INTERNATIONAL CONSTRUCTION CLAIMS: Avoiding & Resolving Disputes

by
Irvin E. Richter

An Engineering News-Record Book
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The field of international construction contracting provides risks as great as the potential rewards. It is incumbent upon the contracting parties, whether they be employer, engineer, contractor, subcontractor, vendor, solicitor or banker, to fully comprehend their rights as well as their concomitant obligations in their respective roles in the construction process. An international environment creates potential for conflict which does not exist on projects in one’s home country. Thus, the potential for claims and disputes is greater.

This text demonstrates how the complexities of the international construction environment promote fertile ground for claims, and arms the reader with the knowledge he must have prior to undertaking such a project, what to do during execution of the work, and how to settle any unsolved differences once the work is complete. The author's experience in the international construction market, enables the reader to benefit from the vast experience which he has gathered over the years by directing one of the largest and most successful construction claims consulting firms in the world.

The number of claims filed internationally has increased tremendously. This trend can be expected to continue and intensify, with potential claims running in the area of 25% to as much as 100% or more of the original project cost. This text is a must for all of those involved in the construction contract process.
ABOUT THE AUTHOR

Irvin E. Richter is a noted authority in the field of construction claims and damages. He has served as an expert witness, consultant, international arbitrator, mediator and hearing officer.

As President and CEO of Hill International Inc. (which has offices in Willingboro, NJ, London, England, Los Angeles, CA and Washington, DC), he has been involved in the preparation, defense, and resolution of claims and disputes totaling more than $100 billion. He was responsible for writing the procedures for resolving claims and disputes on the world’s largest construction project.

Mr. Richter co-authored the Handbook of Construction Law and Claims, a general reference and instructional manual on construction disputes and resolution. He has written numerous articles, including a regular legal column in the bi-monthly journal, Construction Contracting.

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An *Engineering News-Record* Book

Irvin E. Richter

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# CONTENTS

## INTRODUCTION

Why This Book? ................................................................. 1
Guide to Use ................................................................. 3

## PART ONE: BACKGROUND OF CLAIMS ....... 6

**Chapter 1.** The Varied Causes of Claims ................................................................. 6

**A.** Major Areas of Concern in International Construction 6

1. The Concerns During Contract Drafting ................................................................. 6

**B.** Special Risks During Performance ................................................................. 9

1. Political Risks ......................................................................................... 9
   a. Expropriation, Nationalization, and Confiscation ........................................ 10
   b. War and Riot ......................................................................................... 11
   c. Repudiation ......................................................................................... 12

2. Economic Risks ......................................................................................... 12
   a. Currency Fluctuations ........................................................................... 13
   b. Exchange Controls ............................................................................. 14
   c. Inflation ................................................................................................. 15
   d. Equity Ownership .................................................................................. 16
   e. Subcontractors and Default ................................................................ 16
   f. Insurance, Bonding, and Banking Availability ........................................ 20
   g. Lack of Basic Infrastructure .................................................................... 21
   h. Lack of Management Expertise .............................................................. 22
   i. Climatic and Environmental Differences .............................................. 22
   j. Personnel and Labor Risks .................................................................... 22
   k. Others ........................................................................................................ 23

3. Current Trends ......................................................................................... 25

4. Risk Management ....................................................................................... 25

5. Force Majeure ............................................................................................. 25

**Chapter 2.** Contractual—Legal Considerations ....................................................... 33

**A.** General Considerations ................................................................................. 33

1. Varying Legal Systems .................................................................................... 33
   a. Common Law .......................................................................................... 33
   b. Civil Law ................................................................................................. 33
   c. Islamic Law ............................................................................................. 33

2. General Principles of Law .................................................................................. 33

**B.** Standard Documents ..................................................................................... 38

1. FIDIC ............................................................................................................. 38

2. Others .............................................................................................................. 41

**C.** Language and Law Causes .......................................................................... 42

1. Official Language .......................................................................................... 42

2. Choice of Law ............................................................................................... 43

3. Choice of Forum ............................................................................................ 43
1. Actual Costs .......................................................... 162
2. Estimated Costs .................................................. 162

Chapter 9. Negotiating Settlements .............................. 165
A. Preparation for Negotiation .................................. 165
B. Timing the Negotiation ....................................... 166
C. Negotiation Strategy ........................................... 168
   1. Tactical Checklist ........................................... 168
   2. Communication ............................................. 169
   3. Bargaining Positions ...................................... 169
   4. Trade-offs .................................................. 169
   5. Psychology ................................................ 170
   6. Special Techniques and Ploys ......................... 171

Chapter 10. Arbitration of Disputes ............................ 172
A. Preliminary Considerations ................................. 172
   1. Nature of Arbitration ..................................... 172
   2. Law Suits Compared ...................................... 173
   3. Arbitration Advantages .................................. 176
      a. Speedy, Informal Proceedings ...................... 176
      b. Reduced Cost (Compared to Litigation) .......... 176
      c. Encouragement of Negotiated Settlement ...... 176
      d. Amicable Atmosphere ................................ 176
      e. Language Problems Eliminated .................... 176
      f. Locale .................................................. 176
      g. Expert Tribunal ....................................... 177
      h. Enforceability ......................................... 177
      i. Choice of Law .......................................... 177
   4. Arbitration Disadvantages ............................... 177
      a. Litigation Before Arbitration ...................... 177
      b. Scheduling Problems .................................. 177
      c. Delay Costs ............................................ 178
      d. Unsatisfactory Arbitrators ......................... 178
      e. Non-arbitrable Disputes .............................. 178
      f. Limited Discovery of Evidence ..................... 178
      g. Lack of Detail in Awards ............................ 178
      h. Compromise Awards .................................. 178
B. Arbitration Clauses ............................................. 178
   1. Issues to Cover ............................................ 179
   2. Arbitration Institutions ................................. 179
      a. International Chamber of Commerce .............. 180
      b. American Arbitration Association ................ 180
      c. UNCITRAL Arbitration Rules ....................... 180
      d. London Court of Arbitration ........................ 181
      e. Others .................................................. 181
   3. Procedural Matters ........................................ 181
      a. Appointment of Arbitrators ......................... 181
      b. Number of Arbitrators ................................ 183
      c. Locale of Hearing .................................... 183
      d. Language .............................................. 184
      e. Applicable Law ....................................... 184
      f. Time Limits ........................................... 185
INDEX TO TABLES
1-1 Joint Venture Requirements in Various Nations ............................... 17-19
1-2 Position of Middle East and North African Countries on Force Majeure .... 27-29
2-1 Standard Contracts ................................................................. 39-40
3-1 Guide to CONTRACTOR Claims Under FIDIC Clauses ......................... 84-87
3-2 Guide to Recovery by OWNER Under FIDIC Clauses .......................... 88
8-1 Sample CPM Network (Delay) .................................................... 160
10-1 Arbitration Institutions ............................................................. 182
10-2 Major Arbitration Institutions: Duration and Administrative Cost of Proceedings, and Estimated Rate of Compliance with Awards ...................... 188
10-3 States Which Are Parties to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards ........................................ 192
10-4 Settlement of Disputes by Countries ............................................. 197
10-5 Arbitration Laws of Various Nations ............................................. 201

INDEX TO APPENDICES
A. Conditions of Contract (International) for Works of Civil Engineering
   Construction—FIDIC (1977) ......................................................... A-1
B. Conditions of Contract ... Works of Civil Engineering (ICE)
   (Revised January, 1979) ............................................................ B-1
C. Saudi Arabian Tenders Regulations and Rules for Implementation (1977) .. C-1
D. General Conditions of Government Contracts for Building and Civil
   Engineering Works, GC Works, England ..................................... D-1
E. Standard Form 23A General Provisions, Construction Contract, plus other clauses, United States Government (Rev. 8-80) ......................... E-1
F. Selected Clauses, Conditions of Contract, Jubail Industrial City, Royal
   Commission for Jubail-Yanbu, Kingdom of Saudi Arabia (1979) ............... F-1
G. Rules for the I.C.C. Conciliation and Arbitration ................................ G-1
   Association (4/1/82) .................................................................. H-1
I. Construction Industry Mediation Rules of the American Arbitration
   Association (4/1/82) ................................................................. I-1
J. UNCITRAL Arbitration Rules, United Nations (1977) ............................ J-1
K. Convention on the Recognition and Enforcement of Foreign Arbitral Awards ... K-1
Preface

Construction is a risk-taker's business. Contractors who survive when operating internationally and owners who are satisfied with the final costs of their newly-built project usually attribute success to their deliberate plan to minimize the risks they took . . . and to a little luck.

While success is not easy, it is not so difficult that many international contractors have not survived after many years of operating outside their home countries. Of the Top 250 International Construction Contractors, well over one-third were in business 50 years or more, according to Engineering News-Record's fifth annual worldwide survey of international contractors in 1983.

The thrust of this book by Irv Richter is that the construction team—owner, contractor, A/E and consulting engineers—paves its path to success with recognition of the mutuality of the risks, drafting and then observing carefully the terms of a contract that blueprints how each member is to communicate, react and proceed at the first signal of newly-emerging risks.

Its message is clear: Acknowledge that there is no way of eliminating all risks, because some are unforeseeable, so distribute the risk by obligating each member of the team to serve the mutual interest, The Project. The construction contract that is drafted without diligent regard for risk protection requirements of the contractor and owner alike will greatly reduce the project's chances of success.

Because the multi-colored fabric and efficiency of international law are what they are (observe the UN), construction contract provisions and regulations take on different hues as the international contractor shifts his operations from one country to another—or in the same foreign country, switches from government projects such as airports, harbors and railroads, to private or quasi-public industrial projects such as powerplants, oil refineries or manufacturing plants.

Mr. Richter makes many comparisons of construction tender regulations in effect in a number of countries. His purpose is to give readers on the staffs of members of the construction team a rich choice of examples to use in contract negotiation, contract drafting, contract administration, or in setting up procedures for managerial, supervisory or inspection operations in the field.

Of particular use to the reader will be this book's convenient appendix, enlarged to reproduce established contract rules and tender regulations which have been tested for years of use on many international projects, large and small, in several countries.

There wasn't room for—and there might not be enough authors available—to catalog all the special rules, caveats, and risk elements that exist in developing countries, let alone cover all of the some 169 countries around the
world where international construction contractors may be operating tomorrow.

This volume, however, has unusual scope and depth on the subject of how to avoid and resolve construction claims. It is essential reading for personnel on the international construction teams, wherever they are around the world, who are serious about preparing themselves for the all-important mission of guiding their new projects to timely completion at costs which are as close to budget as is feasible.

Just as international contractors' customers in developing countries demand that their projects reflect the state-of-the-art in design and construction, these owners also demand contract terms that provide strong protection of their interests. If the international construction design and contracting industry makes the necessary effort to persuade the owners of the need to balance the protection that the contract provides both owner and contractor, then the outlook for future growth of international construction markets will brighten.

James H. Webber

*Engineering News-Record*
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The Fifth Edition of the I.C.E. Conditions of Contract is reproduced with the kind permission of the Institution of Civil Engineers, the Association of Consulting Engineers and the Federation of Civil Engineering Contractors, Great George Street, Westminster, England SW1P3AA.

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Construction Industry Arbitration Rules and Construction Industry Mediation Rules were reprinted with the kind permission of the American Arbitration Association, 140 West 51st Street, New York, New York 10020.

Introduction

Why This Book?

The increasing demands of developing nations and needs of highly industrialized states to create new markets for their goods and services create a growing interdependence among countries. It is a rare state which does not rely on imports for a substantial portion of its needs.

Concurrent with this growing interdependence has been a surge in the number of construction contracts which are negotiated and performed on an international basis. Developing countries must import construction services because they lack sufficient skilled labor or engineering expertise to undertake on their own projects essential to their national development. So a contractor bidding in the international market often finds himself dealing not only with the foreign owner, but also with architects, suppliers, engineers, materials, and skilled and unskilled labor from third countries. Such a business setting is ripe for confusion.

It is axiomatic that every construction project is subject to disruptive claims and disputes of many kinds. At the international level the scope and effect of such disruptions are greatly magnified. However well-versed a contractor or owner may be on its domestic rights, it is likely to be unprepared for all the intricacies of an international dispute. The terms of the contract are seldom the last word on a difficult claim, and the parties must prepare in advance to face substantial differences between their legal systems, cultural perspectives, and even personalities. The fact that the parties have agreed on a common language does not guarantee an identical interpretation of every point, so care must be taken to minimize the incidence of claims and, more important, to develop sound techniques to deal with claims which are inevitable.

One of the most difficult problems eventually facing participants in an international project is how to determine costs and damages from changes and claims. Commonly used methods of calculating damages may not suffice in the international sphere. In an international forum, certain customs, standards, and guides may be unknown and thus not readily accepted. Certain contracts may be governed by extensive rules and regulations. In Saudi Arabia, for example, many projects are administered by the U. S. Corps of Engineers, which brings with it a vast body of American law and experience. What is required, therefore, is a comprehensive compilation of acceptable cost recovery techniques which a contractor can utilize to collect incurred costs, or which an owner can demand in order to force a contractor to verify its claimed costs.

The greatest difficulties are experienced in countries where competent contract-management services are unavailable, and where the resolution of disputes may depend on legal or governmental mechanisms unfamiliar to
one of the parties. Under these circumstances, it is essential that the parties protect themselves by anticipating likely difficulties and bargaining for a contract which will respond to their needs. The expansion of the international construction market offers many opportunities for business ventures around the world, but thoughtful planning and preparation are indispensable ingredients for success in this robust market.

The function of this book is to describe and analyze those steps and techniques by which disruptive claims can be avoided or resolved. The book is structured on a practical level for all concerned with satisfactory performance of construction contracts. Contractors and owners need to know how to deal with the special problems of the new generation of construction claims. All areas of construction deserve such special attention. This book's focus is on *claims* because the claims process is most likely to propel the parties into the mysteries and intricacies of foreign law and practice.

Even countries sharing a common language and common systems of measurement may have widely divergent legal principles and business attitudes. Such divergences will be of paramount importance when claims are negotiated, arbitrated or litigated. The author outlines major areas of difference, and surveys various methods of planning for and coping with them. There is an ancient aphorism that to be forewarned is to be forearmed, and that statement is, in the author's opinion, fully applicable to the resolution of international construction claims.

In addition to the procedural complexities of claims, the issue of even greater importance to contractors and owners is *cost*. Contractors everywhere want reimbursement for time and expense claims. In many instances, such reimbursement makes the difference between profit and loss on a job. But owners want to limit reimbursement to costs which the contractor has legitimately incurred and which the owner is obligated to pay under the contract. Both parties want to complete the project as quickly and efficiently as possible. So it is to their ultimate best advantage to work together at every phase of the work—especially the claims process. This book suggests methods through which work can be completed and work disputes resolved with minimum confusion and delay.

As long as international construction exists there will be international construction claims. Those who recognize the immutable relationship between work and claims will find this book a useful planning tool.

2 Why This Book?
Guide to Use

This volume contains special features and forms of reference, explained below, which are intended to aid the reader.

CONTRACT CLAUSE IDENTIFICATION

Clauses from various construction contracts are analyzed in the text. Quotations are used where the examples enhance the reader's familiarity with, or sensitivity to, the subject matter of a particular clause (as in chapters 1, 2 and 10), or where a careful comparison between similar clauses is helpful in understanding the effect a slight difference in wording can have (as in chapters 3, 4, 5 and 6).

Clauses are introduced by a preceding paragraph and the agency using or promulgating them is identified. Most quotations are from standard forms of contract used in international construction.

REFERENCES

Statements of specific points of law or practice are, where possible, supported by footnotes. The footnotes for each chapter appear at the end of the chapter, under the heading “References.”

The references are intended to provide readers with a springboard for more detailed study of a particular point. The author tried to avoid emphasis on the law of a particular country or region, but his efforts were limited by the availability of legal periodicals and the texts of case opinions. In some nations, for example, cases are recorded but not indexed, making it impossible to research them in an orderly fashion. In other nations, cases are reported erratically. In all nations, reports are, of course, in the language of the country, and translations can be obtained only one by one. The author feels that the purpose of this book—to provide an overview of international claims—did not warrant copious and expensive translation of foreign materials. Accordingly, many references are to secondary sources such as law journals, books, trade journals, and other authoritative and respected compilations. Secondary source materials were chosen on the basis of three considerations: first, for the variety of regions of the world they discuss; second, for the variety of subjects they discuss—finance, law, arbitration; and, third, for their intrinsic quality of exposition and analysis.

It is hoped that the references will provide readers with a wide variety of avenues to specific subjects and problems which are beyond the scope of this book.

BIBLIOGRAPHY

A brief bibliography appears at the end of each chapter. The bibliographies supplement the references (or replace them in chapters without references) by providing a list of books and periodicals relating to the subject matter of
the chapter. Together with the reference items, the materials in the bibliographies provide major inputs into this book, and readers may further their studies by examination of the sources we researched and compared.

TABLES

Tables have been added to further the reader's understanding of the subjects under discussion. Many provide compiled information regarding institutions, agencies, or treaties which may become relevant to international construction claims.

For ease of location, each table has two numbers. The first indicates the chapter, the second indicates the table's sequence within that chapter (e.g., table 10.2 is the second table in Chapter 10). An index of tables appears immediately after the Contents page.

QUOTATIONS

In addition to contract clause quotations, there are a number of quotations from the decisions of courts, tribunals, regulations, or other sources. Such quotations are clearly marked and referenced. Their use is limited to situations where the original language phrased a subject so well that it would disadvantage the reader if we paraphrased it.

APPENDICES

Because this book makes frequent reference to standard forms of contract, rules of arbitration, and tendering regulations, it was deemed essential to provide the reader with easy access to the full, original texts of those materials. Accordingly, the appendices at the end of the book include the major documents which the book analyzes, each in its original form and up-to-date at press time.

Frequent shifts from text to appendix are not necessary, but readers will find it useful and instructive to examine appendices which relate to their own interests. Moreover, the appendices provide a convenient source of key international materials which will be a valuable addition to the libraries of all who are interested in international construction.

One caveat must be stressed: the materials contained in the appendices are periodically revised and updated by the agencies which promulgate them. Accordingly, the reader wishing to rely on a particular document must ascertain that he is using the most recent edition available.

GLOSSARY

The author has sought to avoid complex technical and legal language, and to present the analysis as simply and directly as possible. Nevertheless, certain abbreviations (particularly those used in the references and bibliographies) are in common use in legal texts, cases, and periodicals, and as they appear in this book. For the benefit of readers unfamiliar with such "shorthand," the glossary explains the abbreviations and how to use them.
CURRENCY OF MATERIAL
The author sought to include all key matters which were current at the time of the book's printing in 1983. Similarly, much of the analysis is based upon decisions and treatises issued prior to that date. However, international construction is a dynamic field generating change and commentary. The reader should be sure to determine the exact state of affairs at the time he contemplates course of action suggested by this book.
Part One: BACKGROUND
OF CLAIMS

Chapter 1
The Varied Sources of Claims

Major Areas of Concern in
International Construction
International construction is subject not only to the same difficulties that arise
on domestic jobs, but many more problems peculiar to international trans-
actions. Proper management of international work begins with gathering
background information about the parties and countries involved, well before
submitting a tender.

This book focuses on the resolution of international construction claims.
Ideally, the parties should aim early on at claims prevention, by identifying
and eliminating potential sources of conflict before the agreement is signed.
Proper planning could result in a contractual relationship in which disputes
can be resolved quickly and efficiently by reference to the contract docu-
ments.

This section discusses the major considerations which should enter into
the planning of an international construction project. Some items merit-
ful attention may appear to have nothing to do with construction. Here
lies the most dramatic difference between domestic and foreign work: inter-
national transactions are subject to numerous variables which are generally
irrelevant to a domestic project, such as currency fluctuations, global political
activities, international relations, international law, and regulations governing
imports, exports, movement of capital or labor. Unfortunately, inattention to
these matters can be dangerous in foreign work.

In the author’s experience, far too often parties suffered severe losses
and hardships because they failed to anticipate the whole spectrum of risks
they faced. While concepts set forth in this chapter need not be "major areas
of concern," what is necessary is awareness of these concerns and that they
should be dealt with during contract negotiations.

THE CONCERNS DURING CONTRACT DRAFTING
The owner’s identity is a primary influence on contract drafting. Large-scale
international work is often initiated by foreign governments acting in their
sovereign capacity, typically for infrastructure such as airports, harbors, rail-
roads, and telecommunications, requiring up to several years to complete.
They generally are supervised by a government agency or minister. The negotiating parties must bear in mind that governmental participation in contracts is subject to variable and political considerations seldom encountered in dealings between private parties.

The owner may be a quasi-governmental agency such as the Arabian American Oil Company (ARAMCO), or a nationally-run university. These corporate branches of a sovereign state are somewhat more insulated from politics or policy changes, but remain exposed to a wide range of government regulation. The parties need to plan accordingly.

In some instances, the participation of the owner/government will be further diluted by special international arrangements. In the Kingdom of Saudi Arabia, for example, a substantial number of Saudi construction projects are administered by the U.S. Army Corps of Engineers, an arrangement resulting from the Engineer Assistance Agreement between the United States and Saudi Arabia. Although the Saudis remain the absolute owners of all property involved, the relationship between the parties is controlled by American legal practice and principles. This is convenient for American firms working in the Kingdom. But contractors from third countries face new elements in their relationship which deserve research and preparation; an outcome expected under a Saudi reading of a contract may not be guaranteed under a Corps of Engineers reading of a Saudi contract. Only by understanding in advance which legal principles will govern their contract can the parties negotiate terms which protect their respective interests and expectations.

The bidding (tendering) itself may be affected by government participation. The general rule that the lowest bid is the accepted one does not always hold true. In some Middle Eastern countries (such as Saudi Arabia) government agencies look for the “most reasonable bid.” The agency in charge may have prepared its own estimate of the total cost of the project and, using it as a basis of comparison, will select a bid which represents the most realistic tender of total project cost. The agency may prefer that the contractor included in its bid a contingency as compensation for future changes, in lieu of repeatedly negotiating change orders and claims for price increases. Furthermore, government agencies are sensitive to a bidder’s reputation and past performance. If the owner favors this type of bid, parties submitting bids should draft their proposals accordingly.

Projects between private parties may be subject to fewer formalities and political considerations, but cultural and social differences will still play an important role. A thorough understanding of a foreign owner’s standards of business etiquette is invaluable in all negotiations, and one should never assume that what is acceptable in Manila is equally acceptable in Lagos. A bidder who fails to prepare for varying customs around the world may find that his inadvertent rudeness removes his bid from consideration. Information concerning foreign business practices is available from many sources, notably the embassies of the host country or the Department of Commerce or export trade agency of the bidder’s country. Careful review of such data should be made before negotiations in a foreign country begin. Tact is always invaluable.

After the contract has been awarded, a second major concern is choosing the language that will specify the parties’ rights and obligations. Parties to international contracts ordinarily speak different languages. Solving the en-

The Concerns During Contract Drafting
suing problems of interpretation can be complex. The meaning of terms in common usage in the construction contracts may be lost in repeated translations. Similarly, use of two purportedly identical contracts, one in the language of each party, leaves a wide margin for error and dispute concerning the accuracy of the translation. If the contracts are not mirror images of one another—difficult even in the best translations—contract claims can become mired in questions of which language should prevail. For example, the use of a stipulated third language can be confusing for both parties, since the services of translators are expensive and time-consuming.

For these and other reasons, certain standard forms of contract are in widespread use in the world of international construction. They are the result of intensive international study and agreement. Their scope is well-defined. The major standard contract to be discussed throughout this book, is the Conditions of Contract (International) For Works of Civil Engineering, published by the Federation Internationale des Ingenieurs-Conseils (FIDIC). The FIDIC documents are in general and widespread use. Their provisions relating to claim resolution will be analyzed in full in later chapters. Although parties may choose to modify FIDIC in ways they deem appropriate to a particular project, the availability of a standard form agreement greatly reduces language-related problems inherent in construction contracts between multi-national parties.

A third area of concern is potential problems with technical specifications and drawings. These difficulties arise when the parties use different systems of measurement, but can be avoided if the parties make certain agreements in advance as to which system is to be used, how the necessary conversions are to be carried out and verified, etc. For example, the Saudi Arabian Standards Organization (SASO) alleviated this problem by preparing uniform standards for building and civil engineering detail designs. In 1985, such uniform standards are mandatory for construction projects within the kingdom. As with many construction problems, anticipation of the difficulty is the quickest and least expensive way to resolve it.

A subsidiary problem with varying systems of measurement arises when materials for the project are being imported. An effort to label shipments in the measurements familiar to the customs agents of the host country will minimize the risk of delays and clerical errors at the port of entry.

Another problem with specifications is the use of "professional slang" shorthand or jargon. They should be scrupulously avoided at all times. In that way, confusion about the drawings can be resolved by reference to standard dictionaries or industry manuals. Those who learned a foreign language from a textbook cannot be expected to divine the meaning of abbreviations or foreign trade names. At best, slang will cause delay, but at worst it will render the plans incomprehensible to those who must use them. This problem can arise even between nations with a common language—for example, most would agree that the English spoken in Britain is different in style and structure from that ("American") spoken in the United States.

Careful preparation of the documents does not guarantee efficient project completion. After completing the negotiations, the parties enter the most intricate, ye: dynamic, phase of their relationship—actual construction. A perfect contract cannot eliminate occasional differences of opinion between the owner and the contractor, so the key to smooth work progress is good

8 The Varied Sources of Claims
communication. Its value cannot be overemphasized, for it is probably the single most important factor at every stage of the work. The parties share a common goal of maximizing the return on their investment. Yet, they will not accomplish this if the transmittal of crucial information and suggestions is frustrated by a taciturn or combative atmosphere on the jobsite. Diplomacy, tact, and flexibility help to build goodwill among the parties. These qualities cannot be written into a contract. Rather, they must spring from a conscious effort at the personal level. A working knowledge of social and cultural differences among the multinational parties will be a valuable asset. An approach which seems perfectly acceptable to an Oriental contractor may offend the cultural sensibilities of an African owner. Compromise will be difficult or impossible unless the parties have a basic understanding of each other’s point of view.

Major ambiguities in the contract and the specifications are a hazard on the jobsite, frustrating even the best communications system. Thorough review of these documents before construction starts will eliminate the need for constant on-site determinations of what should be assumed or inferred. Here again, mutual respect and cooperation will go a long way in aiding resolution of these confusions. An atmosphere of good faith permits amiable, speedier settlement of the kinds of complications which arise on every construction site.

The language barriers are a separate and distinct problem. The presence of several nationalities on the jobsite is often inevitable, and, obviously, translation facilities cannot be provided for all. This problem can be minimized by organizing distinct channels of communication, and educating personnel in their use, so the problem the Dutch subcontractor may have with the Japanese subcontractor will be communicated as quickly as possible to project management. Contractors who recruit expatriate labor forces find one solution is to form work crews based primarily on commonality of language. The bilingual foreman receives his directions and then translates his orders into the tongue of his workers.

Administrative provisions of this type may seem burdensome, but it is better to spend a day planning for multilingual frustrations than to spend a month wondering why your building has no doors. Tight organization enables the parties to cope with divergent human temperaments, widely different educations, involuntary misunderstandings, and language variations.

Special Risks During Performance

In unstable regions of the world, international contracting is a high-risk business. Working conditions can be difficult, even dangerous. Undesirable contractual terms may be imposed by the host government or unpredictable political developments may jeopardize the parties’ entire investment.

POLITICAL RISKS

The events in Iran during 1979 and 1980 clearly demonstrate the risks inherent in international contracting. The political turmoil in Iran subjected foreign contractors to substantial physical peril, as well as uncertain payment
for work already done. Losses to architects, consulting engineers, and contractors have exceeded $3 billion.4

While it is possible to structure a contract which provides for complete political change, negotiations to achieve this can be awkward. If the host country appears to be on the brink of upheaval, it is unlikely that contractors will be eager to submit bids. On the other hand, foreign governments tend to believe they are secure and therefore are not receptive to negotiations which suggest that civil unrest is likely. (A bidder might counter this argument by pointing out that if the government is truly stable, clauses protecting the parties against the eventuality of revolution become a formality and should not be objectionable.) Negotiations will need be delicate, nevertheless the parties should pursue them to protect their financial interests.

A standard clause which protects against major political change should be worded to deal with any fundamental change in the legal system. In Iran, for example, it is clear that the legal system of the Shah was replaced completely by the Islamic courts. A workable contract clause would have to include two things: first, a method for determining that the legal system has indeed changed, perhaps by having a neutral third country or agency examine the situation, and, second, provisions for substituting a law forum in existence at the time the contract was made.6 This is not to suggest that the parties make a comparison of the quality of the former and current legal systems. Rather, the real problem is that the original contract negotiations contemplated the original courts, and subsequent change in the court system might disturb the balance of the contract. The parties are entitled to know their respective rights and obligations at the outset of their contractual relationship, and fundamental changes in the legal system frustrate that purpose.

Knowledge about and an understanding of the parties and countries involved are essential during negotiations.

Expropriation, Nationalization and Confiscation

This problem category arises when a government seizes the assets of a business or corporation. The most direct form of expropriation occurs when the government simply declares itself the new owner of the property, usually by operation of law, and then uses its legal system to enforce the substituted ownership. Expropriations are, in many instances, a valid act of state which cannot be overturned in the international legal forum.5 However, the industrialized nations and the international organizations (United Nations, World Bank, etc.) take the view that when property is seized, the displaced owners must be compensated.6

Questions of compensation can be difficult to resolve. The American position, similar to that of other capital-exporting countries, was reaffirmed by the United States Supreme Court in Banco Nacional de Cuba v. Sabbatino.7 While considering Cuban's expropriation of the Cuban assets of American sugar companies, the court held that a taking is improper if it is discriminating, or if it is done without "prompt, adequate and effective compensation."

Unfortunately, this view is not shared by all nations, and developing countries frequently want to pay far less than the owners' original investment in the property.8 Alternatively, the host government may offer payment in

10 The Varied Sources of Claims
an unsatisfactory (“ineffective” in the language of the Sabbatino case) form, such as a currency which cannot be exported, or shares in another company whose shares cannot be exported.

Some expropriations are achieved in a roundabout way. The host country might, for example, impose discriminatory taxes against foreign-owned corporations, in effect diverting all the corporation’s income to the national treasury. Variations of this method include: laws prohibiting the repatriation of profits; refusal to grant export clearances; or mere refusal to pay for products or services provided by foreign suppliers. Situations like these are ultimately a question of international law, and as such are outside the scope of this book. Nonetheless, contractors can take certain steps to protect themselves from the economic effects of political risks. (These methods will be discussed in detail under the section on economic risks in this chapter.) Also, international funding agencies like the World Bank are helping to stem uncompensated expropriations by refusing to give loans to countries with a history of arbitrary seizures of property.

War and Riot

The ease with which governments can change has been demonstrated by bloodless coups as well as savage civil wars. Recent experiences in Chile, Iran, Afghanistan, and Liberia attest to the surprising volatility of certain political regimes. Parties involved in international construction must be wary of potential civil disorder.

In many instances, civil unrest does not result in a complete transfer of political power, and after the disorder subsides a contractor may find itself still bound by the terms of the original contract. In the interim, however, riots or warlike conditions may have induced the contractor to stop all work at the site, thereby increasing costs and delaying work elsewhere. Advance planning for this contingency is a must. After disorder breaks out, the prudent contractor will be more absorbed with immediate concerns, such as protecting lives, than with attempting to recoup extra costs on the job.

It is certainly possible to bargain for contract terms which deal specifically with civil unrest. For example, Clause 65 of the FIDIC documents entitles a contractor to extra costs caused by “special risks,” including war, rebellion, and the like. In order to protect the owner, however, Clause 65 requires a contractor to use its best endeavors to complete the job during the special conditions; this exemplifies a “reasonableness” standard. A contractor would not be expected to expose itself to extraordinary peril, but neither may it abandon the worksite at the first sign of unrest. A general guideline for this standard of “reasonable action” is that which a prudent contractor would have done in the same circumstances. Each determination must be based on the facts of individual cases. Parties contemplating work in an area where civil disorder is a possibility should organize their contract with that possibility in mind.

For an example of the application of contract provisions which address special risks, see Parsons and Whittmore Overseas Co. v. Societe Generale de l’Industrie Du Papier (RATKA). In that case, Parsons, an American firm, abandoned its worksite in Egypt at the outset of the Arab-Israeli Six Day War in 1967. An international arbitration panel later determined that the special
conditions lasted for only a few days, and that total abandonment was unjustified even though construction was almost complete. (An American court subsequently enforced the award.)

**Repudiation**

Governments are in a unique position when they repudiate a contract. A contractor can resort to legal action against a private owner who repudiates, but in a similar situation involving a government, the action may be barred by the theory of sovereign immunity. Sovereign immunity is the doctrine that a government cannot be sued. (The ramifications of this doctrine will be examined in detail in Chapter 10.)

Practical considerations regarding the possibility of repudiation are primarily financial. Design firms which borrow against actual and/or estimated billings are exposed to serious risks when a contract is repudiated, as are all parties who must manage their cash flows carefully. Protection against repudiation is afforded by repudiation insurance which protects against arbitrary cancellation or non-payment for work performed, as well as for de-mobilization expense. The costs of contract repudiation insurance will vary depending upon the location and size of job, historical experience, and spread of risk.

**ECONOMIC RISKS**

International ventures are fraught with financial hazards and uncertainties. It is extremely important that a firm entering the international market possess sufficient capital strength to withstand extended delays in payment. In extreme cases, contractors have been forced to finance the entire project—from mobilization to occupancy—with their own cash resources. There can even be delays in payment after project completion.

Unexpected costs can arise at every step of the way. Moreover, the pricing of changes and claims may be delayed indefinitely by arbitration or litigation. A party who is unprepared for the possibility of long delays risks more than the project at hand. Its financial stability itself is at risk, not to mention its credit with subcontractors and its bonding capacity for other projects.

The parties’ contract should be drafted to cope with both the cause and the cost of project delays. Working with governments can be tedious when government regulations require numerous clearances or licenses at every stage of the work, so the parties should specify in writing the limits of the waiting periods for these authorizations which will be considered reasonable. Subsidiary administrative delays include customs clearances for imported material, visa approval for expatriate skilled labor, rulings on questions of taxation, unavailability (for whatever cause) of government agents whose approval or supervision may be required at different times, and simple bureaucratic backlogs of paperwork—a characteristic of governments everywhere. Private owners are usually a single, definable person or group, but governments can be immense, without clear channels of authority.

The parties must know in advance who will have authority to make the necessary appropriations of funds or grant the necessary clearances. Tight organization on the worksite must be complemented by tight supervisory control.

12  **The Varied Sources of Claims**
organization both inside and outside the project. To deal with problems arising at the worksite, significant enough to be communicated to supervisory personnel, there should be a clear channel of communication between the supervisors and the owner. The parties should never have to waste time searching for the individual or agency capable of dealing with a particular difficulty—they must know at the outset where to turn for specific kinds of assistance or relief. In addition, the contract should anticipate the financial effects of a government’s inability or unwillingness to cooperate in arranging comprehensive insurance and letters of credit (discussed in more detail below).

The following risks deserve special attention:

**Currency Fluctuations**

Parties expecting payment under an international contract usually want to be paid in their own currency. Those countries with adequate foreign exchange reserves may be willing to pay in a currency other than their own, but this is not often the case. Accordingly, parties involved in international transactions must be prepared to deal with payment in the currency of the host country. This creates the risk that anticipated project revenue will be diminished by an important but uncontrollable variable—the international rates of currency exchange. The seller in an international transaction should give exchange rates serious consideration during bidding and negotiation.

International currency exchange rate fluctuations are so unpredictable and substantial that in recent times a number of respected international commercial banks have found themselves in serious difficulties. Western banks have tightened their policies regarding loans to certain nations. Currency markets respond to global events, not merely the condition of the issuing country. Therefore, the prospect of work in a stable host country is no guarantee that payment in its currency will convert to the same value at completion as during negotiations.

Several fairly simple steps can be taken to protect the parties from currency fluctuations. The following methods are those most commonly employed.

**FIXED EXCHANGE RATES**—The most basic approach is to fix the exchange ratio as of a particular date. For example, suppose that on January 1, one unit of currency X = three units of currency Y. Then, on the following December 31 one unit of X = two units of Y. The value of currency X has fallen relative to currency Y, because it now costs only 2Y to buy 1X, whereas it used to cost 3Y. If the parties had stipulated the exchange ratio in effect on January 1, they would be insulated from the change. There is still a risk, however, that one of the currencies will become nearly worthless.

**THIRD COUNTRY CURRENCIES**—Another approach is for the parties to agree on payment in a third country currency. For example, a Korean contractor working in Kuwait might receive payment in Swiss francs. This tactic is attractive if the third country’s currency is extraordinarily stable. But in times of growing economic strain, even the Swiss franc, for years the most stable currency in the world, has been
devalued by the Swiss government. A general fluctuation in currency markets will still affect the parties. The risk is reduced—but not necessarily eliminated—only if the third currency is noticeably more stable than that of the host country owner.

Some countries, such as Algeria, have regulations specifically prohibiting exchange-rate maintenance agreements of any kind, thus exposing contractors to the full impact of deterioration of the Algerian dinar. Obviously, a determination of applicable treasury regulations must always be made in advance.

BASKET OF CURRENCIES—A newer alternative, available where a nation’s laws permit, is payment in a “basket of currencies.” Instead of relying on their own currencies or that of a single third country, the parties agree to use a mixture of several major currencies. To return to the example used above, when 1 unit of currency 1X = 3 units of currency Y, it might also be true that 1X = 1Y + 3Z + ½A, so a minor change in the value of currency Y will not have a major effect on the value of the “basket.” Since all currency values are expressed relative to other currencies, it is generally true that when some currencies go down, others go up. A basket of currencies dilutes the effect of small changes in certain exchange rates, and it is a useful tool for payment because it enables the parties to rely on a close approximation of the amount they expected.

International banks of the industrialized nations specialize in multicurrency transactions, and their services will be valuable when a large-scale project is undertaken. Taxation and accounting considerations, while outside the scope of this book, cannot be overlooked by any of the parties to an international business agreement.

Exchange Controls
Exchange controls are sometimes used arbitrarily to bring about an expropriation, but most nations’ exchange laws are stable. Still, they ought to be reviewed and checked by contracting parties, because unexpected legal requirements can have disastrous effects.

Some developing nations, eager to expand their industrial infrastructure, require that a portion of all of the foreign company’s earnings be reinvested inside the country. The purpose is to provide working capital for economic growth, but this is a serious drawback for a foreign contractor who needs to expatriate profits to support operations in other countries. If such a law is encountered, the parties might negotiate a special waiver for their case; this is unlikely, however, unless the project is vitally important to the host country, and then only if no other bidders are willing to reinvest profits. Careful examination of applicable law is imperative, since the requirements vary from country to country. In some nations, profits can be repatriated only after several years of continuous work—longer than many construction projects—or only if the work is done partly by nationals of the host country. Parties who fail to plan for the valid exercise of exchange laws can risk serious financial loss. Proper research of the host country’s laws and regulations will give prior warning of financial restrictions.

14 The Varied Sources of Claims
Countries which do not require reinvestment of profits may simply limit the amount of money which a particular individual or corporation can export per year; the others routinely withhold the last payment or series of payments. (This is not the same as “retainage,” which is governed by a contractual provision.) Interest on withheld payments is not recoverable. The reasons for such withholdings may range from a government’s dissatisfaction with the work, to a simple arbitrary refusal to obey the contract. Arbitration or litigation may be necessary in such cases.

**Inflation**

Inflation is a universal plague of the world, particularly in countries which develop rapidly. In the state of Israel, prices increased approximately 100% in 1980, while several Latin American countries (especially Chile) have experienced annual rates of inflation as high as 300%. Material shortages, delays caused by port congestion, speculation in construction commodity markets, and inadequate numbers of skilled workers caused significant price increases throughout the Middle East. In Egypt, for example, construction costs rise at least 25% per year, and prices for certain types of wood increased 50% in the first six months of 1980.

In Kuwait, government projects must be undertaken by locals in an amount equal to 30% of total work, a requirement which has put a strain on the local labor market and driven up prices accordingly. Similarly, reliance on construction materials produced in Israel is affected by both inflation and product shortages.

Fuel cost increases had been a serious concern of long-term projects until the 1982-83 oil glut. Work in remote areas involves constant use of trucks and generators, and any upward spiral of oil prices can have an alarming impact. Taking all this into consideration, the United States government awarded a contract with a fuel-escalation clause, the first of its kind. This option ought to be considered whenever the oil price outlook becomes unstable again.

International contractors face inflation on many fronts when they import labor and materials from a variety of countries.

Contract negotiations must include a fair distribution of inflation-related risks.

Two courses of action can mitigate inflationary difficulties. The first is to import the bulk of the necessary materials from countries where prices are relatively stable. This is frequently necessary when work is being done in the less-developed countries, because local materials are unavailable or capacity is very limited. However, the costs of importation—packaging, shipping, insurance, and customs duties—must be calculated carefully beforehand to determine whether importation will be cheaper.

A second method of avoiding inflationary spirals is to negotiate a cost-plus contract. Unfortunately many countries (especially in the Middle East) are beginning to insist on fixed-price contracts, though project design and management contracts are still cost-reimbursable.

An expense which is sometimes underestimated is the cost of housing and food for project personnel. Providing these services is always expensive, and inflationary impacts are difficult to avoid. Nations which are developing
rapidly tend to have severe housing shortages, and its price can be alarming. In Saudi Arabia, for example, a three bedroom apartment may cost about $40,000 (U.S.) per year.\textsuperscript{28}

**Equity Ownership**

Parties wishing to do business in foreign countries will sometimes find that they must obey equity ownership laws. These laws require that all ventures in the host country be owned and operated by a specified percentage of nationals.\textsuperscript{26} Failure to comply may prevent the work from being authorized. There can be benefits—in some states equity ownership is tied to certain tax advantages. Regulations of this type are in effect in almost all of the Arab world, as well as parts of South America and Africa. For a survey of several national policies, see Table 1-1.\textsuperscript{30}

Agency requirements are also common.\textsuperscript{31} These make it necessary for foreign operators to register with an agent (who must be a national of the host country) who serves as a go-between in all transactions. Selection of an agent is therefore an important matter, and much has been written on this topic alone. Basically, the selection of a foreign agent requires the same prudent business judgments one would use to select a domestic representative. A well-established agency firm with a good reputation is preferable to an unknown individual who is new on the scene. To ensure a productive working relationship the scope of the agent's authority must be clearly defined. All parties need a clear understanding of each other's authority, otherwise administrative delays and embarrassments will drive up costs, even jeopardize the entire business relationship.

Countries which have built up their own industrial base may demand that certain types of projects be executed as a joint venture between foreign and domestic corporations, or that certain materials or personnel be obtained in the domestic market.\textsuperscript{32} The success of the project depends upon strict compliance with all such regulations. Moreover, one won't be awarded a job—even considered for it—if he fails to comply.

**Subcontractors and Default**

Governments may insist that one contractor manage an entire project in order to relieve the local government of supervisory problems. Such a requirement can lead to serious problems if an enormous project is undertaken by a prime contractor who is unfamiliar with some of the disciplines and specialties involved. For example, building an airport requires installing radar and other sensitive electronic equipment, with which the contractor may have had no previous direct contact. Nevertheless, the prime contractor would be directly responsible for the timely completion of all the work, and major difficulties and expense could result if the electrical subcontractor were to default.

Successful management of contracts with subcontractors depends upon first negotiating agreements which provide for the extra costs to which the parties will be exposed should the subcontractor default. On international projects such negotiations may be expensive, since the subcontractors may be located in different countries around the world. Once the work is underway, the prime contractor will have to cope with numerous problems in possibly numerous languages.

16 The Varied Sources of Claims
<table>
<thead>
<tr>
<th>Nation</th>
<th>Joint Venture</th>
<th>Government Approval</th>
<th>Tax/Import Benefits</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>MIDDLE EAST</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Not required, but encouraged. Joint ventures with controlling Saudi interests have priority over non-Saudi individuals and companies.</td>
<td>Required for all direct foreign investment.</td>
<td>Available. A wide range of incentives may be offered to desired industries.</td>
<td>Local agent needed if business is not a joint venture. Saudi individuals and companies have priority over joint ventures and non-Saudis in dealing with the government.</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>Varies among the Emirates. Even where permitted, 100% foreign ownership is discouraged.</td>
<td>Required for all direct foreign investment.</td>
<td>Available.</td>
<td>The UAE is difficult because commercial laws are not codified. Local agents and attorneys essential.</td>
</tr>
<tr>
<td><em>ORIENT</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People's Republic of China</td>
<td>Joint venture required by recent laws. Minimum local participation not specified, but 25% likely.</td>
<td>Required for all direct foreign investment.</td>
<td>Available where venture equipped with “up-to-date technology.”</td>
<td>China wishes to hasten technological development, and it encourages foreign investment.</td>
</tr>
<tr>
<td>Korea</td>
<td>Varies. 50% national ownership requirement can be waived.</td>
<td>Required for all direct foreign investment.</td>
<td>Available on a case-by-case basis.</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Not required.</td>
<td>Required for all direct foreign investment.</td>
<td>Available.</td>
<td>Policies are liberal</td>
</tr>
</tbody>
</table>
Table 1-1 Continued  Joint Venture Requirements in African Nations

<table>
<thead>
<tr>
<th>Nation</th>
<th>Joint Venture</th>
<th>Government Approval</th>
<th>Tax/Import Benefits</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>AFRICA</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>Not required but generally expected. No particular foreign/national ownership ratio is expected.</td>
<td>Required for all direct foreign investments.</td>
<td>Available.</td>
<td></td>
</tr>
<tr>
<td>Gabon</td>
<td>Not required, but government takes 10% of capital and has right to buy 25% more.</td>
<td>Required for all direct foreign investments.</td>
<td>Available. Policies encourage foreign investment.</td>
<td>All terms may be negotiable with the government.</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>Not required, but vigorously encouraged.</td>
<td>Required for all direct foreign investment.</td>
<td>Available, but subject to governmental evaluation of particular industry's value.</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Required. If Nigerian citizens unavailable/unwilling to join venture, Nigerian government will do so.</td>
<td>Required for all direct foreign investment.</td>
<td>Available, but guidelines are confusing and unreliable.</td>
<td>Foreign investment picture in Nigeria is considered frustrating.</td>
</tr>
<tr>
<td>South Africa</td>
<td>Not required unless government considers particular industry &quot;strategic.&quot;</td>
<td>Required for all direct foreign investment.</td>
<td>Available, and designed to encourage foreign investment.</td>
<td></td>
</tr>
<tr>
<td>Nation</td>
<td>Joint Venture</td>
<td>Government Approval</td>
<td>Tax/Import Benefits</td>
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</tr>
<tr>
<td><em>SOUTH AMERICA</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>Not required, but 20% Chilean ownership brings many benefits under Foreign Investment Statute (Decree Law 1748 of March 1977.)</td>
<td>Required for all direct foreign investment.</td>
<td>Available. See “Joint Venture.”</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>Usually required, with majority of ownership Colombian.</td>
<td>Required for all direct foreign investment.</td>
<td>Limited. Reviewed on case-by-case basis.</td>
<td>Colombia is considered a difficult country in which to invest. Subscribes to Andean Investment Code.</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Not required.</td>
<td>Required for all direct foreign investment.</td>
<td>Available.</td>
<td>Liberal laws favor foreign investment, but opportunities are limited.</td>
</tr>
</tbody>
</table>
When conflicts between a subcontractor and the prime contractor arise, the parties may want to rely on their own domestic claims and changes procedures, which vary from country to country. The prime contractor could be exposed to substantial delays if it has failed to make prior agreements with subcontractors on a claims resolution mechanism.

Insurance, Bonding, and Banking Availability

The value of international insurance cannot be overstated. Organizations such as Lloyds of London or the Foreign Credit Insurance Associates (New York) offer political and commercial risk insurance which can substantially reduce the hazards of international business. The basic policies protect sellers of goods against non-payment by the buyer (through insolvency or mere refusal to pay) and against political risks such as destruction by war, riot, or other civil disorder. Other policies cover services, although these are somewhat newer and claims experience is limited.

Sellers of goods or services should not fail to investigate insurance possibilities before they finalize their bids (to allow inclusion of estimated insurance costs in the bid), since a relatively small investment can substantially reduce the economic risk of breach of contract or political disturbance.

Insurers keep detailed, current information on investment prospects in every country, and their evaluations of the stability of various national regimes will enable prospective bidders to determine the desirability of working in particular areas. Many major insurers do not provide coverage on any exports to Iran, Chile, and Afghanistan. In addition, their files indicate questionable areas in all parts of the world.83

A protective tool used in many transactions is an irrevocable letter of credit provided by one party and payable to the other. This substitutes for performance bonds, which are either unavailable or unacceptable in many Middle Eastern or Soviet Bloc nations.84 In a typical operation, the contractor opens an irrevocable letter of credit for the full value of the contract with an international bank. The letter is payable to the owner, who may “draw down” those amounts which represent the value of any breach by the contractor.

The following example shows how a letter of credit operates in its simplest form: Contractor X, a German corporation, agrees to construct an airport in India. The cost will be one billion rupees and the government of India is the owner. In lieu of a performance bond, the contractor opens a letter of credit with a major German bank. The letter of credit has a face value of one billion Indian rupees, and it is backed by the German contractor’s assets as collateral, which the bank will acquire if all or part of the letter of credit is paid to India.

The documents comprising the letter of credit state how and when the bank must make payments to India. They also state the period of time for which the letter will exist, usually the time it takes to complete the project. If the letter is “irrevocable”, which is usually the case, then the contractor cannot amend or cancel the letter under any circumstances.

A letter of credit guaranteeing payment from the government of India to Contractor X would be structured the same way.

Letters of credit are sometimes made payable between banks. In the
foregoing example, Chase Manhattan Bank might be obligated to make payments to the Bank of Bombay instead of to the government of India itself. Under those circumstances, the Indian government would deal with the Bank of Bombay, and the Bank of Bombay would be responsible for obtaining funds from the German bank. The effect is the same: the letter of credit provides a mechanism through which one party can reach the assets of the other.

In the past, casual drafting of the letter of credit or the contract terms relating to it has enabled unscrupulous owners to draw down the entire amount even though the work is substantially complete. Since banks will almost always refuse to stop payment on irrevocable letters of credit, an excessive “draw down” by an owner forces the contractor to seek costly and inconvenient legal relief. The immense difficulties of international litigation are discussed in Chapter 2. Anyone familiar with such proceedings knows that avoiding them is a sound policy.

It is advisable to draft the contract so as to limit the owner’s access to the letter of credit, generally by limiting permissible “draw down” to the percentage of work not yet completed. Thus, if a project is 60% complete when the contractor breaches, the owner can only draw down 40% of the amount held in the letter of credit.

Conversely, the contractor can negotiate for a letter of credit covering payment due from the owner, and such an instrument would again be organized to protect the interests of both parties. Reliance on a bank in the contractor’s country is preferable, of course, because the host government will have no legal control over such an institution.

The contract must define a mechanism for authority for draw-downs. Questions such as “When has there been a breach?” and “When is the contractor entitled to a payment?” are sometimes hotly disputed, and on them the parties may never agree. The task of resolving these disputes is often left to arbitration or a neutral observer, but the choice should be geared to minimize delay. Also, sovereign immunity issues may arise, and these are evaluated in Chapter 6.

In an effort to alleviate the enormous risk a contractor undertakes when opening a letter of credit, many countries have instituted programs which make insurance covering a bank letter of credit available through government export financing agencies. Such countries include, among others, Canada, United Kingdom, Japan, Korea, Brazil, India and the Philippines.35

Lack of Basic Infrastructure

When basic facilities, equipment, services, and transportation needed for efficient project completion are insufficient, as is often the case in developing countries, the parties will face substantial added costs. It may be necessary to build an extraordinary number of service roads, or railroad sidings, or a private telecommunications station in order to facilitate the movement of men, materials, and information. Foreign governments naturally take an optimistic view of the qualities of their domestic services, but the prudent contractor will conduct his own research to avoid unexpected costs and delays. To the basic onsite construction cost might be added an equivalent cost just for the infrastructure necessary to facilitate construction. The contract must

Lack of Basic Infrastructure  21
cover this cost. There is no substitute for pre-bid inspections of both the site and the relevant support facilities. Physical inadequacies of the host country can turn a small project into a major undertaking.

**Lack of Management Expertise**

The simple fact that developing nations import construction services suggests that they lack the skills necessary to undertake them independently. At the same time, requirements of equity ownership or joint venture may compel the parties to utilize host country technical personnel and skilled workers. Even if such pools are sizeable, many may lack the level of education or expertise which efficient work demands, and their employment would result in delays and confusions that increase costs. Shortages can become more acute if expatriate personnel leave unexpectedly, or if the host government limits the number of expatriate technical or managerial personnel who may enter the country.

Since it is usually impossible to negotiate a contract which waives the law of the host country, the only way the parties can cope with imposed reliance on inadequate local personnel is to adjust their cost projections accordingly.

**Climatic and Environmental Differences**

Difficult weather conditions can impede an otherwise efficient operation. The parties may have to contend with 130 degree summer temperatures in Kuwait, or with seasonal floods in the Amazon basin. A labor force from Japan, where the climate is temperate, may become sluggish or even ill in desert conditions. Management of these problems requires expanded support facilities and additional expenditures for proper diet, climate control in employee housing, and probably an allowance for extra leave.

Health problems can also arise. Apart from the need to adjust to extreme climates, personnel may be exposed to diseases of all kinds. The malaria epidemic during the construction of the Panama Canal is a classic example of what can go wrong in tropical areas. Similar risks persist to this day. For example, the river valleys of Upper Volta, Africa, are infested with a fly whose bite can cause blindness. Forested areas everywhere pose the threat of attack by wildlife or dangerous insects, snakes, and poisonous plants.

Countries with temperate climates and a minimum of life-threatening risks sometimes impose artificial restraints. Parties working in Canada, Japan, or the United States must comply with complicated environmental protection laws. These drive up the cost of design and execution, and can delay final approval of the project. The operation of a sophisticated legal system can be as inconvenient as a Saharan sandstorm. Allocation of costs for these dangers must be made during negotiation.

**Personnel and Labor Risks**

**AVAILABILITY**—Because of severe shortages in skilled and semi-skilled labor, many countries require that all labor for a project be expatriates. Other governments demand that a certain percentage of labor and management positions be nationals. In Israel, for example, government officials estimated that in 1979, the country was short 10,000
workers. Thus, the U.S. joint ventures selected by the Corps of Engineers to design and build two air bases in the Negev Desert were required to recruit 4,000 non-Israeli workers from places as distant as Thailand, the Philippines, Scotland, Northern Ireland and Portugal.

Imported labor often outnumbers domestic labor in many Middle Eastern countries, including Saudi Arabia and Kuwait. In addition to complicating administration and increasing costs, importation of labor has been known to generate serious social difficulties. Political and personal clashes are not uncommon. Theft of personal belongings is widespread, particularly in countries where housing facilities for labor offer no security protection. Large construction sites are akin to a small town, and management must anticipate social, economic, and criminal problems of many kinds. The local government may lack the manpower or jurisdiction to assist effectively.

Many of those who sign up to work in a foreign land for a number of years cannot cope with the social conditions and fail to adjust to the local environment. Replacement can be difficult and costly.

PHYSICAL ATTACK—Construction site personnel are particularly vulnerable to physical attack since they are often working in remote rural areas. Employees from capitalist societies may be viewed as symbols, leaving them open to kidnapping, assassination, etc., by foreign terrorists. Conflicts arise among the positions of the foreign government, the employee’s company, and his family. For instance, in a kidnapping, the family will wish to get the victim released as soon as possible; the first priority of the police will be to catch the culprit; the government may not wish to give in to any demands so as to preserve its credibility.

The lengthy hostage crises in Iran and Colombia underscore the intensity and swiftness with which political violence can occur. It is well known that major international corporations are spending more every year to protect their employees from attack. A contractor considering international work must assess the risk of physical harm in order to make a rational decision about what resources should be devoted to countering the threat.

OTHER PERSONNEL RISKS—In addition to health and housing considerations, employers of foreign labor must familiarize themselves with foreign labor laws, possible tax withholding requirements, and foreign labor unions. This becomes a complicated matter when labor from several foreign countries is on the site, because prevailing wage rates vary. These items are a constant concern, even to companies which routinely conduct international business. The following facts were discovered by surveying fourteen leading U.S.-based multinational corporations:

1. Striking differences prevail in the liberality of benefits provided, with wide variation from company to company in the additional costs—the "investment" incurred—for any given assignment.
2. Most compensation plans for local national executives strongly resemble U.S. pay packages; for this reason, they frequently seem to be at

Personnel and Labor Risks  23
odds with both prevailing local pay practices and the company's long-term local national staffing objectives.

3. Most participants did not know how high these costs were, nor had they tried to measure the benefits attributable to the use of expatriates.

The fact that the giants of world trade face unanswered questions in certain areas suggests that individual contractors may also not be able to anticipate every detail of their projects. However, attention to these areas of concern will work to eliminate surprise and confusion once the work is underway.

The matter of foreign labor laws is generally left to the attorneys for a specific project. Events occurring on a project in Venezuela may provide a useful example for the purposes of this book.

The author was associated with a large American construction company working on a long-term project in Venezuela. Litigation was instituted against the company over the discharge of an employee. The court made it clear that Venezuelan employment laws applied to all Venezuelan workers hired by the American firm, and that certain laws—relating to lay-offs, discharge, and benefits—applied to expatriate workers as well. The outcome was that the contractor had to pay all his workers a significant number of costly benefits which are not encountered under American law, including cash bonuses for such things as newborn children, police detention of the employee, and special bonuses for service in excess of one year (regardless of the quality of the employee’s work). There were also mandatory contributions for social and cultural events, school utilities, marriage ceremonies, mortuary services, transportation, identity papers and the like.

It is clear that these costs were likely to mount rapidly during a lengthy project. A contractor's failure to include bonus payments in his cost projections would have a disastrous effect on cash flow and profit.

The Venezuelan lesson is clear: know as much as possible about the host country; a relatively small investment in legal research and consultation will reduce the risk of large, unexpected expenses.

**Other Economic Risks**

The list of possible risks is endless. Among the more prominent are: (1) delays in getting administrative approvals from foreign government officials, which hinder timely completion of work, escalate costs and continue fixed costs; (2) refusals of foreign clients to assume responsibility for any mishaps even though the contractor/engineer is blameless; (3) unanticipated taxes imposed for services performed for the job even though such taxes are outside the foreign country's jurisdiction, and (4) theft and vandalism to onsite equipment. Problems which can arise after the job is complete include foreign and domestic income taxation (for which expert assistance should always be sought) and dealings with host countries whose laws make the contractor the insurer of his structure for a period of several years or more.
CURRENT TRENDS

The wealth of some developing nations, particularly OPEC members, has turned international construction into a buyer's market. Intense competition for lucrative projects gives buying governments substantial power over bidders, so they will frequently try to impose onerous terms on the other parties. Requirements which are neutral on their face—such as equity ownership or complex exchange laws—act as a disadvantage to contractors. Vigorous bargaining after the award invites the risk of losing it. Taking into consideration the extent of the possible losses during construction, bidding without a fair allocation of risks and liabilities may be unwise. Winning a US$1 billion bid is a worthless victory if the contractor faces potential costs of US$1.5 billion.

RISK MANAGEMENT

The classic tools of risk management are analysis, evaluation, mitigation, transfer, and loss control. These apply to international as well as domestic contracts.

The first step in risk management is to consider the nature of the risk (as well as the potential for exposure) that companies incur when contracting overseas. Having identified the risks, the next move is to quantify risk. Most contractors aim to keep their cash flow positive during the contract period, which they try to achieve by negotiating large advance payments. At the same time, analysis should be done of the liabilities incurable if a contract is prematurely terminated due to war, repudiation, embargo, or other external forces.

The types of insurance previously mentioned can be tailor-made for protection against certain risks. Their chief benefit is that they mitigate contingent liabilities. Proper insurance often is the difference between profit or loss.

FORCE MAJEURE

Force majeure clauses are necessary to define the rights and liabilities of the parties in the event of a disruptive occurrence beyond the parties' control. They establish conditions which excuse a party from performing all or part of its obligations, and as such, are different from clauses which address fundamental changes in legal systems or damages related to political upheaval.

The force majeure clause will vary from country to country because activities which are predictable—or even routine in one country might be unthinkable in another. For example, outbreaks of guerilla attack can reasonably be anticipated in Israeli border towns, and would not be so outlandish as to be considered force majeure. The parties would have reason to know of this risk when the contract was made. On the other hand, guerilla warfare in Switzerland would be extraordinary and shocking and might well be a force majeure.

The force majeure clause should always include an allowance for the contractor to increase the price of the contract in an amount equal to the costs created by the force majeure. If the force majeure should make further
work impossible, then the contractor must be entitled to payment for work already completed, even if it has been destroyed.

The Parsons & Whittemore case⁴ discussed above should serve as a reminder that the parties must clearly understand (a) what will constitute a force majeure and (b) what responses will be considered reasonable. Arbitration may be necessary, but its outcome will be completely unpredictable if the contract is vague.
<table>
<thead>
<tr>
<th>Country</th>
<th>Definition of Force Majeure</th>
<th>Labor Disputes</th>
<th>Delivery Delays Due to Port Congestion</th>
<th>Is the Language of the Force Majeure Clause Negotiable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALGERIA</td>
<td>Wars, natural catastrophies, and other disrupting occurrences, including new legislation foreclosing the possibility of further work.</td>
<td>Yes</td>
<td>No, though they sometimes can be alluded to in arguing for time.</td>
<td>Yes, but once agreed upon, it cannot be altered.</td>
</tr>
<tr>
<td>BAHRAIN</td>
<td>Liberal basic guidelines including natural disasters, wars, etc.</td>
<td>Strikes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>EGYPT</td>
<td>Existing civil code includes no provision for Force Majeure. Private parties must specify in contract.</td>
<td>Parties decide.</td>
<td>Parties decide.</td>
<td>Yes</td>
</tr>
<tr>
<td>IRAN</td>
<td>Generally, only war and natural disasters, however, the government may declare a circumstance such as national shortages of building materials and cement a Force Majeure if everyone is affected. (It is unknown at this time what effect the new government will have in this area.)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>IRAQ</td>
<td>No standard clause is used, but most agencies will accept clauses used by the International Chamber of Commerce (ICC) if they are stipulated in the bid offer and subsequently written into the contract before it is signed.</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Country</td>
<td>What is the Definition of Force Majeure in the Tender Regulations?</td>
<td>Labor Disputes</td>
<td>Delivery Delays Due to Port Congestion</td>
<td>Is the Language of the Force Majeure Clause Negotiable?</td>
</tr>
<tr>
<td>----------</td>
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<td>--------------------------------------------------</td>
</tr>
<tr>
<td>ISRAEL</td>
<td>Clause is usually not required, but contractor is advised to include one in the contract.</td>
<td>Yes, if agreed to in the contract.</td>
<td>Yes, if agreed to in the contract.</td>
<td>Yes</td>
</tr>
<tr>
<td>JORDAN</td>
<td>Conditions of Force Majeure are not normally defined in the tender documents.</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>KUWAIT</td>
<td>Only spells out conditions such as war, civil disturbances, and similar unforeseen circumstances.</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(May be negotiable.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIBYA</td>
<td>Usually limited to natural disasters.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, to some extent.</td>
</tr>
<tr>
<td>MOROCCO</td>
<td>Customarily included in tender documents.</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>OMAN</td>
<td>Defined in tender conditions and includes unforeseen circumstance such as wars and natural disasters.</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>QATAR</td>
<td>Fairly standard clause which includes war, floods, fire and &quot;acts of God.&quot;</td>
<td>Yes, although strikes are illegal.</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>What is the Definition of Force Majeure in the Tender Regulations?</td>
<td>Force Majeure</td>
<td>Labor Disputes</td>
<td>Delivery Delays Due to Port Congestion</td>
<td>Is the Language of the Force Majeure Clause Negotiable?</td>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>SAUDI ARABIA</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Tender regulations do not define Force Majeure, although clauses can be put in contract which specify Force Majeure conditions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIA</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Clause is occasionally spelled out in the tender conditions and is always included in the final contract.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUNISIA</td>
<td>No</td>
<td>No</td>
<td>Usually not</td>
<td></td>
</tr>
<tr>
<td>Normally defined as a natural disaster, such as earthquake, famine or civil war.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNITED ARAB EMIRATES</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Usually limited to “acts of God” such as wars and natural disasters.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YEMEN ARAB REPUBLIC</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Not defined in the tender documents and there is no regulation pertaining to its language.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


2. Gordon L. Jaynes, Construction Contracting in Saudi Arabia, ALI-ABA Construction Contracting in Middle East, (1976); Briefing Papers #77-3 (Bixler, "Middle East Construction Contracting").


7. [376 U.S. 398 (1964)].


11. Note 9 supra; Solomon, note 11 supra.


13. [508 F.2d 969 (2d Cir. 1974)].


30 The Varied Sources of Claims
20. Note 9 supra.


24. ENR, 6/19/80, note 25 supra.


27. Powell, Essentials of Construction Contracting in the Middle East, ALL-ABA Course of Study: Contracting in the Middle East (1976).


35. Hicks and McCarthy, note 34 supra.


37. UNITED STATES: Water Pollution Prevention and Control, 33 USC §1251 et.seq.; Air Pollution Prevention and Control, 42 USC §7401 et.seq.

38. Note 27 supra, p. 13; Loustaunau, note 29 supra.

References 31
32 The Varied Sources of Claims
Chapter 2  Contractual-Legal Considerations

General Considerations

Participation in the international construction market brings exposure to a wide variety of legal principles and procedures. The contracting parties may find their relationship governed by a system vastly different from—even contrary to—their own. Parties contracting abroad must be aware of the facets of law which affect day-to-day business, and must be alert to the legal and financial pitfalls hidden in typical provisions of international contracts. Since international construction contracts is so broad a subject and remains unsettled, this chapter will provide general knowledge and insights to how to avoid or resolve various problems.

Legal Systems Vary

The reader should realize that so-called "international law" is generally not relevant to contracts. International law deals with relationships between nations, not individuals, only in rare cases, to be discussed, does a nation pursue the rights of one of its individuals in an international legal forum.

The law under which construction contracts will be executed and performed will be the law of a particular country, or under a combination of such laws often called "general principles." The laws of nations divide into three categories—common law, civil law, and Islamic law. These terms refer to general characteristics of legal systems. They may not always generate a completely different legal result given a particular set of facts, but their procedural and substantive differences deserve special attention:

Common Law

The common law system originated in England and spread to newer English-speaking countries. Under this system, litigation is primarily an adversary proceeding; the court plays a passive role; the parties' counsel have the responsibility of pleading claims or defenses, presenting those factual and legal issues they choose as most convincing for the proof or defense of the case. Oral advocacy plays an important role in the ultimate outcome. Discovery and cross-examination are permitted, and admissibility of evidence is narrowly construed. Moreover, a jury of lay persons may often be permitted in construction cases to decide issues of fact and, on a judge's instructions, render a verdict on the claim.

Substantive concepts of common law have been established over many centuries, on a case-by-case basis. The keystone of common law is the principle of "stare decisis," meaning that once a case settles the legal issues on a given set of facts, all future cases with identical or similar facts will be settled
the same way. As the body of law grows, there are, of course, many cases on record similar to every new case, and it is the duty of the parties to persuade the court that a particular past case is most “on point.” The court then has the duty of examining all arguments on both sides and making a final determination of the applicable law. In some instances, courts choose to disregard past cases, either by carving out a new set of legal principles which is separate from older law, or by declaring that the older case law is incorrect or obsolete and therefore “overturned.” However, courts are reluctant to abandon case law and they seldom overturn a precedent. In most instances they simply declare that the old case law is inapplicable.

Legal thinking is not identical among common law jurisdictions. The outcome on one set of facts may vary between the United States and England, or between Canada and Australia, etc. But the legal mechanism is shared.

Civil Law

The civil law system has its origins in the Roman Empire and the Canon Law of the Church. Legal principles are codified under this system, and past cases are persuasive but not binding. “Stare decisis” does not apply. Most countries of continental Europe have a civil law system, as do other areas they colonized or otherwise influenced, e.g., the French influence on Egyptian law.

Procedurally, civil law litigation is an inquisitorial proceeding in which it is the court or judge who plays the active role, while the parties are relatively passive. This is basically the reverse of the common law procedure. Jury trials are rare in civil code systems. There is no pre-trial discovery or cross-examination. Questioning of witnesses is performed by the court. However, oral testimony is of less importance under this system, where the proceedings are of a written and documentary nature.

The substantive law in a civil code system is comprised of written statutes covering individual and commercial dealings. Civil law varies from common law in that instead of a decision being based on the outcome of prior cases, civil law bases its decision on existing statutory law. In fact, prior decisions under civil law are generally accorded little weight by the trier of fact.

Islamic Law

Since a sizeable portion of international work is performed in the Middle East, a contractor must acquaint himself with the basic precepts of Islamic law. The legal system in Islamic countries, known as Shari’ah, represents a merger of religious, ethical, social, and legal concepts. The Shari’ah is composed of the Islamic Holy Book—the Koran, the practice and sayings of the Prophet Mohammed, and the writings of Islamic legal scholars over the centuries. The Shari’ah is permeated with high moral and ethical standards, and its dominant theme is that the parties are expected to be fair.

The general principles of commercial law and concepts of contract are basically similar to western systems of law. However, problems arise when attempting to adapt the principles of Shari’ah to modern commercial transactions. In many legal systems, the terms of the contract govern exclusively. To a person of the Islamic faith, a transaction may be concluded by agreeing informally and in good faith on the major principles of the transaction, while
at the same time, leaving the minor details to be handled at a later time—if and when necessary.

As Mideastern countries increasingly participated in big international transactions in recent decades, they found the Shari'ah provides insufficient guidance for today's complex commercial matters. So they enacted codes or promulgated decrees to deal with specific problems. While these recent codes sometimes resemble common law or civil law counterparts, they must always be interpreted in accordance with basic Islamic principles. The codes do not change or modify the Shari'ah; rather, they expand the jurisdiction of the Shari'ah courts into new areas. Cases decided under the commercial codes of other jurisdictions may not automatically be accepted by Islamic courts, but may be slightly persuasive if they suggest a clear pattern of thought among nations and are not inconsistent with or offensive to Shari'ah principles. Tact and good judgment are essential. In Moslem countries, the law is not separate from religion but an intrinsic part of it.

Kuwait's legal system is exemplary of Mideastern systems. The most acute problems foreign parties face when litigating a claim in Kuwait are delay and expense. Initially, a claim may be filed only after efforts to negotiate a settlement prove unsuccessful. Then, great emphasis is placed on compliance with a multitude of procedural requirements concerning the form and timing of complaints or defense, for postponement of the case is likely if there are irregularities in the documents. Only Kuwaiti attorneys may litigate cases; foreigners are not permitted to act as attorneys or to attend court sessions.

If liability is found in a technically complex case, the dispute is then referred to a panel of experts to calculate damages. Meeting procedural form requirements dictates more delay. Furthermore, summer recesses by the court also tend to extend hearing dates and ultimate decisions.

When the expert's department finally issues a report on damages, the judge may or may not adopt it. After another round of arguments on the question of liability, the judge renders a decision in the form of a judgment. This judgment may be appealed upon timely and proper notice. The Court of Appeal generally will reconsider the legal basis for the findings on liability. Compelling reasons can invite a decision by Kuwait's highest court, the Cour De Cassation. This court reviews lower court judgments for errors of law, but accepts the facts as provided in the prior lower court proceedings.

In Saudi Arabia the Grievance Board supplements the Shari'ah Courts. A permanent institution established in 1955, the board's jurisdiction extends to cases arising from issues not expressly covered by the Koran, e.g., foreign judgments, industrial or labor code disputes and matters arising under royal decrees.

Upon receiving a complaint, the President of the Council of Ministers assigns the case to an investigator or legal counsel who will conduct a hearing to ascertain the facts. The investigator (or counsel) submits his findings and recommendations to a hearing board called the Case Investigations Committee for a decision. Next, the President of the Grievance Board reviews the Committee's decision, either approving it or possibly requesting a re-investigation. After a final decision by the President, judgment is rendered. The decision is forwarded to the appropriate ministry or agency for implementation. The ministry, however, may appeal the decision, in which case

Islamic Law  35
the King will then arbitrate the matter and present his decision in the form of a Royal Order. At all stages of the procedure involving typical international construction issues, decisions are based on the construction tender's regulations and specific contract provisions—not on precedents—and are governed by the Islamic principle of fairness.

Many Middle Eastern countries have similar judicial systems and procedures. All are time-consuming and expensive, and best avoided, if possible. Negotiation is far more efficient because the parties to the dispute can agree to keep procedural technicalities to a minimum. Aspects of negotiation and arbitration will be discussed in chapters 9 and 10.

**GENERAL PRINCIPLES OF LAW**

International contracts frequently call for enforcement by reference to "general principles of law" or equivalent expressions rather than specifying the applicable national law under which the contract may be enforced. General principles of international law are not a definite and distinct body of international contract law, but are considered to be those principles of law which are normally recognized by civilized nations in general, including those which have been applied by international tribunals. One such fundamental rule of law which is the basis of every contractual relationship is "pacta sunt servanda"—contractual undertakings must be respected. Another maxim of law common to all nations is that a failure by one party to a bilateral contract to perform its obligations is a breach of contract and releases the other party from its obligations and gives rise to a right to pecuniary compensation in the form of damages.

An arbitrator used the general principles of law approach in the case of *Sapphire International Petroleum, Ltd. v. National Iranian Oil Company*. Sapphire was a Canadian corporation. Canada is in part a common law jurisdiction, and the general principles in question were well known there. On the other hand, Iran, a civil law country at that time, had not codified the principles even though it had provided for their use in certain contracts. The arbitrator concluded that the principles were, by implication, common to both nations and the case was decided accordingly.

Some writers have contended that "general principles" are not a formal legal system and they are therefore insufficient to govern a contract. They believe that the only "proper law" is one which has been codified and recognized. However, other authorities have pointed to the emergence of a new system of law called "transnational law" which includes these general principles. Transnational law contains certain substantive rules which cross national boundaries and govern the contractual relationship of the parties, whether equal in status or not, whenever the parties express or imply their intention to exclude a specific national law.

Those who favor the theory of transnational law see it not as pure international law (which deals with affairs of state, not private matters), but as a new international legal mechanism which shares with international law a common source of development and inspiration, namely the general principles of law recognized by civilized nations. Under this view, general principles of law are the backbone of all international law, but the application of the
principles occurs in two separate forums: at the national level as public international law, and at the private level as transnational law.

Generally, international law will only become important to any unfortunate contractor who must resort to one of two recognized international law causes of actions which could be relevant to construction contractors. One cause of action arises when the foreign government impairs a contractor's ability to obtain justice by restricting its access to courts, causing unreasonable delay or otherwise damaging the contractor. Once all reasonable legal remedies are exhausted, the contractor may enlist the aid of its government to bring suit against the foreign nation for relief due to the denial of justice incurred by the contractor.33

The other cause of action arises when the contractor must turn to its own government when the host country where the contractor is working or has an interest takes property without payment of prompt, adequate, and effective compensation. After exhausting available local remedies, the contractor can resort to its government to pursue under international law the claim arising from expropriation.34

Litigation involving governments takes place at the International Court of Justice in the Hague, the Netherlands, where governments pursue an individual's or company's claims only in extreme cases. The rationale for pursuing an individual claim at all is that an injury to an individual is an injury to that individual's nation, on the theory that a nation is simply a collection of individuals; the whole is the sum of its parts.

Many Latin American countries have attempted to eliminate an individual's right to seek his home country's aid in resolving a dispute. These nations have required individuals to waive the right by agreeing to include in the contract a so-called "Calvo clause", which typically states that:

...doubts and controversies that may arise on account of this contract shall be decided by the competent tribunals of the State in conformity with its law, and shall not give rise to any foreign diplomatic intervention or international reclamation.35

Arbitral tribunals have consistently held that where an alien, in consideration for settlement of a claim, voluntarily agrees with the respondent government not to submit any questions or disputes arising from the contract to an international claims procedure or to waive further claims, the state of nationality is prevented from presenting a claim on his behalf.36 Such a waiver has been determined to apply only to "any matter connected with the contract."37 However, the Calvo clause is ineffective where it deprives the claimant of his rights by a denial or delay in justice.38 Several governments, including Great Britain, accept this reasoning as good law.39

Governments themselves have not agreed with the arbitral tribunals. Some industrialized nations, particularly the United States, argue that a Calvo clause may be effective between the parties to the contract, but it is not effective in denying a government the right to pursue the individual's claim in the international legal forum.40 The reasoning: To permit a broader reading of Calvo clauses gives individuals the power to waive the rights of their government, which is inconsistent with the theory that states are sovereign. Nevertheless, government intervention is rare. Even if it were available, the individuals
involved must show that they have completely exhausted every local remedy in the foreign state. For example, if a Japanese contractor experiences difficulty in Guatemala and a Calvo clause is in effect, the government of Japan will not even consider intervening until the contractor has sought and been denied relief from all the Guatemalan tribunals capable of dealing with the problem. If the government of Japan did eventually agree to pursue the claim, the case would not be heard in Japan or Guatemala; rather, the International Court of Justice would have jurisdiction, and general principles of law would be applied to the dispute between the two nations.

It is important to note that any waiver expressed will not be valid if the respondent government has declared the contract null and void or where it has suppressed the arbitral tribunal provided for in the contract. The waiver language must be explicit, in unequivocal terms and be contained in an agreement made by the central national government itself and not by a municipality or a public corporation. Furthermore, the waiver must be expressed in a contractual provision and not in a state constitution, law, or decree which has not been expressly incorporated into the contract.

**Standard Documents**

The type of document to be used by the parties to an international contract is a primary consideration. Most nations have developed standard contracts for works of civil engineering for use between parties who are citizens (i.e. domestic contracts). In some cases, these may also be used when one of the parties is an alien. A few countries (e.g., England and Australia) use a different standard contract, i.e., an international form, when aliens are involved in the project. However, there has been a general increase in the use of a standard form international contracts which endeavor to place the parties on equal footing. Table 2-1 lists many widely used international and local standard contracts.

**FIDIC**

The Federation Internationale des Ingenieurs Conseils (FIDIC) established a set of documents which are widely used in international contracting. Its “Conditions of Contract (International) for Works of Civil Engineering Construction” (3rd Ed., Mar. 1977) is used universally for major civil engineering works. FIDIC also publishes a similar document for electrical and mechanical works.

FIDIC specifications are approved by the Associated General Contractors of America, the Inter-American Federation for the Construction Industry, the International Federation of Asian & Western Pacific Contractors Associations, and the International Federation of European Construction.

FIDIC represents the interests of independent consulting engineers worldwide. Members meet periodically to discuss matters of importance to the consulting engineer.

Contractors and owners everywhere benefit from the care and attention FIDIC devotes to making its documents responsive to the changing needs of the international construction community.

38 Contractual—Legal Considerations
<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENMARK</td>
<td>General Conditions for Works and Supplies for Building and Civil Engineering Works AB72 issued by the (Danish) Ministry of Public Works. 29 November 1972.</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Standard Clauses and General Conditions for Construction of Bridges and Highways. Government of France. [Cahier des Clauses et Conditions Generales des Marches des Travaux des Ponts et Chausées.]</td>
</tr>
</tbody>
</table>

The FIDIC specification divides into three parts. Part I consists of the "General Conditions," i.e., clauses defining the parties' rights and obligations. Part II contains "Conditions of Particular Application," i.e., those clauses specifically drafted to meet the needs of the contract, including conditions unique to the locality of the project being performed, such as taxes, labor laws, local holidays, language, etc. Part III relates to provisions for dredging and reclamation work, where applicable.

A FIDIC document, *Tendering Procedures*, guides owners, engineers and

**FIDIC** 39
Table 2–1 Continued:  STANDARD CONTRACTS

IRELAND
Agreement and Schedule of Conditions of Building Contract (with quantities). Royal Institute of Architects of Ireland 1977 Edition

JAPAN
General Conditions of Construction Contracts. Japanese Architects and Contractors Institutes and Associations March 1975

THE NETHERLANDS
Uniform Administrative Conditions for Execution of Work (Dutch) Ministers of Transport and Waterways, Defence and Housing and Town and Country Planning 1968

NORWAY
General Conditions of Contracts for Construction and Building. Norwegian Standards Association, NS 3401E June 1969

SAUDI ARABIA
Tenders Regulations and Rules for Implementation Royal Commission of Saudi Arabia. (1977) (See Appendix for Text)

SWAZILAND

SWEDEN
General Conditions of Contract for Building, Civil Engineering and Installation Work Form No. 2072 (AB72), The Association of Swedish Engineers and Architects

UNITED KINGDOM
Conditions for the Reconstruction . . . of Plant and Equipment in the United Kingdom Involving work on the site (RC) The British Electrical and Allied Manufacturers Association Ltd. 1978

General Conditions of Government Contracts for Building and Civil Engineering Works GC/ Works/1 Edition 2—HMSO London September 1977 (See Appendix for Text)

Model Form of Conditions of Contract for Process Plants . . . Lump Sum Contracts in the U.K. Institution of Chemical Engineers October 1968

Model Form of Conditions of Contract for Process Plants . . . for Reimbursable Contracts in the U.K. Institution of Chemical Engineers July 1976

Model Form of Conditions of Contract . . . Home Contracts. The Institution of Mechanical Engineers

The Institution of Electrical Engineers, Association of Consulting Engineers 1976 (with 1978 Amendments)


UNITED STATES

others involved in selecting contractors for international projects. Tendering Procedures contains a "step-by-step checklist of actions for selecting a contractor and examples of all relevant document forms." FIDIC’s promotion of uniformity in worldwide bidding procedures is very beneficial to contractors as well.

40 Contractual—Legal Considerations
OTHER STANDARD CONTRACTS

A standard international contract similar to FIDIC's is the Conditions of Contract of the Institution of Civil Engineers (ICE) of England. Most English and Irish engineering works use ICE, as do some British Commonwealth countries. Later chapters will discuss ways in which ICE differs significantly from FIDIC, although they are similar in wording and structure.

Foreign contractors in Saudi Arabia may find their contract is administered by the U.S. Army Corps of Engineers. As a result of a 1965 agreement between Saudi Arabia and the U.S., the Corps is responsible for the awarding and administration of planning, design, and construction contracts worth billions of dollars.46

The Corps acts as an agent for the Saudi government by conducting all prequalification screening of those who wish to be considered for a Corps-administered Saudi contract. A contractor must request to be prequalified for each contract in which it is interested. The Corps submits the list of prequalified contractors to the Saudi government for its approval. Approved contractors submit proposals and those which are "competitive" are considered for final negotiations.

The parties to a final contract will be the contractor and the Corps. Most of the contract provisions will be identical to those found in contracts performed with the Corps in the United States. However, the Corps has incorporated some special provisions in their international contracts, because these contracts may involve third country nationals as well as U.S. firms. For example, contracts have been worded so as to avoid any conflict of law questions. Moreover, there are three different "Disputes" clauses in the General Provisions: one applies to U.S. firms; one applies to foreign firms other than Saudi firms; the other applies to Saudi firms. U.S. and non-Saudi foreign firms are subject to the substantive laws of the United States. The Corps of Engineers Board of Contract Appeals (ENG BCA) hears and decides disputes of any non-Saudi contractor who receives an adverse decision from the Contracting Officer (C.O.). A Saudi contractor must, under the Saudi/U.S. agreement, appeal his claims to the Grievance Counsel of the Saudi Arabian government.

Passage of the Disputes Act in the U.S. in 1978 may afford those who contract with the Corps in Saudi Arabia the right to pursue relief in the U.S. Claims Court. Prior to the passage of the Contract Disputes Act, it appeared that a contractor could not appeal a Board of Contract Appeals decision to the U.S. Court of Claims (a Court created by Congress to adjudicate contract claims against the U.S.), because the Court's jurisdiction was limited to judgments on contracts which could be satisfied from appropriated funds. The Disputes Act grant parties to certain contracts with U.S. executive agencies direct access to the Claims Court. However, for contracts with foreign governments (or their agencies) or international organizations, such access is granted on a case by case basis. Under the act, discretion lies with the head of each agency to decide whether making the provisions of the act (including the right to bring suit in the Claims Court) applicable to such contracts is in the public interest.47

Standardized contracts within a single country or Commonwealth, are
sometimes used by national or local governments. Generally, these documents are drafted by domestic agencies who modify the provisions to suit their specific needs. Owing to the great number of and many variations among these standard domestic contracts, a comprehensive discussion of each is not attempted in this volume. However, selected clauses are cited to illustrate the risks. All parties should be aware that reliance on locally standardized contracts generally increases the uncertainties in multinational business dealings.

[Table 2-1 lists both domestic and international standard construction contracts.]

Prudence is advised when modifying a standardized contract. Advantages of using such an agreement are its balanced approach to the interests of the parties, and in the relatively stable interpretation of its terms by arbitrators and courts. Therefore, any decision to alter its provisions must be weighed carefully.

Although standard contracts, FIDIC for example, should not be considered unassailable or unimprovable, one commentator cautions that “extreme care is required in making modifications to the general provisions.” Similarly, the Standing Joint Committee of the I.C.E. Conditions of Contract recommends that:

When Clauses 1 to 71 of the ICE Conditions of Contract are incorporated in a Contract they are best incorporated unaltered. The Clauses comprise closely interrelated conditions and any changes made in some may have unforeseen effects on others."

Different standard international contracts will be compared and contrasted in detail in the following chapters. Since they can be very dissimilar, generalizations are difficult. However, the one unifying factor is that they provide a useful framework for dealing with the complexities of international construction projects.

Language and Law Clauses

OFFICIAL LANGUAGE

The language problems outlined in Chapter 1 are to some extent reduced by Clause 5 of the FIDIC documents, which states that:

(b) “...if the said documents are written in more than one language, the language according to which the Contract is to be construed and interpreted shall also be designated in Part II, being therein designated the “Ruling Language.”"

This will protect the parties by compelling reliance on only one version of the contract. However, the reliability of the translation of each version continues to be of paramount importance, since there will be many participants in the work who may rely solely on the version which is not in the “ruling language.”

42 Contractual—Legal Considerations
CHOICE OF LAW

The parties may wish to specify in their contract the rules of substantive law to be applied to their contract. Agreement on this point specifies the legal framework within which the contract will be construed and interpreted, regardless of the country in which a claim or dispute is ultimately litigated. Using a third country’s laws is advantageous when the legal systems of the parties’ countries are in flux or otherwise unsatisfactory. Thus, many contracts call for interpretation under the laws of Switzerland, England, or the United States, countries having stable legal systems and long experience with complex commercial transactions.

If the laws of a third country are to be used, it is imperative that the parties agree on a tribunal which is both willing and competent to use those laws. To require, for example, the courts of Ghana to use Swiss law will be a worthless formality if Ghana’s courts fail or refuse to follow Swiss principles. Foreign governments resist attempts to circumvent their own legal systems. A more attractive approach when contracting with a governmental agency is to require that a third country’s laws be used as an alternative if the host country experiences substantial legal change (see Chapter 1). Private owners are generally more flexible on the use of third country laws.

The party’s failure to select a law to govern the agreements may lead to results contrary to its original intentions. In settling a dispute over one such transnational contract, the tribunal applied the law of the country with the most meaningful contracts, which was the law of India. Despite the fact that the contract apparently placed the burden for labor cost increases on the contractor, the tribunal, following Indian law, shifted that burden to the owner.51

FIDIC’s Clause 5 illustrates a provision for the choice of law:

(1) There shall be stated in Part II of these Conditions:

(b) The country or state, the law of which is to apply to the Contract and according to which the Contract is to be construed.52

CHOICE OF FORUM

Some contracts specify not only that a particular set of laws govern the contract disputes, but also that the litigation itself take place in a specified country. A “forum selection clause” specifies the jurisdiction in which the proceedings will be held, the purpose being to choose a neutral site which assures the parties of a fair outcome. But governmental agencies seldom agree to these clauses—in fact, many specifically require that their national law be the applicable law in settling disputes.53 Private owners, on the other hand, are willing to negotiate the point.

Parties may select the laws of one nation to apply in a forum in different country. For example, an English contractor and a Brazilian owner might agree that their disputes will be heard in Swiss courts under the laws of England, or the laws of Brazil, or perhaps the laws of some other country. Due to the practical necessities of international business, the trend in most jurisdictions is to enforce choice of law and forum clauses. However, there is one important caveat: the courts remain free to refuse jurisdiction on the
ground that the dispute has no connection with the forum chosen. In the example given, the Swiss courts might refuse to hear the case on the grounds that Switzerland was totally unrelated to the parties' contract. Judicial economy has become increasingly more important as the volume of litigation grows. Therefore, the parties must make certain that the court they want to use will agree to hear their case.

To ensure enforcement of a choice of forum clauses, certain measures are necessary. Examples: In common law jurisdictions a local agent may have to be appointed; in civil code jurisdictions, an election of local domicile may have to be made. A simple method of ensuring enforcement is to execute the contract in the chosen forum. The English and Brazilian parties mentioned above could arrange to prepare and sign the final documents in Switzerland, in compliance with Swiss law, thus enabling them to show that Switzerland was at least tangentially involved in the contract. Courts are receptive to this approach.

As a general rule, a forum state will require that its own procedural laws be followed regarding filing and timing of court documents, presentation of witnesses and evidence, etc., even if foreign substantive law will govern the outcome of the case.

Payment Provisions

TYPE OF PAYMENT

Compensation arrangements for international projects have usually been limited to lump sum or fixed fee contracts. Unit price contracts are sometimes used. Cost-plus contracts are generally not used for international construction work, but are used occasionally for repair work and for work supplemental to the main project.

Fixed Fee

On domestic jobs, a fixed fee or lump sum contract is suitable when the extent of work can be well defined in plans and specifications. The purpose of using this type of compensation is to help the owner set a ceiling on project costs and permit the contractor to utilize his ability to handle manpower and material in the most ingenious manner to maximize his profits.

To establish a fixed fee amount, the bidder must undertake a detailed quantity take-off as a base for identifying costs. However, the difficulties inherent in calculating into a fixed fee contract the cost of travel, foreign incentive payments to employees, and overseas housing and subsistence are readily apparent. The contractor must also place a money value on all the risks enumerated in Chapter 1, a task which is speculative at best.

To ease the risk of certain unexpected cost factors, fixed fee contracts may contain escalation clauses for rising material and labor rates. An escalation clause will provide that the contract price will automatically be adjusted on the occurrence of some specified event. Clause 70 of the FIDIC documents illustrates a typical escalation clause:

(1) Adjustments to the Contract price shall be made in respect of rise
or fall in the costs of labour and/or materials or any other matters affecting the cost of the execution of the works...58

Clause 70 specifies that changes in costs arising out of changes in governing legislation are grounds for invoking the escalation clause. To apply the clause, other conditions should be carefully set out within a bill of quantities, rate schedule, or other contract provisions.

The government of Swaziland uses a complex formula to insulate the contractor from the adverse impact of price fluctuations. This clause from the government contract provides an interesting model:

Fluctuations:

(1) The Contract price shall be subject to adjustment by reason of variations in labour, plant and materials costs occurring between the date of tender and the contractual completion date and any extension thereof in terms of Clause 19. The value of any such adjustment shall be calculated by multiplying each month the amount as defined in sub-clause (2) of this Clause by the Contract Price Adjustment Factor for that month as determined by the Formula:

\[(1 - x) \left( a \frac{L_t}{L_o} + b \frac{P_t}{P_o} + c \frac{M_t}{M_o} - 1 \right)\]

in which the symbols shall have the following meaning:

(a) \(L\) is the contract price and \(x\) shall be the proportion of that price not subject to adjustment, and unless otherwise specified, this proportion shall be 0.25 (inclusive of Government standard 10% Contingency sum).

(b) \(a\), \(b\) and \(c\) shall be co-efficients which are deemed to represent the proportions of labour, plant and materials costs, respectively, to the total cost of work and shall collectively be equal to “one”. Their value shall be determined by the Quantity Surveyor.

(c) “\(L\)”, the Labour Index, shall be the “Consumer Price Index. All Items” as published by the Department of Statistics for the weighted average of the eleven urban areas.

(d) “\(P\)”, the Plant Index, shall be taken from the “Wholesale Price Indexes (Commodities for South African Consumption, South African produced and imported)” and shall be the average of the two items “Machinery, Non-Electric” and “Transport Equipment”, as published by the Department of Statistics.

(e) “\(M\)”, the Materials Index, shall be the “Wholesale Price Index of materials used in Building and Construction”, as published by the Department of Statistics.

(f) “\(o\)” shall mean that the Index to which it is suffixed shall be the index applicable to the month prior to the month in which the closing date of tender falls.

(g) “\(t\)” shall mean that the Index to which it is suffixed shall be the index applicable on the last day of the period to which the certificate under consideration relates.

(2) For the purpose of calculating the value of the monthly adjustment,
the amount to be multiplied by the Contract Price Adjustment Factor as specified in sub-clause (1) of this Clause shall mean the full amount certified to payment each month before the deduction of retention money but this shall exclude:

(i) the amount of daywork during the period to which the certificate relates, provided such daywork has been measured at current rates and prices.
(ii) the amounts due to any nominated sub-contractors or nominated suppliers, provided these amounts are not themselves subject to variation in price in terms of the sub-contract.
(iii) the amounts of previous certificates.

In the event of the contract extending beyond the contractual completion date, the price adjustment factor to be applied to the amounts certified for payment after the contractual completion date shall be that applicable at the contractual completion date.

The price adjustment factor calculated in terms of sub-clause (1) of this Clause shall be applied to costs of labour, plant and materials at the time of tendering.69

In some instances the applicable law may be helpful. The law in India places the burden of labor cost escalation on the owner, regardless of whether the contract is silent as to the contrary on this point.66

Unit Pricing

The term “unit pricing” is intended to include the terms “schedule of rates” and “bill of quantities” which frequently appear in international contracts. While the terms are not identical in every respect, they possess significant operational similarities.

In many heavy construction contracts, the bid consists of unit prices for a list of items of work which are shown on the plans and described in the specifications. The quantity requirements for these items are provided by the owner, and the total bid price is the sum of the unit prices multiplied by the quantities needed.

In this type of contract, the owner assumes the risk of the accuracy of the quantity estimate which, in turn, will determine the total cost of construction; the contractor bears the risk that the actual cost of each unit of work may exceed the unit price he has offered. [See “Variations in Estimated Quantities”, Chapter 3, Sec. C, for a fuller discussion of the topic.]

An unclear or ambiguous description of the work included in a particular pay item often leads to differences of opinion. Clear, precise plans are important in every project, but especially so when unit prices are involved.

Cost-Plus

Cost-plus contracts are considered by many contractors to be the most attractive business arrangement. The primary advantage to the contractor is that the owner assumes the risk of increased costs, provided they are not caused by the contractor’s deliberate act or omission. In general, the owner pays the contractor for all necessary and reasonable expenses directly in-
curred in the construction, plus some pre-arranged fee, either a lump sum or a percentage of cost. The former is generally abbreviated as "CPFF," which stands for cost-plus-fixed-fee, while the latter is "CPPC" for cost-plus-percentage-of-cost. The parties to such contracts must have a clear agreement as to which costs are reimbursable and which are not, because disputes over particular items are likely to delay essential work and give rise to other debatable expenses.

Cost-plus contracts were for many years a common arrangement in international construction, but foreign owners, particularly governments, increasingly resist them. The reasons for this change are not altogether clear, but a frequent assertion is that cost-plus has enabled an unscrupulous contractor to take financial advantage of an owner lacking in construction experience.\textsuperscript{61} Fixed-price contracts are frequently required by owners, unless the project is so vast and lengthy that a reasonable cost estimate could not be made at the outset, as was the case with the King Khalid Military City in Saudi Arabia.

**TIMING**

**Mobilization**

Initial planning and organization in preparation for an international construction project entails considerable start-up expense. Employment, housing, equipment, and materials, to name a few, combine to place a major financial burden on a contractor. Mobilization becomes more difficult when international work is involved. Commencing foreign operations may involve more tasks and coordination than start up on domestic projects, and may not proceed as smoothly.

Some contractors resort to unbalanced bidding as a means of receiving "up front" financing for a project. Large firms experienced in international work undertake projects on the premise that progress payments will not have to be exclusively relied on to finance work. Many contracts often provide a pay item for mobilization and bond costs to help insure that the contractor will be in sound financial condition in the later stages of the work. This is typical in heavy construction contracts for the largest projects, in which as much as 20% of the total contract price may be provided in advance. (Saudi Arabia, however, reduced its advance payments from 20% to 10% of contract price.)\textsuperscript{62} Subsequent progress payments are then proportionately reduced to offset the advance for mobilization expense.

Contract clauses which provide for "up-front" money may put conditions on these payments, such as placing restrictions on their use by the contractor and designating the method of repayment to the owner if the contract is not performed.

Owners will frequently require that the contractor's letter of credit provide for repayment of unnecessary mobilization payments, but this will not be enforced unless the contractor's expenses are clearly unreasonable.

Experience in the expanded international market has given owners and contractors considerable expertise in those complex areas. Therefore, the parties are more likely to be on equal footing when pricing mobilization. Since all parties to the contract will benefit from timely completion of the work, funds for mobilization will probably not be difficult to arrange. However, the

*Mobilization* 47
contractor may experience immediate cash-flow problems if it fails to make a thorough study of mobilization expenses peculiar to the host country. Airfare and air freight are easy to price, but housing and access problems may have to be resolved by experts. Experts are one of the most expensive necessities and cost estimates must adequately cover all advisory services.

**Progress Payments**

Construction contracts typically call for periodic payments based on work completed, materials received and stored, profit and overhead, and other expenses directly related to the work. International contracts must specify what expenses will be covered by progress payments, since practices common in one country may be different in another.

A common source of delay and expense is port congestion, a hazard for which many developing countries are notorious. In areas where port congestion is predictable, reliance on force majeure clauses will be unsuccessful; accordingly, specific provision must be made for those delays, as well as for delays in transporting heavy equipment overland if inadequate roads and rail service must be used.

Port congestion problems can sometimes be avoided by using the facilities of neighboring countries, as is often done in Kuwait. This may be faster and more convenient, but the parties must ascertain that the receiving country will not tax or delay the shipments. This is usually only a formality, but it cannot be overlooked.

The contract should specify the dates on or before which progress payments will be made, including an unambiguous description of what will be covered. The Saudi Arabian Tenders Regulations provide an example, allowing:

...professional payments... up to 75% of the established value of the materials furnished by the contractor for incorporation in the permanent structures and which are actually required for the work, provided they are in conformity with the conditions and approved, and are properly stored....

The *FIDIC Conditions of Contract* (clause 60, Certificates and Payments) contain general guidelines on how to structure progress payments for monthly requisitions for permanent work executed that month, or for temporary work included in the Bill of Quantities. The clause also sets out the place of payment and frequency of payment (if other than monthly). These optional clauses must be specifically prepared to suit each particular contract.

If the contractor has received a letter of credit from the owner, it should contain a clause permitting the contractor to “draw down” any progress payments which are unreasonably withheld. Drawdowns can create a hostile atmosphere between the parties, so they should not be made unless they are absolutely necessary. Their greatest value is the fact that their presence encourages the parties to meet their obligations.

**Retention**

Traditionally, owners have withheld a certain percentage of each progress payment to provide the owner with security against non-performance by the contractor. In view of the extensive use of letters of credit or other types of
performance insurance, retention is superfluous. Yet in some cases it is still required.

Retention impedes the contractor’s cash flow, and every effort should be made to avoid it through the use of insurance. Alternatively, a different approach would be to have the percentage retained decrease as the percentage of work completed increases, with possibly the last few payments including surpluses representing refunded retainage. The retention agreement between the owner and the contractor should be mirrored by the retainage agreements between the contractor and the subcontractors.

The letter of credit payable to the contractor should provide for a drawdown if the owner violates the contract by holding too much in the retention account.

**Final Payment**

Under general principles of contract law, the contractual relationship expires when final payment is made. Final payment indicates that the selling party has provided all that it agreed to provide and that the buying party has received the goods or services and found them to be satisfactory. These principles are frequently altered in construction contracts, however, and a contractor’s responsibility may not end when final payment is received. Depending upon the laws of the host country or particular contract clauses to which the parties have agreed, the contractor may have a continuing duty (for a specified period) to keep the completed works in good repair, or he may be viewed as an insurer of the building after it is occupied.

Most construction contracts call for final payment when the works have been “substantially” completed. Substantial completion is reached when the work is sufficiently complete, in accordance with the contract documents, for the owner to occupy the work for the use for which it was intended. This term is open to subjective interpretation. The point at which substantial completion is achieved may depend upon the contractor’s obligation to attend to “punchlist” items. Because it is generally the project engineer (i.e., owner’s representative) who decides when substantial completion is reached, the contract should provide for final payment when the engineer has made that decision. The contractor will probably have some work to perform, or minor corrections to make, but must not in any way alter or damage the works which the engineer previously found to be substantially complete.

Clause 48 of the FIDIC documents specifies the procedure to be followed for issuance of a Certificate of Completion. (The full text of Clause 48 appears in the Appendix.) The basic procedure is for the contractor to notify the engineer in writing that the works have passed “any final test that may be prescribed by the contract” and to request the Certificate. The contractor’s request includes an express promise to finish any outstanding work which may be necessary after issuance of the Certificate. The period between certification and the contractor’s final and complete departure from the project is called the “Period of Maintenance” in the FIDIC documents—see Clause 49(1).

Upon receipt of the contractor’s written request, the engineer must, within twenty-one days, issue or expressly deny the Certificate. A denial must specify “any defects in the works” which prevent certification. The contractor

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**Final Payment** 49
is then entitled to receive the Certificate within twenty-one days after he repairs any such defects.

FIDIC procedure is consistent with common practice in most construction contracts. Issuance of the Certificate entitles the contractor to final payment including retainerage, less any amount related to maintenance of the completed work. The contract must clearly indicate the portion of the contract price which may be allocated to maintenance.

When the maintenance period has ended, the project is turned over to the owner in the condition specified under contract terms. FIDIC Clause 49(2) covers this topic in the following language:

(2) To the intent that the works shall at or as soon as practicable after the expiration of the Period of Maintenance be delivered to the Employer in the condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall finish the work, if any, outstanding at the date of completion, as certified under Clause 48 hereof, as soon as practicable after such date and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Period of Maintenance, or within fourteen days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration.65

The cost of work performed by the contractor during the maintenance period to correct any deficiencies which were contractor-caused must be borne by the contractor.66 However, if the engineer is of the opinion that such corrective work was due to problems not the fault of the contractor, the value of such work is calculated and paid for as if it were additional work.67

The issuance of a Maintenance Certificate is not a condition precedent to payment for the work performed, but does mark the end of the contractor’s obligations.68

ASSURANCE OF PAYMENT

Even if the work progresses smoothly, parties expecting payment under the contract may have legitimate doubts about whether they will receive all that they are owed. The owner may become insolvent or, in the case of governments, changed ownership or responsibility can lead to a subsequent repudiation of the preceding government’s obligations. Letters-of-credit and insurance arrangements reduce these risks, but relying on them is often cumbersome, time-consuming, and conditioned upon an exhaustive showing that the owner will not pay. Banks and insurers are unlikely to pay prematurely.

The contractor’s primary concern is always the financial stability of the owner. International banks, insurers, and accounting firms can provide verification of an owner’s financial status, and a prudent contractor will not hesitate to avail itself of these sources. If the owner is a government, insolvency is unlikely, but a contractor should not jeopardize its financial well-being by failing to investigate the government’s past performance in international work. Contracts are based on the presumption that each party is

50 Contractual—Legal Considerations
both willing and able to meet its obligations. There is no excuse for doubt or guesswork.

The contractors second greatest concern is the owner's willingness to pay. It may be difficult for the contractor to extract funds to which he is entitled because of a failure to obtain prior approval for certain expenditures. If the owner's failure to pay is unreasonable, the contract terms should be effective in permitting the contractor to stop work and collect interest on payments withheld. Such provisions of this kind make it impractical for the owner to refuse payment.

**CURRENCY AND EXCHANGE**

The FIDIC documents provide a mechanism for dealing with some of the currency problems discussed in Chapter 1. FIDIC standard clauses may have to be modified in certain circumstances, but they are instructive in showing how the parties can structure protection in their contract. FIDIC Clause 60(3) anticipates the need to import materials, plant, or equipment from a country other than the host country, or to pay foreign labor in foreign currencies. This clause requires the owner to make a portion of the payments in the necessary foreign currencies, thus shifting the burden of exchange rate fluctuations away from the contractor. Similarly, FIDIC Clause 72 discusses when and how the owner shall make payments in foreign currencies (assuming that the relevant treasury regulations permit it). Clause 72 requires that the rate of exchange applicable to such payments shall be:

> ...as determined by the Central Bank of the country in which the works are to be executed, on the date thirty days prior to the latest date for the submission of tenders for the works, as shall have been notified to the Contractor by the Employer prior to the submission of tenders or as provided for in the tender documents.\(^{69}\)

This clause insulates the contractor from fluctuations. Although such clauses should be supplemented by research into other aspects of exchange laws (as discussed in the first chapter) they go a long way in relieving the inevitable hazards of the currency markets.

**Disputes Clauses**

Disputes related to the construction process are inevitable. The parties must anticipate them and plan to resolve them in good faith. The purpose of disputes clauses in the contract is two-fold. First, they should reduce the number and minimize the effect of disputes, both as to the work itself and the relationship between the parties. Second, the contract must outline reliable, convenient procedures for resolving disputes which cannot be circumvented. These procedures should facilitate prompt amicable settlements and prevent a minor mishap from disrupting the work for weeks.

Many contracts appoint the engineer (owner's representative) as the arbitrator of onsite disputes. It is his duty to evaluate all difficulties fairly, without bias toward either side. The engineer's only bias should be in favor of the work itself, and he should endeavor to bring the parties together in
the most efficient manner possible. FIDIC outlines the engineer's duties in Clause 67:

If any dispute or difference of any kind whatsoever shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with, or arising out of the contract, or the execution of the works, whether during the progress of the works or after the termination, abandonment or breach of the contract shall, in the first place, be referred to and settled by the Engineer who shall within a period of ninety days after being requested by either to do so, give written notice of his decision to the Employer and the Contractor.70

Generally, no other dispute resolution methods—arbitration, negotiation, etc.—may be used until the matter has been submitted to the party contractually vested with the authority to first hear disputes. It is common practice to designate someone (usually the owner's representative) familiar with the project to hear the first round of claims. In Swaziland, that means going to the "Architect," whereas in England it means the "Superintending Officer." (See the glossary for other synonyms for owner's representative.)

The contract must anticipate the possibility that one of the parties will find, on occasion, the engineer's decision to be unsatisfactory and therefore refuse to abide by it. Ordinarily, a situation like this triggers another dispute resolution mechanism, such as direct negotiation between the parties or arbitration by a neutral body. Negotiation is the preferable first step, because it requires a minimum of procedural formalities. The parties can discuss their differences in whatever manner they find convenient, and avoid the expense of outside arbitrators or experts.

Arbitration (Chapter 10) is an expensive procedure, especially when arbitrators must be transported, housed, fed, and salaried for long periods. Therefore, it is desirable to limit the use of arbitration to situations involving serious disputes with large monetary values.

To avoid costly delays, the parties should agree that the work will continue normally while disputes are being resolved, so that new delays will not generate new claims. If the dispute is such that one party cannot or will not continue, a contract clause which apportions the liability therefor will be of enormous value.

Other Considerations

Owners sometimes attempt to shield themselves from liability by inserting exculpatory clauses in the contract. An exculpatory clause is an owner-favoring provision which clears the owner of any alleged fault or liability when a specified event occurs, or when the contractor fails to take certain precautions.

Site investigation clauses are a common exculpatory device. Such a provision generally states that the contractor has explored the site and has investigated all conditions which could possibly affect progress and cost. In addition, the contractor is deemed to have included the cost of all such con-
tingencies in his bid. For example, Clause 11 of the General Conditions of FIDIC states that:

...the Contractor shall also be deemed to have inspected and examined the Site and its surroundings... as to the form and nature thereof... and, in general, shall be deemed to have obtained all necessary information... as to risks, contingencies...?1

Compliance may not always be practicable. When the tender period is short, a pre-bid investigation in a foreign land may not be feasible within the time constraints. Of course, a diligent effort should be made to investigate the site, if possible, and to verify all pre-bid data received.

Whether a judge or arbitrator would uphold the validity of this kind of clause may depend on factors such as whether the clause (a) clearly disclaimed owner liability for the accuracy of any information furnished by it, (b) required the bidder to satisfy itself by investigation regarding conditions at the site, (c) is reasonable, given the amount of time in which a contractor has prior to bid to investigate the site, and d) may be supplemented by reference to other contractual provisions which grant recovery for differing site conditions or changed conditions.

Generally, problems arise when information in the plans and specifications does not accurately reflect the physical conditions at the site. The owner then asserts the site investigation clause as a defense to the contractor’s claim for extras.

The thrust of chapters that follow is to analyze different types of claims arising on construction sites, for reasons ranging from defective bidding information to failure to make final payment. Claim pricing and arbitration will also be discussed in detail. But parties to an international transaction must bear in mind that their contract governs their relationship, and thus controls the scope of potential litigation or arbitration. If a party fails to make contractual provisions for a risk that it could reasonably be expected to anticipate, the party may well be deemed to have waived the right to shield itself from that risk. Contractual and legal considerations must be studied at the outset; hindsight may be clear, but it is of no value once a problem arises.
REFERENCES

4. Black's note, 2 supra.
5. Black's note, 2 supra.
10. Note 9 supra.
12. Note 11 supra.
15. Note 11 supra.
17. Note 11 supra.
18. Note 11 supra.
20. Islamic Law, note 9 supra.
21. Islamic Law, note 9 supra.
22. Islamic Law, note 9 supra.
23. Islamic Law, note 9 supra.
28. FRANCE: Code Civil, Article 1184; GERMAN FEDERAL REPUBLIC: BGB (Civil Code) Paragraph 326; ENGLAND: Cheshire, Allen and Fifoot, Stephen's Commen-

54 Contractual—Legal Consideration
29. [35 I.L.R. 136 (1965)]
30. Lalive, note 25 supra.
41. Note 40 supra.
43. Note 42 supra, §11.07.
47. 41 U.S.C. §602(c) (Supp. 1982).
51. The Master Builders, ASBCA 26129, 82-2 BCA 15,842 (1982).
52. Note 47 supra.
57. Eugene Langen, Transnational Commercial Law, (1973); Steiner, note 25 supra.
58. Note 49 supra, cl. 70.
60. Mis Krishan Kumar Madhok v. Union, ILR (1980) 1 Delhi 164.
61. Author's private conversations with international owners and contractors.

References 55


65. Note 49 supra, cl. 49.
66. Note 49 supra, cl. 49(3).
67. Note 49 supra, cl. 49(3).
68. Note 49 supra, cl. 62(1).
69. Note 49 supra, cl. 72.
70. Note 49 supra, cl. 67.
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56 Contractual—Legal Considerations
PART TWO: VARIATIONS IN THE WORK

Chapter 3 Changes in Quality or Quantity

Once the construction phase of a project is underway, the owner and contractor may come to disagree over the precise composition and scope of the work required by their contract. Alterations of the original contract work, referred to as a “variation” (in most countries) or a “change” (American terminology), may affect the original cost of the project. When such a variation claim does arise, the parties will look to their contract provisions to determine who must bear the cost of this change in the work. (Note: The terms “change” and “variation” are used interchangeably throughout the text since their meanings are relatively equivalent.)

When dealing internationally the issue of change (variation) becomes compounded by the complexities of negotiating under varying legal and monetary systems, differing attitudes towards claims for extras, and differing methods of interpreting contract language. In addition, the political atmosphere and customs of the locality will almost always play a significant role. For example, the Egyptian government’s unilateral right to change clauses in its contracts is modified by the requirement that the change serve a true public interest, a reflection of the customary Islamic concern for fairness.

Parties must be aware that the success or failure of a claim for variations in the work can substantially affect the parties by reducing—possibly eliminating profits—even bankrupting contractors, or so depleting owners’ funds as to drain funds from other on-going or planned projects.

Of crucial importance to both parties is to draft the “Variations” clause precisely, so it anticipates potential disputes and provides a sound basis for the successful pursuit (or defense) of a claim. Although many international contracts contain standard “boilerplate” clauses, such clauses are not “etched in stone” and, with assistance from able legal counsel, the parties can make appropriate modifications.

The parties should also be alert to possible variant interpretation of contract wording during the claim resolution process—whether by an arbitrator, or a member of the judiciary.

While the “Changes” clause currently used in United States government agency contracts has been construed by judicial bodies to be flexible enough to include a wide variety of dispute-causing situations, other countries may interpret contract language quite literally. Therefore, the manner in which a circumstance is detailed in the contract can be pivotal to the outcome of a dispute. The possibility exists, under English law, that two very similar con-

Changes in Quality or Quantity  57
tractor claims concerning necessary variations to the Bill of Quantities may have opposite results, depending on whether or not that Bill was originally incorporated into the contract. If the Bill was made part of the contract, the claim would have a better chance of succeeding since express contract terms usually control under England’s strict interpretation. This may not be true in other jurisdictions (e.g., United States) where equity considerations may override strict construction of contract provisions.

Standard international contract forms, such as FIDIC, may serve as a model for drafting a “Variations” clause. (A comprehensive list of standard construction contracts is contained in Table 2-1 in Chapter 2 of this book). Alternatively, many parties experienced in international contracting prefer to draft contracts that fit their particular needs (hereinafter, called private or party-made contracts).

Seldom if ever is a project completed without some modification in the work. At this point, the parties refer to their agreement for guidance. The “Variations” clause then becomes a most important provision, since the goal in resolving a variation dispute is to determine who is responsible for the excess costs incurred. The “Variations” clause provides the basis for establishing this responsibility by detailing each party’s rights, obligations and remedies. Therefore, it is imperative that it be an effective mechanism for handling any variation in the work.

**Formal Change**

A formal change is one ordered in a manner strictly conforming to the requirements of the contract’s “Variations” clause; that generally requires a written order to change the work in a way that is expressly permitted by the clause. The greatest number of controversies arise, naturally, over changes which do not conform to the requirements of the clause, i.e., constructive changes. These will be discussed later in this chapter.

Virtually all construction contracts contain a contract clause allowing the owner (or its authorized representative) to make additions and deletions to the work to be performed, or a change in the quality of that work. This ability to make changes allows flexibility during contract performance, facilitates the suggesting of changes by either party, provides a mechanism for compensating the contractor for additional work, and serves as a vehicle for contractor claims should the amount of compensation be disputed.

FIDIC Clause 51, which follows, represents a typical “Changes” clause:

1. The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:
   a. Increase or decrease the quantity of any work included in the contract,
   b. omit any such work,
   c. change the character or quality of kind of any such work,
   d. execute additional work of any kind necessary for the com-

58 Changes in Quality or Quantity
pletion of the works and no such variation shall in any way vitiate or invalidate the contract, but the value, if any, of all such variations shall be taken into account in ascertaining the amount of the contract price.9

Selected sample clauses from FIDIC and several other standard and party-made international contracts are used as examples throughout this chapter because they represent the best (and sometimes the most poorly written) provisions included in most international construction contracts. Poorly drafted clauses have been included to illustrate what not to do.

Most “Variations” clauses in international contracts describe the kind of changes allowable under the contract. But a different type of “Variations” clause is included in the Saudi Arabian Tenders Regulations. It designates the amount of variations the owner may require, not the kind. In that contract, the owner’s representative may increase or decrease the contract price to a maximum of 20% of the original contract price without further negotiations between the parties.10 Other contracts, which designate limits on change by listing permissible amounts, vary those limits anywhere from 15 to 25%.11 FIDIC’s variation clause combines the two methods by describing the permissible kinds and amounts of changes which may be made.

In many international projects the right and power to make changes seems to be virtually dictated by the specific language of the contract’s “Changes” clause. Consequently, the formal change clause may be the only means through which the parties can negotiate variations in the work. This is a compelling reason why its drafting deserves most careful attention by the parties.

RIGHTS, OBLIGATIONS AND LIMITATIONS

The fundamental considerations in executing a formal change order are (1) who may make the change, (2) how may the change be made, (3) what may be changed, and (4) when may the change be ordered.

Table 3-1 at the end of this chapter illustrates the rights and obligations of a contractor using FIDIC’s clause 51 (Variations), as well as other FIDIC clauses; while Table 3-2 details the owner’s rights and obligations for recovery under a FIDIC contract.12

Who?

The contract itself should indicate the title of and, where possible, specifically name the person authorized by the owner to order the formal change to the contract. Common titles used in international contracts include Architect, Engineer (FIDIC), Contracting Officer (U.S. Corps of Engineers), Superintending Officer (standard English government contract), Supervising Officer, Supervisor, Principal’s Manager, Field Technical Manager, or simply Owner’s Representative. Regardless of the title used, the contractor, before complying, should always exercise great care to ascertain that authority exists for the person ordering the change, since the owner is generally bound only through the orders of his contractually designated representative. Similarly, the owner should clearly define the authority and powers of its agent or representative, to avoid taking on unwanted obligations and responsibilities as a result of its representative’s conduct toward the contractor.
How?

The contract clause granting the owner's representative the right to make formal changes almost always obligates him to put those changes into writing and designate that writing as a change order.

FIDIC Clause 51 (2) is illustrative of this requirement:

No such variations shall be made by the Contractor without an order in writing of the Engineer.

Clause 51(2), however, permits three exceptions. No written order is required before the contractor proceeds with the variation if (a) the amount of work varies only because the actual quantities vary from the estimated Bill of Quantities, (b) a written confirmation from the engineer follows his verbal order, or (c) the contractor's confirmation of a verbal order from the engineer is not contradicted by the engineer within 14 days.

Other international contracts (both standard and "party-made") have similar clauses, some modifying these exceptions, others eliminating them.

Standard Form 23-A, one set of general conditions used by a U.S. government agency, permits probably the widest discretion in fulfilling the writing requirement. Under Clause 3 of that contract (see appendix for full text), change orders are required to be in writing and designated as change orders by the contracting officer (C.O.). The flexibility is created by the provision that certain overt conduct by the C.O., which causes a change to be made, may be deemed a formal order. To avail himself of this option, the contractor is obligated to notify the C.O. in writing that he has regarded such conduct as a direction from a C.O.

England's GC Works contract, which is less flexible than Standard Form 23-A but more expansive than other international contracts, does not expressly require a formal change order to be in writing. However, the inference may be drawn from its Clause 7(2) that some form of writing is preferred:

If any of the S.O.'s [Owner's representative] instructions issued orally have not been confirmed in writing by him, such confirmation shall be given upon a reasonable request by the Contractor made within fourteen days of the issue of such instructions.\(^\text{13}\)

Generally, international contracts state clearly that binding change orders are those put in writing, with only narrow exceptions, such as for an emergency endangering life or property. In the "Changes" clause of a well-drafted contract for a recent Saudi Arabian project, the only permissible exception to its writing requirement is an emergency situation, quoted as follows:

Instructions Directing a Change or Extra Work When, in the opinion of the Owner, a Change or Extra Work is required, the Owner will issue written instructions regarding performance of the Change or Extra Work and requesting Contractor to submit in writing its estimate of the cost and time required for such Change or Extra Work and its proposed method of adjusting the Contract Schedule and the Contract Price; provided that in the event of an emergency which, as determined by the Owner, threatens to disrupt the orderly performance of the Work or endangers persons or property, the Owner-
er may issue oral instructions to Contractor to perform a Change or Extra Work and, as soon as practicable thereafter, confirm such oral instructions in writing.14

(emphasis added)

What?

Generally, a “Changes” clause grants the owner, through his representative, a unilateral right to make a wide variety of changes. The powers of the owner’s representative are usually listed within the clause itself, as in the “Variations” clause from Australia’s Standard Form #2124:

Variations Permitted. The Contractor shall not vary the work under the Contract except in accordance with a direction in writing from the Superintendent [Owner’s Representative]. The Superintendent shall have full power from time to time prior to the stage of Practical Completion by notice in writing to direct the Contractor to—

(a) increase, decrease or omit any part of the work under the Contract,
(b) change the levels, lines, positions or dimensions of any part of the work under the Contract,
(c) change the character or quality of any material or work under the Contract,
(d) execute additional work,
(e) change the program or order of the work under the Contract,
(f) amend previously approved drawings,
(g) execute any part of the work under the contract outside the hours allowed pursuant to Clause 31,

and the Contractor shall carry out such variation, and be bound by the same conditions, so far as they are applicable, as if such variation were part of the work under the Contract originally included therein.15

One important limitation on the owner’s representative’s powers is that generally he may not exercise any power not expressly granted by the variations clause. For example, the FIDIC “Variations” clause, quoted above, would seem to grant the Engineer relatively unlimited powers. However, in practice the Engineer may not vary the Contractor’s chosen construction method, sequence or timing of the construction work, because the clause does not expressly grant those powers to the Engineer.16 Of course, such variations may occur during the course of a project, and eventually lead to disputes. Such events will be discussed under the doctrine of constructive changes.

Another important limitation on the powers of the owner’s representative is that all changes ordered must come within the general scope of the contract’s work as envisioned by the parties at the time of contracting.17 The essential purpose of the scope limitation is the prevention of “cardinal changes,”—a term originated by American tribunals to describe changes requiring work substantially different from that originally contemplated by the parties. Cardinal changes may arise when the owner orders a major alteration in the work, or a significant change in the quantity of major items, or through

What? 61
the cumulative effect of a large number of permissible changes which, in
total, constitute a change in the scope of the contract. However, determining
whether a change is “cardinal” depends upon the magnitude and quality of
the changes, not merely their number.18 This principle may only be recog-
nized in this form in the United States.

For example, on a project which includes construction of both an industrial
area on one site and a housing development on an adjacent site, the
owner’s order for construction of an underground tunnel connecting the two
would be a major alteration and therefore a “cardinal change.”

The imprecision of the term “within the general scope of the contract”
has led to confusion and misuse. Case law suggests only that the issue of
scope be determined on a case-by-case basis, following analysis of each dis-
pute’s particular facts.19 However, one point is clear: should either party
make a substantial change in the nature of the original works without the
prior agreement of both parties, such action constitutes a breach of contract
under general contract law.20 The party in breach may then be liable to
the other for damages. Another important factor relevant to a cardinal change
is that a contractor will not be held in breach of contract if he refuses to
perform work which is determined to be a cardinal change.21

As a guideline to the parties in ascertaining for themselves whether a
change in the work comes within the general scope of the contract, the fol-
lowing questions may be helpful:

(1) Can the ordered change in the work be considered to have been
fairly and reasonably within the contemplation of the parties at the
time the contract was drafted? An affirmative answer means the change
is likely to be within the contract’s scope.22

(2) Is the changed work indispensable to the completed project, re-
gardless of whether it was originally included in the plans and speci-
fications? The “Variations” clause of the Contract of the Institution of
Civil Engineers of England (ICE) encompasses this idea by granting
the engineer the additional power to order changes “for the satisfactory
completion and functioning of the works.”23 An affirmative answer
may mean that the ordered change comes within the scope.24

(3) Does the variation perform basically the same function as the orig-
inal? If the result of such a comparison shows that it does, and the end
product remains essentially the same, it is likely that that change comes
within the general scope of the contract.25

To avoid problems which can arise over the contract’s concept of “scope”,
it is important that the contract documents define the scope of the work in
precise and concise language. To that end, an owner should provide, and a
contractor should obtain, a complete and detailed set of drawings and speci-
fications setting forth exactly the work to be done and the methods to be
used. These details should then be specifically incorporated into the contract
so they will constitute a definitive and binding answer to the question of
“scope.”

When more than one prime contractor is involved in performing the
work, it becomes particularly important to designate precisely the scope of
the work expected from each contractor. On an Iranian joint venture, con-
fusion ensued from a contract which defined in only cursory terms the re-
pective duties of the local and foreign contractors. The problem surfaced after the local, less experienced contractor failed to adequately prepare the site, its assigned task. Consequently, the foreign contractor had to prepare the site anew, resulting in lost time. The Iranian government held the foreign partner in the venture responsible for the delay, whereupon the foreign contractor sought compensation from the local who refused to pay. The latter argued that the foreign contractor knew the local was rather inexperienced and should have supervised more closely. The Iranian revolution brought this circular argument to an abrupt but final determination. Even under ordinary circumstances a reasonable solution would have been difficult to come by because of the vagueness of the contract language.

The best course is to clearly define in the contract the respective duties, responsibilities and precise work operations expected of each party, and clearly explain in the contract each party’s responsibilities regarding coordination of the work.

For contract documents to be properly interpreted, the owner’s representative should use his best efforts to ensure that any ordered change serves the interest of maintaining the quality and workmanship contracted for, making no change so variant that the end product becomes no longer recognizable as the one originally planned.

A properly drawn “changes” clause benefits both parties. The contractor receives protection from “cardinal change” situations through the limitation that changes be within the scope of the contract’s work. On the other hand, a comprehensive and well drafted “changes” clause permits the owner flexibility to deal with problems arising from the inherently unpredictable nature of construction work.

**When?**

Generally, international contracts place no specific limitations as to when a change may be ordered. Changes have been ordered at any time after the signing of the contract but before final payment and, on occasion, even after delivery of the project. The latter is a questionable and risky practice to be avoided. A change order issued after the project is completed may be seen as an offer to make a new contract and be void if there has been no consideration.

After the formalities of issuing a written change order are met by the owner’s contractually authorized representative, the focus shifts to the contractor. He now has the duty to perform these directed changes, regardless of whether he disagrees with them or the amount of compensation offered is unsatisfactory to him. The standard government contracts of England, Ireland and Australia, along with FIDIC, expressly require that the contractor be bound by a properly issued formal change order. The Irish contract states clearly in its “Variations” clause:

> The Contractor shall forthwith comply with and duly execute any work comprised in such Architect’s [Owner’s Representative’s] Instructions.

In a few contracts, similar clauses are more generous in allowing the contractor to refuse a change if, in his judgment, the proposed change would
jeopardize his fulfilling his previously made commitments. The following sample encompasses both the compulsion to the contractor and the permissible exception. It is taken from a private contract used on a multinational project in South America and is also illustrative of a poorly drafted clause, because the inclusion of the ambiguous second paragraph provides a stumbling block to continued and efficient performance of the work. (The phrase "provided cases" means the enumerated powers of the owner's representative.)

In any of the provided cases, the CONTRACTOR must proceed with carrying out the work ordered by the Owner immediately upon being ordered and without being able to claim a condition for performing same on the previous decision of the arbiters nor to any other circumstance, except what is provided in the following paragraph.

Notwithstanding what is provided in this clause, the CONTRACTOR is not obligated to perform any extra work (variation) that exceeds his capacity on the job site, or that may harm his obligation in completing the original project in accordance with the CONTRACT.

Australia's Standard Form #2124 contains a similar clause (written in a clearer, more readily understandable manner):

Modification of Contractor's Obligations. If in the opinion of the Contractor any proposed variation is likely to prevent him from or prejudice him in fulfilling any of his obligations (including guarantees) under the Contract, he shall notify the Superintendent thereof in writing, and the Superintendent shall determine forthwith whether or not the variation shall be carried out.

If the Superintendent determines that the variation shall be carried out, he shall direct the Contractor in writing, and thereby the Contractor shall be relieved of such obligations to the extent set out by the Superintendent in his direction.

It is prudent for the contractor to proceed with the disputed work whether or not expressly required by the contract. This is the safest course for him, even if he firmly believes that the change is outside the contract's scope. He should, however, reserve the right to seek recovery later by immediately notifying the owner of his intention to make a claim.

The owner, who benefits by having job progress maintained, will ensure progress from the outset by having the contract explicitly require a contractor to perform a properly authorized formal change even when the latter may dispute it.

In the event a conflict does occur, the owner becomes obligated to provide the contractor with clear directions by describing exactly the work the disputed change order requires. The contractor is obligated, on the other hand, to exhibit a good faith effort to resolve the attendant administrative and procedural problems. Having done that, the contractor's right to clear directions will supersede his duty to proceed with the ordered work. This balancing of relative obligations and duties appears to serve the purpose of reducing the resolution of the dispute to its essentials.

64 Changes in Quality or Quantity
Constructive Change Orders

CONCEPTS

A constructive change order consists of any owner conduct which does not comply with the formal change order requirements of the contract, but nevertheless causes the contractor to perform work that is different from what is specified in the contract.31 (The term “constructive,” as used here, means “indirect” or “apparent.”) The doctrine of constructive changes has evolved to encompass oral orders or events generated by the owner which result in changes that add to a contractor’s total costs. Constructive changes may evolve from errors in owner interpretation of contract language, defective plans and specifications, acceleration, non-disclosure of technical information, relocation of existing work, work done out of sequence, improper inspection and rejection, and changes in method of performance (as well as other owner-caused events).

Seldom do international contracts expressly provide that the contractor may recover for constructive change orders; Standard Form 23-A is one of the few that does. Section 3(b) of its “Changes” clause, in essence, allows that any order which a contractor reasonably regards as a change order from the Contracting Officer (C.O.) might receive compensation, provided that certain notice requirements are fulfilled. Within 20 days of the occurrence of the constructive change order, the contractor must submit to the C.O. a detailed written notice that he considers the C.O.’s conduct as such. Failure to come within the time limits will bar the claim excepting claims based on defective plans and specifications. The latter exception is allowed because the defects in those documents may not be readily apparent until construction is well underway.

The “Changes” clause quoted below, from a Saudi Arabia project,32 is a rarity in the international field because it deals with situations that generate constructive changes. (This may be a result of the heavy involvement of the U.S. Corps of Engineers in Saudi Arabia and the use of Standard Form 23-A.)

If, however, Contractor receives an order from the Owner which in its opinion constitutes a Change or Extra Work and which the Owner has not so identified, Contractor shall immediately inform the Owner in writing prior to commencing performance of such order. The Owner will review Contractor’s written notice and will advise Contractor if a Change or Extra Work has or has not been ordered. In the event that a Change or Extra Work has been ordered, the Owner’s reply to Contractor shall constitute the Owner’s written instructions directing a Change or Extra Work. Except as provided in the event of an emergency, Contractor shall not commence Work on such a Change or Extra Work prior to receiving such written instructions from the Owner.

In FIDIC’s Clause 51(2), the three stated exceptions to its writing requirement for variations seem to amount to an allowance of a constructive change order under specific circumstances. First, if the actual quantities of a project vary from those estimated in the Bill of Quantities, presumably no
written order is required before valuation and payment can be made. Second, if the engineer’s verbal change order is either confirmed by him in writing or, third, the contractor’s written confirmation of that verbal order (submitted within 7 days of the engineer’s verbal order) remains uncontradicted after 14 days, then such written confirmation will be considered a contractually valid formal order. FIDIC’s term “7 days” means 7 calendar days including Sundays and holidays. Therefore, the contractor who assumes he has been given a constructive change order by the engineer should write that order down and seek written confirmation immediately—before carrying out the order.

For a contractor to recover under constructive changes theory, he should delineate his claim by factually establishing 3 basic elements of his claim:

(a) The minimum amount and kind of work originally required by contract to complete the disputed item.
(b) The fact that the work actually done varied from the required minimum.
(c) The contractor’s performance of this change was required in some way by the owner or its authorized representative.

In general, most international contracts do not specifically allow constructive change orders. In fact, the contractor generally is compelled to carefully observe the formalities of the “Changes” clause in order to recover. It has been suggested that the inclusion of an arbitration clause implies that the owner, if pressed, may be amenable to negotiate over variations. This interpretation is too tenuous for a prudent contractor to risk. The most reasonable presumption for a contractor to make is that the owner will not go beyond the specific (limited) wording of the contract’s “Changes” clause. Since the likelihood is strong that constructive changes will occur, explicit contract provisions for recovery for them will be to the contractor’s advantage.

Generally, the owner looks for protection from such claims in the wording and the strict interpretation of the “Variations” clause. An additional safeguard is available through instruction of the owner’s field staff on how to recognize and therefore avoid situations that may be viewed by contractors as generating constructive change orders. Such situations are described in the following discussion.

DEFECTIVE PLANS AND SPECIFICATIONS

Liability for additional costs sustained by the contractor and caused by errors, discrepancies, or omissions in the plans and specifications is dependent on which party had the responsibility for supplying the data. If the owner had that responsibility (the usual case), the contractor can submit a claim based on the constructive change theory; if the contractor was responsible, that option is not available.

Clause 8.6 of Australia’s Standard Contract No. 2124 epitomizes this idea:

RESPONSIBILITY FOR INACCURATE INFORMATION—Subject to the provisions of Clause 12, the Principal (Owner) shall be responsible for and bear the cost of any alterations to the work under the Contract arising from discrepancies or errors in or omis-

66 Changes in Quality or Quantity
sions from the Drawings or Specification or other written information supplied by the Principal or the Superintendent (Owner's Representative) to the Contractor. This provision shall not apply to any Drawing, Specification or other written information which is clearly stated to be tentative only.

The Contractor shall be responsible for and shall bear the cost of any alterations to the work under the Contract arising from discrepancies or errors in, or omissions from the Drawings or other written information supplied by him whether such Drawings or other written information have been approved by the Superintendent or not. This provision shall not apply when such discrepancies, errors or omissions are due to inaccurate or incomplete information in any Drawing or Specification or written information supplied to the Contractor by the Principal or Superintendent. This provision shall also not apply to any Drawing, Specification or other written information supplied by the Contractor which is clearly stated to be tentative only.

In the majority of situations, the owner initiates the project and employs the engineer who supplies the contractor with the plans and specifications. If the contractor has complied with this data, and it is later found to produce defective results, he is generally not responsible to the owner for any such defect. This derives from the owner's implied warranty (a doctrine applied most often to U.S. and British contracts) that the plans and specifications he supplies are suitable for the purpose intended.36 For example, if the contract gives the contractor no discretion in choosing the pipe for water main construction, he is unable to protect himself, absent this implied warranty, should the pipe prove inadequate for the purposes of the work. Therefore, if the contractor has complied with the contract's specifications for the pipe, he has fulfilled his contractual duty, and additional costs incurred due to defects within the specifications may be recoverable from the owner.

While the specifications and drawings need not be perfect, they are expected to be reasonably accurate, prepared with reasonable care, and of the average quality used in the industry.37 The latter standard is usually evaluated through the end product produced by the contested plans or specifications. If the end product is clearly deficient, the owner will normally be found to have breached his duty.38

Further difficulties arise when the specifications provide the contractor with a choice of products or methods. Construction contracts (particularly American ones) sometimes specify that one particular brand name product "or equal" be used. The theory of implied warranty would apply, if the contractor uses the named product.39 However, a certain risk is assumed in choosing an alternate "or equal" product. If the contractor decides that another product is substantially more advantageous than the specified brand name product, he can mitigate the risk of its future performance by requesting owner approval prior to its use. However, if the owner uses performance specifications, the entire risk falls upon the contractor to meet the specified performance levels with the product he selects.

Generally, when alternate types of materials or performance standards

Defective Plans and Specifications  67
are expressly allowed by the specifications, the contractor is protected by the owner’s implied warranty, provided the alternate chosen by the contractor meets contractual requirements. 40

Many international contracts do not deal separately with the issue of defective plans or specifications. For example, FIDIC’s Clause 17 says only that the engineer will pay for additional costs resulting from incorrect data he has supplied to the contractor. Standard Form 23-A is one of the few contract forms which expressly details how a contractor may recover for defective plans and specs. In fact, this claim is accorded the only exception to Standard Form 23-A’s 20- or 30-day limit allowable between the C.O.’s constructive order and the contractor’s notice of intent to submit a claim.

Ambiguous data can also lead to disputes. In U.S. Government contracts, if government supplied data is ambiguous rather than in error, the contractor is generally obliged to request a clarification from the C.O. before proceeding. If the contractor waits too long before requesting clarification, neither the contractor’s reasonable interpretation of the ambiguity, nor the policy that ambiguous language is construed against the party who drafted it, may save a contractor’s claim from failing. And, in the event that other available data in the possession of the contractor could clarify the ambiguity, the contractor cannot claim he was misled by inaccurate drawings and specifications.41

In projects where the contractor provides the plans and specifications, he obviously may not make a claim against the owner if these documents prove defective. If the owner wants a turnkey contract, where the contractor serves also as the engineer and designs the project, the contractor should be alert to his combined responsibilities for complete and accurate plans and specifications.

**METHOD OF PERFORMANCE**

The power to order variations in the method and manner of performance of the work is seldom expressly given to the owner’s representative. FIDIC does not list it among permissible changes in its “Variations” clause. The contractor has been interpreted to have full (“complete and entire”) responsibility for the method of construction under FIDIC.43

Standard Form 23-A and ICE, however, do grant such power to the owner’s representative. In Standard Form 23-A, the contracting officer may:

> ... make any change in the work within the scope of the contract, including . . . changes . . . in the method or manner of performance of the work.

Consequently, under 23-A, the C.O. may direct a change in the method or manner of performance. But there are limits beyond which such action by the C.O. will be interpreted as constructively ordering a change in method. For example, despite a C.O.‘s apparent consent to a change in method proposed by the contractor, the contractor may be held to the contract’s original method of performance. In one case, the C.O.’s verbal “enthusiasm” was not in itself sufficient to amount to a constructive change. The contractor should have given the C.O. written notice that the contractor considered such “enthusiasm” a change.44

If a contract allows the contractor a choice of methods, a subsequent
requirement by the owner that only one method can be used could constitute a change for which the additional costs may be recoverable by the contractor.46

IMPROPER REJECTION

If an owner erroneously concludes that methods or materials used by the contractor do not meet the required standards of the specifications, any order to change them will constitute a constructive change.46 The contractor may recover if the change forces him to incur additional costs in complying with the improper rejection.

This theory may also be applicable, with the reverse effect, if the owner fails to reject unsuitable work within a reasonable time after he discovers it is defective.47 Then, if the contractor must disrupt his work sequence to repair the defective work, it could be interpreted as a compensable change. The reasoning seems to be that unreasonable lapse of time between the owner’s discovery of the defect and the owner’s order to make the repair would give the contractor the mistaken impression that the owner had approved the work. Therefore the contractor would have felt justified in continuing the progress of the work as originally scheduled.

OVERINSPECTION

Although an owner has the right to inspect a contractor’s work at any time during the progress of the contract, he may not conduct such inspections in any way which will substantially interfere with the contractor’s efficient performance of the work.48 For example, suppose an owner orders the contractor to make extra tests (i.e. ones beyond contract requirements) on work the owner suspects to be defective. If those tests show the work was not defective, the contractor may be entitled to reimbursement for the extra costs. Over-inspection can also include other owner actions such as inconsistent inspection standards, late inspections, over-zealous inspection, or making major changes in the inspection methods already in operation.

Although any inspection will create some interference with construction progress, permissible interference generally is that which is reasonable in relation to the nature of the inspection. If it can be shown to be unreasonable and beyond the scope of what is anticipated by the average contractor, the additional costs arising from the overinspection may be recoverable by a contractor under a “Variations” clause.49

DISRUPTION OF ORDERLY PERFORMANCE

Any action by an owner which substantially affects the orderly performance of a contractor may result in a compensable variation in the work. This disruption may occur in any phase of the work (for example, owner’s unreasonable demands in punchlist items). Recovery is premised upon the assumption that any disruption of the contractor’s planned performance will reduce his efficiency and increase his anticipated costs.

The owner has an implied duty not to hinder the contractor in his work so long as that work is in accord with the terms of their contract.50 For example, an owner pumped large amounts of raw sewage into a waterway
immediately adjacent to the construction site; the contractor recovered on
the ground that the owner's action was a major (and malodorous) interference
with the contractor's performance.\textsuperscript{51}

One form of disruption attributable to an owner is owner-initiated changes
in construction sequence. A contractor is entitled to employ any sequence of
performance so long as it does not violate his contractual obligations regard-
ing coordination of work. Construction projects require a carefully scheduled
sequence of activities to reach project completion on time. Owner directives
which necessitate change in the construction sequence can extend project
completion and cause additional costs.

Should the owner require unreasonable or inefficient changes in the
work sequence, the contractor may recover the extra costs thereby created,
by showing that the owner's request bore no reasonable relation to standard,
efficient construction procedures.\textsuperscript{52}

Occasionally, even the issuing of contractually permissible formal change
orders may amount to a disruption if, in the aggregate, the timing or number
of these orders becomes unreasonable. Most "Changes" clauses grant the
owner the right to make changes \textit{at any time}. A too literal interpretation of
this would create havoc with the contractor's schedule.\textsuperscript{53} A contractor's claim
based on too many or too frequent valid change orders would, presumably,
rely heavily on the implied duty of the owner not to hinder the contractor's
performance of the work.

Regardless of the precise reason for owner interference, the resulting
disruptions may lead to unplanned stops and starts, idle crews, idle equip-
ment and related problems which increase costs that the contractor may be
entitled to recover.

\section*{REVISED OWNER REQUIREMENTS}

Revisions and modifications of specifications made by the owner during the
progress of the job may become a constructive change, provided the owner
has not observed the formal requirements of the contract's "Changes" clause
in implementing them. Typically, this situation occurs when the owner re-
quires a higher standard of performance than originally specified in the con-
tract.

For example, in a project where the owner imposed excessively strict
procedures (beyond the contract requirements) for preparation of reinforcing
material used in the construction of a powerhouse, the owner's actions
were considered a variation in the planned work, enabling the contractor to
recover for these additional costs.\textsuperscript{54} (Should the owner discover that the origi-
nal specifications are insufficient to meet either his needs or those of existing
building code requirements, this problem may be categorized as a defective
plans or specifications problem.)

Other incidents which may be deemed revised owner requirements are
the "mid-stream" introduction of new and previously unspecified adminis-
trative requirements, or the demand for contractor compliance with more
stringent than reasonably anticipated safety requirements. Although the ac-
tions may have been taken by a third party (such as a government agency),
and there may be no direct owner demand or communication, the need for
the contractor to make a change is implied in the revised requirement. Owner

70 \textit{Changes in Quality or Quantity}
involvement can be inferred from the assumption that the owner is, likewise, bound by the third party to see that these changes in the work are accomplished.

A private standard form of contract in use in Hong Kong acknowledges this concept by deeming such a government order to have the same effect as a variation ordered by the Architect.55

The Main Contractor shall comply with and give all notices required by any Act or Ordinance of Government, any instrument, rule or order made under any Act or Ordinance of Government, or any regulation or bylaw of any local authority or of any statutory undertaker which has any jurisdiction with regard to the Works or with whose systems the same are or will be connected. The Main Contractor before making any variation from the Contract Drawings or the Contract Bills necessitated by such compliance shall give to the Architect a written notice specifying and giving the reason for such variation and the Architect may issue instructions in regard thereto. If within seven days of having given the said written notice the Main Contractor does not receive any instructions in regard to the matters therein specified, he shall proceed with the work conforming to the Act or Ordinance of Government, instrument, rule, order, regulations or bylaw in question and any variation thereby necessitated shall be deemed to be a variation required by the Architect.

IMPOSSIBILITY OR IMPRACTICABILITY

The issue of impossibility or impracticability of performance deals with variations that are so different in quality or quantity from the original contract work, they either cannot be achieved at all (actual impossibility) or cannot be achieved within a reasonably acceptable variation of the original cost (practical impossibility).

Recovery on the basis of impossibility is very difficult for the contractor working in the international market, because he must show that the impossibility of performance was completely unknown to him, or reasonably unforeseeable by him, at the time of contracting. The burden rests on the contractor to prove not only that it is impossible for him to perform the disputed contract work, but impossible for any contractor to so perform.56

Impossibility is akin to the doctrine of frustration of contract, which was stated very clearly in a leading British case, Davis Contractors v. Fareham.57

Frustration occurs whenever the law recognizes that without default of either party a contractual obligation has become incapable of being performed because the circumstances in which performance is called for would render it a thing radically different from that which was undertaken by the contract. Non haec in foedera veni. It was not this that I promised to do.

To show work as impossible or impracticable to perform, the contractor need not show actual impossibility (though this is his best chance at recovery), but only that it is impossible in its practical application—the cost of the work being so extreme as to make it illogical to undertake.58

Impossibility or Impracticability 71
There are two basic factors which, if proven, generally establish that the work as proposed cannot be accomplished: (1) that the specifications required work which was either impossible or impracticable by legal definition, and (2) that the contractor could not have known of the problem through a fair reading of the specifications.

There are situations which may place the obligation of impossible or impracticable performance entirely upon the contractor:

(a) When only performance specifications are involved;
(b) Where the problem is evident to the contractor (or should have been) at the time of contracting;
(c) Where the contractor supplied, or was partially responsible for, the plans, specifications, etc.; or
(d) When a contract clause exists which places the entire risk of performance upon the contractor.

In the Davis case (noted previously), the contractor entered into an agreement to build 72 houses within an 8-month period. The contractor attached to his bid a letter stating that his bid terms were conditional on the availability of adequate supplies of labor. Unfortunately, through no fault of either party, the supplies of labor actually available fell far short of what was required for the contract work. Consequently, the construction of the houses took 22 months instead of 8, causing the contractor to incur heavy additional costs. Upon the contractor's request to recover on a quantum meruit basis, the court refused, holding that the letter had not been incorporated in the contract, and as a result, could be of no use to the contractor in his attempt to recover. As for the contractor's claim of frustration, the court held that the contract had not been frustrated, but merely rendered more onerous by the fact that the anticipated large supply of local labor was, in reality, inadequate to fulfill the contract as planned. This reasoning is highly indicative of international treatment of claims of impossibility.

Few international contracts deal specifically with impossibility. FIDIC and ICE mention it briefly, stating that a contractor is bound to follow the engineer's instructions “save for legally or physically impossible circumstance.”

Many international contracts do, however, carry provisions, like the “Force Majeure,” “Special Risks” or “Acts of God” clauses, which describe events completely beyond the control of either party, and excuse the parties from contract performance due to earthquakes, fire, war, etc. (See Table 1-2 in Chapter 1)

To earn recovery, a claim of impossibility may have to be based on circumstances nearly as catastrophic as those in “Force Majeure” clauses. The British view (typical of others) is that the owner gives no guarantee that the work can be carried out in accordance with contract specifications, absent a clause to the contrary. Consequently, the contractor is expected to accept most risks.

For example, where impossibility results from failure of materials or methods to perform as anticipated by the contract, it may be found that the contractor should have asked for a formal change of materials or methods upon discovery of this failure. Again, that comes from a viewpoint that a contractor's work has only been made more difficult—not impossible.

There are no standards, therefore, by which one can determine how

72 Changes in Quality or Quantity
difficult a job must become before it can be deemed legally impossible. In *Transatlantic Financing Corporation v. United States*, a dispute arose as a result of the closing of the Suez Canal. The contractor claimed commercial (financial) impracticability because the planned route of the voyage through the canal had to be changed to one around the African continent. The courts denied the claim because the cost increase over contract price amounted to only 15%. Disregarding, first, the fact that the condition causing the dispute did not exist at the time of contracting, and second, the fact that if the condition had been known or foreseeable at that time, the terms of the contract may have been different, the court declared that the work had only been made more difficult, not impossible. Under similar circumstances, cost increases of 44% and even 100% have been deemed within the realm of commercial practicability by British courts.

In France, courts traditionally have ruled that parties can not be released from their contractual obligations because of a supervening contingency (imprevision) which renders performance “intolerably onerous” but not truly impossible. In that circumstance, inclusion of an arbitration clause might alleviate this problem by providing a method of settlement other than litigation. (See Chapter 10).

Because of the general difficulty in establishing these claims, the parties would be wise to incorporate a clause specifically defining impossibility of performance for the purposes of their contract.

Given the fact that standard and private contracts rarely deal expressly with impossibility of performance, it is difficult to present a sample clause drawn from an existing contract. Instead, the author offers one which is a hybrid of the essence of FIDIC/ICE’s clause 13 (as quoted above in this section) and the thrust of most “Force Majeure” clauses. (Be advised that the following sample is only a suggested wording and not a legally tested clause.)

**IMPOSSIBILITY OF PERFORMANCE**—No failure or omission of the Contractor to perform any of the obligations or fulfill any terms of the Contract shall be considered a Default by the Contractor, if such performance or fulfillment has been rendered either actually or financially impossible by Force Majeure or other unforeseeable circumstances materially affecting the execution of the contract work.

Force Majeure should be defined elsewhere in the contract in the standard way, e.g., war, hostilities, natural catastrophes or circumstances which are wholly beyond the control of the contractor or owner.

**COMPRESSED PERFORMANCE**

Compressed performance is an increase in the rate of progress of the job in order that:

1) The work may be completed in fewer days than planned for in the original schedule (or “programme”) and on a date prior to the original completion date, or
2) The work, which is being performed at a slower than scheduled pace, may be completed on the original completion date or as soon thereafter as possible.

*Compressed Performance  73*
Two terms generally used to describe compressed performance are “expediting” and “acceleration.” In the context of international construction contracts, each term has a relatively distinct meaning and will not be used interchangeably here.

Few international construction contracts contain provisions which specifically discuss compressed performance. Clause 46 in both FIDIC and ICE grants the engineer the power to require the contractor to expedite progress, if he has fallen behind his schedule for any reason which does not entitle the contractor to an extension of time (i.e., a cause resulting from the Contractor’s own fault). ICE (but not FIDIC) includes in its “Variations” clause the power of the engineer to vary the “timing” of the work. Standard Form 23A, in its “Changes” clause, expressly allows the contracting officer (CO) to “accelerate” the work for whatever reason.

The absence of provisions describing how compressed performance is to be dealt with leads to the inference that international owners may rarely acknowledge (or compensate) claims for expediting/acceleration. Therefore, the contractor is wise not to anticipate owner compensation for extra costs resulting from compressed performance unless the contract expressly permits it. In fact, Clause 46 of FIDIC and ICE specifically precludes the contractor from receiving additional payments which resulted from ordered expediting.

When the contractor’s progress is significantly slower than scheduled, the owner may order the contractor to quicken the pace of his operation in order to complete the work by the original contract date. Here, as in delay, fault is a factor. When the contractor’s slow progress is the result of his own fault the owner’s order may be considered “expediting.” The contractor may “expedite” by increasing the size of the work force, adding an extra shift and/or working the main crew overtime. Generally, under these circumstances, the contractor will not be reimbursed for any extra costs incurred.

“Expediting” is also used to describe a situation where an owner requires a contractor who is on schedule to increase his pace of work. The owner may want the work to be performed in fewer days than originally planned in the contract, with the objective of completing the project prior to the original contract date. There is no element of owner-caused delay present in this use of the term “expediting.” In England, private contracts sometimes contain clauses which offer a bonus to a contractor for “expediting” the job. Since these bonuses are primarily incentives for greater diligence than usual, they are intended for contractors who are already on or ahead of schedule.

“Acceleration” is distinguished from either definition of “expediting,” in that the contractor has encountered an excusable delay, i.e., a delay which is beyond the control and without the fault of the contractor. When the owner holds the contractor to the original contract completion date, despite this period of excusable delay, acceleration has occurred. There are two kinds of acceleration, directed and constructive.

**Directed Acceleration**

Although directed acceleration is actually a formal change, a more cohesive discussion results if it is included here with constructive acceleration. Directed acceleration occurs when an owner specifically orders a contractor, in writing, to complete performance by the original contract date, despite the fact that the contractor has experienced an excusable delay.

74 Changes in Quality or Quantity
Seldom do international contracts have clauses explicitly dealing with acceleration. In FIDIC, it is difficult to find specific language under which this kind of change may be made. ICE grants the engineer the power to change the “timing” of construction, while FIDIC makes no mention of timing. Therefore, it is possible the engineer may have the power to accelerate under ICE’s “Variations” Clause 51, but not in FIDIC’s 51.

U.S. Corps of Engineers Standard Form 23-A is a rare contract in that its “Changes” clause specifically mentions acceleration as one power of the contracting officer (the owner’s agent). Under 23-A, claims may be submitted for acceleration provided certain conditions are met:

1. The contractor has encountered excusable delay for which he was entitled to a performance time extension;
2. The contractor has specifically requested such extension from the contracting officer (C.O.);
3. The C.O. failed or refused to grant the extension;
4. The C.O. either:
   a. expressly ordered the contractor to accelerate, or
   b. acted in such a way that it was clear that the contractor was required to complete within the original performance period (“constructive acceleration”); and
5. The contractor actually accelerated, incurring excess costs.  

There are, in addition, very specific notice requirements in 23-A, which will be discussed later in this chapter.

Both FIDIC and ICE, clause 14 (Programme to be Furnished) call for the contractor to furnish the engineer a schedule showing the contractor’s order of procedure and a general description, in writing, of the arrangements and methods the contractor will utilize. The engineer may request, at any time that it appears to him that progress is slipping, a revised schedule to assure the engineer of timely completion. If the contractor has fallen behind due to reasons amounting to non-excusable delay, then the compressed performance amounts to “expediting” and the cost is borne by the contractor.

However, if the reason for the contractor’s slow progress is unremedied excusable delay, then the engineer’s order under Clause 14 may constitute formal “acceleration,” and the contractor may have a valid claim for extra costs.

The difficulty contractors have finding support for acceleration claims in most international contracts is not necessarily an advantage to the owner. Because if the contractor incurs additional costs by quickening the pace of the work following an unremedied excusable delay and finds no relief in his contract, owner/contractor working relations may be adversely affected. The owner can circumvent this undesirable prospect at the onset of the problem, regardless of contract terms, by carefully investigating each delay in contractor progress to ascertain whether an extension of time is justified. (Delays of this type will be discussed in Chapter 6)

Consequently, when parties write their own contracts, an acceleration provision similar to that of 23-A is highly recommended. It can help avoid a great deal of controversy by expressly outlining each party’s rights and duties regarding acceleration.
Constructive Acceleration

When the owner refuses the contractor a time extension for an excusable delay and compels the contractor to perform within the original time limits of the schedule ("programme"), without regard to the denied time extension, the contractor has less time to perform than originally provided for in the contract. This is called "constructive acceleration," because the result is the same as if the acceleration had been expressly ordered. To insure a timely completion, the contractor may have to increase his work force, work extra shifts, or take other measures to increase the rate of his work.

Typical international construction contracts (private and standard) yield little guidance for owner or contractor as to how to deal with constructive acceleration in the international market. A clause or two from FIDIC/ICE can be very useful in supporting this kind of claim.

In the FIDIC/ICE framework, if the engineer believes that the rate of progress is too slow to ensure completion in the prescribed time for completion, Clause 46 grants the engineer the authority, after giving notice to the contractor, to "expedite progress." It then states that the contractor is not entitled to further compensation. The engineer's power is to order expediting for "any reason which does not entitle the contractor to an extension of time" (i.e., any reason which results from contractor fault). If the contractor can prove that the cause of his poor progress was not under his control and therefore, a time extension was unjustifiably withheld, then an argument can be made that he is entitled to reimbursement for extra costs resulting from the engineer's contractually unjustified decision.

Whether a contractor could successfully collect on a claim using these clauses hinges on how well developed contract law is in that particular jurisdiction. The better such law is developed, the greater the chances are of recovery for constructive acceleration. 67

Standard Form 23-A is one of the few contracts in use internationally containing a provision dealing expressly with constructive acceleration. The "Changes" clause in 23-A not only specifically permits the C.O. to order acceleration, but also allows that any act of his which causes a change may be recognized as a constructive change order. Therefore under 23-A, if an act of the C.O. causes acceleration to occur, then the contractor has a mechanism available in the "Changes" clause by which he can assert a claim for constructive acceleration.

The five factors outlined above in establishing a directed acceleration claim, also apply to constructive acceleration situations. The difference is that the second part of fourth element (the C.O. "acted" in a way that caused the contractor to believe he must accelerate) governs when compulsion by the owner is the issue. Any act or statement by the C.O. which can reasonably be construed as indicating to the contractor that he is expected to complete on time, despite an excusable delay, will satisfy that factor. Examples of this compulsion are threats of termination by the C.O. 68 or threats of assessing the contractor for liquidated damages for delay, 69 if the contractor does not complete on time.

However, if the silence of most international contracts on this concept is indicative of the prevailing attitudes, foreign jurisdictions may not be receptive to constructive acceleration claims.

76 Changes in Quality or Quantity
For his part, the contractor should keep detailed records of job progress, to substantiate any argument that a delay preceding an acceleration was without his fault or control. Such an exhibit seems to qualify as a primary basis upon which to rest a compensable claim for acceleration, since most contracts explicitly deny recovery if the contractor was at fault for lagging behind schedule.

The owner, on the other hand, should maintain effective supervision of contractor activity, to become alert to any excusable delay at its outset which would enable the owner to deal with it immediately. Detailed record keeping is understandably important to the owner. From such records he can determine whether and to what extent the contractor actually accelerated, thereby successfully countering any unwarranted contractor claim.

**Notice Requirements**

Since very few contracts deal with acceleration in explicit terms, notice requirements in this area are not well-defined. The safest course for a contractor is to regularly inform the owner, in writing, of all events which hinder job progress, and to outline any plans the contractor has for coping with them.

Therefore, whenever the rate of work must be quickened because a justified time extension was withheld, the owner should be presented with written notice that such contractor action was the result of a constructive acceleration, and that reimbursement of excess costs is requested. Such notice (a) prevents an owner from claiming he was not informed of any delay problems, (b) may provide opportunity for quick resolution, and (c) avoids loss of a claim (through waiver) by not meeting time requirements in asserting a claim.

Another device for preserving contractor rights is "Claim Reservation" language that protects against an inadvertent waiver of a claim. For instance, contract provisions may require the contractor to submit a detailed analysis of acceleration costs. However, a contractor has a limited amount of time in which to give such notice. Information about additional expenses may not be completely available at the time notice is to be filed and extra costs may continue to be incurred. Thus, contract language should be included in the contract reserving rights to costs which are not ascertainable at the time the claim is submitted.

Because of the literalness with which foreign jurisdictions interpret contracts, "Reservation" clauses may not supersede other express requirements. Furthermore, inclusion of a "Reservation" provision does not guarantee success. In view of the lack of remedies available to a contractor for acceleration, the "Reservations" clause provides a minimum of protection.

The owner may protect itself (as mentioned in the previous section), by effective, alert supervision, by detailed record keeping and by insistence that the contractor adhere to all notice requirements.

**Variations in Estimated Quantities**

A contract in which the total price is controlled primarily by pricing the quantities of materials, labor, etc., estimated to be required for a project is called a unit price contract. ("Measure and value" or "schedule of rates" are names also used for similar types of contracts.)
The contractor bases his unit price bid primarily on these quantity estimates. If the quantities actually encountered during the project vary significantly from those estimates, the contractor could suffer a loss (or gain a windfall) unless the original contract price is adjusted to reflect the actual quantities.

Whether under most contracts a contractor is entitled to an adjustment for sizeable variations from those estimated quantities depends on which party (owner or contractor) had the responsibility for preparing the estimate. In the majority of situations, the owner either prepares the estimate himself, or in some countries, hires a Quantity Surveyor to prepare the estimate. Occasionally, the contractor has the responsibility of preparing the estimate.

The fact that an owner had the responsibility for preparation of estimated quantities may not automatically work in a contractor’s favor. Frequently, an owner expressly disclaims the accuracy of his estimates, declaring them non-binding. Even where the owner guarantees or upholds the reliability of his estimate, a range of variations from the estimated quantity is often declared to be permissible. This range must be exceeded before a contractor is eligible for additional compensation.

Both parties invite risk if actual quantities differ significantly from the estimated amounts. Either side may suffer losses, depending upon the circumstances. Therefore, the interests of both parties are safeguarded when a provison allowing a contract modification for variations in estimated quantities is included in the contract. Such provision should state the conditions which permit a contractor or owner to recover when quantities actually encountered differ by a specified amount from those estimated.

Typically, an estimated quantities clause expresses the range of permissible variations in percentages. For example, FIDIC clause 52(3) allows a price adjustment only when the contract price is reduced or increased by more than 10% as a result of the occurrence of two conditions:

(3) If, on certified completion of the whole of the Works it shall be found that a reduction or increase greater than ten per cent of the sum named in the Letter of Acceptance, excluding all fixed sums, provisional sums and allowance for dayworks, if any, results from:—

(a) the aggregate effect of all Variation Orders, and
(b) all adjustments upon measurement of the estimated quantities set out in the Bill of Quantities, excluding all provisional sums, dayworks, and adjustments of price made under Clause 70(1) hereof, but not from any other cause, the amount of the Contract Price shall be adjusted by such sum as may be agreed between the Contractor and the Engineer or, failing agreement, fixed by the Engineer, having regard to all material and relevant factors, including the Contractor’s Site and general overhead costs of the Contract.

(Emphasis Added)

It should be noted that a plain reading of the first sentence of clause 52(3) expresses that only the cumulative effect of all variations (including quantity variations) will be addressed upon “certified completion of the whole of the Works.” This indicates that individual material variations which arise during performance are not addressed when they occur, and may be meaningless if the net effect of all variations by the end of the work remains within
a ± 10% range. The risk exists that a combination of the cost of additions due to variations (3a) and deletions in the work involving quantities (3b) might work to produce a net effect which falls within the 10% range, thus, precluding price adjustment.

To measure the aggregate effect of all variation orders, first, each of these orders would have to be priced; second, each priced variation order would be compared to the original cost estimate for that portion of the work; and third, the total contract price would then be increased (or decreased) by the difference between the original cost and the changed cost for each and every variation order.

For example, suppose Variation Order #1 had an actual cost of 120 monetary units (M.U.) when completed as compared to the estimate of 100 M.U. for that portion of the work as originally planned. The increase of 20 M.U. would be added to the total contract price.

If there are a number of variation orders, the calculation would look like this:

<table>
<thead>
<tr>
<th>Variation Order</th>
<th>Actual Cost</th>
<th>Original Estimate</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>120 M.U.</td>
<td>100 M.U.</td>
<td>+20 M.U.</td>
</tr>
<tr>
<td>#2</td>
<td>180 M.U.</td>
<td>90 M.U.</td>
<td>+90 M.U.</td>
</tr>
<tr>
<td>#3</td>
<td>50 M.U.</td>
<td>100 M.U.</td>
<td>−50 M.U.</td>
</tr>
<tr>
<td>#4</td>
<td>90 M.U.</td>
<td>110 M.U.</td>
<td>−20 M.U.</td>
</tr>
<tr>
<td>Total Effect</td>
<td></td>
<td></td>
<td>+40 M.U.</td>
</tr>
</tbody>
</table>

The cumulative effect of the orders is to increase the total contract price by 40 M.U.

The same computation would be done for quantities, using estimated versus actual, measured quantities. First, the cost of the quantities of a particular items as estimated would be compared to the price of these quantities as actually encountered; second, the total contract price would be increased (or decreased) by the difference between those two prices.

The adjusted contract price (now reflecting the effect of all variation orders and variations from estimated quantities) would be compared to the original total contract price. In the event the difference between these two contract prices is greater than 10%, an adjustment to the original price will be made. The purpose of these calculations is to determine the final, cumulative effect of any and all change orders and variations in estimated quantities.

In the “Estimated Quantities” clause of Standard Form 23-A, recovery is permitted only after the percentage of variation becomes greater than 15%. Whenever the quantities actually encountered on a project vary (either through increase or decrease) by more than 15% from the estimated quantities for that item, either the contractor or owner is entitled to an equitable adjustment. Unlike FIDIC, no other conditions are imposed on recovery. Variation and quantity categories are treated separately, i.e. payable item by item.

Standard Form 23A’s “Variation in Estimated Quantities” clause reads in full:

Where the quantity of a pay item in this contract is an estimated quantity and where the actual quantity of such pay item varies more than fifteen percent (15%) above or below the estimated quantity stated in

Variations in Estimated Quantities  79
this contract, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above one hundred fifteen percent (115%) or below eighty-five percent (85%) of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contracting Officer shall, upon receipt of a written request for an extension of time within ten (10) days from the beginning of such delay, or within such further period of time which may be granted by the Contracting Officer prior to the date of final settlement of the contract, ascertain the facts and make such adjustment for extending the completion date as in his judgment the findings justify. [Emphasis added.]

(It should be noted that this provision also allows for a time extension if the quantity variation increases the time necessary for completion.)

In actual practice, this clause has been very useful in protecting contractors and owners from grossly under—and over—estimated quantities. In one dam construction project, an owner's estimate of the amount of dewatering thought to be necessary was grossly insufficient. While the job was still only partially completed, the dewatering actually done was four times that predicted by the owner. During litigation, the court temporarily denied the owner's request that the contract's unit price for dewatering be reduced in order to save the owner from a substantial loss on the project. The court found that the fact situation fit within the terms of the “Estimated Quantities” clause, and therefore, based on that argument alone, the contractor could not be denied recovery for the enormous cost overrun. The court considered the total contract price rather than an individual bid item to be the pivotal factor. If, at the completion of the project, the total price was found to be grossly underestimated due to the dewatering error, then the unit price for dewatering would be adjusted accordingly.

Other international contracts (private and standard) which contain “Variation” clauses follow the general intent (if not the wording) of FIDIC and 23-A in that they grant the contractor the right to be compensated for significantly large variations from an owner-supplied estimate of quantities. In Saudi Arabian contracts, the percentage of variation triggering adjustment must be at least 20-25%.

If the contract does not contain a separate estimated quantities provision, the contractor is dependent on the owner's receptiveness to such a claim. As discussed in previous chapters, certain countries assume that a contractor's bid takes into account all eventualities; thus, owners could disallow claims arising during construction. For the contractor, reliance on the owner's discretion for an adjustment in the contract price is not a practical alternative. A specific contract provision discussing how variations from estimated quantities will be handled can help prevent substantial loss by either party.

**Notice Requirements**

A most critical element in the process of requesting compensation for all types of changed work is giving notice. Notification permits all parties to verify conditions, assemble facts, and resolve disputes while the issues are fresh in minds.

80 Changes in Quality or Quantity
No claim or disputable issue can be studied unless proper notice is given to the owner’s representative. This generally includes a written description of the problem, an estimate of the costs or damages suffered to the extent realized, and the relief requested. Notice must be received within a reasonable time period.

In FIDIC and ICE Clauses 14 and 46, dealing with the engineer’s powers, there is no mention of notice requirements regarding contractors. The standard of “as soon as practicable,” then, would seem to be a suitable one. Standard Form 23-A, however, very specifically outlines the manner and timing of the notice required of the contractor. For example, no acceleration claim will be allowed for costs incurred more than 20 days prior to the written notice to the C.O. of the conditions which caused the contractor to accelerate. In addition, he must submit a priced claim within 30 days of the written notice. Failure to abide by these requirements will generally lead to the claim being barred. However, in other decisions claims were allowed despite late notice, provided the government/owner had not been prejudiced.

A contractor may find its claim barred regardless of its validity because it failed to adhere to contractual notice requirements. Under most contracts, the failure of a contractor to submit written notice of a potential claim within specified time limits will constitute a waiver of claim rights. All contracts, whether public or private, should contain provisions clearly stating the time limitations within which a contractor must assert a variations claim.

FIDIC’s Clause 51(2) calls for variations to be made through the written order of the engineer. (Except that a contractor who confirms in writing, within seven days, a verbal order given by the engineer, and receives no contradictory reply from the engineer within fourteen days thereafter, is construed to have been given a written order from the engineer, i.e., a formal change order.) Clause 52(2) provides, however, that any change granted under the provisions of Clause 51 will not be compensated unless:

... before the commencement of the work or as soon thereafter as is practicable, notice shall have been given in writing:

(a) by the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price. ...

In other words, even a formal change order does not automatically entitle a contractor to compensation; he must submit a written claim for added expenses. A contractor is not expected, however, to provide the total calculations of incurred costs at the time of notice. When pricing a change order, a contractor should be alert to the expense considerations not immediately apparent in the particular work items involved in the change. The indirect costs resulting from a change order are often overlooked. If such costs are potentially significant, but cannot be immediately determined, the contractor should inform the owner, in writing, that he is reserving the right to claim these costs when they are ascertained.

Furthermore, FIDIC Clause 52(5) provides that the contractor shall submit, once every month, a detailed report of all his potential claims. No claim will be considered without this prior notice, except that the engineer has the discretion to allow a claim he decides has been submitted by the contractor at the earliest practicable opportunity.

A British court has held that a contractor’s claim may be considered submitted “as soon as practicable”, even when that is not within what is or-
darily considered "a reasonable time." In *Terson Ltd. v. Stevenage Development Corporation,* in a claim arising under a FIDIC clause, special circumstances were found to excuse a lapse of five months between the issuance of the engineer’s order and receipt of the contractor’s notice of an intent to submit a claim. The “special circumstances” came about because the contractor had not immediately put into use a drawing issued by the engineer. Therefore, the need to submit a claim for additional expenses (incurred because of that drawing) did not become apparent to the contractor until the work related to the drawing had actually begun—some five months after its issuance.

In other contracts, where the time frame is not specified in terms of days, other phrases such as “forthwith” or "as soon as reasonably practicable" may be used to describe what is considered timely notice.

Underscoring the emphasis placed on timely notice, the otherwise flexible Standard Form 23-A requires a contractor to meet specified time requirements to assert a “Changes” claim or risk having his claim barred. Under the formal “Changes” clause, notice must be given before any claim will be entitled to an equitable adjustment. This notice must be in writing and set forth the general nature and monetary extent of the claim. Notice must be received by the contracting officer within thirty days from receipt of a written change order or written notice of a constructive change. Failure to meet these requirements may render the claim invalid. However, the government has discretion to receive any claim asserted prior to final payment.

While failure to give timely notice may bar a claim in most jurisdictions, a few do allow a claim to be considered if an owner or his agents had actual, active knowledge but not formal written notice of the change. The courts have utilized this concept of "constructive notice" to avoid unfairness (*"constructive" here means “apparent” or “indirect”). A contractor could experience severe hardship, if no recourse is available to him to pursue a valid claim in situations when formal requirements of the contract could not be met. However, it should be noted that the burden is on the contractor to show that the owner was, in fact, actively aware of the change and that the contractor was justified in thinking the owner had tacitly approved it.* A showing of knowledge alone, without tacit approval of the owner, would probably not be sufficient as proof.

Under the “Changes” clause in Standard Form 23-A, notice must be given of

... the date, circumstances, and source of the order and that the contractor regards the order as a change order.

Notice must be in writing and must be given within twenty days of incurring any increase in costs because of the constructive change. The consequence of failure to meet these notice requirements is that the costs incurred more than twenty days prior to such notification cannot be recovered. However, a few decisions interpreting this provision have allowed recovery of costs incurred more than 20 days prior to the giving of notice, if no prejudice to the government is shown.*

The requirement that a contractor's claim be in writing may not always be explicit in the provisions, but might be inferred from other stipulations, such as one that requires the claim be based on either a written change order or a written confirmation of a verbal order. Nevertheless, a contractor would
be wise to see that all the information regarding the particular dispute (the change order, the notice of the potential claim and the claim itself) is put in writing in deference to the oft-mentioned literal interpretation given contract terms. If he fails to take such precautions, a contractor may find himself precluded from disputing a proposed change, even though the ordered variation was later found to be outside the scope of the contract work.

Generally, the contractor is required to give the owner advance notice of a potential claim before the owner can give any consideration to that claim, regardless of whether this is expressly stipulated in the contract. After being informed that there may be unanticipated costs, the owner might decide to withdraw the change order. In any event he has the right to learn of liabilities before they occur, whenever that is possible. Adherence to notice requirements gives the owner the opportunity to assess the utility and necessity of a contemplated change in light of its cost, and the opportunity to investigate a contractor's claim while the events are fresh in the participants' minds.

It is essential to the interests of both parties that each clause (or section) of the contract contain the notice requirements relevant to it, e.g., notice relating to claims for "Changes" be within the "Changes" clause itself. Hopefully, this would eliminate the ambiguity created by very broadly worded, separately placed notice requirements which are meant to apply to the agreement as a whole. Whenever the responsibilities of each party are clearly detailed, a potential controversy may be avoided.
<table>
<thead>
<tr>
<th>Clause</th>
<th>Grounds for Making Claims</th>
<th>Rights to Reimbursement</th>
<th>Notices to be paid by Contractor</th>
<th>Clauses for payment</th>
<th>Payment includes profit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>5(2)</td>
<td>Instructions issued by the Engineer in cases of ambiguity or discrepancy arising out of the several documents forming the Contract</td>
<td>Delay and disruption involved Variation may be ordered to overcome the problem</td>
<td>None 51(2)</td>
<td>5(2) 52</td>
<td>No 'cost' only Yes</td>
</tr>
<tr>
<td>6(4)</td>
<td>Failure or inability of the Engineer to issue, at a time reasonable in all the circumstances, drawings or instructions requested by the Contractor</td>
<td>Delay and disruption involved Variation may be ordered to overcome the problem</td>
<td>6(3) 51(2)</td>
<td>6(4) 52</td>
<td>No 'cost' only Yes</td>
</tr>
<tr>
<td>12</td>
<td>Unforeseen physical conditions or artificial obstructions are encountered Any instructions may be issued by the Engineer to overcome the problem</td>
<td>Delay and disruption involved</td>
<td>12 line 9 12 line 9</td>
<td>12</td>
<td>No 'cost' only No 'cost' only</td>
</tr>
<tr>
<td>17</td>
<td>Setting-out based upon incorrect data supplied in writing by the Engineer or his Representative</td>
<td>Delay and disruption involved Variation may be ordered to overcome the problem</td>
<td>None</td>
<td>5(2) 51(2)</td>
<td>No 'cost' only Yes</td>
</tr>
<tr>
<td>18</td>
<td>Carrying out exploratory excavations or boreholes required by the Engineer's requirements to be treated as if a variation</td>
<td>Delay and disruption involved</td>
<td>None</td>
<td>18 &amp; 52</td>
<td>Yes</td>
</tr>
<tr>
<td>20(2)</td>
<td>Repairs and making-good damage arising from 'Exempted Risks'</td>
<td>Delay and disruption involved Engineer requires the repairs etc.</td>
<td>None</td>
<td>20(2)</td>
<td>No 'cost' only</td>
</tr>
<tr>
<td>26(3)</td>
<td>Fees paid in respect of any Statute or regulation, etc.</td>
<td>Engineer certifies Contractor has properly paid such fees</td>
<td>None</td>
<td>26(3)</td>
<td>No</td>
</tr>
<tr>
<td>27</td>
<td>Discovery of fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest, on the Site</td>
<td>Engineer's Representative orders disposal of fossils, etc. Delay and disruption involved</td>
<td>None</td>
<td>27</td>
<td>Yes</td>
</tr>
<tr>
<td>30(2)</td>
<td>Protection or strengthening of highways for the movement of loads of Constructional Plant, machinery or pre-constructed units of work</td>
<td>Engineer requires or approves proposals to strengthen or protect highways or bridges</td>
<td>30(2) line 5</td>
<td>Check BQ* for items or see 30(2) No 'cost' only</td>
<td>30(2) line 5</td>
</tr>
<tr>
<td>30(3)</td>
<td>Extraordinary traffic has caused damage to highways or bridges</td>
<td>Employer indemnifies Contractor against such claims</td>
<td>30(3) line 3</td>
<td>30(3)</td>
<td>No</td>
</tr>
<tr>
<td>31</td>
<td>Opportunities afforded to other contractors, workmen of the Employer or duly constituted authorities, Roads or ways, scaffold or other plant, or any other service provided on the written request of the Engineer or his Representative</td>
<td>Delay and disruption involved Facilities afforded on the written request of the Engineer or his Representative</td>
<td>None</td>
<td>31</td>
<td>Yes</td>
</tr>
<tr>
<td>36(2) &amp; (4)</td>
<td>Samples required which are not clearly intended by or provided for in the Contract. Tests required which are not clearly intended by or provided for in the Contract, providing the tests show work, etc. is sound</td>
<td>Delay and disruption involved Samples provided tests carried out</td>
<td>None</td>
<td>36(2) &amp; 36(4)</td>
<td>No 'cost' only</td>
</tr>
<tr>
<td>38(2)</td>
<td>Engineer directed Contractor to uncover work or make openings in any part or parts of the Works and such parts found to be in accordance with the Contract (after compliance with Clause 38(1))</td>
<td>Delay and disruption involved Uncovering, making openings and the making-good of same</td>
<td>38(1) line 5</td>
<td>38(2)</td>
<td>Yes</td>
</tr>
<tr>
<td>40(1)</td>
<td>Suspension ordered involving the protection and security of the work</td>
<td>Delay and disruption involved Protection and security</td>
<td>40(1) lines 13-14</td>
<td>40(1)</td>
<td>No 'cost' only</td>
</tr>
</tbody>
</table>

* BQ - Bill of Quantities
<table>
<thead>
<tr>
<th>Clause</th>
<th>Grounds for Making Claims</th>
<th>Rights to Reimbursement</th>
<th>Notices to be Given by Contractor</th>
<th>Clauses for Payment</th>
<th>Payment Includes Profit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>40(2)</td>
<td>Permission to resume work (following an order to suspend) is withheld for 90 days or more enabling work to be treated as an omission</td>
<td>Work omitted renders rates or prices unreasonable or inapplicable</td>
<td>40(2) line 4 and 40(2) line 7</td>
<td>52</td>
<td>Yes</td>
</tr>
<tr>
<td>42(1)</td>
<td>Employer fails to give possession of as much of the Site as may be required</td>
<td>Delay and disruption involved Variation may be ordered to overcome the problem</td>
<td>42(1) line 8</td>
<td>52</td>
<td>Yes</td>
</tr>
<tr>
<td>49(3)</td>
<td>Work or repair, amendment, reconstruction or rectification required</td>
<td>Such work arises from a defect, etc., which is not due to failure on the Contractor's part (Works are complete &amp; no delay)</td>
<td>None</td>
<td>49(3) &amp; 52</td>
<td>Yes</td>
</tr>
<tr>
<td>50</td>
<td>Searching for the cause of any defect</td>
<td>Delay and disruption involved Searching</td>
<td>None</td>
<td>50</td>
<td>No 'cost' only</td>
</tr>
<tr>
<td>51</td>
<td>Variations in Contract</td>
<td>Delay and disruption involved Increase in quantity, change in character, or quality or kind, etc., as 51(1)(a)(c)(d) &amp; (e)</td>
<td>51(2)</td>
<td>52</td>
<td>Yes</td>
</tr>
<tr>
<td>52(1)</td>
<td>Extra payment required under 52(1) Variation of rate or price is required under 52(2) due to the nature or amount of an omission or addition (ordered under Clause 51) rendering a rate or price for any item of the Works unreasonable or inapplicable</td>
<td>Delay and disruption involved due to the nature or amount of an omission or addition of work Extra payment or varied rate or price</td>
<td>52(2)(a)</td>
<td>52</td>
<td>Yes</td>
</tr>
<tr>
<td>52(3)</td>
<td>Upon certified completion of the whole of the Works there is found to be a reduction of the sum named in the Letter of Acceptance by an amount greater than 10%</td>
<td>A substantial (10%) reduction in 'turnover' reduces the returns originally anticipated (based upon the datum sum named in the Letter of Acceptance)</td>
<td>None</td>
<td>52(3)</td>
<td>This lump sum payment is to restore the Contractor's return (profit) to the original level</td>
</tr>
<tr>
<td>59(4)</td>
<td>Clause 52(5) requires the Contractor to make monthly claims for 'any additional payment.' This would appear to include sums for: (a) work executed or goods materials or services supplied by Nominated Subcontractors and (b) labours in connection and (c) all other charges and profit</td>
<td>Engineer has ordered or directed the payments concerned and labours, etc.</td>
<td>59(5)</td>
<td>59(4)</td>
<td>(a) No (b) Yes (c) Yes</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------------------</td>
</tr>
<tr>
<td>65</td>
<td>Special risks arise</td>
<td>Damage caused to Works, materials or other property (of the Contractor)</td>
<td>None</td>
<td>65(2)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increased costs arising</td>
<td>65(4)</td>
<td>65(4)</td>
<td>'cost' only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Termination of contract</td>
<td>None</td>
<td>65(8)</td>
<td>See 65(8)</td>
</tr>
<tr>
<td>66</td>
<td>Contract frustrated</td>
<td>By war or other circumstances arising outside the control of both parties preventing the Contractor (or Employer) fulfilling their obligations</td>
<td>None</td>
<td>65</td>
<td>See 65(8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(but some notification would of course be given)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>Defaults (as detailed in 69(a)(b)(c)(d) committed by Employer)</td>
<td>Termination of employment</td>
<td>69(1) line 12</td>
<td>69(3) and 65(8)</td>
<td>See 65(8)</td>
</tr>
<tr>
<td>70(1)</td>
<td>Adjustment of Contract Price in respect of labour and/or materials, or any other matters affecting the cost of the execution of the Works have arisen as set out in Part II under Clause 70</td>
<td>Rises in costs occur, or any other matters affecting cost arise</td>
<td>None</td>
<td>70(1) and see Part II</td>
<td>'cost' only</td>
</tr>
<tr>
<td>70(2)</td>
<td>Changes in Statutes etc., causes additional cost to the Contractor in the execution of the Works</td>
<td>Statutes, Ordinances, etc., have changed after the date 30 days prior to submission of tenders</td>
<td>None</td>
<td>70(2)</td>
<td>'cost' only</td>
</tr>
<tr>
<td>71</td>
<td>Currency restrictions are imposed in relation to the currencies in which the Contract Price is to be paid</td>
<td>Restrictions in relation to currencies give rise to legal or damage to the Contractor</td>
<td>None</td>
<td>71</td>
<td>Financial losses suffered are to be reimbursed</td>
</tr>
</tbody>
</table>
### Table 3-2 Recovery by OWNER Under FIDIC Clauses

<table>
<thead>
<tr>
<th>Clause</th>
<th>Grounds for Recovery of Sums Due</th>
<th>Rights to Recovery</th>
<th>Notices to be Given by the Engineer in Respect of the Sums Due</th>
<th>Method of Recovery of Sums Due</th>
</tr>
</thead>
</table>
| 25     | Contractor fails to produce satisfactory evidence that insurance, referred to in the Contract, is in force | Employer has paid the premium necessary to obtain the insurance required | None | 1. Deduct the amount so paid from any money due, now or in the future, to the Contractor  
2. Recover the amount as a debt |
<p>| 30(3)  | Highways or bridges communicating with the site are damaged in the transporting of Contractual plant, machinery, etc., due to failure on the part of the Contractor to observe and perform the obligations detailed in Clause 30(1) and (2) | Engineer has certified an amount to be due to the failure on the part of the Contractor | None | Payment to be made by the Contractor to the Employer |
| 39(2)  | Contractor fails to carry out the Engineer’s orders to remove or substitute materials, or to re-execute any work | Employer employs and pays other persons to carry out such removal or re-execution, etc. | None | As for Clause 25 above |
| 47(1)  | Contractor fails to complete the Works within the relevant time | Liquidated damages arise as stated in the Contract | 46 line 3 | See Clause 47(1) |
| 49(4)  | Contractor fails to finish certain work required by the Engineer pursuant to Clause 49, which, in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contract | Employer employs and pays other persons to carry out such work | 49(2) line 7 | As For Clause 25 Above |
| 52(1) &amp; (2) | A decrease under 52(l) is applicable in the Engineer’s opinion. The nature or amount of an omission or addition (ordered under Clause 51) relative to the nature or amount of the whole or any part of the Works renders a rate or price unreasonable or inapplicable | Engineer varies a rate or prices | 52(2)(b) | Adjustment of Contract or prices |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Action</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>52(3)</td>
<td>Upon certified completion of the Works there is found to be an increase of the amount named in the Letter of Acceptance by an amount greater than 10%</td>
<td>A substantial (10%) increase in work increases the return originally anticipated (based upon the datum sum named in the Letter of Acceptance)</td>
<td>None</td>
</tr>
<tr>
<td>59(5)</td>
<td>Contractor fails to show reasonable proof of payment (or discharge) to Nominated Subcontractors</td>
<td>Employer has paid the Nominated Subcontractor direct</td>
<td>Certification under 59(5) lines 11 &amp; 12</td>
</tr>
<tr>
<td>63</td>
<td>Default by the Contractor leading to his expulsion from the Site</td>
<td>Costs of execution and maintenance together with damages for delay (if any) and all other expenses incurred providing the amount exceeds the sum payable to the Contractor under 60(3)</td>
<td>Certification under 63(2) and 63(3)</td>
</tr>
<tr>
<td></td>
<td>Employer may sell Constructional Plant, etc.</td>
<td>As above</td>
<td></td>
</tr>
<tr>
<td></td>
<td>64 last line</td>
<td>Apply proceeds towards the debt owing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Deduct the amount so paid from any money due, now or in the future, to the Contractor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Recover the amount as a debt</td>
<td></td>
</tr>
<tr>
<td>70(1)</td>
<td>Adjustment of Contract Price in respect of labour and/or material cost reductions, or any other matter affecting the cost of the execution of the Works (arising as set out in Part II under Clause 70 to reduce the cost)</td>
<td>Reductions in costs occur</td>
<td>None</td>
</tr>
<tr>
<td>70(2)</td>
<td>Changes in Statutes, etc., cause a reduction in cost to the Contractor in the execution of the Works</td>
<td>Statutes, Ordinances, etc., have changed after the date 30 days prior to the submission of tenders</td>
<td>Certification under 70(2)</td>
</tr>
</tbody>
</table>
REFERENCES

3. Indian Law Institute, Contractual Remedies in Asian Countries 6 (1975).
4. Young Construction Co., ASBCA 10761, 66-1 BCA §5551 (1966). (Site flooding due to overflow of government-controlled water main is a constructive change.); Aerojet-General Corp., ASBCA 13548, 70-1 BCA §8245 (1970). (Extra costs incurred by contractor because of government failure to supply Vietnamese currency, as required by their contract, is a compensable construction change.)
7. Note 5, supra.
20. Note 5 supra, 425; Hudson’s, note 8 supra, 548-553.
22. Freund, note 17 supra.
25. Note 19 supra.
26. Gail Frey Borden, Legal Counseling in the Middle East: Particular Lessons from Iran, 14 Int'l. Law. 545 (Summer, 1980).

90 Changes in Quality or Quantity
32. Note 14 supra.
33. Note 12 supra, 137.
34. Claims preparation technique utilized by author.
35. Hudson’s, note 8 supra, 266-7; Note 5 supra 55; Nash, note 8 supra, Chap. 12 generally.
37. John McShain, Inc. v. United States, 412 F.2d 1281 (Ct.Cl. 1969), 11 G. C. ¶310; See also City of Eveluth v. Ruble, 225 N.W.2d 521 (Minn. 1974).
38. Southern New England Contracting Co. v. Sate of Connecticut 345 A.2d 550 (Conn. 1978); Spearin, note 36 supra.
42. Hudson’s, note 8 supra, 277.
43. Note 12 supra, 136.
45. Barkdale Brothers Corporation, ASBCA 7214, 1963 BCA ¶4,000.
47. Hydrospace Electronics & Instrument Corp., ASBCA 17922, 74-2 BCA ¶10,682.
48. Stanley W. Wasko, ASBCA 12228, 68-1 BCA ¶6,986; note 5 supra, 126; note 23 supra, cl. 38(1).
51. Johnson, note 50 supra.
52. Mech-Con Corporation, GSBCA 1373, 1965 BCA ¶4,574; Stone and Phelps, note 40 supra.
53. Hudson’s, note 8 supra, pp. 326-7; Nash, note 8 supra, 54-5.
54. Graves Granite ENG BCA 4081, 79-2 BCA ¶14077.
59. Note 9 supra, cl. 13; note 23 supra, cl. 13.
62. Tsakiroglou, Note 58 supra.
64. Note 23, supra, cl. 46.
65. Hudson’s, note 8 supra, 577.

References 91
66. Briefing Paper #64-3 (Ribakoff, "Acceleration").
69. Pathman Construction Co. ASBCA 14285, 71-1 BCA ¶9,404, 13 G.C. ¶359.
70. Note 5 supra, 21.
72. Monmouth Food, Inc., ASBCA 19682, 77-1 BCA ¶12,462; Fred McGilvray, Inc., ASBCA 15471, 15778, 71-2 BCA ¶9,113; Oren Childers Paint Contracting Co., ASBCA 13987, 70-2 BCA ¶8388.
73. Hoel-Steffen Construction Co. v. United States, 456 F.2d 760 (Ct.Cl. 1972); Copco Steel 
& Engineering Co. v. United States, 169 Ct.Cl. 601 (1965); Hartford Accident and 
Indemnity Company, I BCA 1139-1-77, 77-2 BCA ¶12,604 (1977); Baltimore Contractors Inc., GSBCA 3791, 77-1 BCA ¶12,234; Fletcher Aviation Corp., ASBCA 7,669 et al., 1974 BCA ¶4,192; Gibbs Shipyard, Inc., ASBCA 9809, 67-2 BCA ¶6,499.
76. Powers Regulator Company, GSBCA 4,668 et al., 80-2 BCA ¶14,463.
77. Note 73, supra.

92 Changes in Quality or Quantity
Chapter 4

Adverse Site Conditions

Conditions encountered at the project site during construction may differ adversely from those anticipated at the planning stage. When this occurs, contractual language will be controlling in determining responsibility for delays and liability for additional costs. This chapter samples contractual language in use, analyzing its usefulness and limitations.

Unknown subsurface or latent site conditions are a very significant risk inherent in virtually all construction projects. That risk is compounded when some public international contracts (e.g., Saudi Arabian Tenders Regulations and England's Standard Government contract), place great emphasis on the contractor's duty to thoroughly investigate the site before bidding. Such terms shift responsibility from the owner when unanticipated adverse (or "unfavorable") site conditions are encountered.¹

Contract clauses which provide for price and/or time adjustments when such latent conditions are encountered, represent an enlightened owner's effort to reduce the contingency cost that contractors include in bid prices in anticipation of unexpected conditions. Such clauses are based on the assumption that when the contractor can reasonably expect adjustments in the contract price and/or completion time, if adverse site conditions are encountered, there is no need to raise bid prices for self-protection. Both owner and contractor benefit from acknowledging in the contract the valid expectation of encountering adverse site conditions and providing for mutual economic relief from this threat.

Contract Clauses

FIDIC's clause 12 on adverse site conditions and artificial obstructions permits recovery if

"... during the execution of the Works the contractor shall encounter physical conditions or artificial obstruction which conditions or obstructions could not have been reasonably foreseen by an experienced contractor ..."²

and the engineer concurs with the contractor's written notice of these events.

Upon the engineer's certification, the owner pays the contractor the additional cost incurred as a result of these unforeseeable conditions. Payment includes the reasonable cost to the contractor of compliance with the engineer's instructions issued in connection with the condition.

By granting the contractor a price and/or time increase when subsurface or latent conditions result in greater cost and effort than were reasonably anticipated, the risk of adverse site conditions is assigned to the owner.
As far back as 1927, the U.S. Government began including a “Changed Conditions” clause in its construction contracts. Now called “Differing Site Conditions” (DSC), it grants a contractor arguably the broadest protection compared to other contracts used in international work. In addition to providing for equitable adjustment to the contract price if a DSC is encountered, it takes into account the cost effects that the adverse condition has on any portion of the contract work, whether resulting directly or indirectly from those conditions. Standard Form 23-A covers two types of differing site conditions in its Clause 4:

(a) The contractor shall promptly, and before such conditions are disturbed, notify the Contracting Officer in writing of (1) subsurface or latent physical conditions at the site differing materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in this contract. The Contracting Officer shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor’s cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly. [Emphasis added.]

The contractor should be aware that under Form 23-A he is obligated to give prompt written notice to the engineer of the unexpected condition. (This requirement may be waived under some circumstances. For example, oral notice given to the owner’s representative may be sufficient in some cases to satisfy the notice requirement.) Most importantly, the contractor must act before the condition is disturbed because it is essential that the engineer personally inspect the adverse condition while it remains in the same condition as when first encountered so that (1) the extent of the problem can be analyzed, and (2) the engineer is given the opportunity to minimize any resulting damages.

Types of Conditions

Some contracts offer the contractor relief from site conditions that differ materially from plans and specifications (as in one private Saudi contract); and others from unusual site conditions that are not reasonably foreseeable by an experienced contractor (Clause 12, FIDIC and ICE).

Rarely do other contracts permit recovery for both types of conditions as does Standard Form 23-A. The language of 23-A’s “Differing Site Conditions” provision (above) clearly allows claims for either type of adverse site condition. Most other contracts are not so straightforward. For example, the wording of FIDIC’s “Differing Conditions” clause is quite general. Although definitely allowing a claim for unusual, unforeseeable conditions, it is open to the interpretation that this clause also permits claims for conditions differing materially from contract documents. (See Appendix A for full text.)

Australia’s Standard Form #2124, describes both kinds of conditions.
However, it appears that both conditions must be satisfied before a claim can be brought under its “Latent Conditions” clause:

If the contractor encounters on the site or its surroundings physical conditions including artificial obstructions, which he considers
a) differ materially from those which would have been ascertainable by the contractor, if he had done that which by Clause 12.1 [examined drawings, specifications, maps, diagrams made available to him by the Owner] he is deemed to have done, and
b) could not reasonably have been anticipated at the date of the contractor’s tender by a contractor experienced and competent in carrying out work of the type with which the contract is concerned, if he had done that which by Clause 12.1 the contractor is deemed to have done,
the contractor shall as soon as practicable thereafter, and when possible before the conditions are disturbed, give written notice thereof to the Superintendent [Owner’s Representative].

On receipt of such notice from the contractor, the Superintendent shall promptly investigate the conditions and shall determine whether any variation to the work under the contract is necessary . . . [Emphasis added.]

The first type of changed condition is that of a subsurface or a latent condition differing materially from that described in the technical data of the contract. Not restricted to subsurface conditions, this category also includes conditions which may be at, or above, the surface but are latent in the sense that they are concealed, hidden, or dormant.

The following situations illustrate this type of changed condition:

1. The presence of rock or boulders in an excavation area where none is shown or indicated or the existence of such rock at materially different elevations than is indicated in the data available to bidders;
2. The presence of permafrost or subsurface water where none is indicated by the contract documents;
3. The encountering of loose, soft material at a location or elevation where the boring data indicate the existence of sound rock;
4. The failure of designated borrow pits or quarry sites to produce the required materials, entirely or in sufficient quantities, without excessive waste or unusable materials beyond that reasonably anticipated from the pre-bid data;
5. The presence of rock, debris or other subsurface obstructions in substantially greater quantities than might be in the bid documents;
6. The encountering of groundwater at a higher elevation, or in quantities in excess of those indicated or reasonably anticipated from the data that might be available to bidders;
7. The presence of a higher moisture content in soils to be compacted than is to be anticipated from the contract data; and
8. Ground contour elevations at the site which may differ from those shown on the drawings and, accordingly, greater quantities of excavation or fill are required.

Proof of the existence of this type of changed condition depends upon
the *comparism* of the conditions actually encountered with those indicated in the contract. If the contract were to contain no indications of subsurface conditions then, obviously, no comparison can be made and the adverse condition cannot be of this type. (Relief for such unmentioned conditions may still be available within the second category of changed conditions, to be described later.)

While the existence of this first type of differing condition depends on a comparison between the conditions actually encountered and those indicated in the contract, these indications need not be explicit or specific. All that is required is that there be a sufficient indication to support the conclusion that a bidder would not reasonably have expected the conditions actually encountered after carefully studying the contract references.7

Whether an international contract offers relief for differing site conditions often depends on whether the owner has assumed responsibility for or warranted the accuracy of the technical information he has supplied. A clause stating that the data supplied by the owner is for informational purposes only and the owner does not guarantee or warrant the accuracy of the data, is a way whereby the owner disclaims any obligation to the contractor regarding differing site conditions. The contractor will likely bear the risk of extra costs in that event.

In England, material differences between contract-described and actual site conditions may be regarded as misrepresentations. A contractor may now bring an action under the Misrepresentation Act of 1967 against an owner for damages if serious discrepancies are found in owner-supplied information.8 In one leading case, the owners of a barge had negligently represented to a contractor seeking to rent the craft for use on a construction project that the barge had a payload capacity of 1,600 tons. In actuality, the capacity of the barge was 1000 tons and grossly insufficient for the rental purpose. The owners were found liable on the ground of misrepresentation.9

The second type of changed condition occurs when a contractor encounters at the site an unanticipated physical condition of an unusual nature, differing greatly from conditions ordinarily encountered or from what are generally recognized as inherent in the kind of work contracted.

Unlike the first type, this category does not depend on how contract data compare with actual conditions. What is required is that the condition must have been *unknown*, *unusual*, and must *differ materially* from what is ordinarily expected in this kind of project.

Examples of conditions which may serve as the basis for relief under this second type of condition could include:

1. The unanticipated unearthing of a buried, full-size river barge during excavation at a waterfront site;
2. The unexpected and highly corrosive nature of groundwater at the site, which might result in extensive damage to the contractor’s dewatering equipment;
3. Excessive hydrostatic pressure encountered in the laying of a pipeline, which might not have been reasonably anticipated at the time of bidding;
4. Failure of rock from an approved borrow pit to fracture in the manner which might be expected for production of contract aggregate.

96 Adverse Site Conditions
The unknown and unusual condition encountered does not have to be a one-in-a-million situation, such as a subterranean lake under a desert. All that is required is that the condition be unanticipated based on a reasonable evaluation of the work contained in the contract documents. Demonstrating this type of changed condition is not as clear-cut a task as in the first type of situation. In the type two situation, actual conditions encountered must be compared with what is reasonably expected, taking into account all factors an experienced bidder customarily considers regarding quantity, quality and methods of performance for that particular kind of work.

The customary elements in establishing the second type of changed condition may be derived from the bidding judgments made by the contractor, such as: (i) a reasonable site inspection, (ii) a study of the contract documents, and (iii) intelligent interpretation based on construction experience.

Background factors for establishing that a condition was not to be reasonably anticipated are: customs of the trade; common knowledge in the industry; manufacturers' instructions and recommendations; and traditional assumptions involved in bidding a particular kind of work.

Hindsight may lead the owner to conclude that the condition should have been foreseeable. To overcome this assumption, the parties can use as a guideline this question: Given the information available to bidders, was the contractor's judgment and interpretation of the work a reasonable one at the time of the bidding?

An experienced contractor is aware of countless unexpected conditions that may be encountered at construction sites. The criterion ought to be whether there was a substantial risk of it occurring, given all the data available at the time of the bidding, not whether there existed any possibility, however remote, that the condition might occur.

In the majority of cases, the adverse condition is probably unknown to both the owner and the contractor at the time of bidding. Therefore, it becomes a mutual mistake situation for which relief is customarily available under standard contract law. However, for a contractor to recover it is not necessary that the condition also be unknown to the owner, as long as it remains unknown to the contractor after a diligent review of the contract documents and his site inspection. Failure of the owner to reveal a latent condition known to him could constitute misrepresentation or concealment for which relief is available to the contractor under a breach of contract theory.

Conversely, if the contractor knows of the unusual condition at the time of bidding, he cannot recover for any type of changed condition. Furthermore, knowledge by the contractor is not limited to actual awareness. He may be deemed to have had constructive knowledge if the condition is one he should have reasonably expected. Type two conditions include those which would have been discovered by reasonable site investigation, observations of the performance of other contractors working at the same site, or common knowledge among construction contractors in the area which could have been determined by an adequate inquiry. Failure of the contractor to visit the work site prior to bidding, especially if alerted to potential problems, and the resulting nondiscovery of obvious adverse conditions might very likely cause a type two condition claim to be barred on the theory that the bid itself lacked a reasonable basis.

Types of Conditions  97
Thorough inquiry and site investigation on a foreign project may not always be feasible. Owners may not take this into consideration because of their reliance on disclaimers and exculpatory language discussed in subsequent sections.

Duty to Investigate

Almost all public and private international contracts contain clauses requiring the contractor to personally inspect the site and satisfy himself as to all observable conditions which may affect construction. FIDIC (and ICE) Clause 11 is indicative of most of these clauses:

The contractor shall also be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his Tender, as to the form and nature thereof, including the subsurface conditions, the hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the Works, the means of access to the Site and accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.17

Other contracts’ wording may differ—less emphatic or more detailed, but has the same general intent: preclude the contractor’s later claim if he could have discovered the condition during a reasonably thorough, personal investigation of the site.

What is the extent of the bidder’s duty to investigate the site? The condition for which the contractor is seeking relief must have been unforeseeable on the basis of all information available at the time of bidding.18 If the condition should have been anticipated after a site inspection, there will be no basis for relief, even though the drawings and specifications made no reference to this condition or may have indicated conditions different from those actually encountered.19

For example, if rock were unexpectedly encountered during excavation and an inspection of the site would have revealed the presence of such rock where none was shown in the contract documents, it is very likely no relief will be granted.

Likewise, if groundwater conditions should have been reasonably anticipated from the topography at the work site, the presence of groundwater in the excavation would not constitute a changed condition even though the groundwater was not mentioned in the contract documents.

On the other hand, if a site investigation is not performed as required, but nothing more would have been revealed had such an inspection been conducted, then a non-literal reading of inspection clauses should not bar recovery for the contractor.

The final decision as to what constitutes a reasonable site inspection may vary from case to case. When the owner has made express representations in the contract documents which cannot be readily verified (e.g., soil test bor-
ings), the contractor is generally entitled to reasonably rely on those representations, and is generally not required to make independent studies or conduct his own tests, absent a contract clause to the contrary. In interpreting the owner-supplied data or observing onsite conditions, the bidder is charged with the knowledge a reasonably intelligent and experienced contractor would acquire from such an inspection, and will not necessarily be expected to reach the same conclusions that a specialized expert (e.g., a soils engineer) might reach using the same data. Unless the contract expressly disclaims responsibility for the accuracy or reliability of such tests, the bidder is not obligated to seek out experts to determine the validity of the contract information. However, because the law is not stable on this issue, the preceding statements should be understood only as generalizations which are subject to the facts, the law, the forum, or the individual(s) deciding the issue.

Failure to personally inspect the site will generally not preclude relief if either the differing condition could not be discovered by a reasonable inspection, or the contractor was denied a chance to make an inspection. In the latter case, the contractor must be able to clearly establish the reasons for his inability to inspect the site.

There are five primary questions which ought to be considered in reaching the decision whether relief is warranted or not:

1. What were the expected and typical physical conditions at the work site?
2. What physical conditions were actually encountered?
3. Did such conditions differ materially from the known or the typical?
4. If so, did such conditions cause increased costs or extend the time of performance?
5. Would a reasonably diligent site investigation have revealed the adverse condition?

The proof of these answers should be clearly documented and effectively presented by the contractor if he expects to surmount the duty to investigate conferred upon him by the owner in most contracts. Since a “differing site condition” is one of the most frequently encountered construction problems, the prudent contractor is fully aware that his failure to abide by the site inspection clause may bar future claims on this ground.

Exculpatory Clauses

Virtually all contract documents issued by owners will include general disclaimers of liability, or other exculpatory clauses, which endeavor to relieve owners of the responsibility for adverse physical conditions at the site and/or the accuracy of any data furnished to bidders.

The following examples typify disclaimers present in many international contracts (paraphrased by the author):

The owner denies any responsibility for the accuracy of any subsurface data furnished and expects each bidder to satisfy himself as to the

Exculpatory Clauses 99
character, quantity and quality of subsurface materials to be encountered (as contained, in essence, in Saudi Arabian Tenders Regulations, Article 102).²⁶

The estimated quantities set forth in the contract are not guaranteed and are provided solely for purposes of determining approximate amounts or for making estimates (as in FIDIC, Clause 55).²⁷

The subsurface data furnished to bidders does not constitute a part of the contract, and is furnished solely for information (as in a private Icelandic contract).²⁸

The bidders must make their own investigations as to subsurface conditions and no claim for additional compensation will be allowed regardless of the subsurface conditions actually encountered (as in England’s GC Works Contract, Clause 2).²⁹

These disclaimers are inconsistent with the intent of “Changed Conditions” clauses and will not be effective against a “Changed Conditions” clause.³⁰

The principal reason for this would seem to be that express provisions such as “Differing Site Conditions” (DSC) enjoy supremacy over the disclaimed specifications, because the latter’s purpose is to supplement, not render inoperative, the main body of the contract.³¹ Without express DSC provisions, however, the exculpatory language prevails.³²

Caution is advised before placing complete reliance on the general practice of the courts in this area. The very literal interpretation of contract language in many international jurisdictions places a great risk on the contractor that contractual disclaimers may bar an otherwise valid claim. Predicting how a jurisdiction may construe these disclaimers is uncertain. Over the years, the customary English literalness and the equally customary American liberality in interpreting contract disclaimers have each shifted slightly toward the opposite view.

Prior to 1967, a disclaimer in an English contract would have negated a contractor’s chance to recover for misinformation supplied by the owner, unless it resulted from fraud or recklessness. Then Parliament enacted the Misrepresentation Act of 1967, that softens this approach. Remedies once limited to cases of fraudulent misrepresentations are now available to a contractor for innocent misrepresentations. In addition, English law requires that clauses restricting liability for misrepresentation must be “fair and reasonable” or they will not be given effect.³³ Conversely, American lower courts, in a few decisions, held that exculpatory clauses prevented contractors from recovering for unexpected subsurface conditions.³⁴

Parties to a contract-in-the-making should weigh the utility of exculpatory language against the possibility that it may conflict with other express contract provisions.

One option is to exclude unnecessary disclaimers. If the body of a contract is carefully drawn and sufficiently specific, a generally worded disclaimer (such as those above) might be bypassed by a court or a negotiator in a claims dispute anyway. Omitting ineffective exculpatory language may avoid a potential conflict between clauses. Furthermore, a contract oriented toward risk-sharing may induce a contractor to reduce contingencies in his bid.

Should the owner require a disclaimer to be part of the contract, the
most prudent approach for each party is to ensure that the exculpatory language is neither too generally worded nor too all-encompassing. A disclaimer serves both parties best when carefully and specifically worded, clearly detailed, and outlines exactly what the owner intends to hold the contractor responsible for. The owner is more assured that his disclaimer will not be found ineffective; the contractor is alerted to the precise risks he is expected to assume.\textsuperscript{35}

**Notice Requirements**

Contractual notice requirements are generally very strict. They severely limit the amount of work that a contractor may perform prior to receiving direction from the architect/engineer/owner regarding a changed condition. The safe course for the contractor is to give prompt attention to owner notice requirements whenever a changed condition is encountered, since failure to comply with contract requirements may result in a claim being barred.\textsuperscript{36}

The purpose of requiring advance notice is to permit the owner’s representative to investigate the conditions before they are disturbed, so he can make his own determination as to the character and scope of the problem. The owner’s representative can then plan a course of action which he considers most effective in coping with the changed site condition. Consequently, he is able to exercise control, from the outset, over the cost and effort necessary to solve the problem.

It is generally held that the requirement that such notice be in writing is not absolute, and may not be enforced, as long as the owner’s representative had actual notice of the conditions encountered. Substantial compliance with formal notice requirements is met where oral notice is given to the authorized representative of the owner. In situations where the engineer supervising the work had full knowledge that water had been unexpectedly encountered, or where the area engineer knew the contractor was encountering unanticipated rock, failure to give written notice did not bar recovery by the contractors.\textsuperscript{37}

On the other hand, the owner (or his representative) will not be deemed “to know” merely because an opportunity to know was available.\textsuperscript{38} For example, the fact that the owner’s representative made general visits to the construction site would usually not be enough to charge him with actual knowledge, if he had not been informed of, or had the opportunity to personally observe, the existence of a changed site condition.

The prudent contractor puts all communications to (and from) the owner in writing, to avoid losing any claim solely on a technicality.

If notice is given and the owner, within a reasonable time, fails to exercise the right to examine the conditions encountered, the owner may be deemed to have acquiesced in the contractor’s choice of the appropriate procedures for coping with the problem.

Some contract clauses specify a time frame within which the owner must reply to such notice. In the event the owner does not make a timely response, the contractor would be wise to inform the owner, in writing, of his need to proceed with the work, and advise the owner that he intends to resume work within a certain period if no further word comes from the owner. This prac-
tice of continued written communication fulfills even the most exacting notice requirements, and protects both parties from faulty assumptions that one party might make about the intentions/decisions of the other. Given the many misadventures that can occur at construction sites, this increased amount of paperwork is justified by the complicated disputes it may prevent.
REFERENCES

5. See text of clause 12 in Appendix.
15. Wyman Const., Inc., PSBCA 611, 80-1 BCA ¶14,215.
27. Note 2 supra, cl. 55.
28. Private contract for project in Iceland.

References 103
33. Note 1 supra, 38-46; note 11 supra, 60-62.
35. Sasso, note 34 supra.

104 Adverse Site Conditions
Chapter 5
Pricing Variations In The Work

On international projects, pricing variations in the work may involve factors not generally encountered by the contractor in his home country. Each jurisdiction or forum is influenced by its particular culture when it evaluates whether or not a specific cost is recoverable by the contractor. In many cases, a successful claim will depend on the contractor’s ability to present his case persuasively vis-a-vis these cultural variables. Therefore, thorough evaluation of and familiarization with a particular culture’s concepts and practice when dealing with variation pricing require the advice of able domestic and foreign counsel.

The best time to determine methods of pricing variations is prior to bidding on an international contract. Thoroughly advance information on economic, political, geographic, climatic and cultural conditions in the host country enables a contractor to formulate a bid responsive to these conditions. Cultural patterns, for example, may influence labor supply, wage and productivity rates through strict observance of lengthy religious holidays. Climatic conditions, such as sandstorms or monsoons, increase expenses of maintaining equipment and construction camps. Foreign governments add a heavy labor cost burden in the form of various social changes.¹

The international contractor can often cope more effectively with local conditions by forming a joint venture with a local contractor. Such agreements can allow the foreign contractor the benefits usually reserved for the domestic contractor only. (See the section on equity ownership in Chapter 1 and Table 1-1 for a more comprehensive treatment of joint ventures.)

Price Adjustment Concepts

OVERVIEW

Variations in the work that cause increased or decreased costs require an adjustment in the contract price. If both parties—the owner and/or his representative and the contractor—agree on a price, a bilateral change order is issued either before or after performance of the variation. When the parties cannot agree and are in dispute over the existence of, the responsibility for, or the price of the changed work, a claim is generated.

A word of caution. Some international jurisdictions may not look favorably on contractor claims of any kind. The reason could be cultural: the contractor was expected to have prepared for all eventualities by including a sufficient contingency in his bid, as in the Middle East. The reason may be legal: the prevailing contractual theory being that the greater share of risk generally falls on the contractor, not the owner, as in England.² Under these circumstances, a successful claim depends on how persuasively the contractor

Pricing Variations in the Work 105
presents the explanation (supported by documentation) of the pricing technique he uses. Substantiation of a claim is of utmost importance when the pricing method is not expressly covered in the contract.

METHODS

The basic difficulty arising between owner and contractor attempting to arrive at a fair and reasonable price for variations is that age-old problem of the “irresistible force meeting the immovable object.” Both tend to look at the pricing of variations subjectively: The contractor asking, “What will it cost me to perform this change?”, and the owner asking, “What should be the reasonable cost to me of having this changed work performed?”

The conflicting viewpoints render diverse cost figures for the work at issue. A compromise can best be reached by ensuring that the pricing adjustment keeps the parties in the same relative position (profit or loss) they would have maintained had no change occurred.

The prudent course to pursue when pricing a change order, regardless of the method, is to carefully segregate the changed from the unchanged work with the aid of detailed and accurate record keeping. Tribunals are likely to require adequate proof of costs before evaluating a claim. As discussed in the next section, owners increasingly demand that contractors support pricing claims with great detail. Because these records will form the basis of a contractor’s claim, their importance is obvious—particularly when there is difficulty assessing effects, such as delay or inefficiency, that the changed work has on the unchanged work. This type of pricing is discussed in Chapter 7.

Contract Clauses

The language of a contract usually dictates—and at the very least establishes the guidelines for—resolving a dispute between the owner and the contractor. In general, the terms of standard government contracts’ variation pricing clauses are more flexible in application than those used in private (party-made) contracts. Therefore, the latter usually specify in greater detail which costs may be included in a claim. FIDIC and some government contracts generally allow much of the pricing to be done by informal discussion between the owner/engineer and the contractor, as long as the agreed-to costs are reasonable.

FIDIC’s “Valuation of Variations,” Clause 52, Clause 40.2 of Australia’s Standard Contract #2124 and ICE’s Clause 52, state that changes will be priced by using:

1. Rates and prices contained in the contract, or
2. If these are not applicable, then suitable rates as agreed on between engineer and contractor, or
3. If agreement cannot be reached between the parties, rates which the engineer shall fix.\(^5\)

The term “rate/price in the contract” is used when the variation involves the same kind of work as that in the contract. “Suitable rates, etc.” is used
where the variation does not involve the same kind of work as in the original contract. Using the third alternative, the engineer fixes rates when circumstances surrounding the variation are such that they would cause the rates in the contract to become unreasonable or inapplicable.

FIDIC’s contract allows an additional evaluation if, upon completion of the work, the contract price has been increased or decreased by more than 10% because of the combined effect of all variation orders and all adjustments of estimated quantities.

Clause 9 of England’s GC Works Contract permits the contractor to use costs actually incurred in performing the variation if the first three methods are not applicable to the situation. But such use is conditional on the Engineer’s approval of the actual cost under the terms of the contracts’ Daywork Clause.4

Standard Form 23-A’s “Changes” clause provides simply that an “equitable adjustment” will be made to the contract price for changes in the work. The U.S. Court of Claims has defined “equitable adjustment” as a “corrective measure utilized to keep a contractor whole when the government modifies a contract.” More specifically, it is an increase or decrease in the contract price and/or performance time when a formally ordered or constructive change occurs. This adjustment may be calculated by determining what the reasonable costs of the work should be for that particular contractor in his specific situation. Negotiations between the Contracting Officer and the contractor are, typically, the initial step taken in a claims settlement procedure under 23-A.6

The rules for implementing Article 25 of the Saudi Arabian Tenders Regulations permit the soliciting agency to increase or decrease the contractor’s work up to “20% of his obligations.” Prior Saudi regulations and rulings indicate that a resolution by the Council of Ministers is required for changes which would exceed the 20% limitation. The pricing of changes is to be based, initially, on prices quoted in the contract. If the changes involve work which has not been provided for in the contract, they are treated as “direct procurement,” i.e., actual costs. These prior rulings still seem to be in effect since they do not contradict (but rather supplement) the current Tender Regulations.7

Japan’s standard construction contract makes a distinction between pricing increases and decreases in the work. A decrease is valued using prices stated in the contract while an increase is valued at current fair market prices.8

Private contracts use much greater detail when stating how change orders are to be priced. In such contracts for projects in the Dominican Republic or Iceland, variation pricing clauses state that either a lump sum estimate of cost or unit prices in the bid are the preferable pricing methods. If neither of these methods is applicable, the claim would be priced on a cost-plus basis, i.e., the direct costs of labor, material and equipment, plus a specified percentage for profit and overhead (generally 15-25%).

The clause from the Dominican Republic contract follows:

The contractor shall keep and later present (to the owner in such form as the owner may direct) a correct account of the direct costs and an account of all the charges for the rental of construction equipment used, accompanying both accounts with vouchers. The engineer will

Contract Clauses  107
certify to the amounts of direct cost and of construction equipment rental used in such work. The direct cost includes labor, social security costs, immediate supervision (foremen), materials, and supplies used in the work; it does not include overhead administrative or engineering expenses; nor does it include contractor’s profits all of which will be considered included for payment in the 20% of direct costs. The charges for construction equipment rental shall be made in accordance with a rate schedule based on similar rate schedules for comparable construction equipment that are currently in force in the Dominican Republic. Rates for equipment rental shall include overhead, administration expenses, fuel, lubrication, repairs, profit, and other expenses related to the use of this equipment. Until the final correct amount of the cost of the work is determined, monthly payments will be made based on the engineer’s estimates.\footnote{9}

The following sample clause from an Icelandic contract shows the extensive benefits the contractor was expected to pay workers on this project and illustrates the degree of specificity that such clauses may reach:

The Extra Work shall be remunerated by direct cost plus 17%, and equipment rental as defined hereinafter. The contractor shall keep and later present to Owner’s Representative in such form as he may direct, an accurate account of the direct costs and an account of all the charges for the rental of construction or manufacturing equipment used, accompanying both accounts with vouchers. These accounts are to be available for inspection by Owner’s Representative at any time. The Owner’s Representative will certify to the amounts of direct cost and of construction or manufacturing equipment rental used in the Work.

The direct labor cost includes: labor and immediate supervision (Foreman), contractor’s expense of housing and feeding and transporting of labor, and all social charges and taxes on labor listed below but not limited thereto as well as sales tax and all other taxes to the state or municipalities but does not include administrative or engineering expense, the cost of various additional insurance policies taken by the contractor and other overhead cost, nor does it include the Contractor’s profit, all of which will be considered included in the 17% of direct costs.

The main social charges and taxes on labor include:

- Vacation allowance
- Paid official holidays
- Wages due to sickness or accident
- Sickness fund fee
- Vacationhouse fee
- Pension fund fee
- Wage tax
- Obligatory insurance
- Employer’s pension
- Insurance fee
- Employer’s accident

108 Pricing Variations in the Work
Insurance fee
Employer's unemployment insurance fee
Employee's accident insurance
Industry charge
Fee to industry loan fund
Municipality tax

The direct cost of materials and supplies will include the purchase prices and transportation costs. The cost of procuring and storing the materials and supplies as well as administrative and engineering expenses and other overhead cost and the contractor's profit shall be considered included in the 17% of the direct cost.

In case an applicable rate is not available for certain equipment in the Schedule of Prices, a rate schedule for that equipment shall be agreed upon between Owner's Representative and the contractor before the Work under the Extra Work Order is started. Such rates shall be based on similar rate schedules for comparable construction equipment on large construction projects that are currently in force in Iceland or manufacturer's shop rates as Owner's Representative may select. Rates for equipment rental shall include overheads, administrative expenses, fuel, lubrication, repairs, profit, and other expenses related to the use of this equipment. Until the final correct amount of the cost of the Work is determined, payments will be based on estimates made by Owner's Representative.  

Sharp contrast is found in the “Variation Pricing” clause of the standard fixed fee building contract of Swaziland.  

All extras, omissions and variations authorized in terms of Clause 1 [Powers of Architect clause] hereof shall be measured by the Architect who shall give to the Contractor opportunity to be present with him on the Works at the time and to take such notes and measurements as he may require. The value of such extras, omissions and variations shall be agreed between them.

The measurements and valuation of the Works shall be completed as soon as possible after completion of the Works. Interim measurements and valuation shall be made whenever necessary to enable the Architect to issue certificates under Clause 24 [the monthly payment provision].

The success of this provision would seem to depend on a sound working relationship between the owner and contractor.

As stated in the beginning of this section, a wise contractor employs able counsel from within the host country. A special reason is that political, social and economic conditions affecting international business are not likely to remain static in the countries experiencing a construction boom. They can change dramatically or quietly. Domestic counsel can alert and advise the contractor as to the likelihood of these changes and their possible influence on forthcoming contracts.

The difference between two public Saudi contracts, written only five
years apart, exemplifies the changes in one government’s sophistication in drafting contracts. There is a dramatic difference in the language, tone and specificity between the clauses in each. The more recent contract (1979) has richly detailed clauses which apparently leave little to chance and reflect the expertise the Saudis gained through wider experience with multi-national construction projects in the past decade. The advantages of expert legal advice is obvious in the crafting of the more recent contract.

From a 1974 public Saudi contract, the “Variation Pricing” clause states:

The value of any such extra work or change shall be determined in one or more of the following ways: (In the order of priority).

a. By unit prices named in the contract or subsequently agreed upon.
b. By estimate and acceptance in a lump sum as follows:
   1) Estimates for work to be done by lump sum change order shall include breakdown of quantities and unit costs of items omitted or added.
   2) Maximum fees of 25% of net costs for overhead and profit will be allowable.
   3) Maximum mark-up by Contractor on work done by Subcontractors shall be 5%, which may be added to the 20% for Subcontractors, for a total of 25%.

The contractor shall keep and present in such form as the architect may direct, a correct account of the cost, together with vouchers. The architect shall then certify to the amount, including allowance for overhead and profit, due to the contractor. Pending final determination of value, payments on account of changes shall be made on the architect’s certificate.12

The sample clause from the 1979 public Saudi contract is more detailed and thus substantially longer than its 1974 counterpart. See the full text of GC 47, Changes and Extra Work, in Appendix F.13 Comparing the difference in tone between the two clauses underscores the added sophistication of the 1979 version.

Regarding the work itself, the contractor is immediately warned in the Saudi 1979 “Variation Pricing” clause that he shall perform any changes or extra work “in strict accordance with the instructions” he receives from the Royal Commission (owner). Regarding the costs of the variation, the preferred methods of pricing remain unit prices or a lump sum estimate. If the lump sum estimate is judged the approved method, it must contain, among other things, sufficient detail “to permit thorough analysis of the estimate” by the owner.

A basic difference from the 1974 clause is that the 1979 edition allows cost-plus pricing to be used where unit prices or lump sum estimates are not agreeable to both parties. The permissible costs under that method are summarized below:

1. Direct labor costs are payable and include all manual classifications up to and including foremen, but not superintendents, assistant superintendents, general foremen, surveyors, office personnel, timekeepers and maintenance mechanics. Time charged to variation work is subject to the daily approval of the owner or it will be unacceptable for payment.

110 Pricing Variations in the Work
2. Equipment costs for contractor-owned or rented equipment are payable. Transportation cost of equipment used exclusively for variation work are permissible, provided they are approved in advance by the Owner.

3. Material costs are payable, provided the use of the materials is as specifically authorized in the variation orders and actual use of the material is verified by the owner.

4. Subcontractor costs are payable, provided the subcontractor and terms of his payment are approved in advance by the owner.

5. Tools, supplies, overhead, supervision and profit are charged to the variation work as a percentage (either 35% or 40%) of the direct labor costs.

The extent of detail and coverage of the 1979 Saudi contract clause should serve as a clear indication to those who may have been away from the international market for a time. Many developing countries are much more sophisticated in their approach to contractual-legal relations with architects, engineers, and contractors than they were previously.

**Variations Increasing Costs**

Clauses discussed in the previous section illustrate how each particular contract deals in its own way with pricing variations. However, broad principles are discernible.

Generally, the contract price may be increased by the reasonable cost to the contractor for changes requiring added work. What constitutes reasonable cost depends on the existing cost information. If the change is negotiated before the performance of the work, estimated costs must, of necessity, be used. The estimate should be based on the most accurate cost statistics available at the time of pricing.

Actual costs incurred in performance of the work can be looked at two ways: (1) such costs will be presumed reasonable because it is assumed that the prudent contractor will strive to keep costs as low as possible on a fixed-price contract; or (2) the contractor must demonstrate that all expenditures were caused by the variation and not by negligence on his part.

The reasonable cost standard has been adopted in the standard FIDIC contract, Clause 52, where the engineer may reject a unit price contained in the contract if a variation in the work renders it "unreasonable and inapplicable." He then has the power to fix another rate or price which is "reasonable and proper" in his estimation.

A word of caution about the definition of "cost." FIDIC's clause 1 (4) and ICE's clause 1 (5) define "cost" to include overhead expenses occurring both onsite and offsite. This is a rather liberal interpretation. Many contracts define "cost" more narrowly, including only direct, onsite expenses in overhead. Since the meaning of "cost" can vary from contract to contract and country to country, it is prudent for the contractor at the outset to be certain of exactly what an owner intends to include when it discusses "costs."
Variations Decreasing Costs

If a change order reduces (deletes) work, the owner is generally entitled to a decrease in the contract price equal to the costs the contractor would have experienced had the work been completed. Pricing omitted work is difficult, particularly because no actual costs have been incurred. The contractor's original cost estimate for the omitted work may not be the best source of reasonable cost information for the price adjustment.

Changes in international market conditions since the time the estimate was prepared, and changes in the contractor's methods of work and completion schedule, usually render the original estimate inaccurate for current conditions. Consequently, deleted work should be priced using the most current cost information. The result may be a figure above or below the contractor’s original estimate and is a procedure that favors neither contractor nor owner.

When contract work is deleted, the burden of proving the amount of decrease in the contract price should be on the owner. If the contractor can show (perhaps because of improved techniques) that he could have actually performed the work for less than his original estimate, the lower amount should be used in pricing the adjustment. But, if the contractor's original estimate was too low in relation to true cost of the work, he should bear the loss as though the deleted work had been, in fact, performed.

The best evidence of the reasonable costs which would have been incurred by the contractor in performing the work include the following sources: contractor's estimate and experience in similar work, subcontractor's quotations, owner's estimate and experience in other contracts, bids of other contractors and estimating services and manuals.

If the deletion involves a unit price item, then the price decrease may be valued at the unit price rate. The primary advantage in using this method is speed and ease of application. This method limits the impact on the Contractor of deleting a unit price item to the loss of the prospective profit on that item alone. FIDIC's clause 52 prices deleted work in this fashion. However, if the cost of the omitted work, in relation to the cost of the total contract, is greater than 10% (taking certain other factors into account), then a more suitable rate may be agreed upon between the parties.15

A problem with the unit price method is that it does not necessarily maintain the contractor in his relative profit/loss position under the contract as originally signed. If the deleted item would have earned a high profit, the contractor loses that profit. On the other hand, if the item would have produced a loss, the contractor is relieved of the loss.

Where a number of unit-priced items are intentionally unbalanced, the contractor is exposed to a risk of substantial harm if underpriced items are increased in quantity while overpriced items are reduced or deleted. Under a FIDIC contract, the engineer has the power to mitigate this type of harm, if he decides that doing so would be reasonable and proper. The Saudi Tenders Regulations require the contractor to include all applicable expenses under the unit price for each item. Consequently, it seems that the contractor unbalances a bid at his own risk under a Saudi contract.
Contractors may intentionally unbalance a bid for any one of several reasons. Overpricing early work items and underpricing later items reduces financing costs. If the contractor believes that certain of the engineer's estimated quantities are understated, he may gamble on making additional profit by overpricing such items, in the expectation of added work change orders during performance of the work. This strategy might induce the contractor to submit a total bid at cost in anticipation of making a "windfall" on increased actual quantities. But if the overpriced items were later deleted, the contractor would probably find himself in a precarious financial position.

Overhead and Profit Considerations

OVERHEAD

Contracts vary on the method of allocating overhead expense to variations in the work. Foreign projects carry a heavier overhead burden because they introduce more unknowns and complexities.

Owners and contractors must be conscious of the interplay among economic, cultural, and political considerations and their substantial impact on overhead costs of a foreign project. Since direct costs of labor, materials, and equipment will in all likelihood be higher than for home-based operations, foreign overhead costs calculated as a percentage of direct costs will be necessarily higher. Similarly, costs of transportation, living accommodations, insurance, taxes, and duties can be much higher than expected. Dealing with foreign governmental departments and agencies, can also be more costly than expected.

Normally, contractors estimate overhead on their domestic jobs in the range of 20-30% of direct costs. Experience has dictated that overhead costs for overseas work may be twice as high as those for domestic work.

The international market offers no unified approach to allocating overhead to pricing of variations in the work. Few standard public contracts explicitly define or even mention overhead. Some private contracts, however, do go into great detail about how overhead will be treated under cost-plus work. Under most domestic contracts, profit and overhead are usually part of the price adjustment resulting from increased performance costs. If the change is minor, and the contract does not otherwise specify, reasonable percentages for overhead may be utilized. If the change is major, then actual rates of incurred overhead are a better indication of the changed position of the contractor.16

The Saudi Tendering Regulations do not expressly or separately discuss overhead costs, except to state that unit prices submitted should include all expenses and liabilities of whatever kind the contractor encounters.18

FIDIC and ICE do define cost to include overhead expenses both on and off the site. Onsite overhead consists of costs incurred through the direct supervision and administration of variations in the work. Offsite costs include the cost of "managerial resources" (fixed, standing expenses of the contractor's principal office) and the cost of financing the project (interest charges on loans).17 Being thus specific, FIDIC and ICE are far more permissive than most standard public contracts which usually are silent as to proper treatment
of overhead expense. However, where they use a term such as "reasonable costs", this should be interpreted to include necessary overhead costs. Since the engineer is given much discretion in evaluating reasonableness of contractor claims, there is little certainty as to which overhead costs will be permissible under most international contracts.

In many private contracts, the most favored methods for pricing variations are unit pricing and lump sum estimates. In both, permissible overhead is usually negotiated by the owner and contractor—unless the contract expressly deals with it. Cost-plus pricing is often a third alternative. The "Variation Pricing" clause in these private agreements generally states that under cost-plus, the overhead allocation is a specific percentage of the direct costs for the work involved in the variation, usually within a range of 15% to 25%. (Private Icelandic and Dominican Republic contracts previously quoted are illustrative.)

The brevity with which most contracts treat overhead costs in the pricing of changes points up the need for good communication and rapport between the owner/engineer and the contractor. Much depends on the engineer's decision about the reasonableness of costs for the changed work. He may be persuaded to view the contractor's claim more favorably if it is supported by accurate, detailed cost records.

PROFIT

Profit on changes that increase costs is an accepted element of the contract price adjustment. If changes reduce the costs, then profit is usually reduced. In either situation, the amount of price adjustment is troublesome. For minor changes, contract clauses often set a standard rate. A series of rates could be used for different kinds of work of varying degrees of difficulty. Clauses 52 ("Valuation of Variation") and 70 ("Changes in Cost and Legislation") of the FIDIC contract may be useful to that end (the full text of each appears in the appendix).

If the definition of profit is the excess of income over all items of cost, then the meaning and scope of "cost" becomes pivotal. Under FIDIC, "cost", for the purpose of determining profit, encompasses wages/salaries, materials/goods, subcontractor services/hired equipment and onsite overhead. However, the owner may not always agree that onsite overhead (administrative and financing expenses) should be included in "cost" when calculating profit. Therefore, a contractor may find that, under FIDIC, he will be reimbursed for onsite overhead in a variation claim but will not earn a profit on that item.

For a major change, the profit rate should be negotiated to fairly account for the impact of the change. The amount of capital employed in the changed work, complexity of the work, the risks associated with it, and the contractor's historical profit rate for similar work are factors that should be examined in negotiating the profit rate. If the risk or difficulty of the variation is greater or lesser than that of the original work in the contract, the negotiated profit rate should reflect it.

In the United Kingdom, profit on non-competitive government contracts is figured by using a formula which makes contractor "capital-employed" (CE), or contractor investment, an important factor in the calculation. The

114 Pricing Variations in the Work
formula yields a profit of 10% on “non-risk” contracts, such as cost-plus contracts, and a profit of 15% on “risk” contracts, such as firm, fixed-fee contracts.

“CE” is defined, for these purposes, as the average of the contractor’s total net assets at the beginning and at the end of a designated measuring period, perhaps a year. The British system appears to be successful in practice, largely because it is not difficult to apply and deals fairly with both the government and the contractor. The United States government employs a similar factor in its “Weighted Guidelines” method of computing profit, which also makes contractor investment a significant factor in profit calculation. However, it has not been in effect for a sufficient amount of time to evaluate its utility and effectiveness.

Many international contracts treat profit with as little detail as for overhead. Standard form contracts, such as FIDIC and ICE, allow a reasonable profit, but specify no percentage. Private contracts, such as the Icelandic and Dominican Republic examples, include profit as part of a percentage of direct cost when using the cost-plus pricing method. Standard Form 23-A in the U.S. implicitly includes profit within its “equitable adjustment” concept in the pricing of changes. The Swedish standard contract for civil engineering works includes a formula for calculating whether work omitted is sizeable enough to merit payment for loss of profit. The omission is first priced, then reduced arbitrarily by 10%; if the resulting amount is more than 20% of the contract price, the contractor is deemed entitled to lost profit.
REFERENCES

1. Terms of “party-made” contracts used on private projects in Iceland and Venezuela.
10. Note 1 supra.
14. Notes 1 and 9, supra.
15. FIDIC, note 3 supra, cl. 52(3).
18. Note 7 supra, art. 28.
20. Note 17 supra.
22. Note 21 supra.
23. Note 21 supra.

Pricing Variations in the Work
PART THREE: TIME CLAIMS

Chapter 6
Suspended Performance

The steady, productive progress of a construction project depends on effective control and coordination of many variables, such as the productivity of the work force, managerial efficiency, timely delivery of materials and stable financial status of the parties, plus suitable site conditions and favorable weather. A problem with only one variable in this network can stall progress, resulting in a suspension or disruption in the performance of the work. This suspension can be either ordered or constructive, total or partial, temporary or permanent.

As each category of suspension is discussed in this chapter, a sampling of representative clauses from international contracts will be examined.

Ordered Suspension of the Work

During a construction project, the owner may decide to temporarily suspend the work for reasons which may or may not relate to the contractor's performance. Most international contracts contain "Suspension" clauses. They vary in length from a short, generally worded paragraph to a detailed, comprehensive outline of precisely what procedure a contractor must follow during suspension.

The "Suspension of Work" clause in FIDIC (Clause 40) directs that:

1. The Contractor shall, on the written order of the Engineer, suspend (the works, in whole or part) for such time... and in such manner as the Engineer may consider necessary...

That provision is common to most "Suspension" clauses, as is FIDIC's further provision in that clause that the contractor shall protect the works and will be reimbursed for all reasonable costs incurred in complying with the order unless:

(a) otherwise provided in the contract, or
(b) necessitated by contractor default, or
(c) necessitated by weather, or
(d) necessitated by proper execution or safety of the works, absent owner fault or action and any Excepted Risks [Force Majeure].

Some contracts may provide that the owner must give notice of the suspension to the contractor a few days (sometimes three to seven) in advance of the date work is to stop. Generally, however, work is stopped on receipt of the Suspension Order.

A clause in a Saudi Arabian contract outlines in detail the measures the Suspension Performance 117
contractor is expected to take upon receiving the Suspension Order, as well as
the amount and method for compensation that can be expected by the
cContractor:

Upon receipt of the owner's written notice to suspend (under this con-
tract) the contractor must:

(a) Immediately discontinue work on the date and to the extent speci-
ified in the notice;

(b) Place no further purchase orders or subcontracts for material,
services, or facilities with respect to suspended work other than to the
extent required in the notice;

(c) Promptly make every reasonable effort to obtain suspension upon
terms satisfactory to the owner of all purchase orders, subcontracts and
rental agreements to the extent they relate to performance of work
suspended; and,

(d) Continue to protect and maintain the construction plant and per-
manent works including those portions on which work has been sus-
pended.6

The contractor is reimbursed under the Saudi contract for the following
costs, if reasonably incurred, to the extent such costs directly result from the
ordered suspension of the work:

(a) A standby charge to be paid to contractor during the period of
suspension, which standby charge shall be sufficient to compensate
contractor for keeping, to the extent required in the notice, its orga-
nization and equipment committed to the work site on a standby status;

(b) All reasonable costs associated with mobilization and demobiliza-
tion of contractor's construction plant and forces;

(c) An equitable amount to reimburse contractor for the direct cost of
maintaining and protecting that portion of the construction plant and
permanent works upon which work has been suspended; and

(d) An equitable adjustment with respect to the performance of the
remaining portion of the work, if as a direct result of any such sus-
pension of work the cost to contractor of subsequently performing the
work is increased or decreased.7

Used by the U.S. Corps of Engineers in the United States and interna-
tionally,8 Standard Form 23-A provides relief for a constructive suspen-
sion of work through its “Suspension” clause.9 Any act, failure to act, or
omission by the owner which has the effect of suspending the work for an
unreasonable time may be considered a suspension of the work for purposes
of the contractor's right to recovery of additional costs. The clause contains
strict notice requirements, however, which must be adhered to or the claim
may not be allowed. The contractor is obligated to inform the owner of any
act or omission on the part of the owner (within 20 days of the event) which
the contractor considers to have caused the work to be suspended. Costs
incurred more than 20 days before such notice are generally not recoverable.
Examples of government inaction deemed to be a constructive suspension under 23-A include failure to use reasonable efforts to alleviate excessive work restraints by local authorities entitled a contractor to relief.\textsuperscript{10} Delay in the government’s issuance of a change order was also deemed an excusable delay.\textsuperscript{11}

Many international contracts do not acknowledge the occurrence of constructive suspension. Generally, the only reimbursement available to the contractor is through a direct written suspension order from the owner.

Should an ordered suspension continue for a very lengthy period, many contracts provide a remedy. FIDIC, in Clause 40(2), allows a contractor to consider that the owner has abandoned the job if the owner does not order the work resumed within ninety days of the date of suspension.\textsuperscript{12} However, before considering the work abandoned, the contractor is obligated to seek permission from the owner to resume the work. If permission is not given within 28 days of the request, the contractor is entitled to consider the work abandoned by the owner. A sampling of other contracts reveals that periods of ordered suspension can last anywhere from 30 days\textsuperscript{13} to three months\textsuperscript{14} before the contractor may consider the owner to have abandoned the work.

Clause 35 of Australia’s #2124 is an unusual provision, allowing the contractor to request a suspension of the work.\textsuperscript{15} If the owner’s representative decides that the contractor’s written explanation for the requested suspension is sufficiently reasonable, the owner’s representative may grant permission to suspend for whatever length of time he (the owner’s representative) deems proper.

Under FIDIC, the extent of the work to be suspended determines its treatment and dictates its remedies.\textsuperscript{16} If only a part of the work is suspended, then FIDIC’s “Suspension” Clause 40 directs the parties to use Clause 51(1) (b), which treats the partial suspension as an omission of work. However, if the whole of the work is suspended, then the parties are directed to use Clause 69 (“Employer Default”), which treats a complete suspension as if it were an abandonment of the project and provides that remedies for reimbursement are available to the Contractor under Clause 65(8). Clause 65(8) allows recovery for direct costs, and for certain losses or damages resulting from the abandonment by the owner. These clauses are reprinted in Appendix A).

**Delayed Performance**

Delays are said to be responsible for more monetary losses than any other field condition.\textsuperscript{17} A disruption in the progress of the work may cause the time of job performance to be extended beyond the originally scheduled completion date (plus entitled extension of time). Such delays result in an unanticipated loss of time and an increase in costs. Since few causes of delay are unforeseeable and beyond the control of both parties, the majority of potential delays can be prevented or minimized with proper care.

Essentially, a delay occurs when the contractor is either performing the work at a substantially less productive pace than he originally planned or is not performing at all. Determining which party is responsible for delay is crucial to the issue of whether a time extension (and compensation) will be
granted. The determination depends on the factors of (1) control, (2) foreseeability of the cause, and (3) the language of each particular contract.

“Delay” (or “Extension of Time”) clauses in international contracts vary a great deal in form and content. The samples used in this chapter were chosen because they are well-written and represent different approaches.

FIDIC’s Clause 44 is a typical “Extension of Time” clause. Under it the Engineer determines whether, and for how long, an extension of time for the completion of work will be granted. Causes excusing delay include (1) extra or additional work, (2) exceptionally adverse climatic conditions, and (3) other special circumstances of any kind whatsoever which are not the fault of the contractor. The sole remedy available under Clause 44 is a time extension.

FIDIC’s Clause 42 permits the contractor to be granted a time extension and to be compensated for extra costs incurred when the owner fails to grant possession of the site in accordance with contract terms.

The following illustration is from a contract of Saudi Arabia’s Royal Commission. It encompasses elements common to all well-drawn delay clauses—control, foreseeability, notice requirements and duty to mitigate costs, where possible. Typically, the only available remedy is a time extension.

**Delays and Extension of Time**

Either party shall be entitled to an appropriate extension of time for performance of its obligations under this Contract if such performance is prevented or delayed by any condition, existing or future, which is beyond the reasonable control and without the fault or negligence of such party and which condition was not foreseeable by such party at the time this Contract was entered into and by such party taking reasonable steps could not have been prevented. Such conditions shall include, without limitation, acts of God, war, fire, floods, and interference by civil or military authorities. Such party shall, within seven (7) days of the commencement of any such delay, give to the other party written notice thereof and of the anticipated results thereof. Within seven (7) days after termination of any such delay, such party shall file an additional written notice with the other party specifying the actual duration of the delay. Failure to give either of the above notices shall be sufficient ground for denial of an extension of time hereunder.

In the event of any such condition, the party whose performance is prevented or delayed thereby shall take all necessary measures to mitigate and minimize the effect of the delay and to continue with the prompt and diligent performance of its obligations under this Contract.

The first of the elements common to most “delay” clauses is control. To determine the extent of a party’s control over the cause of the delay, it must first be determined whether that party could have prevented or avoided the delay through any reasonable action on its part. If not, the cause is considered beyond that party’s control and, for the contractor, means he may be entitled to a time extension.

The second element, foreseeability, determines whether an experienced contractor could have anticipated the conditions which caused the delay.
Foreseeability is pivotal because time extensions are generally not granted if the cause of the delay was reasonably foreseeable by an experienced contractor (e.g., excessive delays due to numerous equipment breakdowns in the hot, sandy environment of a Middle Eastern country).

Since construction is an inherently unpredictable business, the experienced contractor knows he must consider many variables while planning a project. A condition is deemed excusable when it is reasonably unforeseeable by an experienced contractor. A British authority has described the term “reasonably unforeseeable” as “not encompassing every possible hazard (however remote), but only those which have a substantial risk of occurring.”

Close, continuous communication between contractor and owner is especially beneficial when the contractor encounters unexpected circumstances leading to a delay of the work. Contracts generally contain notice requirements in their delay clause obligating the contractor to inform the owner, usually within a specific time period, of the possibility or the occurrence of a delay. Some contracts expressly state that failure to so notify the owner may alone be sufficient to deny a claim.

Another common element in “delay” clauses is the duty of the parties to minimize the costs of delay—the contractor, for example, reassigning idle men and equipment.

**TYPES OF DELAY**

When the cause of the delay is beyond the control of, unforeseeable by, and without the fault of the contractor (e.g., an act of God), it is “excusable” and the contractor is entitled to receive an extension of time. If the owner is found to be responsible for an excusable delay, it may be “compensable,” thereby allowing the contractor to recover additional money. In the event of delays caused concurrently by contractor and owner, (both parties are at fault), it may be neither “excusable” nor “compensable.” To maintain goodwill, parties may attempt to negotiate and apportion the additional costs according to the relative fault of each.

**Excusable Causes of Delay**

Under general contract law principles, a party under contract has an absolute obligation to perform, barring breach or unfulfilled conditions by the other side. A contractor who extends his work beyond the original completion date may be liable to the owner, under the contract, for monetary damages beyond such date in the form of actual or liquidated damages. When completion of the work is delayed, time extensions become vital to the contractor. An owner cannot terminate a contractor or assess liquidated damages until all time extensions to which the contractor is entitled for excusable delay are determined and added to the original completion date. This revised completion date is the basis from which liquidated damages are calculated.

The following are illustrative of the factors most frequently cited as excusing timely performance:

**ACTS OF GOD/“FORCE MAJEURE”—**Natural disasters such as earthquakes, tornadoes, volcanic eruptions, floods and fire fall within the definition of acts of God. These are, per se, beyond the control and without the fault or negligence of either party.
“Force Majeure” clauses (also called “Excepted or Accepted Risks” clauses) include acts of God but go further and also specify man-made catastrophes such as war, insurrection, riots, major labor strikes, or Acts of the State as conditions excusing delay.

WEATHER—When weather becomes unusually severe and surpasses in intensity the normal, average or reasonably expected weather for that particular locality during a specific season of the year, it becomes a factor excusing delay.36

A standard contract from Hong Kong sets out very precise conditions under which inclement weather will excuse delay. Although this specificity is rare, it is interesting to note. The clause states, in part:

“Extension of time will be granted if work is delayed... by reason of inclement weather or the subsequent effects of such inclement weather; for the purpose of this sub-clause inclement weather is defined as rainfall in excess of 50 millimeters in a twenty-four hour period (midnight to midnight) as recorded at the Royal Observatory or the hoisting of Typhoon Signal No. 8 or higher.”51

For most international projects, what is to be considered extremely adverse weather is entirely dependent on the locality of the project. In the Middle East and Equatorial Africa, temperatures commonly rise above 38°C (100°F.) during the summer season.52 Sandstorms are prevalent in Saudi Arabia during summer time;53 flood conditions are severe during the rainy season in Africa’s Ivory Coast.54

These weather conditions might be considered unusually severe by a contractor when working in his home country. But they may not be deemed unforeseeable in the host country. A rainfall of 2.7 inches in one hour, which evidence showed was likely to occur at any one place in the United Kingdom only once in 800 years, was deemed not to be an act of God.55

However, average weather conditions for an area over the previous ten years or more are a pivotal factor in analyzing delays caused by severe weather conditions.56 Weather records (meteorological data) are a good source of information for determining expected conditions based on prior years.57

LABOR DISPUTES—Labor disputes are generally excusable causes of delay in the United States, if they are unforeseeable and beyond the control and without the fault or negligence of the contractor, his subcontractor and his suppliers.58

Whether labor disputes (strikes, slowdowns, etc.) are excusable in the international sphere depends on the host country. Table 1-2 in Chapter 1 illustrates which Middle Eastern and North African countries view labor disputes as excusable events.

CIRCUMSTANCES BEYOND CONTRACTOR’S CONTROL—The key element in excusability is control—whether the condition causing the delay was beyond the control of the contractor, so that his reasonable efforts would have had little impact on preventing the delay. Such a condition does not have to be as calamitous as a natural disaster. For
example, if the contractor’s performance is dependent on a prior timely performance of the owner (e.g. obtaining a right-of-way), then the owner’s failure to so perform is beyond the contractor’s control. So long as the contractor is reasonably blameless and the delay was not foreseeable, the cause generally does not have to fit into a previously specified category to be excusable.\textsuperscript{39}

**Non-Excusable Causes of Delay**

Any delays caused by foreseeable conditions, or by circumstances within the contractor’s control, or by contractor negligence are “non-excusable.” Absent owner misconduct and the excusable-type circumstances listed above, the contractor owes the owner an unconditional duty to perform.\textsuperscript{40}

A major non-excusable condition is financial inability of the contractor to carry out the work—whether due to lack of sufficient working capital, financial panic, radical change in economic systems, or failure of a third party on whom the contractor relied for monetary support.\textsuperscript{41} Other frequently occurring conditions termed non-excusable are ineffective supervision by the contractor, inadequate manpower, and failure to schedule the work efficiently.\textsuperscript{42}

If the delay is non-excusable, the contractor will not receive a time extension,\textsuperscript{43} nor is monetary relief possible. In fact, the contractor may be liable to the owner for delay damages and risk being terminated.

Generally, delays caused by the prime contractor’s subcontractor will not excuse the prime from timely performance.

The U.S. Government Contract Standard Form 23-A is one of the few international contracts which expressly allows the subcontractor to also be excused by conditions that excuse the prime, e.g., Acts of God, fire, flood, or acts of another contractor in performance of a contract with the government.\textsuperscript{44}

**Compensable**

Only excusable delays are potentially compensable.\textsuperscript{45} The determining factor in compensability is whether the owner, by its action or inaction, is responsible for the delay.\textsuperscript{46} The theory underlying compensability is that the owner has an implied obligation not to hinder contract performance unnecessarily or make it more costly.\textsuperscript{47} In general, when the owner’s failure to fulfill an express or implied contractual obligation or the owner’s conduct unreasonably hinders a contractor’s progress, the resulting delay is compensable.\textsuperscript{48}

Examples of events which might constitute owner caused delays are failure of the owner to provide access to the site, failure to approve shop drawings or schedules within a reasonable time, failure to make progress payments, failure of the owner to furnish promised materials, or interference by other subcontractors employed by the owner, where the owner had the responsibility of coordinating the work.

A major cause of compensable delay is the issuance of frequent change orders, which affect the work directly because scheduled progress of work has to be interrupted to perform the changes. Frequent changes can also affect the work indirectly—the changed portion of the work may be delayed, thereby creating a “ripple” effect.
Under Standard Form 23-A, the cost of delay resulting from changes is compensated through an equitable adjustment to the contract price. It includes any cost directly or indirectly associated with performing the change. 49

Depending upon the timing of the delay in relation to the changed work, either the “Suspension” or “Changes” clause of 23-A applies. If the delay occurs between discovery of the necessity for change and the start of the actual work, the “Suspension” clause is the proper basis for claiming delay costs. 50 On the other hand, if the delay occurs after the start of the changed work, any associated cost of the delay becomes part of the claim under the “Changes” clause. 51 A principal difference between the two clauses is that no profit is allowed on costs of delay when the “Suspension” clause applies.

FIDIC’s “Variation” clause also permits recovery for delays related to change orders. Clause 52(3)(a) states that if the contract price is increased or decreased by greater than 10% partly as a result of the effect of all variation orders, the contractor may be entitled to an adjustment to the contract price. Therefore, if the effect of the change orders is to delay the work, then the delay costs are recoverable by the contractor (provided all other conditions of that clause are met).

A standard contract used in Hong Kong provides for compensation for costs resulting from the “ripple effect.” 52 Clause 24 “Loss and Expense Caused by Disturbance of Regular Progress of the Work”; provides that:

If upon written [timely] application being made to him by the Main Contractor the Architect is of the opinion that the Main Contractor has been involved in direct loss and/or expense for which he would not be reimbursed by a payment made under any other provision in this contract by reason of the regular progress of the Works or of any part thereof having been materially affected by (a) Delay in receipt of necessary drawings from Owner, (b) Improper Inspection, or (c) Discrepancies between various contract documents, the Architect may ascertain the amount of loss and have it added to the Contract sum.

Other contracts seem to indicate that costs of related delays ought to be included in the cost of change orders. For example, Australia’s Standard Form #2124 provides in its “Extension of Time” clause that: 53

Extra costs necessarily incurred by the Contractor by reason of or as a result of or arising from the exercise by the Superintendent of the power to determine any extension of time under this clause shall be borne and paid for by the Principal only if the extension of time was due to a breach of the provisions of the Contract by the Principal, or an act or omission on the part of the Principal or the Superintendent, or any other cause provided for elsewhere in the Contract.

Any claim for recovery of extra costs due to delay, regardless of the contract used, should show that:

1. delay actually occurred (e.g., by showing the progress originally anticipated in a specified time frame, absent the delay); and
2. the owner caused the delay; and
3. the contractor did not contribute to the delay; and
4. the additional costs actually resulted from the owner-caused delay.

124 Suspended Performance
When neither party is at fault (natural disasters, acts of war) the contractor is entitled to a time extension but not reimbursement.\textsuperscript{54} The theory is that these events are also beyond the control and without the fault of the owner; thus, he should not be liable for them.

**Concurrent Delays**

"Concurrent" delay is a term used to describe two or more delays in the work occurring within the same time period. Since many phases of a project are in progress at one time, it is possible for delays to occur simultaneously in a few phases. To determine whether any remedy is required, each delay must be analyzed separately to determine who is at fault.

For example, suppose that a contractor experienced delays in two phases of his project within the same time period—one lasting 7 days and the other 14 days. Responsibility for each delay must be determined before it can be decided whether the contractor is entitled to a time extension (and possibly compensation). If both delays were the fault of the contractor, due to inadequate supervision, neither delay would be excusable and he would not be granted extra time. On the other hand, if both delays resulted from conditions beyond his control and without his fault (labor stoppage, for example) both delays would be excusable and the contractor might be entitled to a time extension. The problem then becomes one of determining the length of the time extension. Generally, the contractor may receive an extension of time equal to the length of the longer delay (14 days here—the two delays are not added together).

The most complex type of concurrent delay results when both the owner and contractor are partly responsible for a delay. For example, the owner may have been unreasonably late in issuing a needed drawing, but the contractor would not have been ready to proceed on the original issuance date because he had inadequately manned that portion of the work. In this situation, the relative fault of each party could be weighed and a determination made as to which delay had the greater impact on job progress.

When the owner and the contractor share responsibility for a delay, varying solutions are possible. One theory is that neither should be permitted to recover from the other because the concurrent delays offset each other.\textsuperscript{55} Another view is that the proper method is to apportion the damages according to the percentage of the delay for which each party is responsible. The latter view was adopted in a case before the United States Court of Claims in *Raymond Constructors of Africa, Ltd. v. United States*.\textsuperscript{56} The Court stated, with respect to allocating damages:

**Actually, there is no basis in the record on which a precise allocation of responsibility for the overall delay in completing the work under the contract can be made as between the defendant's delay in procuring equipment and delivering it to the Sudanese government at Port Sudan, the Sudanese government's delay in transporting equipment from port Sudan to the jobsite, and the subcontractor's shortcomings. In such a situation, it seems that the only feasible thing to do is to make a finding in the nature of a jury verdict that the defendant's delay in procuring equipment and delivering it to the Sudanese government at Port Sudan was responsible for one-third of the overall delay in the completion of**
the work under the contract and, hence, for one-third of the extra indirect expenses that were incurred by the plaintiff because of such delay...

In a more recent case, a forum examined the Critical Path Method (CPM) network of a project to determine responsibility for its delay. The Armed Services Board of Contract Appeals (ASBCA) ruled in the case of Fischbach and Moore International Corp. that the owner's delay (which was on the critical path) superseded the contractor's delay (which was not) in importance in allocating responsibility between the parties.

Although theoretically "concurrent" (occurring within the same time frame), critical path and non-critical path delays do not have an equal impact on job progress. The ASBCA deemed they should not be considered concurrent in the strictest sense. Therefore, the party causing the critical path delay would be responsible to the other for compensation.

In the Fischbach case, the work was the construction of a communication network in the Philippines. The owner had misinterpreted specifications regarding construction of radio towers, a critical path item, and had to suspend the work until this problem was rectified. During that suspension, the contractor proceeded with other non-critical work in which his subcontractors suffered delays. The Court found that the impact of non-critical delays on job progress did not equal that of critical path delays.

EFFECTS OF DELAY

Delays seldom occur in a clear-cut, stop-or-go manner. Generally, they occur gradually, having multiple effects on not only the particular delayed work, but also on other parts of the project as well.

The complex nature of construction stems from its dependence on balancing many variables: weather, terrain, availability of labor, materials and equipment. Delays, therefore, can have a "ripple" effect resulting in an extended completion date, cost overruns, protracted overhead costs, escalation of labor and material costs, and considerable aggravation to all the parties involved.

Unreasonable disruption or interference in the contractor's planned performance creates additional expense. Interference results from the owner breaching its implied duty not to unnecessarily hinder the contractor in his work.

A contractor's bid and preliminary work schedule are based on efficient sequencing of each portion of the work and on productive use of men and equipment. Unnecessary and unreasonable intrusions into this by the owner may affect the contractor's deployment of men and equipment, causing productivity to decrease and costs to increase. Although proof is difficult and dependent on accurate record-keeping, inefficiency is an acceptable element of recovery.

A classic example of inefficiency occurs when the contractor is forced by delay to perform work in an unanticipated season of the year during which weather is unfavorable. If this should happen as a result of owner fault, then the contractor ought to be able to recover for any loss of productivity which might occur.

Other factors leading to lowered productivity rates include excessive demobilization and remobilization in different locations, overcrowded work areas,
overlapping of different trades in a single area, and lack of coordination between separate prime contractors.

An Australian court recently held that a contractor was entitled to relief for costs incurred through unproductive use of his labor force resulting from an owner-caused delay. Despite a duty of the contractor to minimize expenses, the court allowed that, if a prudent contractor decided it was the "lesser evil" to keep the work force on, even though they were being used unproductively, that decision was reasonable.61

Termination

One party to a contractual relationship may, at some point, unequivocally show that it will not fulfill the terms of the contract and, in fact, is abandoning the work. In such an event, the other party may have the right under the contract to end (terminate) the business relationship and recover the resulting losses/damages from the repudiating party.

Most international construction contracts have a clause permitting the owner to terminate upon default by the contractor,62 some have a provision allowing the contractor to terminate upon default of the owner,63 and a few contain a clause allowing the owner to terminate for its own convenience.64 Each kind of termination will be discussed below.

TERMINATION FOR DEFAULT

Most often, this terminating action is taken by the owner upon default of the contractor. The grounds for termination provided in most contracts are failure of the contractor to execute the work with due diligence; poor workmanship, inexcusable delay, and bankruptcy of the contractor.65

Some contracts state also that failure of the contractor to comply with any provision of the contract gives the owner the right to discharge him.66 In ICE contracts, this type of clause is called a "Forfeiture" clause, underscoring the idea that the contractor's default, not the owner's whim, is the proper basis for terminating the contract.67

FIDIC's Clause 63 exemplifies most clauses (also called "Determination", "Cancellation", or "Resolution", "Removal", clauses) allowing default termination of the contractor. It provides for termination:

If the Contractor shall become bankrupt...or, being a corporation, shall go into liquidation,...or if the Contractor shall assign the Contract ...or if the Engineer shall certify in writing to the Employer that in his opinion the Contractor:
(a) has abandoned the Contract, or
(b) without reasonable excuse has failed to commence the Works or has suspended the progress of the Works for twenty-eight days after receiving from the Engineer written notice to proceed, or
(c) has failed to remove materials from the Site or to pull down and replace work for twenty-eight days after receiving from the Engineer written notice that the said materials or work had been condemned and rejected by the Engineer under these conditions, or
(d) despite previous warnings by the Engineer, in writing, is not ex-
executing the Works in accordance with the Contract, or is persistently or flagrantly neglecting to carry out his obligations under the Contract, or

(e) has, to the detriment of good workmanship, or in defiance of the Engineer's instructions to the contrary, sublet any part of the Contract.\textsuperscript{71}

The remainder of this FIDIC clause specifies the owner's right to expel the defaulting contractor from the Works, and states procedures to be followed in ending the project, such as valuation of the work as of the date of forfeiture and in making payments due the contractor (if any) after forfeiture.

Once the decision to terminate has been made, the owner is obligated to give the contractor written notice that he is to be expelled, usually several days ahead of the actual date of termination.\textsuperscript{72} The contractor must comply with the notice by ceasing all work immediately (or within any time limit specified).\textsuperscript{73}

A clause from a private Saudi Arabian contract\textsuperscript{74} clearly details what the contractor must typically do upon termination. It is useful as a checklist of what may generally be expected of the contractor.

**The contractor must:**

a) Immediately discontinue work on the date and to the extent specified in the notice;

b) Assist the owner in making an inventory of all construction plant at the work site and all permanent works in storage at the work site, en route to the work site, and on order from vendors and subcontractors;

c) Remove from the work site all construction plant listed in said inventory other than the construction plant which is designated in writing by the owner to be used by the owner in completing such work;

d) Assign to the owner subcontracts, purchase orders, supply contracts and equipment rental agreements, all as designated by the owner;

e) Deliver to the owner in the manner and to the extent determined by the owner, any data, plans, drawings, specifications, reports, estimates, summaries, completed work, work progress, and such other information and materials as may have been acquired or prepared by contractor in connection with this contract; and

f) Make available to the owner the names and category of employment of all persons employed on the work site, other than contractor's permanent staff, to enable the owner to employ such personnel as the owner may require to complete the work.

The Owner generally retains the right, under FIDIC and most contracts:

i. to complete the work removed from the contractor by employing anyone (except the same contractor) to do so;

ii. to take possession of any materials supplied or construction plant and other equipment owned by the contractor which are necessary to completion of the work; and

iii. to withhold any monies due the contractor until the terminated portion of the work is completed and priced.\textsuperscript{75}

128 Suspended Performance
Most termination for default clauses specify that the contractor is liable to the owner for the cost of the remaining work in the contract. Such work will be valued after its completion. If the reasonable value of that work exceeds the amount due the contractor for his previously complete work, the contractor will be indebted to the owner for the difference. In the unlikely event the cost is less than what is owed to the contractor, the owner will usually pay the contractor that difference.

Some contracts obligate the contractor to pay damages to the owner upon termination in the form of liquidated damages. These are usually expressed as a monetary amount each day (such as US$ 1,000 per day) from the date of the contractor's termination until completion of the remaining work.

Some contracts provide for termination of the contractual relationship as a remedy to the contractor if the owner should fail to make payments within a certain time frame, if the owner should go bankrupt, or (in a few private contracts) if the work is stopped by court order for three months through no fault of the contractor. FIDIC's Clause 69 details these grounds clearly. (Appendix A has the full text.)

The contractor must notify the owner in writing that he is terminating the contract, stating how the owner is deemed to have defaulted within the meaning of their contract clause for termination upon default of the owner. Generally, under these clauses, the contractor may be reimbursed for all costs necessary to stopping construction, for all payments accrued up to the termination date, and for any losses (except anticipated profits) or damages resulting from the termination.

TERMINATION FOR CONVENIENCE OF OWNER

An owner may sometimes prefer to have the option to be free of its contractual obligations without breaching its contract. This can be accomplished by a termination clause allowing the owner to end the entire, or only part, of the project for its own convenience. There would be no need to establish faulty performance or financial difficulties of the contractor prior to termination. This type of clause is included in the U.S. Standard Form 23-A (Clause 18) and England's G.C. Works (Clause 44). Both contracts outline the steps the contractor must take if terminated for convenience, the scope of his compensation for the project, and the rights the contractor has to dispute the termination (see appendix for the text.) The general intent of this kind of clause is to safeguard the contractor's interest, since he is not at fault for the termination.

A private Icelandic contract conditions a "Termination for Convenience of the Owner" clause which states these essentials succinctly:

TERMINATION OF THE CONTRACT OR
THE CONTRACTOR'S EMPLOYMENT FOR
THE CONVENIENCE OF THE OWNER

The Owner may terminate the contract or the employment of the contractor under the contract at any time provided the contractor is given notice in writing which shall include the date on which the work is to be stopped. Payment for the work accomplished will be made as follows:

Termination for Convenience of Owner
A. Payment at contract prices for items of work completed.

B. A lesser prorated amount based on contract prices for partially completed items of the work. This amount will be determined by mutual agreement between the owner and the contractor and if agreement is not reached the matter will be subject to arbitration and/or litigation as the case may be.

C. The out-of-pocket cost of materials acquired for the work by the contractor but not used in the work. The materials will become the property of the owner.

D. The cost of demobilization which shall include dismantling equipment, shipment of equipment to point or origin, and cost of termination and transportation of personnel to their home station.

The amount will be determined by mutual agreement between the owner and the contractor and if agreement is not reached the matter will be subject to arbitration and/or litigation as the case may be.

If a contractor/owner is using a standardized international contract, it would be prudent to study the termination sections very carefully. Both parties need to be aware of the circumstances which will cause the contract to be terminated, because the usual consequence of default termination is to expose the party in default to a major financial loss.

Project conditions may necessitate the inclusion of any or all of the termination provisions. Parties writing their own individualized contracts might be wise to include all three types of “termination” clauses discussed above, thereby adequately protecting either party if the contract should be terminated by the other.
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References 131
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132 Suspended Performance
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Chapter 7  Pricing Time Claims

Delayed Performance

The time period in which a contractor is originally scheduled to perform the work may be extended, suspended, or compressed by various factors. Variations in the work can force these time adjustments, as can delays in obtaining equipment, materials, authorizations, or other essential inputs.

OWNER’S RIGHT TO LIQUIDATED DAMAGES

Basic Principles

When a contractor fails to complete a project by the contractual completion date (including any time extensions) and no further extension of time is warranted, the contract is generally considered breached. At that time the owner may begin to incur financial loss. Although traditional contractual remedies for breach, such as rescission or termination are available to the owner, circumstances may be such that continuation of the existing business relationship is the preferable solution. In that event, the owner may utilize the contract’s liquidated damages provision to remedy the breach.

Liquidated damages clauses are negotiated and agreed to by both parties during contract formation. At that time the parties designate as liquidated damages an amount which will be paid by the contractor to the owner commencing with the scheduled (plus entitled time extensions) and ending at the actual completion date. This provision represents an estimate of the loss the owner is likely to incur as a result of the breach. If triggered, the fixed amount applies regardless of the actual damages. No measurement of actual loss is necessary or pertinent.

Although a liquidated damages clause clearly benefits the owner, the inclusion of this provision alerts the contractor to the scope of his liability in the event of breach. Moreover, the protection is not always unilateral since an increasing number of contracts now set an upper limit on damages recoverable from a contractor. This, in turn, further benefits the owner by limiting contractor risk and minimizing the contractor’s need to protect himself with inflated tender prices.

While terms of liquidated damages clauses can vary greatly from contract to contract, basic theory remains consistent. The breaching party (the contractor) has agreed to pay the injured party (the owner) a pre-arranged, fixed sum upon the occurrence of the breach (e.g. a non-excusable condition delaying the original completion date). These sums are generally specified as a fixed monetary amount per day (or week or month) of delay. The damages are expressed either as a sum of money per day or as a fraction of the contract price, such as 1/1000 of the contract price per week.
When triggered, the liquidated damages provision begins to run at the
time the contractual date for completion has passed, taking into account any
extensions. This points up the importance of the relationship between
liquidated damages and extension of time clauses, discussed in the previous
chapter.

A project is seldom free of delay. Therefore, evaluations ought to be
made continuously as to whether each delay merits an extension of the com-
pletion date. Continual re-evaluation accurately pinpoints the valid comple-
tion date. Since liquidated damages are triggered only at a definite time—
usually the passing of the valid completion date—the inclusion and imple-
mentation of an extension of time clause not only favors the contractor, but
is crucial to preserving the owner's rights under the liquidated damages clause.

An owner will, generally, be barred from recovering liquidated damages
when he is partially responsible for the delay, if the applicable damages clause
is not worded so as to specifically cover that contingency, or if no appro-
priate means exists to apportion liability. However, relief may still be avail-
able to the owner under a claim for general damages against the contractor,
if the contractor does not complete within a reasonable time, (taking all fac-
tors into account).

Once triggered, liquidated damages run until the contractor completes
the work. Generally, "completion" is defined by the contract as "final" com-
pletion. However in a few contracts, substantial (or "practical") completion
may be sufficient to end a contractor's liability. Australia's Standard Form
#2124 expressly allows "practical" completion to be the gauge for triggering
or ending assessment of liquidated damages. American administrative tri-
bunals, applying liquidated damages clauses, have held that such damages
may not be assessed subsequent to substantial completion.

Similar to liquidated damages clauses is the "Limitation of Liability" clause.
This specifically designates a mutually agreed upon limit on the liability of
the breaching party. Unlike a liquidated damages provision, the actual loss
to the injured party resulting from the breach must be measured and pro-
en. If actual damages are less than the designated limit, the injured party's
recovery equals only its actual losses. Should the actual loss be greater, re-
cover cannot exceed the contractual limits.

Increasingly, liquidated damages clauses are incorporating features of
Limitation on Liability clauses. These hybrids do not require that actual dam-
ages be calculated or proven, but some set an upper limit on the total liability
of the contractor. ICE refers to such a limit in its liquidated damages clause
in the main body (or General Conditions portion) of the contract. FIDIC,
on the other hand, merely suggests in its Part II, Conditions of Particular
Application, (a supplement to the main body) that it might be advisable for
contracting parties to include an upper limit on contractor liability.

Penalty clauses are distinguishable from liquidated damages clauses. True
penalty clauses are extremely unconscionable when judged in light of the
time the contract was written, not when breached—for example, a provision
permitting the owner to retain all money due the contractor rather than
merely enough to cover the owner's actual losses. Such clauses will generally
not be enforced when they operate to severely penalize the contractor, rather
than fairly compensate the owner.

In civil law jurisdictions, provisions similar in content to liquidated dam-

**Basic Principles**  135
ages clauses are also called “penalty” clauses. The name notwithstanding, the latter provisions are not, nor may they be, onerous or unconscionable. Their terms and their application closely approximate liquidated damages provisions. Sample civil law “penalty” clauses are discussed in the following section.

**Contract Clauses**

FIDIC's clause 47 illustrates the typical Liquidated Damages for Delay Clause.

1. If the Contractor shall fail to achieve completion of the Works within the time prescribed by Clause 43 [Time for Completion] hereof, then the Contractor shall pay to the Employer the sum stated in the Contract as liquidated damages for such default and not as a penalty for every day or part of a day which shall close between the time prescribed by Clause 43 hereof and the date of certified completion of the Works. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies in his hands, due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

2. If, before the completion of the whole of the Works any part or section of the Works has been certified by the Engineer as completed, pursuant to Clause 48 [Certification of Completion of the works] hereof, and occupied or used by the Employer, the liquidated damages for delay shall, for any period of delay after such certificate and in the absence of alternative provisions in the Contract can be reduced in the proportion which the value of the part or section so certified bears to the value of the whole of the Works.

In its Conditions of Particular Applications section, FIDIC suggests that some clauses may be varied “as necessary to take account of the circumstances and locality of the Works...[and] specially prepared to suit each particular contract.” Suggested additions to Clause 47 include defining the method of calculating the assessable amount, the method of deducting, currency to be used, reduction as work is substantially completed and an upper limit on contractor liability.

In its Fifth Édition, ICE contains a liquidated damages clause which is applicable to delay in either the whole or part of the work.

**ICE Clause 47 [full text is in the Appendix]:**

1. a. In the Appendix to the Form of Tender under the heading “Liquidated Damages for Delay” there is stated in column 1 the sum which represents the Employer’s genuine pre-estimate (expressed as a rate per week or per day as the case may be) of the damages likely to be suffered by him in the event that the whole of the Works shall not be completed within the time prescribed by clause 43 [Time for Completion.] Provided that in lieu of such sum there may be stated such lesser sum as represents the limit of the Contractor’s liability.

136 Pricing Time Claims
for damages for failure to complete the whole of the Works within the time for completion therefor or any extension thereof granted under Clause 44. [Extension of time for Completion.]

(b) If the Contractor should fail to complete the whole of the Works within the prescribed time or any extension thereof granted under Clause 44 the Contractor shall pay to the Employer for such default the sum stated in column 1 aforesaid for every week or day as the case may be which shall elapse between the date on which the prescribed time or any extension thereof expired and the date of completion of the whole of the Works. Provided that if any part of the Works not being a Section or part of a Section shall be certified as complete pursuant to Clause 48 before completion of the whole of the Works the sum stated in column 1 shall be reduced by the proportion which the value of the part completed bears to the value of the whole of the Works...

(3) All sums payable by the Contractor to the Employer pursuant to this Clause shall be paid as liquidated damages for delay and not as a penalty.

(4) If the Engineer shall under Clause 44 (3) or (4) have determined and certified any extension of time to which he considers the Contractor entitled or shall have notified the Employer and the Contractor that he is of the opinion that the Contractor is not entitled to any or any further extension of time the Employer may deduct and retain from any sum otherwise payable by the Employer to the Contractor hereunder the amount which in the event that the Engineer's said opinion should not be subsequently revised would be the amount of the liquidated damages payable by the Contractor under this Clause.

The application of ICE's Clause 47 is dependent upon proper application of Clause 44 (Extension of Time). A pre-condition to recovery under 47 is that the engineer determine and certify to any extensions of time to which the contractor is entitled or to certify that the contractor is entitled to no further extension of time. In litigation over a liquidated damages clause very similar in wording to Clause 44 of the 4th Edition of ICE, an owner was barred from recovering liquidated damages because he was responsible for a delay in a way not expressly dealt with in the clause.

ICE's Clause 44 subsequently was redrafted and broadened to explicitly cover most forms of owner breach. Therefore, courts which formerly were reluctant to find that liquidated damages were proper because the extension of time clause was vague may hold otherwise under ICE's 5th Edition clause 44.

The liquidated damages clause, Article 37, of the Saudi Arabian Tenders Regulations outlines in detail the method of calculation of the amount due. And it offers an unusual option to the parties: The extent of contractor liability may be reduced if the part delayed does not preclude full utilization of the work.

**Article 37: In public works contracts, if a contractor fails to complete**
work and deliver it in full on schedule and the soliciting agency does not see a justification for withdrawing the work from him, a fine shall be imposed upon him for the delay of completion beyond the scheduled date, to be calculated on the basis of the average daily costs of the project by dividing the contract's value by its period as follows:

a) A fine on the first part of the delay period amounting to one quarter of the average daily costs for each day of delay until it reaches 15 days or 5% of the contract period.

b) A fine on the second part of the delay period amounting to half the average daily costs for each day of delay until the delay for the two parts reaches either 30 days or 10% of the contract period.

c) A fine on the third part of the delay period amounting to the full average daily costs for each day of delay until the delay for the two parts reaches the two parts provided for in paragraph (b).

The total amount of fines shall not exceed 10% of the contract value. If the soliciting agency, however, deems that the delayed portion neither precludes full utilization of the work on the specified dates, not interferes with the use of any other utility or adversely affects the completed portion of the work, the total amount of the fine must not exceed 10% of the value of the delayed portion of work.

The wording of the liquidated damages clause in England's G.C. Works Contract embodies much of what the foregoing clauses do. However, it adds a paragraph stating that the ordering of modified or extra work during the period in which liquidated damages are to be assessed shall not be deemed a waiver of or to affect in any way the rights of the government.35

Australia's standard form #2124 contains a typical liquidated damages clause, except that “completion” is qualified to be “practical completion.”34

The Australian courts have defined “practical completion” to mean:

"The work...carried out in accordance with the contract...except for departures from the contract which were either latent or undiscovered or merely trivial."35

Most frequently, liquidated damages are assessed against a contractor who remains on the job to complete the delayed work. The U.S. government expressly reserves the right in Clause 5 (...Damages for Delay...) of U.S. Standard Form 23A to assess liquidated damages against the original contractor after he has been terminated and another contractor completes the work. The period for damages, in that event, extends "until such reasonable time as may be required for final completion of the work." In addition, "any increased costs occasioned by the Government in completing the work" will also be assessed against the original contractor.36

Recovery of liquidated damages may not always be restricted to, inter alia, retention monies for the delayed contract. The Public Works Department of Hong Kong broadens its source of recovery to its liquidated damages clause.

"Government may, without prejudice to any other method of recovery, deduct the amount of such damages from any moneys due or which

138 Pricing Time Claims
may become due to the contractor whether under this or any other contract with Government.\textsuperscript{37} [Emphasis added.]

Liquidated damage clauses are often called penalty clauses in civil law jurisdictions. Despite their name, penalty clauses in France may not be onerous or impose “excessive or insignificant penalties.”\textsuperscript{38} The civil codes of other jurisdictions permit judges to modify penalties if deemed “inordinately high” (Germany),\textsuperscript{39} or “manifestly excessive” (Italy),\textsuperscript{40} or merely “excessive” (Switzerland).\textsuperscript{41} In Algeria, the debtor is liable only in respect of the loss which was normally foreseeable at the time of contracting, provided the debtor has not committed fraud or gross negligence.\textsuperscript{42}

\section*{CONTRACTOR’S DELAY CLAIMS}

Time burdens are almost always accompanied by increased costs and the prudent contractor must be prepared to identify and prove those costs which are recoverable. Even an undisputed right by the contractor of entitlement to costs would be difficult to exercise unless those costs can be satisfactorily quantified and proven.

The value of diligent recordkeeping cannot be over-estimated. Foreign projects are typically large, complex, and lengthy, creating sometimes overwhelming amounts of paperwork. A brief memo which appeared self-explanatory when written may be unintelligible months later if it is unclear who wrote it, who received it, and what was being discussed. Simple matters such as dating notes and memos, and identifying both the sender and the recipient, are frequently overlooked. The lack of this basic information frustrates the evaluation of valuable claims. Paperwork is undoubtedly a burden, but giving it extra attention on a daily basis can pay off substantially when a determination of the source and value of claims becomes important. Chapter 8 discusses the preparation of claims through documentation and other means. The remainder of this chapter outlines important cost areas which should be monitored and documented from an owner’s viewpoint, and addresses the manner in which the contractor can incorporate such costs into its claim.

The most crucial issue to a claimant is the recovery of costs. Ideally, of course, the claimant should be completely reimbursed for the extra costs produced by the delay or interruption in the work. Unfortunately, questions of causation and cost allocation complicate that simple goal. Experienced owners and contractors are well aware that arguments concerning how costs arose can grow heated and prolonged. Contractors tend to want the owner to pay all the costs incurred due to delay when, for example, the work is extended unexpectedly into a troublesome season of weather or into a period of price escalation. Conversely, the owner will expect the contractor to mitigate certain costs (by dismissing personnel, etc.) and allocate some costs to other jobs.

A contractor who presents a detailed breakdown of reasonable costs incurred during the delay period is a step closer to recovery, provided a crucial condition is met: the delay must not have been caused by the contractor’s negligent act or omission.\textsuperscript{43} An owner is unlikely to indemnify the contractor against the contractor’s own mistakes.

In general, a contractor’s reimbursable costs include wages and fringe
benefits of direct labor, salaries of employees stationed at field offices, or engaged in expediting the production or transportation of materials or equipment, the cost of reasonable transportation and hotel facilities incurred in connection with the work, the cost of materials, supplies and equipment, subcontractor payments, rental or ownership charges for necessary machinery and equipment, cost of insurance premiums or letters of credit, sales and use taxes, permit fees and royalties, losses and expenses not compensated by insurance, and miscellaneous expenses directly related to job performance. Overhead and profit on direct costs are typically included in the compensation.

In some instances, reimbursable costs will be difficult to quantify. Contractor-owned equipment is usually reimbursable on the basis of ownership expense plus operating costs; but when rental equipment is involved, the parties must be as explicit as possible concerning item requirements and applicable rental rates. Home office overhead may be difficult to apportion among various jobs, although on foreign projects there is likely to be a distinct allocation of resources.

Certain costs are generally not reimbursable. These generally include: salaries of the contractor's officers performing general services at the home or branch offices, most capital expenses which cannot be allocated among jobs (such as office equipment rentals at the home office, utility costs, etc.), costs generated by the contractor's negligence, and costs related to any subcontractor or anyone employed (directly or indirectly) by a subcontractor.

International accounting firms can provide useful assistance or information on cost categorization and management. Such services should be considered if the contractor plans to undertake projects in the foreign market.

Deserving special attention because of the frequency with which they evolve into claims are overhead, idle labor and equipment and cost escalation.

Overhead

Estimates of project cost invariably include an allocation for all relevant overheads, including that of the home office, foreign branch offices, and any necessary field offices. The foreign bidder is likely to assume that the conclusion of one project will be followed fairly quickly by another project, so that there is a continuous cash flow to be applied against overhead; or that overseas operations and overhead expenses will cease on schedule, upon final closeout of the project.

When performance on the project is extended, however, overhead costs may exceed the amount originally budgeted for them, and new, cost absorbing work may have to be postponed. The cost of standard office overheads is substantial in these inflationary times, and failure to identify and claim the budget overrun may turn a profitable undertaking into a loss.

Home-office overhead for a particular project is generally easy to identify if all the inputs for foreign work are handled by a foreign branch or home division created specifically for a particular project. The contractor should maintain clear, dated records of fixed expenses such as supervisory payroll, employer-provided housing for expatriate employees, telecommunications of all kinds, computer time or computer services, and office equipment rentals. These are direct costs. Indirect costs include legal or accounting services,
professional consulting costs office supplies, employee fringe benefits, miscellaneous insurance, and other items which are in general use throughout the contractor's business.

The parties may agree on a method for the calculation of offsite overheads. In Australia, for example, the following mathematical relationship is used to establish offsite overheads (O.S.O.) encountered during extended performance periods, assuming that overhead as a percentage of annual turnover (revenue) can be defined:

\[
\text{O.S.O.} = \left( \frac{X}{100} \right) \times \left( \frac{C}{P} \right) \times D
\]

Where:
- \( X \) = the established percentage
- \( C \) = the contract sum
- \( P \) = the contract period in days
- \( D \) = the period of delay in days

Contractors involved in projects with United States Government agencies, (such as under Standard Form Contracts) have been successful in recovering extended home office costs due to owner-caused delay. A formula was devised in the case of *Eichleay Corp.* to approximate the impact of an extended performance period on a contractor's home office overhead. The formula is generally expressed as follows:

1. Overhead Allocable to the Contract equals:
   \( \frac{(\text{Contract Price})}{(\text{Total Company Billings for Actual Contract Duration}) \times (\text{Total Overhead Incurred During Duration of Contract})} \)

2. Daily Overhead Allocable to Contract equals:
   \( \frac{(\text{Allocable Overhead})}{(\text{Number of Actual Days to Perform Contract Work})} \)

3. Extended Overhead Costs equals:
   \( \frac{(\text{Daily Overhead})}{(\text{Number of Days of Compensable Delay})} \)

This formula (and variations thereof) is currently accepted on public projects of U.S. government agencies as a reasonable approximation of home office overhead costs incurred during an unreasonable delay in the work.

The United States and the Australian formulas are similar in many respects. Yet, both are subject to the same criticism: plugging numbers into a formula, without demonstrating a connection between proof adduced by the formula and a fair estimate of actual damages, is not a sufficient substitute for direct evidence of overhead costs.

**Idle Labor**

Delayed performance means additional time on the project. A delay may severely disrupt the work, making it impossible to proceed and idling a substantial part of the labor force.

An owner might argue that semi-skilled or unskilled labor should be temporarily discharged while the work is suspended, since this appears to be the most obvious way to reduce cost. However, in areas where suitable labor is scarce—as in most developing countries—discharged employees may take new jobs and refuse to return when work is resumed. A serious on-site labor shortage can result, necessitating expensive recruitment and training of new personnel. Discharging of personnel should be weighed carefully.
Top level professional personnel are rarely discharged during suspensions of the work. In many instances, they continue to work, trying to resolve the delay, plan new schedules, etc.

Idle Equipment

Recovery may be possible for equipment which is on the job and ready to operate, but must be put on “standby” because of an owner restriction or other reasons preventing reassignment to another job. An interruption in work progress often means that equipment (whether owned or leased) stands idle until other work becomes available. The contractor should attempt to minimize such idle time by remobilizing equipment to areas (if any) unaffected by the delay, or ascertain the feasibility of relocating the equipment to another project.

For rental equipment, the contractor may be entitled to compensation for the rental costs during the delay period, since rental costs are incurred whether or not the equipment is utilized. Rental invoices are useful as evidence for a claim since they will indicate the actual amount paid for the period of delay.

Rental information can otherwise be supported by recognized rental publications. Parties should be aware that rental rates in such publications will vary by factors such as age of equipment, operating conditions, geology, topography, and climate. The rates represent the amount an owner must charge to recover his costs and make a reasonable profit on his investment.

Reimbursement for costs related to contractor-owned equipment sometimes requires more difficult calculations. The contractor’s financial records may not allocate ownership costs (maintenance, repairs, depreciation, insurance, etc.) among specific projects. It may be necessary to resort to outside publications which provide estimated equipment ownership costs during specified time periods. These publications are generally reliable indicators of the average costs of owning and maintaining construction equipment. Unfortunately, such publications might be unacceptable in foreign jurisdictions where they are not well known. Before relying on their cost figures, one should check on whether the particular authority is familiar with and willing to accept such reference guides. However, if a parties’ contract makes specific reference to a particular publication, a court may be likely to accept that agreement as binding between the parties.

Careful consideration should be given to which guide to use. Climatic conditions can place extraordinary demands on equipment. Middle Eastern desert temperatures routinely exceed 100°F (38°C) and sand wears out moving parts. Mud and dampness are constant problems in jungle areas. Equipment will operate, but its useful life will be shortened, causing a proportionate increase in per diem cost of ownership.

Alert owners faced with a claim for idled equipment will use the guide prices in effect during the year the claim arose, not the year in which the claim is being negotiated or litigated.

Cost Escalations

Worldwide inflation makes it almost a certainty that the cost of labor and material will increase as a project progresses. Contract clauses may provide for escalation. For example, FIDIC Clause 70 under Parts I and II of the

142 Pricing Time Claims
Conditions of Contract, allows adjustments to the contract price in the event of alterations in wage rates or changes in the cost of materials. However, unreasonable interruptions in the work caused by owner delays are not encompassed by this provision and a contractor must seek recovery elsewhere.

Labor and material escalation costs are compensable elements if owner-caused delays extend performance of the project into a period of higher prices. For example, concrete costing U.S. $50 per cu. yd. at the time of contracting may cost U.S. $100 per cu. yd. at the time of pouring, if the delay occurs on a project in a country experiencing runaway inflation. Or a change in a country’s political structure during a delay period may strengthen unions in that country, resulting in greater social charges and higher wages for native labor. Furthermore, a contractor will incur the costs of transportation of any additional materials, equipment, or labor necessitated by a delay.

If expatriate workers are employed under a contract expiring during the period of extended performance, special inducement payments may be required to retain them until the ultimate completion date. Such arrangements can get complicated if the employees are contractually obligated to go elsewhere, or if they find working conditions so unattractive that they simply want to leave. If extended performance seems to be a substantial risk at the time of contracting, the parties may want to agree on contract provisions which contemplate and apportion extraordinary personnel replacement costs.

**Suspended Performance**

**PARTIAL SUSPENSION COSTS**

With regard to costs encountered during a suspension, FIDIC Clause 40 provides that:

The Contractor shall... be entitled to recover any such extra costs... upon written notice... to the Engineer... in respect of such claim as shall, on the opinion of the Engineer, be fair and reasonable.

During a period of suspended performance, the contractor is likely to incur idle equipment and idle labor costs, as previously discussed. When work resumes and the contractor is pushed into an extended performance period, he may experience a “repeat” of certain fixed costs, such as insurance, performance bonding or letters of credit, and rentals. All these extra expenditures should be documented for presentation to the owner.

Generally the contractor should not be burdened with the duty to make special efforts to mitigate costs every time his work is halted by the owner. Contractors who are able to foresee an extended performance period may nevertheless wish to pre-plan ways to reduce labor and services to an extent consistent with efficient work. Construction, like all business enterprises, requires the intelligent allocation of expensive resources, and it is a sound business policy to minimize waste regardless of who is paying the bills.

Suspension may also occur as a result of a force majeure, such as an earthquake, war, or other national emergency. In this event the added costs may be recoverable under the force majeure provisions in the contract rather than under a suspended work theory. The parties should attempt to settle the cost problems under whichever clause is more appropriate, upon a study of the facts.

*Partial Suspension Costs 143*
TOTAL TERMINATION COSTS

If an owner breaches the contract, a contractor may be entitled to stop work, terminate the agreement, and collect whatever costs remain unpaid. Paragraph 3 of Clause 69 of FIDIC provides that when an owner breaches, a contractor is entitled to payment as if the work had been subjected to the “Special Risks” outlined in Clause 65.58

Clause 69 goes farther, however, by permitting a contractor to recover consequent damages of the breach. This broader view reflects the common principle of contract law that contractual obligations must be respected (“pacta sunt servanda”); and if they are not, the injured party is entitled to money damages.59

The costs that may accrue in a termination situation are divided into two classes: those costs associated with performance of the work, whether incorporated, ordered, committed, or shipped; and those costs that are a consequence of the termination.

Costs incurred in the expectation of performance should be capable of actual cost analysis. The second class of costs—demobilization of equipment, plant, and labor, repatriation costs, down time, losses in general conditions, losses in anticipated profit, general expenses and other damages—illuminates the fact that a construction project cannot stop abruptly, but instead “skids to a halt.”

Recovery of “skid costs” depends on the contract, the method of calculation, proof, local custom, and the forum in which recovery is sought. These types of damages are not directly related to the performance of the contract, but arise out of the contract as a result of some injury or harm that is not too remote and was foreseeable by both parties when the contract was signed.

Calculations of lost profit are inherently speculative, but they have been undertaken and enforced. Expert witness testimony regarding potential profitability had the contract been completed may be necessary. This can be supplemented by an analysis of the contractor’s profit margin on past work of a similar nature.60

Courts and arbitral tribunals are unlikely to be too generous in awarding anticipated profits, yet, a claim of this kind should be pursued when an owner terminates. In the case of *Sapphire International Petroleum Ltd. v. National Iranian Oil Company*,61 an arbitration panel acknowledged that, despite expert testimony, the loss of profit could not be calculated with any exactitude. However, the panel went on to award anticipated profits on the basis of “equity and good conscience.”

When a contractor is terminated for default, the owner has the upper hand. The owner is entitled to be reimbursed for amounts paid in excess of work completed and, sometimes, for the consequential damages (cost of replacing the contractor, etc.) flowing from the original contractor’s breach.62 Letters of credit and/or insurance arrangements may be activated during breach situations. As a consequence, a breaching contractor may lose his credit with banks or insurers, thus jeopardizing his future work. In addition to formal measures available to the owner to remedy a contractor’s breach, an owner may have other means of satisfying his claims. The Saudi Tenders Regulations allow the Soliciting Agency to impound any or all of the con-

144 Pricing Time Claims
tractor's equipment, tools, materials, or plant, without incurring any liability for any payments, if the work has been withdrawn from the contractor.\textsuperscript{63}

Formal breaches are relatively rare unless extraordinary circumstances arise. More commonly, the question of whether a breach has occurred is disputed. The facts underlying the dispute are frequently very complex. Since completion of the work is the preferred goal for all parties concerned, disputes are likely to be negotiated or arbitrated to a resolution rather than have a party abandon the project.

## Compressed Performance

### ACCELERATION COST ELEMENTS

Costs incurred due to acceleration may include: overtime pay, costs due to loss of efficiency (congestion, disruption of work, fatigue caused by overtime work, etc.), costs of extra shifts and additional manpower and equipment, and additional production costs resulting from adoption of a different production method to satisfy the acceleration order.

Acceleration may also result in changes in other segments of work, which generally increases the cost of those segments. Cost increases known as "impact costs" or the "ripple effect" result from a disruption in those elements of work which have not been accelerated. For example, if there is a change in one part of the work—such as giving structural steel workers priority of access to working areas in which work has been accelerated, this may, in turn, cause congestion and hindrance of the ongoing work of other labor crews.

On an international project, these compressive situations introduce problems. If new materials, equipment or technical personnel need to be imported, expediting costs might be incurred. These costs may include extra fees for permits, premium charges for faster transportation and handling, and extra housing and subsistence costs for expatriate technical personnel. Costs typically associated with stepped-up activity will also be experienced. Additional labor, material, and equipment expenses, as well as loss of productivity due to congestion, worker fatigue, or inexperience may all generate added costs.

### METHODS OF CALCULATION

An acceleration of the work may entitle a contractor to recover the increased costs he actually and reasonably incurred on the project specifically accelerated.\textsuperscript{64} Generally, a contractor's overall rate of productivity should be determined so that the net effect of the acceleration can be measured. Therefore, the contractor must prove, rather than simply assert, that his productivity was changed by the acceleration.\textsuperscript{65}

A fair profit on the extra costs should be claimed at the same rate of profit anticipated by the original contract.\textsuperscript{66} Any elements of cost savings realized as a consequence of acceleration should be offset against the increased costs. For example, an acceleration might bring about extra labor costs of $25,000 (U.S.) but reduce material storage costs by $5,000 (U.S.). Under those circumstances the contractor should only be entitled to $20,000.
All costs necessary to expedite extra labor, materials, equipment, etc. to meet an acceleration order should be separately monitored and accounted as accurately as possible.

The component most affected by acceleration is worker efficiency, which is inherently difficult to measure. The next section of this chapter presents guidelines for efficiency estimation, with the caveat that an estimate will be highly speculative unless a contractor's records enable him to make a comparison of pre-acceleration and post-acceleration performance.

**Loss of Productivity**

Variations or changes in the work have the potential to reduce worker efficiency and the sequence of performance is likely to be disrupted. Workers experienced with the job may suddenly be joined by inexperienced workers. The premature arrival of subcontractors may congest the site and generate an atmosphere of confusion. Lowered productivity increases costs because more manhours must be expended to achieve the normal output of work. Several factors may have an adverse effect on productivity.

**ADVERSE WEATHER CONDITIONS**—A contractor generally assumes this risk during the duration of a "normal" job (assuming there are no abnormal conditions, acts of God, etc.). But a contractor's work output suffers when, due to delay, the project is still in progress during unanticipated seasonal changes and inclement weather.

Ordinary weather conditions can be just as exhausting as overtime. Climates vary dramatically throughout the world, and expatriate personnel cannot adapt as quickly as weather can change. Suppose, for example, that an English electrician spends January in London, where the average temperature is 45 degrees F, then spends February in Fairbanks, Alaska, where the average temperature is 0 degrees F, and then spends March in Khartoum, where the temperature is 88 degrees F. It has been demonstrated that such wide variations in temperature affect both the health and morale of personnel.

**OVERTIME**—Physical fatigue and lowered morale resulting from extended overtime reduce the efficiency of a contractor's workforce.

**MANPOWER UNAVAILABILITY**—A shortage of skilled workmen is a factor in many areas of the world where engineering and construction skills are imported.

**STACKING OF TRADES**—Concurrent operations of various trades causes congestion of personnel and conflicts with other contractors. Forcing more work into an already-planned sequence of operations also disrupts future work.

**CREW SIZE INEFFECTIVENESS**—Adding to or reducing work crews affects morale, rhythm, and overall effort.

**RESTRICTED ACCESS**—Changes in work sequences, safety factors, or labor disputes may interfere with previous access routes to work areas.
DELIVERY DELAYS OF MATERIAL AND EQUIPMENT—Contract changes can cause problems of procurement and delivery of materials, as well as rehandling of substituted materials at the site. This can be a major factor in international work.  

WORK PERFORMED OUT-OF-SEQUENCE—Reassignment and remodeling of manpower results in much wasted effort.

MEASUREMENT METHODS

There are two important elements which must be shown with specificity: time and cost. The time period in a claim for loss of efficiency claim should run from the date of notice of the event, until the completion of the entire job. Similarly, the costs due to inefficiency should encompass only the affected work. A contractor's figures should clearly reflect the work that was affected and the increased labor costs incurred therefrom, since proof may result in a recovery of increased costs directly attributable to such changes.  

Measuring a loss of productivity can be accomplished in a variety of ways. Choosing among the following methods depends on the nature and complexity of the work. No one method may be satisfactory in itself.

EXPERT ANALYSIS—A contractor may not always maintain precise records from which increased labor costs, resulting from reduced efficiency, can be ascertained. Therefore, testimony by an expert with construction experience and knowledge of labor costs may be necessary. Proof might consist of a comparison of the contemplated method of performance to actual costs under the methods a contractor was forced to employ as a result of the conditions encountered.

ACTUAL VS. CONTEMPLATED COSTS OF PERFORMANCE—This method of calculation, would probably need to be verified if unaided by expert testimony. The actual costs must be shown to have been incurred as a direct result of an owner-caused change, and not attributable to delay, negligence, etc. on the contractor's part. Furthermore, the proposed method of performance, as an estimate, must be shown to have been reasonable.

COMPARISON OF A NORMAL VS. INEFFICIENT PHASE OF WORK—This method is feasible only if a “normal” working period has existed for comparison purposes. “Normal” means a standard productivity rate for the labor force under average working conditions.

SUPPORT OF ESTIMATED LABOR COSTS—A standard of reasonableness should be met, taking into consideration the nature of the work and the totality of the circumstances.

ANALYSIS OF WORK ACCOMPLISHED PER HOUR OR PER UNIT OF CURRENCY OF INEFFICIENT VS. EFFICIENT CREWS—Labor costs during a less productive period should be compared to those incurred in an efficient period to reflect the impact on work in the relevant time period. The number of labor hours exerted, in conjunction with the money spent during each period, can demonstrate the reduction in worker productivity.
STANDARDS OF OTHER CONTRACTORS ON SAME OR SIMILAR PROJECTS—An effective way to demonstrate loss of productivity is to be able to point to an unhampered work force performing similar work (the greater the similarity the better) to illustrate the variance between their rate of progress and that of a work force which has been hampered and thus working under less productive circumstances. By comparing regular productivity rates to the inefficient period which is being claimed, the disparity becomes apparent. To serve as a valid basis of comparison, the “efficient” work period supporting calculations must have occurred under similar conditions and circumstances.

USE OF INDUSTRY STANDARDS MANUALS—Attempting to prove a percentage of loss of productivity by using industry averages or estimating rates is seldom convincing because industrywide data will usually not relate to the specific problems encountered and is therefore not relevant evidence. Furthermore, owners may counter that these “manual” rates are usually prepared by contractor groups solely for claims purposes, and thus are biased and not credible. They may, however, have value in demonstrating that the loss of productivity falls within a range noted by some of the guides.

LEARNING CURVE USE

The learning curve principle is that as experience is gained, production becomes more efficient. Workers develop individual manipulative skills and increased familiarity with the details of their tasks. Smoother operation increases efficiency and output per manhour, thus reducing labor cost per unit of work.

Along the initial learning curve of a project, costs allocable to job performance will diminish (per unit of time) until a practical maximum efficiency (or efficiency norm) is reached. Absent unusual disruptions, workers can be expected to operate at normal efficiency during most of the project. Moreover, those who work in pairs or teams will develop a group efficiency, with each member operating the way which is best for him and best for the others. This type of relationship is particularly sensitive to disruption; changing one member of the group distorts the efficient rhythm of the entire unit.

Where productivity is disrupted by acceleration orders or delays resulting from changes in the work, a new learning curve develops. Productivity generally falls below the practical maximum efficiency during the orientation period during which workers become familiar with the new or changed circumstances. If changes are major or frequent, productivity may consistently fall short of the maximum, depriving a contractor of the minimum labor cost per unit of work on which his bid was probably based. Additional costs may arise for employee training, costs of correcting defective work of inexperienced personnel, organizing new tool locations and work procedures, materials waste and excessive need for supervisory personnel.

When pricing a claim, a contractor should attempt to prepare and document a sample learning curve for those who worked on different aspects of the project. Proper illustration of a learning curve can be valuable ammunition for demonstrating effects on productivity. Comprehensive time and la-
bor records will be essential to this effort, and expert assistance may be necessary where the work is complex.

Owners faced with a claim for lost productivity should analyze the data to determine whether the contractor's own mismanagement or negligence contributed to the loss. If a contractor has failed to exercise good business judgment in organizing work crews, the owner can legitimately claim that maximum efficiency would not have been reached under any circumstances. This may reduce or eliminate the contractor's claim; a fair outcome since a contractor is expected to be an expert at his own work.

PROVING COSTS

The reality of proving a loss of efficiency is that unless the documentation is so exact that the rate of loss is a mathematical certainty, convincing an owner or a tribunal of the loss becomes extremely difficult. Because the criteria are largely subjective, every assertion of loss must be well supported by clear evidence.

Too often, only one of the methods previously mentioned is relied upon to substantiate loss of efficiency. Unfortunately one method alone is seldom convincing. Several methods that are indicative of the loss, though not necessarily in exact agreement, may be more credible. The most compelling argument might be supported by well documented proof of the causation of the productivity loss coupled with the substantiation of the degree of the loss by using more than one method.

Loss of Profit

Whether a contractor can recover profits lost because of owner-caused delay is questionable. Such damages must be pleaded with more specificity than the standardized or general damages (directly related to performance and representing an immediate economic expectation). The lost profits must have been reasonably foreseeable.78

Conversely, if delay is the fault of the contractor, the owner is more likely to recover for lost business profit. The appropriate measure of damages will be those anticipatory profits which can be proven with reasonable, though not absolute, certainty.79 Such proof might include past profitability, past business practices, and any factors which are more than just speculative.80

Special Costs

Other costs may be claimed when variations in performance increase costs. These might include, but are not limited to, the inflationary effect of devaluation of the local currency when forward-pricing adjustments; interim national controls imposed during extended performance periods that may affect material, labor, equipment, or financing costs; contract requirements for insurance, retainage, bonds, or warranties when entering a new time frame; special burden costs of extended labor agreements; the psychological aspects
of dealing with multinational parties who view extras very conservatively; and the costs of pursuing recovery should the dispute go beyond the negotiation level.

It is apparent that a claim is only as good as the evidence supporting it. Failure to record the value of all inputs invites the risk that unexpected costs will eventually be unidentifiable and therefore unreimbursable. The intricacies of international work demand that every activity receive careful, thoughtful attention. The cost of such attention will be a productive investment when claims are being priced.

Both idle and active labor may contribute to extra taxation costs. Most countries have a territorial system of taxation, by which they tax any income, profits, or royalties generated within their boundaries. Some countries have extraterritorial taxation as well, imposing taxes on their nationals working abroad. Tax treaties sometimes provide relief by providing exemptions to territorial or extraterritorial taxes, but when no treaty protection is available, employers may have to increase the salaries of their expatriate personnel to overcome the tax increase those individuals may experience. Researching tax matters is complex, but should be undertaken so labor costs can be estimated accurately. Moreover, the variety of taxes potentially imposable—customs taxes, social taxes, employment taxes, excise taxes, franchise taxes, etc.—can be an expensive surprise for a contractor who fails to research the subject.
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References 151
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152 Pricing Time Claims
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PART FOUR: RESOLVING CLAIMS

Chapter 8  Preparing the Claim

A formal claim arises when an aggrieved party asserts that the other party has failed to meet its contractual obligations or has prevented the aggrieved party from performing its own duties.

The injured party carries the burden of proving that the other party's conduct caused the alleged injury. Different procedural rules may vary the standard of proof—how much evidence must be presented, how the evidence will be received and identified, what will be considered relevant and what will not—but the burden of proof will always rest on the asserting party.

The accused party will generally not be required to defend itself against the allegations until it is confronted by evidence showing misfeasance or nonfeasance on its part, a rule which is consistent with the "presumption of innocence" common to many legal systems. The accused party must come forward to defend itself against evidence which is sufficiently strong to support the allegations. At this point, the accused party can bring out its own evidence to show that it did not cause the harm, either by casting serious doubt on the evidence supporting the allegations, or by establishing some other cause of the harm.

In rendering a decision, the judge, arbitrator, or other authority presiding over a claim will look to see which side is favored by the greater weight of the evidence. The amount of evidence needed to establish this plateau and the methods by which the decision is reached will vary depending upon the legal system involved, but in any forum it is imperative that the parties present and document their positions as thoroughly and persuasively as possible.

The parties' legal relationship is not always clearly defined. One party may be deceived by the illusion of legal equality, and nothing is more shocking than discovering (usually too late) that the applicable legal system applies unexpected or unmanageable standards and burdens of proof. This is why advance examination of legal matters is indispensable. The parties must be prepared to prove their claims in a fashion which is both factually and procedurally acceptable to the presiding tribunal.

Proving Liability

CONTRACTUAL BASIS

While not ignoring the specific provisions of a construction contract, courts still tend to impose certain general obligations on the parties to a construction contract.

The owner has several implied or express obligations which relate to

154  Preparing the Claim
contract performance. For example, it must: provide a reasonable area in which to work and access to and from work;\textsuperscript{2} keep the job reasonably free from unwarranted interference with the contractor's performance of contract obligations;\textsuperscript{3} and make payments under the contract when due.\textsuperscript{4}

The contractor is the expert who has been chosen to fulfill certain needs and thus assumes responsibility for furnishing the structure or facility delineated in the plans and specifications, at the agreed price and within the agreed time. The contractor is also expected to make prompt payment, when due, to his own subcontractors and suppliers\textsuperscript{5} and to be reasonable in his dealings with them and with others on the construction site.\textsuperscript{6} With respect to performance, the contractor must recognize the extreme importance, not only to his own work but to the owner and architect, of proper coordination, supervision and performance on the job. The owner has employed the contractor as an expert, not simply to put one brick upon the other, but to see to it that the many trades involved work in harmony so the final product is of requisite quality and completed within a reasonable time.

Parties seem to inevitably disagree about certain phases of the work, particularly when a phase is delayed or when costs escalate. In most cases, informal negotiation—perhaps nothing more than a telephone call—will resolve the disagreement. But some claims will be contested and may lead to litigation or arbitration. A claim which reaches that stage must be prepared with great care, because pursuing relief before a formal tribunal is expensive and time-consuming. Accordingly, when a party intends to file a claim, or when notification of an alleged dispute is received, the first reaction should be a careful review of the contract documents. The concept of review is axiomatic, because while the prudent contractor or owner will already be familiar with his contractual duties, they must always isolate and study the portion of the contract which will control the dispute.

A claim must be based on some contract provision. Where contract language is clear, the only remedy available will be that which is expressly mentioned, such as liquidated damages at a stipulated daily rate. This general rule pervades all contract law: tribunals give first attention and full effect to those items to which the parties have expressly agreed.\textsuperscript{7} It is sometimes possible to avoid this general rule (by arguing, for example, that the clause in question was imposed on the weaker party by the stronger) but this is never a simple matter and it is risky to attempt it in an unfamiliar forum. Legal systems which favor a literal reading of contract language may be particularly unwilling to consider evidence describing the atmosphere which prevailed during bidding and negotiation.

If the contract specifies claim procedures, these must be followed without variation.\textsuperscript{8} Procedural provisions requiring notice of claims or notice of an intention to seek judicial or arbitral review are frequently included in international construction contracts. However, compliance with contractual procedures is not a substitute for compliance with the rules and regulations of courts or arbitral tribunals, if these are involved. Failure to follow contractual procedures may be an actionable breach or a powerful defense for the accused party. Failure to follow formal court or arbitral procedures may cause the tribunal to refuse jurisdiction or dismiss the claim.\textsuperscript{9} Attention to these details cannot be neglected.

Claimants must analyze the relevant contract provision(s) in detail, out-
lining what kind of performance was anticipated and what was actually required. The specifics of their presentation must be tailored to individual circumstances, but the analysis should follow the general pattern outlined in earlier chapters of this book.

In addition to showing that anticipated performance was changed, the asserting party must demonstrate a causal link between the accused party's acts or omissions and the alleged harmful result. A showing of liability, causation and damages must be made—the lack of just one of these three can cause a claim to fail. A claim must also demonstrate that the asserting party did not cause or contribute to the harm, although in some jurisdictions apportionment of fault between the parties will simply reduce damages instead of invalidating the claim. Competent professional advice will be needed on these points of law. The professional is able to structure the claim around a theory of recovery which is reasonable and acceptable under the applicable system of law.

**FACTUAL BASIS**

A dispute or a change in the work which leads to a claim may involve more than just the owner, the A/E (owner's representative) and the contractor. Consultants retained by an A/E may be negligent, thus causing damage to others affected by or involved in the construction process. Other prime contractors (in projects with multiple primes), subcontractors, or suppliers may have contributed to the contractor's present claim. A review of the responsibilities of all involved parties will determine which parties should participate in resolving such claims.

Facts bind a claim together and give it its ultimate strength or weakness. If the claim lacks force, facts are probably lacking. The party preparing a claim must therefore research the history of the project more deeply to locate the necessary information. The principal parties to the claim are always an important source of facts, but corroborative information should also be sought from the architect, engineer, other contractors, subcontractors, suppliers, government officials who participated in the project, experts, applicable guides and manuals, the contract and supporting documents, letters, memoranda, photographs (an extremely valuable tool, because visual evidence is explicit and easily understood), test reports, etc.

Ideally, every factual assertion should be supported by more than one piece of evidence, as this tends to minimize the number of inferences which can be drawn from any one item. For example, a contractor's photograph which shows unexpected water at a purportedly dry site will be much more convincing if it can be verified by test reports and the engineer's observations. Without the latter two pieces of evidence, the accused owner might argue that the water problem was caused by the contractor's negligence. Claims which are self-verifying will be resolved much more quickly than claims which make bald assertions and leave them open to contradiction.

Document control is extremely important at every stage of a project. Ideally, both the contractor and the owner should establish reliable procedures for preparation, identification, transmittal, and storage of incoming and outgoing materials. A master chronological file of each type of document
(i.e., correspondence, logs, reports, cost data, notes or minutes of meetings, etc.) should be maintained so that events can easily be traced throughout the life of the project. Meticulous dating of documents is essential to the process of fact reconstruction, and incoming materials must be marked with the date of receipt, the names of the individuals who reviewed them, and a notation of the action taken.

Support and secretarial staff are most often in control of document flow. Their importance must not be underestimated, because they hold the key to careful handling of materials which may someday become crucial evidence. Document control must be something more than a topic on the executive agenda—it must be explained and reinforced at every level. Field personnel should also be instructed to preserve memoranda, and to reduce oral instructions to writing.

Photographs should be taken regularly, so that a chain of events can be shown when a claim arises. If photography begins after problems arise, it will be more difficult to convince a negotiator, judge, or arbitrator of the scope of and liability for particular errors.

The most important document of all is the contract. The parties entire relationship is created and defined by the contract, and every claim should be based on express contract provisions. Personnel should be thoroughly familiar with the contract provisions which affect their work and responsibilities. Any claim or defense to a claim must begin with the contract. Facts are indispensable, but they cannot create a right which the contract does not contain.

Once the proper parties have been identified, and an examination made of events leading up to the claim, the input from all relevant parties should be placed in chronological order and studied to establish those factual developments upon which the claim is to be based.

At this stage, a claim may be resolved when the facts are revealed and all parties are in agreement as to the cause of the claim. The facts may clearly indicate the liable party, thereby either closing the issue or allowing the parties to concentrate on a quick but fair and equitable settlement. To settle at this stage will invariably save money for all involved.

When a contractor seeks reimbursement for costs related to a claim, he bears the burden of showing the cost impact of that claim. The causal link will become relevant again. And the contractor will have to show that his costs incurred were reasonable under the circumstances, because he is expected to exercise prudent business judgment in the execution of all work, anticipated or otherwise.

Under most circumstances, it would be quite natural for the owner to hesitate to pay a contractor’s claim for additional costs in cases in which a contractor fails to provide adequate cost records. Thus, proof of expenditures should be a key element of claims analysis by the owner or his representative.

**WRITING THE CLAIM**

Actual writing of the claim should be done only after all the facts have been assembled. The first step in the assembly process is to focus on the area of the job from which disputes have evolved. All important contract documents
and all other relevant material should be assembled. Organization and inspection of documents at an early stage avoids surprises and allows complete evaluation.

Once the files are arranged in chronological order, the progress of the job should be mapped out on paper and all evidence organized into an outline which will form the backbone of the claim. As the outline is further developed, it will become evident whether further information is needed. In addition, outside expert advice may be necessary to answer questions or discuss special problems. At this time, charts, graphs and exhibits should be formulated to provide further illustration of delays, accelerations, lost productivity and other claims.

The goal of any claims-resolution process is to place the aggrieved party in the same position it would have occupied had the other party not breached some term of the agreement. This is accomplished with an award of money damages or time extensions, so costs incurred should be linked, in writing, with some action or omission by the accused party.

The body of the final claim document should include a brief description of the project and what was required by contract. It should describe how the job was to progress according to the project schedule. Then, the report should introduce the problems which affected job performance. Each claim should be thoroughly analyzed, and presented in a format which emphasizes the fact that a contract requirement was breached and which particular clause of the contract entitles one to relief. In this portion of the report, it is essential to cite those provisions of the contract upon which reliance is being placed, and then to show a clear relationship between the contract, the harm, and the right to relief. The resultant cost impact on operations should be revealed in the damage section, which must detail meticulously the costs being requested. Supporting documentation should be footnoted in the body of the report and made accessible in the back of the report so as not to break the continuity of the reading. A report, if done correctly, should flow smoothly, so that the statement of facts will be read in such a manner as to lead the reader to the inescapable conclusion that the aggrieved party is entitled to relief.

**Proving Causation**

Proof of causation requires proof of the connection between the change and the cost increase. In most delay-type claims, the contractor attempts to show that the project would have been completed at an earlier day, but for the delay. The owner may attempt to counter by arguing that the delay did not cause later completion of the entire project, even though it might have delayed an activity.

The causal link is likely to be hotly disputed, so it should receive careful attention and thorough preparation in the final report.

**USE OF CRITICAL PATH METHOD (CPM) SCHEDULING**

There is little argument that the greater visibility a work schedule has, the greater the likelihood that spurious claims will be dismissed and valid claims upheld. Clear scheduling analysis can help eliminate formal claims by making

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158 Preparing the Claim
it obvious what should have been happening at what time. A murky schedule encourages confusion and debate, and may prevent a claims resolution tribunal from grasping the interrelationship of the many factors which make up a complex construction project. Network programming responds to these needs.

Final determination of responsibility for a schedule delay may be quite simple or very complex. One of the most effective ways to demonstrate the effect of a delay on the completion date is through use of Critical Path Method (CPM) scheduling. For example, late delivery of foundation reinforcing bar, which would delay critical concrete pours, would be quite visible in the CPM network and responsibility for delay is readily determined. However, if concurrent delays by the A/E and owner in approving structural steel shop drawings or obtaining the building permit were to occur concurrently with the foundation rebar delivery delay, determining prime responsibility for the eventual delay in the project completion would not be so easy.

A network-based schedule kept up-to-date throughout the project can serve to determine the impact of each delay. To be effective, the impact calculations should be made as soon as delay is identified (through regular weekly or monthly updatings). In the foregoing example, late delivery of steel reinforcing bar (rebar) might delay the project completion date by six weeks, whereas the permit might have delayed the project four weeks and the structural steel two weeks. In this simple example, the rebar delivery delay overrides the other two delays with respect to impact on the project completion delays; when delays are concurrent, the longest delay controls the analysis. Under these circumstances, an owner might be absolved of responsibility for the four-week permit delay and the architect for the two-week structural steel delay. The summary network in Chart 8-1 on the following page depicts this concurrent delay.

The delays in the example are critical in nature because they arrest project performance. The analysis becomes progressively more complicated as critical and non-critical delays overlap.

Responsibility for delay is best determined by high schedule visibility, combined with the determination of delay impact at the time the delays are identified.

On a hospital project in which the author was involved, a series of concurrent strikes (carpenters, laborers, plumbers, pipefitters, cement masons) occurred during the erection of the hi-rise concrete building frame. The strikes all began and ended on different dates. Regular monthly CPM schedule updatings, with schedule analysis and narrative reports before, during and after the strikes, provided high schedule visibility and the impact of each strike was determined. Contract time extensions (as necessary) could then be precisely calculated. (There were multiple prime contractors on this project.) In this instance, a project schedule contingency factor had been established at the beginning of the project. And the contingency was more than ample to absorb the delay caused by the various strikes (the carpenter strike overrode all others in magnitude of impact) and all contractors were so advised. Whenever possible, it is recommended that a schedule contingency factor be established at the start of a project and the remaining amount be regularly monitored through the life of the job.

Effective use of CPM will vividly portray the impact of delay on a project.
TABLE 8-1  CPM NETWORK — DELAY

PREPARING THE CLAIM

PERMIT DELAY
4 WEEKS

DELIVER REBAR

REBAR DELAY
6 WEEKS

FOUNDATIONS

ERECT STEEL

COMPLETE BUILDING

STEEL DRAWING

APPROVAL DELAY
2 WEEKS

DELIVER STEEL
The cause-and-effect ripples can be followed through all the different aspects and phases of the work, enabling the claimant to show all the extra costs he incurred (or permitting the defendant to show the limits of his liability).

CPM can be used for acceleration claims. The key element in an acceleration case is a showing that the claimant was on or ahead of a properly-adjusted schedule (or was late due to events beyond its control) at the time the claimant was directed to quicken his pace of operations. The use of networks extends to proving or defending against other types of claims as well. Claims for loss of efficiency or extra work have been successfully demonstrated through CPM techniques.14

CPM networks are generally prepared, monitored, and updated by experts in construction management and project scheduling. Their services add to the fixed cost of operations, but this will be offset by efficiencies the network discovers and facilitates. The intricacies of large projects generally warrant serious consideration of the use of CPM or other network techniques.

EXPERT ANALYSIS

The expert's knowledge allows him to analyze a claim objectively and intelligently. If litigation is necessary, evidentiary rules may allow him to testify as to his conclusions. An expert can give opinions and conclusions on matters within his expertise and can base his opinion on his experience with similar projects. So when one is needed, it is important to seek an expert familiar with the type of work being disputed. He should utilize demonstrative evidence (charts, graphs, etc.) to make his presentation simple and easy for the layman to understand.

Since construction contract litigation is very complex and voluminous, the use of expert witnesses is extremely important in preparation for trial, in presenting the case, or in any attempt to reach a settlement prior to or during the trial. Litigation is very expensive. The decision to proceed becomes a cost-benefit decision. In preparing for trial, wise use of experts is imperative and only those with specialized knowledge of the required facts should be employed.

Expert witness testimony can be invaluable in establishing causation, but the expert's conclusions, however convincing, should not be regarded as obvious or universally accepted. For they must be proved by the expert at trial or in arbitration to the satisfaction of the deciding authority. Quality of the evidence will be a pivotal factor in the proof.

Selecting an expert is a sensitive matter. Any appearance of bias will substantially reduce the expert's credibility. If the matter requiring expert assistance is genuinely relevant and persuasive, the choice of expert should be made solely on the basis of professional credentials. Experts from a third country, not involved with the project, will appear more objective since none of their compatriots are likely to have a stake in the outcome. In some instances, the tribunal hearing the claim will appoint its own experts, though this usually occurs only when expert testimony already offered is in serious conflict, or when the parties' agreement calls for outside selection of experts.15 Arbitrators may themselves be experts in the disputed subject, but members of the judiciary generally will not be.

Experts are no substitute for careful documentation and unambiguous
evidence. In fact, expert testimony may appear far-fetched and irrelevant if the presiding officials lack a clear evidentiary framework within which to consider and evaluate the testimony. The most important function of expert testimony is to interpret and explain the evidence, not to create it.

Proving Damages

ACTUAL COSTS

Recovering extra costs in international work depends to a great extent upon convincing the engineer that the costs have in fact been incurred. Documentation of actual costs is favored, particularly if extra costs can be segregated from original contract costs.

The burden is always on the contractor to couple his actual costs—proved by payroll records, invoices, equipment rental invoices, subcontracts, etc.—with his original contract costs—shown by estimates, purchase orders, quotations, bid takeoffs, etc. The key to recovery by using actual costs is (1) making certain all costs are included, and (2) proving the basis of the variation in the work which causes the need for the adjustment that is evidenced by the difference.

Unless they are unreasonable under the circumstances, actual costs should be reimbursed by the owner to the extent that the claimant has proven liability and causation. Some latitude should be allowed because accounting records are often imprecise in segregating every aspect of project cost, but judges or arbitrators will be extremely wary of cost claims which seem to have materialized just in time for the proceedings.

ESTIMATED COSTS

Often it may be impossible to isolate and prove actual costs. In that event, the parties will be forced to analyze estimated cost data. The claimant should demonstrate why actual costs cannot be shown, then estimate costs as carefully and convincingly as possible. The estimated cost approach is inherently speculative, but can be effective as long as damages can be reasonably demonstrated. A comparison between the disputed job and a typical similar job is often a convenient frame of reference, though an international project may be so complex that it is unique.

Two methods of estimating costs have been successfully asserted: the total cost method and the jury-verdict method. Both methods can be supported by expert testimony for estimating the allocation of costs to the variation in the work. Accurate records—even if they do not clearly reflect actual costs—would be a crucial component of claims analysis. The tribunal hearing the claim will evaluate the evidence presented, and will measure its credibility and value. If a claimant puts forward a clear and convincing claim for estimated costs, recovery should be permitted. The tribunal in the *Sapphire International Petroleum, Ltd. v. N.I.O.C.* case used “equity and good conscience” as a standard against which to evaluate an estimated costs claim.

The total cost method calculates extra costs by computing total costs of performance for the entire job (or portion thereof), then subtracting the
original estimated costs. The difference represents the overrun and the amount the contractor wishes to recover.

This method may be looked upon with disfavor since it seems to be based upon questionable assumptions: (1) the original estimate was accurate; (2) extra costs were reasonable; and (3) extra costs were all caused by the variation in the work. A claims tribunal will seldom allow recovery of amounts which cannot be traced back to both a variation in the work and a contractual entitlement to compensation. The fear of overcompensation apparently is pervasive.

To have this method of proof accepted, substantial support of the estimate’s feasibility must be supplied along with actual cost data, where available. Expert testimony supporting reasonability and causation is also imperative. In practice, the total cost method, if well-documented, would be one of the best methods to use in seeking recovery on international claims.

The jury-verdict method is the result of the attempts to tie actual costs and estimated costs together. Where liability is clear but the adjustment is incapable of exact determination or segregation, and the original estimate is fully supported, the tribunal may render a decision in the same manner that a jury would, i.e., provide a unified monetary award which is not allocated among particular aspects of the claim. The formulas necessary to arrive at the dollar amount may differ, but the result is normally a reduced award that attempts to achieve a fair and equitable result. If the claim is sketchy or ambiguous, but the basic need for compensation is apparent, the tribunal may render this type of award.

Preparation of any claim requires extreme care and thoroughness. Once the proceedings are underway, it may be difficult to alter or modify the original claim documents and, even if it is not difficult, the opposing party may successfully assert that sudden changes in the claim have an unfair element of surprise.

Know what happened. Show what it cost. Identify the liable party and the chain of causation. And prepare a written document which is complete, concise, and geared for readers who will lack personal, intimate knowledge of the project. Avoid unfounded assumptions or estimates. Stress the factors which support your argument, but do not insult the tribunal by hiding or misstating the weak points in your case. It is far more persuasive to acknowledge your weak points and explain why they are not relevant than to pretend that they simply do not exist.

Try to anticipate and overcome the defenses the opposing party is likely to assert, and always tie your points into particular contract provisions. Arbitration and litigation are proceedings in which personality (except for the attorneys) is notably absent, so the claim documents must express the energy and conviction behind the claim.
REFERENCES

13. Impress C.E.S.I.C.A. ASBCA 25437, 82-1 B.CA ¶15,656.
15. UNITED STATES: Fed. R. Evid. 706.
18. [35 I.L.R. 136 (1969)]

164 Preparing the Claim
Chapter 9
Negotiating Settlements
Preparation for Negotiation

Parties to international construction contracts are seldom newcomers to the construction market and generally are familiar with the negotiation process. However, negotiation experience in the home market, where business and social customs are shared by all the participants, may be insufficient preparation for negotiation in an international setting. Different cultural, political, and economic perspectives may produce an atmosphere in which negotiation techniques which succeed at home may be inappropriate. Failure to respect the expectations of foreign governments or private parties may jeopardize both negotiations and prospects of future dealings.

For these reasons, the parties should never begin negotiations without thorough preparation and planning. Special attention must be given to the format which is likely to be used. In some cases the parties may wish to include a negotiation procedures clause in their contract, which would incorporate either expressly or by reference a widely accepted set of procedures, such as the conciliation rules established by the International Chamber of Commerce in Paris.

Construction claims attitudes abroad are different from those in the claims-conscious environment of the Western world. The litigious industrialized nations have formalized most claims resolution procedures, and parties from these countries may view negotiation as the beginning of a prolonged conflict. The atmosphere in developing and Third World countries will be different. There is less formality, bargaining is sometimes a ritual, and compromise is often the answer.

Negotiation should not be viewed as teams going into “battle.” Important points to consider are: How many people to include on a negotiating team; whether including too many negotiators will damage any rapport established earlier; who will be the spokesman for your group; and to whom discussions should be directed and in what manner. These procedural aspects of the art of negotiation may play a heavier role on an international level where the “outsider” must conform his approach to the ways of the host country.

Another important element for success in negotiating a claim internationally is to be well-prepared by having first thoroughly analyzed and evaluated the claim. A well-informed negotiator lends credibility to a request for or objection to additional costs or time. Combine credibility with a personable approach and the chances of progress are enhanced.

As a rule, negotiations involving a government agency or large corporation will be most carefully structured. This is the natural consequence of the need for large organizations to establish regular patterns of administration with which any one of their representatives will be familiar. The identities of the parties always affect the structure of the negotiations.

Throughout the negotiations, the parties must not allow procedural de-
tails to distract them from attaining their primary objective, which may be adjustments in time and/or money, or the signing of a contract. Attainment of this goal must be the first priority, perhaps at the expense of lesser “victories” or concessions.

There is almost always a difference between “what you want” and “what you’ll accept.” The amount requested for a claim should permit flexibility in the negotiating process. An owner may be willing to eventually settle on those “hard” costs to which a contractor is reasonably entitled, but not borderline “soft” costs. The latter are included by many contractors to inflate a claim so as to provide a cushion between costs actually absorbed and those which are purely speculative. Since the fact that negotiation has been selected as a means of resolution suggests that the parties’ demands may be somewhat flexible, progress would be impossible if there is no give-and-take.

Proper preparation includes: (a) being certain all information is current and complete; (b) minimizing the scope of negotiation beforehand so that insignificant points will not precipitate heated arguments and disrupt progress; (c) knowing your weaknesses and trying to offset a weak position by coupling submission on a weak point with a concurrent demand on another point; (d) foreseeing problems in advance; and (e) anticipating that the opponent will make the right move, because it is foolish and dangerous to assume that your opponent is any less prepared than yourself.

Timing the Negotiation

Since time is a precious commodity on a construction project and disputes may arise unexpectedly, a working knowledge of negotiation strategies will be indispensable. Sensitive timing is essential. Discussion at the proper moment may resolve a dispute before it erupts into a full-fledged claim. Determining the proper moment will require good communication among those responsible for different aspects of the work.

Specific projects require specific types of management, but in general the parties should attempt to predict problem areas by maintaining a close watch on costs and progress. If actual expenditures are considerably more or less than projected costs, something is probably wrong and this may be the proper moment for the owner and contractor to examine the facts and figures, discuss problem areas, and plan for the types of difficulties a revised schedule might create. Informal discussion is faster than formal negotiation.

When negotiation is necessary, it should begin as soon as possible after the dispute arises. Promptness will make the negotiations faster and smoother because the unsatisfactory conditions which allegedly plague the project will be fresh in the parties’ minds and will not have to be reconstructed from records, charts, or memory. Contracts which include a negotiation clause should also include a timetable which encourages a speedy arrival at the bargaining table. The parties will need sufficient time to organize and document their arguments, of course, but needless delays and postponements may simply increase costs without improving the negotiations. Reasonable time periods between notice of a dispute and the commencement of negotiation must be geared to an individual project.
An attitude of reasonableness will bring a better result than stubbornness. It is best never to hesitate to initiate discussions. A desire to settle quickly should not be taken as a sign of weakness, but rather as the mark of a “take-charge” person. All parties are likely to realize that extended negotiations will become burdensome because they distract the parties from the work remaining on the project.

A primary element of negotiations, whether their term is brief or lengthy, is patience. Speed is desirable. But parties who rush one another may find this obscures important points and leads to an unsatisfactory result. Focusing on the issues is preferable to glossing over them. Allow your adversary to express himself fully and without undue interruption—and expect him to extend the same courtesy to you.

The importance of patience when doing business in a foreign country cannot be overstated. The drive to get things done quickly, which is the rule in industrialized societies, may be the exception in third world countries, particularly in the Arab world. Everything seems to take longer to accomplish for reasons which may baffle the foreign national. Unrealistic expectations about the smooth and speedy completion of tasks, grand or trivial, can only lead to anger, disappointment and further delay.

The ability to sense whether negotiations are progressing well is invaluable to a negotiator. Knowing at what point to follow through on an issue or to refrain from pressing so as not to antagonize the other party is a skill which every successful negotiator needs. Knowing how to turn non-productive negotiations around is important. If discussions are not proceeding well, a change of discussion may be advisable. If your adversary seems disturbed (an undesirable state of mind), call for a change of subject matter, a break for refreshment, or tell a joke—anything to disrupt the sour mood caused by the prior discussion. Switching issues and returning to the subject later, after your opponent has had time to reflect on the matter, may produce better results. Often, a proposal which seemed harsh at first becomes more appealing by the passing of time.

The standards of good faith and fair dealing are the keystones of a contractual relationship. The parties may sometimes downplay these factors, but to do so during negotiations will be a serious mistake. Because most countries place great reliance on an individual’s word and his follow-up actions, a party will destroy his credibility if he fails to live up to negotiated promises. Legal systems of certain countries favor negotiated settlements (e.g., China and Kuwait). Failure to meet settlement responsibilities may have unpleasant legal consequences.

In certain areas of the world, especially Islamic and Oriental nations, societal mores generate a great reliance on good faith. A large project in a poor country probably means a tight budget; there may not be any funds available for major overruns in contract cost. Both of these situations breed a climate unfriendly to claims. The owner and consultant try to stop claims at the source, using methods such as trading, compromise, and good will.

Arab countries which have chosen not to follow the Western model of contract law (which permits relatively easy modification of the agreement when one party can show changed circumstances, unjust enrichment, or some other fundamental change in the relationship) tend to feel that an initial agreement is final and they will resist settling claims on the theory that the
original bid should have anticipated possible risks. The solution in these circumstances is prevention: making sure that the bid does allow for likely claims or losses. The increase in your bid may not be damaging if it is clear to the owner that the price and risk anticipations are reasonable. As indicated previously, some countries accept the most reasonable bid, regardless of whether it is the lowest.

**Negotiation Strategy**

The preparatory tactics discussed above should be mobilized in a plan to deal with a foreign government or private party in negotiating a settlement. Development of a strategy must take into account the relative strengths and weaknesses of the parties and the claim.

Watching a United Nations debate is analogous to the way negotiation is conducted in some countries. Everyone has his say and “blows off some steam.” Nothing, in substance, is accomplished, until the preliminaries are out of the way and the parties can get down to business. Yet, a businessman in the People’s Republic of China may interpret the “blowing off of steam” as a sign of weakness in negotiation. An Arab businessman may expect the proceedings to follow a well-established pattern just like a drama. One who ignores protocol is considered rude. Business and personal relationships will deteriorate if rudeness is detected. At times, basic agreement exists, but negotiation must take place anyway as a matter of form.

The negotiation rules or traditions of the host country deserve thoughtful attention, because there is no excuse for losing a claim as a result of minor errors in procedure, protocol, or presentation.

Strategy is basically a matter of individual style, so the person or persons who will represent each side should be selected on the basis of experience, tact, and familiarity with the project.

**TACTICAL CHECKLIST**

Strategy should be mapped out in advance for two reasons: (1) The party best prepared can persuasively and confidently discuss its position and know where it stands as the talks progress; (2) negotiations are probably being held in an alien environment so there is a greater likelihood of the unexpected occurring. Pre-planning decreases the latter risk.

A checklist will serve as a reminder of what has to be covered, in what manner, and the steps to be taken if problems develop. Among the items which can be included on such a list are:

1. Attempt to observe all formalities to get the negotiations off in the right direction, especially if you are a guest in a foreign country;
2. Establish good feelings and trust among the parties before getting down to business;
3. Cover all the issues—otherwise, raising a forgotten but important issue after negotiations have ended will damage your credibility;
4. Know in advance which items are “giveaways” so that special attention can be given to more important items;

168 **Negotiating Settlements**
(5) Anticipate trouble spots by planning for alternative strategies. A checklist summarizes the plan which will be put into action and serves as a reminder of every essential objective.

COMMUNICATION

Parties will never resolve anything unless they are speaking about the same thing. This should be obvious. But on a project involving several nationalities conversing in different tongues, clear communication becomes especially critical. Keeping the lines of communication open minimizes the chance that slight discrepancies in the plans and specifications will mushroom into a major issue. Constant contact creates scant opportunity for misunderstandings to develop. And close relationships reap benefits, such as lessening tension between contractor and owner when problems occur and providing a warmer environment in which to straighten things out.

BARGAINING POSITIONS

Many factors directly affect the outcome of the negotiations: the strength of the parties in terms of their relative economic stability; the side the facts favor; and the amount of damages or added expense being claimed.

These factors in combination dictate who can “deal” from a position of strength and who may have to compromise his demands to salvage some gains from the settlement.

The owner, especially in foreign contracts, is usually on a stronger economic footing than a contractor. If the owner knows that it could financially withstand long, drawn-out negotiations and further litigation better than the contractor, negotiations may evolve into a battle of attrition. The owner may stall and eventually be the victor, but at great cost and effort. The owner may have won on principle, but lost financially because of the added claims and litigation costs.

A foreign government’s (or private company’s) strongest bargaining point—which is inherent in its contracts—is that negotiations will usually take place in its own country. A negotiator should tread lightly when his firm has invested a sizeable portion of its resources in a foreign country, and stands to damage its standing in that country and third countries because of disruptive negotiating techniques and financial loss.

On the other hand, owners are not eager to force a contractor off the site, because even if substitute contractors are available, there will be enormous delays and a tremendous loss of productivity. The contractor should stress the quality of the work he has already done, his excellent reputation, and his familiarity and expertise with the work underway. A superior bargaining position is seldom an ironclad guarantee of victory; it simply forces the weaker party to be more aggressive.

TRADE-OFFS

A contractor’s claim can be diminished by the use of trade-offs. The owner may use incomplete or defective performance or backcharges as bargaining “chips”. In some cases, a contractor may drop or reduce all or part of its claim when an owner agrees, for instance, to drop all backcharges against the
contractors. Such deals lessen the complexity of issues and allow parties to turn their attention to the tougher questions. There is always more incentive to negotiate when you are also seeking money. You cannot win a fight if you are not allowed to throw a punch.

In almost all foreign construction markets, trade-offs play an important role. It has been said that European contracting procedures abound with incomplete estimates, prolonged schedules, extras, and inflation. Solving such problems before they take root and grow into a major confrontation becomes a necessity. One needs to develop an attitude of compromise and trade because to be a good trader you must get something in return every time you give something.

A written negotiation settlement will be valuable as a matter of record.

As with all negotiated settlements, trade-offs may present an enforcement problem. Once a party has agreed to make a payment or forgive defective performance or a backcharge, the party receiving that benefit will want some assurance of receipt. If the negotiations were conducted in good faith, to the satisfaction of both parties, it is unlikely that payment will be withheld. However, if it is withheld, patience must once again be exercised. Gentle persuasion and reminders will be more effective than temperamental demands, but if all else fails, litigation or arbitration may be necessary.

**Psychology**

Knowing one's opponent and method of negotiating is a great aid during discussions. An experienced contractor has undertaken negotiations many times before and will have developed certain tactics which proved successful in previous negotiations. Conversely, owners may also have past negotiating experience and can use this to their advantage.

Both sides' attitudes toward negotiations will play an important role in the outcome. Do both sides have an immediate desire to settle? Who can afford not to settle? Are both sides willing to compromise? What type of emotional characteristics will the opponent display? The form of one's strategy may vary depending on the personality of the opponent.

Analyzing your opposition in this way may uncover valuable tips which will strengthen one's position. Emotional factors, a poor financial footing, fear of going out of business, political factors, and inadequate technical or legal advice may have put either party in a weaker bargaining position. But this information has no value until it is recognized and then properly employed before or during the negotiation sessions.

Negotiating in the international market requires the participants to be broad-minded and patient, remembering always that cultures vary as much as personalities. A stereotyped approach to every negotiation situation will be unproductive in the long run. Sometimes charm will work better than an aggressive facts-and-figures attitude. But at other times, a heated debate may be expected—and perhaps enjoyed—by one of the parties. Versatility is the key to success.

Of course, political connections and distributing financial favors do wonders on some projects, but a basic tenet of international negotiation is to establish personal relationships. The value of friendship, combined with patience and grace, is more than half the battle in foreign lands. If the parties
have worked at having a good relationship throughout the project period, they should be sufficiently sensitive to one another to negotiate amicably and efficiently.

SPECIAL TECHNIQUES AND PLOYS

Negotiating is an art, and there is a vast array of literature and seminars offered on the subject. Among the different ploys and gambits offered by these authors and lecturers are: make the other party appear unreasonable; place the other party on the defensive; blame a third party; temporarily walk out of negotiations; claim you have little time to settle and would like to clear things up so that you can catch your plane; and quit when you’re ahead.

The opportunity to employ any of these tactics should be tempered by understanding that techniques used in domestic negotiating may do more harm than good when dealing with individuals who have different social and economic values and more than the usual amount of tact, diplomacy, patience, and communication skill will be required, along with advice of trusted advisors—from home and abroad—in international dealings.

Whatever the technique, never lose sight of your objectives. In researching the subject of negotiating, bear in mind that the techniques employed must suit your personality and style, as well as those of your adversary. An optimistic attitude is appropriate because the vast majority of international construction claims are settled through informal discussion and negotiation without the need for judicial or arbitral supervision.
Chapter 10
Arbitration of Disputes

Preliminary Considerations

Negotiation is generally the least expensive, most expedient method of claim resolution. Sometimes complex problems or serious disagreement between the parties make negotiation impossible. Assuming that the parties plan to continue their contractual relationship, they must choose between the two remaining resolution methods: litigation and arbitration. Litigation is seldom recommended because of its high cost, customary long delays, and abundant procedural pitfalls.

A viable alternative is arbitration, pursuant to a contractual clause providing for this procedure in the event claims difficulties become acute. Arbitration is a legally binding procedure in which the parties agree to submit their differences to a neutral third party or parties for analysis and decision. When an arbitration clause is included in a contract, each party has both the right to initiate arbitration of its claims, and the obligation to submit to arbitration initiated by the other party. This mutuality of rights and obligations arises naturally from contract law, which requires each party to give something in order to receive something. The parties must understand and accept the fact that an arbitration clause carries as much weight as any other contract clause.

Arbitration is generally preferable to litigation because it can be tailor-made to suit the needs of the parties, thus eliminating some procedural and substantive problems inherent in foreign law. However, because arbitration is relatively new, particularly at the international level, and because its results are not on the public record, it lacks a well-established history which would enable contractors and owners to evaluate it with certainty.

Careful research into the kinds of arbitration available in particular countries, the position of both the host and guest countries' laws on enforcement of arbitral awards, and the available legal systems (which are arbitration's "competition" in the field of dispute resolution) is an absolutely necessary first step, or precaution, to be taken before deciding in favor of arbitration.

Many contractors and consultants are wary of arbitration because they fear that it will take too much time, cost too much, yield an unpredictable result, or produce an award which cannot be collected. It is the purpose of this chapter to point out the extent to which those understandable fears are or are not justified. Arbitration is becoming increasingly popular and efficient in relation to all types of international business, rapidly expanding worldwide experience is improving this form of claims resolution. There will always be situations in which arbitration is inappropriate, but, in an increasing number of international relationships, it is the ideal mechanism through which to present or defend a claim.
Much is written on this subject by private individuals and arbitration institutions alike, so it would be impossible for this chapter to cover all the fine points and technical considerations of arbitral arrangements. Such analysis must be conducted on a case-by-case basis whenever international construction work is contemplated.

**LAW SUITS COMPARED**

The components of international litigation which have made it an unpopular alternative can be summarized in these words: formalities, complexities, and uncertainties. One or all of these factors can reasonably be anticipated to be an obstacle in foreign courts, owing largely to the fact that at least one of the parties will most likely be dangerously unfamiliar with crucial matters of procedure and conduct, placing that party at a disadvantage and perhaps diminishing the value of the proceeding as a whole.

Parties to a formal judicial proceeding need attorneys. In most countries, only nationals or specially accredited foreigners are permitted to appear in court. For the foreign party, this generates the need to shop for an attorney with special qualifications.

1. The attorney must be well-respected in the jurisdiction in which the claim is to be litigated. It is undeniable that an attorney with a shady reputation can be an embarrassment to his clients, and this can be particularly damaging in the sensitive area of international litigation. In some areas, a party may find branch offices of major law firms from his own country. These should certainly be considered because they offer the obvious advantages of a shared language, similar business and cultural perspectives, and familiarity with litigation involving parties from different nations. If firms of this type are unavailable, as is usually the case unless the host country has a particularly robust international trade, advice about lawyers can be obtained from a party’s embassy, international banks, insurers, or accounting firms. It is important to remember that to some extent an attorney is simply a seller of services, and the maxim “let the buyer beware” applies.

2. The attorney should be fluent in the languages of the major parties to the litigation, so that he can identify and understand the relevant evidence, plan for testimonial evidence where needed, and advise his clients without undue confusion or ambiguity. In many instances, foreign counsel will work with a party’s domestic counsel—Dutch contractor suing a Nigerian owner in Nigeria would probably hire both Dutch and Nigerian attorneys. This is expensive, but it offers added protection because domestic counsel may be better able to monitor the proceedings and evaluate settlement offers or other matters.

3. The attorney should have significant experience with the law of construction contracts, a field which has become extremely complex owing to the expansion of world trade, the use of new technologies, and the fact that most international projects involve parties from numerous countries. There is no substitute for experience, but, unfortunately, the supply of attorneys in many countries is small and choices limited. Deficiencies in a party’s attorney will jeopardize that party’s

*Law Suits Compared 173*
claim, so the adequacy of counsel is a crucial element of successful international litigation.

These considerations become much more pressing when the forum state will be applying the law of a third country. For example, suppose that a Korean contractor sues a Venezuelan owner in Venezuela, but the contract calls for claims resolution under the laws of Switzerland. In this situation, each party needs an attorney who is not only qualified to practice in Venezuela and follow Venezuelan procedures, but who is also familiar with Swiss legal principles and, ideally, able to speak French, Korean, and Spanish. The attorney will also need access to Swiss legal materials (a costly requirement because frequent travel and document reproduction will probably be necessary), and sufficient professional expertise to argue Swiss principles in a manner which is understandable and persuasive to a Venezuelan court. It may be possible for such an attorney to be located, but the parties would be taking a foolish risk if they failed to consider their specialized legal needs before a court proceeding even becomes necessary.

Litigation itself can become a procedural disaster. Failure to abide by court rules—however intricate or bizarre they may seem—may cause the court to dismiss the suit and bar another attempt. This settles the claim, but not in the manner either of the affected party had anticipated.

Another consideration is that the proceedings will take place in the native tongue of the court. If the contract and all related documents were executed in some other language, copious translations (an expensive item) would be required and the risk incurred that an imperfect translation would distort the original contractual relation. This can be very damaging to the parties, since many courts construe contracts literally without regard to the subjective intent of the parties. Literal interpretation is not intrinsically unfair, unless the contract, as translated, is materially different from the original language version.

In some cases, the court will question whether it has jurisdiction over the claim. In simplest terms, jurisdiction dissolves into the question “Is this the court that should hear this claim?” Answering the question involves many complicated factors, and arguing them will involve a great deal of time and money. The outcome can be surprising. In Saudi Arabia, for example, the U.S. Corps of Engineers had structured a claims-resolution mechanism for use under the Engineer Assistance Agreement. One clause stated that Saudi contractors could take their claims to the Saudi Grievance Board, which is a Saudi government agency. The reasoning seemed sound: the work was being done for the Saudi government, with the Corps acting as managerial agent rather than owner, so it was decided that it would be improper to require Saudi contractors to use the U.S. Board of Contract Appeals (which normally reviews claims relating to Corps work). When the first Saudi contractor’s claim arose, however, the Grievance Board decided that it did not have jurisdiction because of the presence of the Corps, a non-Saudi party. This necessitated a reworking of the claims procedure and underscores the uncertainties of foreign litigation.

Gathering evidence for foreign litigation can be extremely difficult. Courts can ordinarily subpoena persons or things within their jurisdiction, and compel their presence in court; but what if the court is in Australia and the key

174 Arbitration of Disputes
witness is in Switzerland? Suppose further that crucial documents are in New York and Lisbon, and it becomes clear that supporting the claim will be a major task. Courts are not obligated to enforce the decrees of their foreign counterparts. The Swiss courts in the preceding example would have no obligation to enforce the Venezuelan subpoena for the key witness. However, under special circumstances, they may agree to do so. The procedure is complicated for obtaining crucial information located in another jurisdiction. A formal request for judicial assistance may be necessary. The court in the country where the litigation is taking place may send a "letter rogatory" to a court in another country, asking it to gather certain items or take testimony and report back to the first court. Some countries, including the USA, will comply with a letter rogatory under their own laws. Others, such as Norway, France, Sweden, Denmark, and Portugal signed the Convention on the Taking of Evidence Abroad in Civil or Commercial Matters of July 27, 1970. The details of this Convention are beyond the scope of this book, but it is a potentially valuable tool. Even if the Convention applies, gathering evidence will be time consuming and expensive, and supplementing such evidence will require that the parties begin again with a new letter rogatory.

The concern that foreign courts will be biased in favor of their own nationals finds little supporting evidence to suggest that this is a matter of express policy in any particular country. Yet, the fear is legitimate and there is nothing a party could do to eliminate such a bias.

An example of such bias occurred while the author was associated with an American firm doing business in the Middle East in the mid-1970’s. A construction services agreement was executed for construction of a housing project. During the course of the work, a dispute arose and the owner refused to pay, despite apparent entitlement under the terms of the contract. The contract contained a provision for arbitration, to be conducted under the auspices of the International Chamber of Commerce. However, local counsel advised the American firm that two points were not in its favor: (1) the cost of arbitrating on an international scale versus the extent of possible recovery; and (2) most importantly, even if the American firm was successful in arbitration, the local counsel pointed out that the country in which the work was performed was not a signatory party to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Thus, the American firm would have to go before that country's court system and request that the court enforce the award. However, in this particular case, the attorney also noted that the individual in the judiciary who was to render such a decision was a blood relative of the defendant national. Needless to say, the American firm avoided arbitration and settled for a lesser amount.

Moreover, it may be extremely difficult to enforce a foreign award—for example, if an owner in Bahrain wins a judgment against a French contractor, but must take his judgment to France in order to collect (assuming that the contractor's assets in Bahrain are insufficient). Situations like this require elaborate maneuverings under international law or through diplomatic channels.

Litigation abroad is risky at best. The process will be slow, expensive, and the alien party will probably be at a disadvantage because of his unfamiliarity with the language, customs, and procedures of the presiding court. For these reasons, arbitration and negotiation are preferred.
ARBITRATION ADVANTAGES

Arbitration is a private procedure. The parties agree upon it and structure it to their needs. The details of the proceedings are not publicized or circulated unless the parties do this on their own, or give a third party permission to do so. Nonpublication prevents the outcome of a particular case from binding the arbitrators in another, similar case, thus encouraging a fresh review of every claim. Other basic advantages include the following:

Speedy, Informal Proceedings

Courts are bound by procedural rules, but the parties to an arbitration agreement can arrange to avoid unnecessary formalities such as filing requirements, excessive duplication of documents, and so on. It is unwise to make the proceedings so streamlined as to cause essential facts to be overlooked. However, it is always possible to avoid the rigorous attention to procedural detail which characterizes litigation.

Reduced Cost Compared to Litigation

The parties would probably spend less time in arbitration than in litigation. Any savings of time will reduce the cost of attorneys or experts whose services are indispensable. The arbitrators themselves will be costly because travel, lodging, daily fee, secretarial help, and other arbitrator expenses must be borne by the parties (or by the losing party if the agreement so requires). However, these costs can usually be estimated with some accuracy, whereas litigation can drag on interminably with no relief from legal fees and other expenses.

Encouragement of Negotiated Settlement

The presence of an arbitration clause will sometimes encourage the parties to settle informally, since each knows that the other has a right to institute claim procedures. The present availability of litigation is less immediate, however, and may not stimulate negotiation.

Amicable Atmosphere

Arbitration is less hostile than a court proceeding, partly because the parties are in joint control of what is happening and cannot resort to surprise maneuvers based on legal technicalities.

Language Problems Eliminated

Arbitration can take place in the language of the contract, or of the parties, or in any other language upon which the parties agree. This reduces the need for costly translators and eliminates the risks inherent in defective translations.

Locale

Arbitration can be held in whatever location best suits the parties’ needs, without regard to the place of performance or the place where the contract was executed. Many contracts specify major trading cities such as London,
Tokyo, or New York for arbitration, but the parties are free to choose any spot as long as they are willing to finance travel and lodging for themselves and for the arbitrators.8

Expert Tribunal

In litigation the parties run the risk that the judge(s) hearing their claims will be unfamiliar with the type of claim under consideration. It is, in fact, a rare judge who has the time or the incentive to make a hobby of international construction law. Arbitration eliminates this risk because the parties can select arbitrators who possess technical knowledge, experience, and a familiarity with industry customs.9 In addition to assuring a thorough and rigorous review of the claim, the arbitrators' expertise will make it unnecessary to spend valuable time and money explaining every technical point in layman's terms.

Enforceability

International conventions and domestic statutes are making it easier to enforce arbitral awards.10 These will be discussed in detail later in this chapter. Basically, a party can take an arbitral award to his home courts and receive a court order compelling compliance.11 The court does not review the facts; it merely gives the award a judicial seal of approval, and gives the party holding the award a legally enforceable right to collect. Courts will only review the facts in special circumstances, such as when there is a showing of mistake or fraud.12

Choice of Law

The parties may specify which system of law will govern the procedural and substantive issues of their case, or they may specify "general principles of law," which will be discussed below.13

ARBITRATION DISADVANTAGES

Apart from the relatively remote possibility that a court will void an award instead of enforcing it, there are several other disadvantages with which the parties may have to cope:

LITIGATION BEFORE ARBITRATION—Occasionally, one party to an arbitration agreement will contend that arbitration should not take place because of particular circumstances. This may lead to litigation on the limited question of whether the arbitration agreement is applicable to the facts at hand.14

SCHEDULING PROBLEMS—The parties may become mired in disagreement over future hearing dates, excusable absences by either party, etc. Also, arbitrators themselves may cause delays if they have personal problems, conflicting responsibilities, or questions about their own competence to review certain matters. Arbitrators are usually employed full-time in other capacities, and therefore not limitlessly available for prolonged proceedings. It may even be difficult to schedule hearings on consecutive days.
DELAY COSTS—As outlined above, arbitration may not be cheaper than litigation if delays occur with no reduction in per diem costs.

UNSATISFACTORY ARBITRATORS—It is possible that the parties will have made poor selections, so it may be advisable to provide for removal of arbitrators under special circumstances. The parties can agree in advance on a procedure through which an unsatisfactory arbitrator can be dismissed. It must be remembered that arbitrators are not subject to canons of judicial conduct which govern important matters such as conflict of interest. Gross misconduct by the arbitrators may be grounds for judicial modification or vacation of the award.15

NON-ARBITRABLE DisPUTES—Local law or public policy may make it impossible to arbitrate certain matters. In the United States, for example, bankruptcies must always be adjudicated by the courts.16

LIMITED DISCOVERY OF EVIDENCE—Arbitration does not provide a formal mechanism for the issuance of subpoenas or letters rogatory, but the parties and arbitrators ordinarily cooperate in this area. Moreover, a limit on discovery may be beneficial because it limits the introduction of extraneous evidence.

LACK OF DETAIL IN AWARDS—Courts will usually explain how they calculated an award, but arbitrators sometimes announce a lump sum and say nothing more. This is more common in the USA than elsewhere, and, in any event, the arbitration agreement can be worded to require a breakdown and explanation of the arbitrators’ decision. A carefully structured award may be more resistant to attack in the courts. An American court enforced an extremely detailed award because it evidenced “able and competent’ work on the part of the arbitrators.”17

COMPROMISE AWARDS—It is sometimes said that arbitrators feel they have done a good job when both parties feel that the award is unsatisfactory. Considering how often participants in formal litigation have this feeling, it would be unfair to call this a major flaw of the arbitration process. Like judges, arbitrators wish to avoid overcompensation.

A final point is that local law governing arbitration varies. While it is true that the parties create their own arbitral relationship, local law will control what an arbitral issue is and how the award can be enforced.18 Also, many governments resist private arbitration, though there has been a movement away from this position in recent years. International organizations such as the United Nations are sensitive to the need for uniform procedures, and it is hoped that their work and research will be put into effect on a wide scale.

Arbitration Clauses

The individuality of each international construction project combined with variations in local laws concerning arbitration make it impossible to draft a sample arbitration clause for universal application. Clauses must be drafted
with precision and clarity to cope with the endless array of situations which can arise on a job. Specific points to cover will be governed by the unique characteristics of the parties, the work, and the locale.

The guidelines that follow in this section underscore areas which require attention in any clause. Other provisions must be left to the discretion of the parties. The arbitration institutions are excellent sources of information on arbitration options, estimates of cost and duration of proceedings, as well as lists of individual arbitrators specializing in various fields.

ISSUES TO COVER

Parties to an arbitration clause generally plan to have all their disputes resolved through this procedure. The clause should specify arbitration as the exclusive remedy for all disputes arising from the contract, provide the broadest possible jurisdiction for the clause, and include an express renunciation of possible judicial review. The clause can be made applicable to typical construction claims and ancillary matters such as fraud, competence of arbitrators, exchange rate fluctuations—anything the parties foresee as a possible problem.19

The disadvantages discussed in the preceding section should be dealt with clearly, specifying language to be used, locale, discovery rules, allocation of costs, etc. A blanket clause reaffirming the parties' intention to avoid litigation might read:

Except for those matters specifically excluded from arbitration as expressed herein, all other disputes, controversies, or claims arising out of or relating to this agreement or its performance shall be settled by arbitration.

ARBITRATION INSTITUTIONS

Arbitration proceedings may be individualized or administered by an agency with established rules of procedure. In most cases, it is better to select one of the recognized impartial institutions to conduct the arbitration. Most provide rules of procedure which simplify and organize the proceedings.

A major difference between arbitration institutions is whether (like the International Chamber of Commerce and the Zurich Chamber of Commerce) they prefer the civil law inquisitorial system, which makes the arbitrator the main questioner and places greatest importance on documentation; or the Common Law system (as followed by the London Court of Arbitration and the American Arbitration Association) in which the oral hearing, with its direct and cross-examination, is given top priority. The parties should choose an institution which uses a procedure familiar to them, taking into account location and schedule.

Arbitration institutions offer several advantages. Competent administration can be expected throughout. They have no bias because the institutions have no stake in the outcome (any event which suggested a bias would be fatal to the institution's credibility.) Their only goal is to provide an efficient framework for the proceedings. They have centralized stenographic and other office services that the parties will find convenient. Procedural mistakes or
oversights are minimized because the institutions have substantial experience in all fields of arbitration. Moreover, they provide guidance aimed at reducing the risk that a court will overturn an arbitral award on grounds of mistake.

**International Chamber of Commerce (ICC)**

The ICC, comprised of members from over 80 countries spanning the globe, provides a Court of Arbitration to settle business disputes of an international character. This permanent body does not itself settle disputes but supervises the application of its arbitration rules by the arbitrator in each individual case. However, the Court of Arbitration must approve, or may modify, the form of the award.

In addition to ICC Arbitration Rules, the ICC provides optional Rules of Conciliation of which either party may take advantage. But if a settlement does not result from the conciliation proceedings, the parties may then refer their dispute to arbitration— if bound by contract—without prejudice to either side’s position.

The ICC recommends that all parties wishing to provide for ICC arbitration in their foreign contracts use the following standard clause:

> All disputes arising in connection with the present contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said rules.

**American Arbitration Association (AAA)**

The AAA is a neutral non-profit organization which administers arbitration hearings—in accordance with its Construction Industry Arbitration Rules—for those parties who have contractually agreed to submit disputes for final resolution.50

The proportion of international disputes in relation to all of the thousands of cases for which the AAA is selected each year has been continually increasing. These cases have involved parties from five continents. The services of the AAA are greatly in demand in the United States. Many of the contracts commonly used in private construction contracts expressly provide for arbitration in accordance with the AAA and its rules.

Parties are directed to use the following clause for arbitration under the authority of the AAA:

> Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgement upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

**UNCITRAL Arbitration Rules**

The United Nations Commission on International Trade Law has developed a set of rules for use on a worldwide basis to provide uniformity in international ad hoc arbitrations. The General Assembly of the United Nations, by
resolution adopted December 1976, recommended the use of the UNCI-
TRAL Arbitration Rules "in the settlement of disputes arising in the context
of international commercial relations, particularly by reference in commercial
contracts."

The Sixth International Arbitration Congress of the International Coun-
cil for Commercial Arbitration, held in Mexico City in March 1978, rec-
ommended that arbitration institutions throughout the world consent to perform
services if so designated under a contract providing for the UNCITRAL
Arbitration Rules. The UNCITRAL Rules are too new to be able to tell how
they will be used, if at all, in construction works abroad.\textsuperscript{21}

**London Court of Arbitration**

This body has 24 individuals, 12 selected by the Common Council of the
Corporation of the City of London, and 12 by the City's Chamber of Com-
merce. The Court's purpose is to provide facilities for and promote the set-
tlement of disputes via arbitration in Great Britain, Northern Ireland, and
overseas. The Court maintains a panel of arbitrators and appoints one to
each case unless the parties provide otherwise.

**Others**

In addition to the institutions just described, there are others with equally
fine services. These include the organizations listed in Table 10.1 which fol-
lows:

In some instances, a government will require that arbitration take place
at an institution within its borders. This is so in China, which has only recently
accepted the concept of dispute arbitration. Other countries, such as Kuwait,
will want to use local arbitration rules, which can be disadvantageous if there
is a lack of expertise or a likelihood of bias. Overall, the increasing need for
arbitration has encouraged more and more countries to accept it as a legiti-
mate mechanism for the speedy resolution of disputes.

Major institutions have built a reputation for impartiality and excellent
administrative guidance, and parties negotiating a contract should not hesi-
tate to discuss institutional arbitration as an alternative to individual arbitra-
tion. Prudent parties will specify that recognized international rules be ap-
plied in a neutral forum.

**PROCEDURAL MATTERS**

**Appointment of Arbitrators**

Parties may select their own arbitrator(s), although if they have selected an
institution's arbitration rules to govern the proceeding, the rules generally
provide for the method of selection. For example, the ICC Rules specify that
the Court of Arbitration shall appoint arbitrators, while the arbitration rules
promulgated by the government of Kuwait specify that the relevant Chamber
of the Civil Court appoints arbitrators.\textsuperscript{22}

Where the parties have failed to make provision for an arbitrator, the
ICC, for instance, will make the appointment, taking into consideration such
factors as the proposed arbitrator's nationality, residence, and other relation-

\textit{Appointment of Arbitrators} 181
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A standard practice in international arbitration is to designate an “appointing authority” to make the selection of arbitrators. The preferable and most convenient method of avoiding conflict is to have the appointing au-

182 Arbitration of Disputes
authority also be the arbitral institution administering the arbitration. When designating the institution in a contract, the parties can accomplish this by adding the phrase that the institution "shall also act as appointing authority."

Number of Arbitrators

Much discussion has been centered on which is preferable, one or three individuals to serve as the arbitrator(s) of a case. Those who favor a single arbitrator claim that, in cases where each side selects one arbitrator (who, in turn, select a third), the two arbitrators who were handpicked will be too biased for their respective sides to be of any aid to the impartial third arbitrator. (A solution to this criticism may be to indicate in the arbitral provision whether the parties desire "neutral" or "advocate" party-appointed arbitrators.)

Where the institution selects all three arbitrators, critics claim this only brings confusion and greater disagreement among the arbitrators. Therefore, they reason, having only one person conduct the hearing means a case conducted more efficiently, economically, and quickly. Alternatively, those who favor a multiple arbitration board, particularly those from continental Europe, explain that one person may have difficulty grasping all the issues in a complicated construction case where the facts are particularly difficult. A three-person panel minimizes this problem. Not only can three provide the technical expertise needed in understanding most construction claims (without losing the administrative and legal expertise of a lone arbitrator who is often an attorney), but they can also bring to bear upon the arbitral deliberations different cultural perspectives and varied insights needed to help resolve disputes growing out of widely different social, economic, and legal backgrounds.

The essence of arbitration is that resolution will be encouraged by the active participation of a neutral third party. Thus, when only one arbitrator is stipulated, then such arbitrator should be neutral and, in the case of international arbitration, from a country different from the countries of both the disputants.

Locale of Hearings

The issue of which site for the arbitration proceedings can be a major source of aggravation to parties who failed to carefully consider the question in advance. If possible, the arbitration provision should indicate where the hearing would commence. The clause may also designate the institution or the arbitrator to select the place of hearings. Problems are possible with either choice.

If the selection of the site is left up to the administering institution, the result may be unacceptable to one or more of the parties. Future unnecessary litigation may ensue. If the decision is left to the discretion of the arbitrator, he may tend to choose his own country or other location accessible to him as a matter of convenience. These competing considerations should be evaluated before arbitration is instituted.

A court that intervenes (when requested) and examines the institution's or arbitrator's choice of locale may be empowered to make a limited inquiry into whether the choice was made in accordance with a minimum standard
of fair dealing, though experience of this kind has thus far been limited to the USA.

Arbitration is provided as a forum to gather all parties and relevant information together at one place and time to settle a dispute. Therefore, the location selected should be convenient to all associated with the claim. Factors which should be considered when making this choice include: the whereabouts of potential evidence and witnesses; the location of the project involved in the dispute; accessibility of the locale by travel; availability of communications equipment; cost and quality of travel, lodging and meals for the parties, their counsel and witnesses; and the type of hearing facility available. These factors may lead the parties to select a third or neutral country. A third country locale can also prevent haggling between parties attempting to gain a “home” advantage.

**Language**

Language may not be as big a problem as one would anticipate because so much international business basis is conducted using English. Of course, where both parties speak one tongue, they should agree on the use of that language. In cases where the language of one party is selected, a stipulation for instantaneous translation should be incorporated. Language considerations will affect the choice of arbitrators, locale, counsel, expert witnesses, etc. Translations are costly and should be avoided.

**Applicable Law**

The parties to the contract have the option of selecting the law to govern the contract. It may be the law of one of the respective parties' countries or it may be the law of a nation experienced and respected in international business affairs. Governing law can be substantive or procedural, although arbitration procedures are generally taken from the rules of the arbitration institution or the laws of the forum of the arbitration.

If the contract is silent with regard to choice of law, but designates a forum for arbitration, the applicable substantive law will be determined by the forum's rules governing conflict of laws. A conflict of laws analysis weighs various factors and determines which country has the greatest interest in having its substantive rules of law applied to the dispute. Anyone who has been exposed to conflict of laws rules knows what a frustrating subject they can be. Therefore, a choice of substantive law and a choice of forum for arbitration should be included in the contract to avoid difficulties.

The parties may also request that trade customs and usage be observed. A statement can be included to that effect, specifying the applicability of customs and usages common in a particular geographic region. Arbitrators from within the relevant business community should have little difficulty factoring trade customs into their decision.

Many European countries grant to arbitrators the authority to decide as "amicables compositeurs." For example, under French law, arbitrators who act as "amicables compositeurs" generally may decide in accordance with their own sense of justice and the fundamental principles governing judicial procedure. They need only comply with those mandatory rules of law which the parties cannot derogate. In addition, through this procedure the parties waive all means of recourse against the award that can validly be waived in advance.
Time Limits
The parties must work within a reasonable framework which allows time for necessary preparation, but not time for delay. Provisions for time limitations are included in each arbitral institution's set of rules. In addition, it is advisable to include in the arbitration agreement any important time limits not specified elsewhere.

When the parties plan non-institutional arbitration, they must provide their own rules on time limits. Institutional rules can be used as a guide. Key items include the amount of time to be allowed for pre-arbitration procedures and preparations, selection of arbitrators, and the amount of time the arbitrators will have to make their decision. Time periods between other important events should also be specified to prevent them from becoming excessive.

Speed is desirable, but the parties should not rush themselves unnecessarily, since this may cause important items to be misunderstood or overlooked. The goal is an award based upon a fair evaluation of all relevant materials, and leniency about minor delays will help achieve this goal.

Entry of Judgment
Arbitration rules do not generally set forth the procedural law for enforcement of arbitration awards. To assure enforcement of an international arbitration award in a timely manner, a statement should be added to the arbitration clause indicating that "any award made by the arbitrator may be entered as a judgment in any court having jurisdiction thereof." This language makes clear the parties' intention to be fully and finally bound by the arbitration.

The parties must always familiarize themselves with the entry-of-judgment laws in the jurisdiction(s) where they may have to seek judicial enforcement. If the parties enter the arbitration in good faith, they will probably meet their award obligations voluntarily without any prodding from the courts. But to ignore the possibility that the courts will be needed invites an unnecessary risk.

Costs
Arbitration often costs less than international litigation, but it is not inexpensive. The arbitration agreement must apportion the financial responsibility for administrative costs, arbitrators' fees, and other expenses. International arbitration clauses run the gamut on this subject, ranging from complete silence (a poor choice) to placing the full burden on the losing party, or requiring joint contribution regardless of the outcome. The last choice is probably the easiest to manage, but the final decision will depend on the parties' perceptions of what is fair.

Miscellaneous Provisions
The following items are usually not incorporated in formal arbitration rules, but the parties should consider dealing with them in advance to minimize delay and confusion should one of the listed difficulties arise:

**ARBITRATOR REPLACEMENT**—Arbitrators occasionally resign because of personal problems or conflicts of interest. Under these cir-
cumstances, it will be extremely helpful for the parties (and the remaining arbitrators, if any) to know what to do.

AUTHORITY OF ARBITRATOR TO RULE ON OWN COMPETENCE—Issues may arise which are, arguably, beyond the arbitrator’s authority to decide. The arbitrator can be given the authority to determine the limits of his power, and to refuse to exceed those limits.

DUTY OF PARTIES TO CooperATE IN REASONABLE DISCOV-ERY DEMANDS—This is an important area, since evidence is crucial to any claim.

REFERENCE OF DISPUTES FOUND NON-ARBITRAL TO SPECIFIED TRIBUNALS—This clause would be similar to the forum selection clauses discussed in Chapter 2.

EX PARTE PROCEEDINGS—An ex parte proceeding is one in which only one party appears, such as for a determination of his rights or obligations under a particular contract clause. It is possible to do this through an arbitral panel, but the procedure is expensive and basically contrary to the concept of arbitration between two parties.

REQUIRE ARBITRATORS TO HAVE SPECIAL QUALIFICATIONS—This can often be accomplished by naming the arbitrators in advance, though advance selection is risky because the named individuals may be unavailable when they are needed.

DENIAL OF RIGHT OF APPEAL—The parties can, by contract, agree to accept the arbitral decision as final without the right of recourse to the courts. The only exception would be a situation where the award was based on fraud or mistake.

NO PUBLICITY WITHOUT ADVANCE CONSENT—The vast majority of arbitration cases are unpublished for reasons of privacy, and the parties should agree in advance on this subject.

CONDITIONS PRECEDENT TO ARBITRATION—Many agreements specify arbitration as a last resort after conciliation and negotiation have failed. This puts off the expense of arbitration in the hope that it will be unnecessary, by requiring the parties to give their best efforts to informal means of dispute resolution. Note, however, that arbitration cannot be invoked until all contractual conditions precedent have been met—for example, formal review by the Engineer.

CONTINUED PERFORMANCE DURING ARBITRATION—Difficulties leading to arbitration may arise early in the project, and it will be to everyone’s advantage to have work continue normally while the difficulties are resolved. This should be specified, however, so that one of the parties will not attempt to withhold work or payment to coerce the other party. Also, the arbitrator may be authorized to make interim decisions compelling performance and payment.

Other areas of special concern are likely to arise when the parties review the proposed work with an eye toward possible disputes. It is important to note that it takes less time to agree on small matters in advance than to thrash them out after the trouble has begun.

186 Arbitration of Disputes
Enforcement of Award

An arbitration award will be worthless if the losing party refuses to pay and the winning party has no mechanism for judicial review. Arbitration institutions have no enforcement powers, and they can do no more than urge compliance. Some arbitration agreements call for the parties to deposit an amount equal to that claimed in escrow as a guarantee that the award will ultimately be obeyed, but this approach is onerous for parties with tight cash flows. Borrowing an escrow amount will incur potentially substantial interest payments, so this option is also burdensome.

As mentioned above, the most common enforcement tactic is to seek a court order which does three things. First, the court declares that it has jurisdiction over the matter pursuant to a statute or other legal theory. Second, the court declares that the arbitration proceedings were validly invoked and managed (assuming, of course, that they were).

Third, the court renders a judgment and order compelling the losing party to obey the award. If the losing party’s assets are in the jurisdiction, the judgment can be enforced by attachment if necessary. If the loser is outside the jurisdiction, and his remaining assets are insufficient or nonexistent, the prevailing party may have to repeat the procedure. This rather gloomy analysis focuses on the worst possible case, however. As Table 10-2 indicates, the vast majority of awards receive voluntary compliance or compliance after court order. The table also indicates the average length of proceedings and the cost (relative to other institutions). The time estimates are based on a simple average, and there is great variation depending upon the size and complexity of the claim.

To encourage arbitration, nations and international organizations have promulgated various statutes and conventions which make enforcement easier. These will appear later in the chapter.

SOVEREIGN IMMUNITY

As indicated in Chapter 1, sovereign immunity is a legal principle which shields national governments from lawsuits or other adjudicative procedures instituted in other countries. For example, suppose that an English contractor is owed money by an agency of the government of Kuwait, and in order to collect, he obtains an English court order seizing a Kuwaiti naval vessel which happens to be in an English port. Under the theory of sovereign immunity, the attachment of property of the government of Kuwait is null and void. The government of Kuwait is simply “immune” to the powers of the English courts. Note, however, that the rule applies only to the sovereign; in the example above, the outcome would be different if the contractor were owed money by a Kuwaiti businessman, and if the boat were the businessman’s personal yacht.

An offshoot of the sovereign immunity theory is the “Act of State” doctrine. This doctrine stands for the principle that the courts of one country have no power or authority to review acts of state of another country—such as legislative acts or executive orders. For example, suppose an American contractor’s equipment in Libya had been expropriated by the Libyan government and he sought relief in the American courts on the theory that the

Sovereign Immunity  187
<table>
<thead>
<tr>
<th>Institution</th>
<th>Average Duration of Proceedings (See Note 1)</th>
<th>Estimated Rate of Compliance (%) (See Note 2)</th>
<th>Relative Administrative Costs (See Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Arbitration Association New York, USA</td>
<td>6 mos.</td>
<td>97% or more</td>
<td>Low: 0.5%–3% of award</td>
</tr>
<tr>
<td>Associazione Italiana per L’Arbido Rome, Italy</td>
<td>12 mos.</td>
<td>95%</td>
<td>Low: 0.1%–4% of award</td>
</tr>
<tr>
<td>Chamber of Foreign Trade Berlin, German Democratic Republic</td>
<td>6 mos.</td>
<td>98%</td>
<td>Low</td>
</tr>
<tr>
<td>Foreign Trade Arbitration Commission Bucharest, Rumania</td>
<td>9 mos.</td>
<td>Unavailable</td>
<td>Low: government subsidized</td>
</tr>
<tr>
<td>Foreign Trade Arbitration Commission Peking, China</td>
<td>Unavailable</td>
<td>Unavailable</td>
<td>Unavailable</td>
</tr>
<tr>
<td>Hamburg Chamber of Commerce Hamburg, West Germany</td>
<td>Variable</td>
<td>High</td>
<td>Moderate: 3% or more of award</td>
</tr>
<tr>
<td>Indian Council of Arbitrators New Delhi, India</td>
<td>2 yrs. maximum</td>
<td>Uncertain: estimated to be poor</td>
<td>Moderate</td>
</tr>
<tr>
<td>International Chamber of Commerce (ICC) Paris, France</td>
<td>20 mos.</td>
<td>90% or more</td>
<td>High</td>
</tr>
<tr>
<td>Japan Commercial Arbitration Association Tokyo, Japan</td>
<td>Variable: 2 mos.–3 yrs.</td>
<td>88%</td>
<td>High</td>
</tr>
<tr>
<td>London Court of Arbitration London, England</td>
<td>6 mos.</td>
<td>High</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
### TABLE 10–2 Continued: Major Arbitration Institutions: Duration and Administrative Cost of Proceedings and Estimated Rate of Compliance with Awards

<table>
<thead>
<tr>
<th>Institution</th>
<th>Average Duration of Proceedings (See Note 1)</th>
<th>Estimated Rate of Compliance (%) (See Note 2)</th>
<th>Relative Administrative Costs (See Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands Arbitration Institute</td>
<td>9 mos. (36 mos. maximum)</td>
<td>Uncertain: estimated to be high</td>
<td>Moderate</td>
</tr>
<tr>
<td>Rotterdam, Netherlands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polish Chamber of Foreign Trade Warsaw, Poland</td>
<td>12 mos.</td>
<td>99 + %</td>
<td>Low: government subsidized</td>
</tr>
<tr>
<td>Stockholm Chamber of Commerce Stockholm, Sweden</td>
<td>12 mos.</td>
<td>Uncertain: estimated to be high</td>
<td>Low</td>
</tr>
<tr>
<td>USSR Chamber of Commerce Moscow, USSR</td>
<td>3–4 mos.</td>
<td>99 + %</td>
<td>Low: government subsidized</td>
</tr>
<tr>
<td>Zurich Chamber of Commerce Zurich, Switzerland</td>
<td>18 mos.</td>
<td>99 + %</td>
<td>Varies: parties have some control</td>
</tr>
</tbody>
</table>

NOTES: 1. These are simple averages. Duration varies with complexity of proceedings.
2. This includes compliance after judicial enforcement. Uncertainty arises because institutions cannot compel parties to report results, etc.
3. This covers the institution’s administrative fee only. The bulk of the costs (travel, experts, arbitrators' daily fees and expenses) are controlled by the parties themselves.
expropriation was improper or illegal. Because of the Act of State doctrine, the American courts would be unable to pass on the question of whether the expropriation was valid. They would have no power to review or evaluate an exercise of Libyan government power in Libya. If the case were to be litigated at all, the United States itself would have to sue Libya in international law court, as described in Chapter 2. These restrictive theories of law spring from the notion that every country has complete power over its own territory, and that power cannot be limited or disrupted by any other country.

For many years, the doctrines of Sovereign Immunity and Act of State were an absolute bar to lawsuits against a government or one of its agencies. This became cumbersome as world trade increased. Governments were sometimes unscrupulous in the way they dealt with foreign individuals, because they could avoid payment or other liability by relying on one of the protective doctrines. Accordingly, many nations began to modify the sovereign immunity/act of state laws which applied to their courts. They began to recognize that in certain types of business transactions, foreign governments are not actually exercising their sovereign powers; they are simply entering worldwide markets as buyers or sellers of goods or services. It followed that under those circumstances, the special protections of sovereign immunity and act of state should not apply. The aim of these statutes is to place businessmen and governments on equal footing in certain types of transactions. For example, the United States Foreign Sovereign Immunities Act goes into considerable detail to help the courts determine when a foreign state should be denied sovereign immunity. England has a similar statute.26

These considerations are particularly important when arbitration with a government is contemplated, because the government may refuse to honor an arbitral award against it, and then use sovereign immunity as a defense against any attempt to enforce the award in court. Expensive legal maneuvering may be necessary to defeat the sovereign immunity defense, so it is advisable to include a sovereign immunity waiver clause in any government contract which contains an arbitration clause. It is also advisable to include such a waiver even without the arbitration clause, since legal problems can arise in a number of ways. The waiver need only state clearly and irrevocably that the government involved agrees to waive any defenses of sovereign immunity or act of state in any action arising from the performance or breach of the contract. The waiver will be binding as long as the contract is in force, but if the contract is terminated, the waiver will expire with it. Courts will ordinarily enforce a contractual waiver because it is a basic principle of contract law that a party may give up anything he owns or possesses (including a legal right) to receive something from the other party.

**LOCAL ENFORCEMENT OF FOREIGN ARBITRAL AWARDS**

International law regards each nation, however large or small, as an equal, independent entity. The tiny nation of Luxembourg has the same international rights and responsibilities as the vast Soviet Union or Brazil, and each nation is entitled to establish and enforce its own legal system within its territory.29 Accordingly, no country is obligated to enforce judicial judgments from other countries; extradition treaties sometimes permit accused or con-

190 Arbitration of Disputes
vicited felons to be arrested in one state and returned to the state where they have committed their crimes, but this is a departure from the norm. A nation’s territorial sovereignty is complete—it need not import another country’s legal pronouncements, and it may not export its own.

The same reasoning is theoretically applicable to arbitral awards. As mentioned earlier, a party can usually seek to enforce an arbitral award through the courts of the country where the award was made (assuming that the losing party is in the jurisdiction). But suppose that a Korean contractor and a Chilean owner enter into arbitration at the International Chamber of Commerce in Paris. The contractor wins a large award, but the owner refuses to pay and returns to Chile, leaving no money or assets in Paris. Clearly, a French court order compelling payment will be of little value, since the owner has no French property which the court can seize. Moreover, the Chilean courts are not obliged to enforce the French court order, for the reasons outlined above. It may appear that arbitration has given the contractor a worthless award, but fortunately, most nations, eager to encourage the reasonable, efficient settlement of business disputes through arbitration, have enacted laws or adopted policies allowing their courts to enforce foreign arbitral awards. One reason for this is that arbitration is an increasingly popular and effective alternative in all kinds of business disputes, construction or otherwise. Another reason is that since a foreign arbitral award is not a foreign judicial pronunciation—because arbitration is a private proceeding, not a government activity—a country can enforce the award without appearing to import foreign law. The second reason may seem unimportant, but in fact, all countries are resistant to acts which seem to chip away at national independence or sovereignty, so the private nature of arbitration is attractive.

Laws or policies regarding enforcement of foreign arbitral awards vary from country to country and a careful evaluation of available alternatives is a key element in negotiating an arbitration clause.

**U.N. ENFORCEMENT CONVENTION**

The United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards is a multilateral agreement which provides for mutual recognition and enforcement of arbitration decisions by the ratifying countries. Approximately 50 countries are signatories see Table 10-3 for a listing. The convention’s effect is to establish uniform provisions under which the contracting states shall recognize and enforce under their rules of procedure, in their respective jurisdictions, arbitration awards which have been obtained in other signatory countries. Countries which are not parties to this convention may, however, have bilateral treaties with your home country in which they have agreed to enforce arbitration awards.

An award is enforced by means of a judgment obtained in the court of any contracting state and is subject to review by that court, not on the merits, but only on limited grounds specified in the convention. One of these grounds was used as a defense to enforcement in an international construction case before the United States courts. In *Parsons & Whittemore Overseas Co. v. Societe Generale de L’Industrie du Papier (RAKTA)*, an American court rejected RAKTA’s argument that the award violated U.S. public policy. It declared that “the Convention’s public policy defense should be narrowly construed” and
States which are parties to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, As of February 1982

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia*</td>
<td>Kampuchea (Cambodia)</td>
</tr>
<tr>
<td>Austria</td>
<td>Korea</td>
</tr>
<tr>
<td>Belgium</td>
<td>Kuwait</td>
</tr>
<tr>
<td>Benin</td>
<td>Madagascar</td>
</tr>
<tr>
<td>Botswana</td>
<td>Mexico</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Morocco</td>
</tr>
<tr>
<td>Byelorussian SSR</td>
<td>Netherlands*</td>
</tr>
<tr>
<td>Central African Empire</td>
<td>Niger</td>
</tr>
<tr>
<td>Chile</td>
<td>Nigeria</td>
</tr>
<tr>
<td>Colombia</td>
<td>Norway</td>
</tr>
<tr>
<td>Cuba</td>
<td>Philippines</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>Poland</td>
</tr>
<tr>
<td>Denmark*</td>
<td>Romania</td>
</tr>
<tr>
<td>Ecuador</td>
<td>San Marino</td>
</tr>
<tr>
<td>Egypt</td>
<td>South Africa</td>
</tr>
<tr>
<td>Finland</td>
<td>Spain</td>
</tr>
<tr>
<td>France*</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>Germany - East</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Germany - West*</td>
<td>Syrian Arab Republic</td>
</tr>
<tr>
<td>Ghana</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Greece</td>
<td>Trinidad and Tobago</td>
</tr>
<tr>
<td>Holy See (Vatican)</td>
<td>Tunisia</td>
</tr>
<tr>
<td>Hungary</td>
<td>Ukrainian SSR</td>
</tr>
<tr>
<td>India</td>
<td>USSR</td>
</tr>
<tr>
<td>Indonesia</td>
<td>United Kingdom*</td>
</tr>
<tr>
<td>Israel</td>
<td>USA</td>
</tr>
</tbody>
</table>

*States which extended the treaty to their outlying territories and possessions

that an “expansive construction... would vitiate the Convention’s basic effort to remove pre-existing obstacles to enforcement”; and that “considerations of reciprocity... counsel courts to invoke the public policy defense with caution.” In addition, in opposition to RAKTA’s contention that its return to work would “contravene United States public policy,” the court wrote:

To read the public policy defense as a parochial device protective of national political interests would seriously undermine the Convention’s utility. This provision was not meant to enshrine the vagaries of international politics under the rubric of “public policy.” Rather, a circumscribed public policy doctrine was contemplated by the Convention’s framers and every indication is that the United States, in acceding to the Convention, meant to subscribe to this supranational emphasis.

This case, along with other American court decisions, indicates a clear trend toward effective enforcement of international arbitration awards, at least by U.S. courts.

192 Arbitration of Disputes
INTERNATIONAL LAW AND LOCAL TRIBUNALS

Nations without a blanket policy of enforcing foreign arbitral awards may subject the entire dispute to de novo consideration (a second look) by their own courts.

This becomes less common every year, partly because nations favor arbitration and partly because parties to arbitral agreements have taken care to draft clauses which minimize such a risk, but the possibility must be considered. For example, Article 29 of the Laws of Kuwait declares that foreign arbitral awards will be binding if they meet the necessary conditions for execution in Kuwait. If the parties can reasonably expect that it will be necessary to enforce their agreement in Kuwait, they must take care to plan and carry out their arbitration with the Kuwaiti requirement in mind.

Planning and investigation have no substitutes. It cannot be denied that contract negotiation and drafting are complex enough without legal considerations of this kind, but an extra few hours or day of preparation is ultimately a small price to pay for an enforceable arbitral award.

Arbitration institutions or international attorneys can be consulted for information on how different countries deal with foreign arbitral awards. Among examples underscoring the need for individualized research: In Czechoslovakia, an award will be judicially enforced only if it was final and binding in the country where it was issued (meaning that any rights of appeal or review must have been exhausted or waived); the German Democratic Republic grants almost automatic enforcement if presented with a transcript of the judgment; the Peoples Republic of Mongolia has enforcement laws, but in practice voluntary compliance is expected and legal relief is almost never granted; and Romania also urges voluntary compliance, but it does not hesitate to allow judicial enforcement. The message is clear: plan your contract so that it will be responsive to international, local, and individual needs and expectations.

INVESTMENT DISPUTES—WORLD BANK

The International Bank for Reconstruction and Development (World Bank) is the largest source of international development funds. It is an international agency, consisting of 127 member countries, which makes loans to governments or to organizations which can obtain a government guarantee. The loans are normally made on a project basis. A policy has been adopted in its loan agreements with borrowing nations of providing that disputes and claims, arising out of projects to which the loan relates, be resolved by and under the procedures of the International Centre for the Settlement of Investment Disputes (ICSID)—which is an ancillary organization within the World Bank Group. The ICSID provides a permanent forum, a panel of arbitrators, and Rules of Procedure.

There is some question whether the ICSID applies to construction contracts, because it is uncertain whether these contracts meet the two requirements set by the Convention with respect to the nature of the disputes that may be submitted. A dispute must be one "arising directly out of an investment." Construction contracts appear to present a marginal situation. If the entrepreneur is required to commit substantial resources to the project for
extended periods of time, the arrangement probably could qualify as an investment. An argument could be made that a contractor, consulting engineer, or supplier is an investor in the sense that he extends credit to an area where payment is not guaranteed.

The second requirement is that the dispute must be a “legal” one. This means that the dispute must concern the existence or scope of a legal right or obligation. A construction claim would have no problem meeting this requirement.

Article 54 of the Convention imposes a duty on each Contracting State—not merely on the State which had been a party to the dispute or whose national had been a party to the dispute—but on each Contracting State, to recognize an award as binding as if it were a final judgment of a court in that State, on the simple presentation of a copy of the award certified by the Secretary-General. It provides:

(1) Each Contracting State shall recognize an award rendered pursuant to this Convention as binding and enforce the pecuniary obligations imposed by that award within its territories as if it were a final judgment of a court in that State. A Contracting State with a federal constitution may enforce such an award in or through its federal courts and may provide that such courts shall treat the award as if it were a final judgment of the courts of a constituent State.

(2) A party seeking recognition or enforcement in the territories of a Contracting State shall furnish to a competent court or other authority which such State shall have designated for this purpose a copy of the award certified by the Secretary-General. Each Contracting State shall notify the Secretary-General of the designation of the competent court or other authority for this purpose and of any subsequent change in such designation.

(3) Execution of the award shall be governed by the laws concerning the execution of judgments in force in the State in whose territories such execution is sought.

The World Bank procedures are competently drafted, but their application is so limited that only a few cases have been heard under them. They are reserved for specialized projects, but they provide a useful example of an approach to major international arbitration concerning projects which are invariably complex.

DIPLOMATIC INTERVENTION

Diplomatic intervention on behalf of a particular party or award is always somewhat suspect. It is certainly not a reliable alternative, since its availability will depend on the relationship between particular governments and the effectiveness of particular ambassadors. It also runs counter to the notion that parties to arbitration proceeding should be on equal footing at all times.

The situation is different if an international agency such as the World Bank or the Agency for International Development (AID) has provided financing for the project. Under those circumstances, government intervention may be consistent with the overall character of the work.
INSURANCE

Contractors working abroad should insure themselves, if possible, through governmental or private institutions against non-enforcement of arbitration awards. United States contractors may secure such protection under a guarantee program instituted by the Export-Import Bank of the United States in July, 1978. Eximbank provides contractors with protection against certain types of losses when they undertake international construction projects. This arrangement, fashioned after the Overseas Private Investment Corporation’s (OPIC) “Special Incentive Program for U.S. Construction and Services Overseas”—which expired on July 1, 1978, compensates U.S. contractors doing business with foreign governments and private entities overseas for losses resulting from (among other causes):

The project owner’s failure to honor an arbitration award or comply with the dispute-resolving mechanism set forth in the construction contract when such failure is not due to the fault of the contractor.

Eximbank coverage is offered if the contract, taken as a whole, has a “substantial U.S. interest” such that 50% of the contract price can be attributed to (1) procurement of U.S. goods and services and (2) U.S. indirect costs such as overhead and profit. Contracts not meeting this requirement will be considered on a case-by-case basis.

Reimbursement is limited to 90% for losses resulting from the project owner’s failure to honor an arbitration award, and 50% for the owner’s refusal to comply with the dispute-resolving mechanism set forth in the construction contract.

Another requirement of Eximbank is that disputes coverage is given only if the construction contract contains a provision for settlement of disputes by arbitration, preferably international arbitration.

The United States is not alone in providing services of this type. Eximbank procedures are illustrative of the types of coverage offered by agencies of other industrialized nations, such as England, Canada and West Germany.

If a particular project fails to meet the requirements for government-sponsored insurance, the services of private insurers should be considered. In addition to arranging insurance of all kinds, these institutions can provide a wealth of information on business activity all over the world. Lloyds of London and Foreign Credit Insurance Associates (New York) are two prominent examples.

Effective use of insurance requires careful evaluation of every component of a project. This task can only be undertaken by experts in the field.

Arbitrating With Governments

Despite arbitration’s increasing popularity, there remain certain areas of the world in which it is possible that an arbitral award will be modified or subjected to special scrutiny. This underscores the need to tailor any arbitration clause to the attitudes likely to be encountered in specific countries. Table 10-4 lists countries’ attitudes towards international arbitration.

The following is a summary of some varying governmental attitudes:

Saudi Arabia 195
SAUDI ARABIA

A 1963 decision by the Council of Ministers of Saudi Arabia declared that ministries and agencies were prohibited from submitting disputes with a private party to arbitration. (However, in situations in which the Saudis are granting a concession and find it to their advantage to agree to an arbitration provision, this restriction will not apply). Clearly, a ministry and probably any governmental organization primarily exercising governmental powers would be considered a governmental agency, but a government-owned company formed to engage in commercial activities is not considered to be a government agency. The University of Riyadh and the Royal Commission would be considered agencies of the government, but the Arabian American Oil Company would not.

Saudi Arabia has the smallest amount of codified commercial laws in the Middle East. The resolution of commercial disputes is handled by a system of arbitration-like administrative commissions—for commercial disputes, a Commission or Board for the Resolution of Commercial Disputes, and a Grievance Board for disputes with the Saudi government and its agencies. Royal Decree No. 3/M/1368, dated May 31, 1976, confirmed the use of the Grievance Board as the tribunal to handle cases between a contractor and the government.

The Saudi Tenders Regulations form the basis for deciding a case, regardless of whether they have been expressly incorporated into the contract. When the Regulations, along with the contract documents, do not specify a result, equitable principles of Shari'ah law are applied. Grievance Board decisions are finalized upon approval of the Board President.

Private entities in Saudi Arabia are free to agree to international arbitration of disputes and the application of foreign law to the contract. This may be a difficult task because Saudi courts do not recognize foreign judgments. The solution may be to specify that any enforcement action will take place in Saudi Arabia, and to maintain a flexible attitude toward compromise and settlement.

The first step for resolution of claims against the Corps of Engineers (doing work in Saudi Arabia) is presentation of the claim to the contracting officer (C.O.) of the Corps of Engineers. The acceptance of the C.O. as the “third party” to render decisions is a prerequisite to contract execution.

The C.O. can be defined as any person who, either by virtue of his position or by appointment in accordance with procedures prescribed by law or regulation, has the authority to enter into contracts, administer them, and make determinations and findings with respect thereto. The C.O. acts in a quasi-judicial capacity and is bound to observe a high standard of impartiality, commencing upon the initiation of the procurement process.

Any final decision rendered by the C.O. should contain: (1) findings of facts, and (2) a statement of the considerations which led to the decision. In the absence of appeal provisions, or if the contractor fails to appeal within the specified time limits, the C.O.’s decision is final and conclusive with respect to all participating parties. A final decision must be reduced to writing, labeled as a “final decision,” and should refer to the disputes clause. All decisions should advise the parties of their right to appeal, the appeal procedures, and the time limit for filing. Finally, the decision must be signed by the C.O.

196 Arbitration of Disputes
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<th>Yes</th>
<th>Partial</th>
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<td>Afghanistan</td>
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<td>Kuwait</td>
<td>Denmark</td>
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The documentation supplied by the contractor to the C.O. must reflect all relevant and material facts bearing upon and supporting his claims position. Contract clauses upon which the contractor is relying and legal precedent to support his position should be clearly identified and applied to the facts.

The need for thorough claim preparation cannot be overstated. Whether the owner is a familiar domestic party or an unfamiliar foreign government, careful attention must be given to which clauses apply, how the evidence fits into them, where that evidence is (a troublesome issue if documentation has been lax), and the extent of recoverable damages. Note that foreign governments may have inadequate commercial laws. So it is wise to prepare for the worst in advance rather than to panic when a claim arises.

When a settlement has proved impossible or the contracting officer has issued a final decision or has refused or unreasonably delayed in making a final decision, the contractor may appeal, within a specified period of time, to the Corps Board of Contract Appeals (ENG BCA). The ENG BCA is a quasi-judicial Board whose jurisdiction extends exclusively over construction contracts. It closely adheres to U.S. Federal Rules of Civil Procedure and Evidence. Its decisions are founded upon contract terms that have been analyzed and evaluated many times by judicial tribunals. Prior decisions are fully recorded and publicized (and easily available), and serve as valuable precedents for future disputes.

CHINA (PRC)

An international contractor must be prepared to encounter unique Chinese attitudes toward the settlement of disputes arising out of international transactions.

The Chinese strenuously avoid not only litigation, but any process that resembles formal adjudication. Writer Wang Yao-tien expressed the Chinese view in discussing treaties, and the same would hold for international construction contracts:

Since the subjects of international treaties are sovereign states, there cannot be a supranational organ in international affairs to interpret international treaties and compel the contracting parties to accept its interpretation. Consequently, the interpreters of international treaties can only be the contracting states themselves; the best method of settling this problem is through diplomatic negotiations.

The Chinese view on arbitration of international construction claims can be gleaned from their position on international trade contracts.

The typical Chinese import and export contracts often have a clause which anticipates the possibility of disputes arising under the agreement. Such clauses normally note that those disputes shall be settled through negotiation. Variations on such clauses often add that the parties should attempt to settle disputes through “friendly discussion.”

China’s preference for amicable settlement is, of course, not unique to the Chinese people. Many tribunals, including the American Arbitration Association and International Chamber of Commerce, encourage conciliation prior to more formal means of adjudication. The Chinese, however, evidence
a lack of concern for formal procedures in that none of China's trade agreements and contracts stipulate the means by which an amicable settlement may be reached.

The Chinese have adopted three methods for "non-arbitral" settlement of disputes: (a) settlement through friendly negotiation; (b) consultation; and (c) conciliation.

Under the first method, the parties themselves resolve the dispute without resorting to a third party. Under the second method, the dispute is brought to the attention of the Foreign Trade Arbitration Commission (FTAC) or the Marine Arbitration Commission (MAC), depending upon the nature of the dispute. These commissions are within the jurisdiction of the China Council for the Promotion of International Trade (CCPIT). (The Legal Department of The CCPIT advises China's foreign trade corporations on matters of foreign commercial law and practice.) However, neither the FTAC or the MAC will recommend a solution; rather, either organization will assist the parties in finding their own solution. The Chinese feel that the principal signees should sit down and work out their problems. This is the process most widely employed and encouraged. Under the third method, the FTAC or the MAC will act as a conciliator, making suggestions, which are, however, non-binding.

In the event China's three non-arbitral methods fail, the case may then be submitted for arbitration. Third-party settlement is accepted only when there is no other solution, otherwise the Chinese consider this a serious loss of face. The FTAC will arbitrate if one party insists, but first it must be satisfied that other means will not be fruitful. Usually, the arbitration will take place in Beijing, although some sellers have been able to obtain Chinese consent to arbitration in Sweden, Belgium or Switzerland (with Switzerland being first choice). In one contract with a United States seller, reportedly, Canada was specified as the forum nation. The contract may state that arbitration will be held in an unnamed third country to be agreed upon between the parties. (Although it would seem unwise to add this element of uncertainty.)

In more recent years, the Chinese have become willing to specify not only a third country, but also the rules applicable to the arbitration proceeding. The Chinese have expressed antipathy to "choice of law" clauses that subject disputes to the rules of a designated foreign legal system, whether that of the seller or that of the third country. Presumably no legal system can be neutral since the Chinese view law as an instrument by which ruling social classes maintain their dominance. However, they try to deal only with countries whose laws are as sophisticated as possible. These tend to be European countries, since they possess an extensive history of international trading and commerce.

Several years ago, American businessmen urged Chinese acceptance of the American Arbitration Association clause, the International Chamber of Commerce clause, or some other customary U.S. form clause in contracts. The Chinese found those clauses unusual and unacceptable. Conversely, American businessmen are reluctant to accept Chinese contracts that require arbitration to be held in Beijing and to be conducted under the rules promulgated by the CCPIT.

In a very recent transaction, a Chinese corporation not only agreed to arbitration before a named third country body under ICC rules, but also
agreed that the contract would be governed by the law of that country. However, this is an extremely isolated example. No matter what dispute settlement clauses and the applicable law in the contract provide, the most significant aspect of Chinese practice on these matters is their preference to avoid arbitration altogether.

Representatives of the American Arbitration Association were told, during their visit in 1974, that over 100 cases which were brought to the attention of the FTAC were settled by friendly negotiation, while 12 were settled on the basis of non-binding recommendation made by the FTAC; and only two cases were settled by formal FTAC arbitration. In a publication of the National Council for United States-China Trade on “Arbitration and Dispute Settlement in Trade with China,” so few arbitrations had occurred that special note was made of the ones that were reported.

In cases in which arbitration is the preferred means of resolution, the Chinese attach great importance to evidence. Comprehensive documentation is derived from hearings in which anyone who has a connection to the case is permitted to attend and is given an opportunity to speak. The Chinese also place great emphasis on the learning aspect. The effect of arbitration is seen as twofold; not only is the specific case settled, but the parties are taught the lesson of not repeating the same mistake in the future. To the Chinese, their method of arbitration fosters “prevention” which is preferable to the “cure.”

Another goal of the Chinese arbitration system is avoiding national chauvinism. The guiding principle is equality before the law. A Chinese party may not prevail simply because of his nationality.

There may be some concern that the Chinese regard a request to arbitrate as an unfriendly act, and a request could endanger future business relationships. The Chinese have been known, in some cases, not to respond at all to a formal demand for arbitration. A dispute between an American commodity seller and a Chinese buyer was resolved through conciliation under both the Legal Department of the CCPIT and the American Arbitration Association. Conciliators, appointed by the two parties, met in Beijing and arrived at a satisfactory basis for resolution within ten days. While cooperation of Chinese with industrialized nations is encouraging, it should be realized that the more institutionalized conciliation becomes, the greater the difficulties likely to be encountered by the international contractor who often reaches a stage at which he wants to stop negotiating and bargaining and proceed to litigation or arbitration.

OTHER NATIONS

Table 10-5 provides citations for various arbitration laws. These synopses illustrate the variety of practice:

ALGERIA—Algeria allows arbitration only if it is carried out in Algeria pursuant to Algerian law. Special exceptions have been made, but not often enough for a clear trend to have emerged.

EGYPT—Egyptian courts will enforce arbitral awards, and they also have the right to review arbitration proceedings on appeal. The law requires that arbitration agreements be in writing, and that there be an odd number of arbitrators. The government has in the past acquiesced to arbitration by the ICC.

200 Arbitration of Disputes
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<th>ARBITRATION STATUTE CITATION</th>
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<td>Arbitration Act of 1940</td>
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<td><strong>INDONESIA</strong>—General Statute:</td>
<td>S. Gautama, “Commercial Arbitration in Indonesia,” published in <em>Lawasia, Law</em></td>
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<td>Section 615-651 of the Code</td>
<td>Association for Asia and the Western Pacific, 3rd edition (Jakarta, July 1973),</td>
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<td>of Civil Procedure of 1849</td>
<td>edited by the Organizing Committee of the Conference. (in English)</td>
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<td>Book III, Title II, Articles 251-276 of the Law of Civil Procedure (Law Number 82 of 1969)</td>
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<td>Articles 786-805 of the Code of civil Procedure (Law Number 29, 1980)</td>
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<td><strong>KUWAIT</strong>—General Statutes:</td>
<td>A. Lindbørg, <em>Privat Rettergang</em>, (Oslo, 1944) (in Norwegian)</td>
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<td>Sections 254-266 of the Code of Civil and Commercial Procedure (Law Number 6 of 1960) (see also Law Number 3 of 1971)</td>
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<td>Sections 739-777 of the Third Book of the Code of Civil and Commercial Procedure of 1953</td>
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<td><strong>NORWAY</strong>—General Statute:</td>
<td>J. Jakobowski, “The Settlement of Foreign Trade Disputes in Poland,” <em>International and Comparative Law Quarterly</em> (London, Number 3 of 1962) (in English)</td>
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<tr>
<td><strong>PAKISTAN</strong>—General Statute:</td>
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<td><strong>POLAND</strong>—General Statute:</td>
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<td>Articles 695-715 of the Code of Civil Procedure (Law Gazette Number 46 of 1964, item £96)</td>
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202 Arbitration of Disputes
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<th>ARBITRATION STATUTE CITATION</th>
<th>RELEVANT PUBLICATIONS</th>
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<td>SOUTH AFRICA—General Statute:</td>
<td>Davis, <em>Law and Practice of Arbitration</em></td>
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<td>Act Number 42 of 1965, which preserves all common law remedies.</td>
<td>(Durban, 1966) (in English)</td>
</tr>
<tr>
<td>Article 27, Union Republics’ Codes of Civil Procedure, as well as Articles 6 and 124, Fundamentals of Civil Legislation of the U.S.S.R.</td>
<td>Chamber of Commerce and Industry, Section of Law, Moscow. (available in most languages and obtainable through most U.S.S.R. embassies)</td>
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INDIA—Arbitration in India is characterized by confusion and delay amidst persistent allegations of corruption. There have been cases where biased individuals have been appointed arbitrators without any provision for their removal, and administrative agency arbitrations are highly suspect. The government has a varying attitude towards arbitration, usually accepting it on equitable terms only when it cannot impose its own rather cagey approach to dispute resolution.

ISRAEL—Government agencies will not agree to submit disputes to international arbitration. In practice, however, more disputes are settled out of court by negotiation or arbitration, whether or not arbitration is stipulated in the contract. If the parties choose to use three arbitrators, one can be a foreign national.

POLAND—The government of Poland provides excellent arbitration facilities through its Chamber of Foreign Trade. Costs are very low and the rate of enforcement is high (See Table 10-2).

YUGOSLAVIA—The law permits state and government agencies to resort to arbitration with foreigners, provided that the dispute can be settled by compromise and does not fall within the exclusive territorial jurisdiction of a Yugoslav court of law.

**Conclusion**

Arbitration is a manageable and intelligent choice for parties to a modern international contract. The fact that so many aspects of the proceedings—locale, language, time limits, etc.—are within the control of the parties pro-
vides a powerful tool for cost control. The respect which arbitration com-
munds throughout the world has drastically reduced the possibility that an
arbitral award will be unenforceable.

Negotiation is certainly the ideal method of dispute resolution, but when
it fails only litigation and arbitration are left. Arbitration eliminates most of
the defects in litigation—delay (usually), unfamiliarity with the legal system,
language problems, potential for bias, great expense, and nightmarish pro-
cedural rules—but yields a result of equal force. Arbitration clauses deserve
serious and careful attention.
REFERENCES

5. The full text of the convention appears at T.I.A.S. No. 7444.
7. Some nations prohibit publication of the names of the party, e.g. AUSTRIA: §593, para. 2, Code of Civil Procedure, Austria.
8. Note that an American court has applied an objective standard, declaring that the locale must be "reasonable". Aeroflot-General Corp. v. American Arbitration Association, 478 F.2d 248 (9th Cir. 1973).
18. Note 16, supra.
24. Note 15, supra.
26. French for "friendly arbitrators."
27. Note 11, supra.
29. Note 11, supra.
32. Note 31, supra.
33. Note 31, supra.
Chapter 11
Avoiding Future Claims

The Role of the Contract

The contract document, as a record of the parties’ original intent as to the apportionment of the various rights and responsibilities arising from the project, defines and ultimately governs the relationship between the parties.

The critical need to devote careful attention to drafting, implementation and interpretation of the contract has been stressed repeatedly in the preceding chapters. For even after project completion, the contract continues to control the relationships, especially if any claims or disputes remain unresolved. Negotiators, arbitrators and judges generally consider the contract language to be more significant than other records (daily progress reports, etc.) in determining entitlement or liability of a party.

It is imperative that from the initial stages of contract preparation the parties be alert to the extensive, continuing impact that contract provisions will have. For example, when designing the procedures for resolution of future claims, they will be mindful of avoiding contract terms likely to generate disputes. A thorough understanding by each party of its respective contractual rights and obligations will lessen the potential areas of dispute.

Various preventive measures and techniques are suggested in this chapter. By focusing their energy and attention on eliminating circumstances that generate claims, parties in the international construction market may avoid most of the myriad difficulties discussed in the preceding chapters.

DRAFTING TO BALANCE LIABILITY

The key to intelligent contract drafting is clear definition of the respective duties and rights of each party. This requires a thorough analysis by the parties as to their intentions regarding the division of responsibility for various aspects of the contract work. Competent counsel is invaluable at this stage, especially if standard “boilerplate” clauses need to be modified to suit the specific requirements of the project.

The interests of the parties may diverge during the drafting process. Owners will favor terms limiting and qualifying recovery of costs beyond the original contract price, while contractors favor terms facilitating claims settlement. Both parties’ concerns are valid in light of the risks and uncertainties that make the construction process somewhat unpredictable.

A contract in which duties are clearly defined, risks are shared, claims are anticipated and a comprehensive resolution process agreed upon, provides significant protection to both parties. It minimizes liability through a balanced approach.
ALTERNATIVE THEORIES OF RECOVERY

In the event a contract is silent or ambiguous regarding claims resolution, courts and arbitrators may employ contractual theories of recovery based on provisions which, though not expressly found in the contract language, may exist by implication. Examples of these judicial and legal maxims include the implied covenant of good faith and fair dealing, the implied duty of cooperation and full disclosure, and the implied warranty of suitable specifications.1

Non-contractual theories of recovery, such as quasi-contractual recovery for unjust enrichment, may be attempted in countries with a well-developed legal system. Depending, of course, on the forum, formidable arguments may be established for tort claims of fraud and negligence or complaints based on negligent misrepresentation or bad faith. However, reliance on non-contractual theories of law will require special legal skill and counsel. As illustrated in the foregoing chapters, foreign legal entanglements of this nature should be avoided wherever possible.

Although these theories are useful and valid alternatives to contractually designated procedures, it is far more prudent to negotiate a fair and explicit contract initially than to base hopes for recovery on judicial or arbitral generosity—after a serious claim arises.

Claim Recognition and Prevention

PREPARING CONTRACT DOCUMENTS

Care by the owner in the design phase of a construction project will minimize disputes and decrease the chances for future claims. Owners rely on architects and engineers to articulate their construction needs in the “language” of the builder in the plans and specifications of the project. Successful completion of any project is dependent on communication and cooperation between the owner and the contractor. Since the plans and specifications define what the owner expects to receive from the contractor, preparation of these must be done with reasonable precision. In addition, there must be an accord on their interpretation. Establishing such communication between the parties at the earliest phases of a project’s development helps facilitate matters at the more complex construction phase.

Contract documents typically include the Instruction for Bidders, the Invitation to Bid, the Proposal Form, the Bond Form (if applicable), the Agreement, the Conditions of Contract, the Technical Specifications and the Contract Drawings (or Plans). The Conditions of Contract include the General Conditions, the Supplemental Conditions and/or Special Conditions.

The Conditions of Contract deserve individual discussion. The General Conditions section contains the definitive information about the contractual-legal relationships between the parties and the parties should be thoroughly familiar with its terms. Construction contracts vary significantly in their general conditions. Internationally, the most commonly used standard forms are those prepared by the International Federation of Consulting Engineers (FIDIC) entitled, The Conditions of Contract (International) for Works of Civil

208 Avoiding Future Claims
Engineering Construction and Conditions of Contract (International) for Electrical and Mechanical Works. For greatest protection of the parties, a standard general conditions form should be bound into the specifications, not simply incorporated by reference. Thus, neither party can claim ignorance of its terms.

If a project requires a contract specifically drawn to suit its needs, it is prudent to seek advice of counsel, particularly one with construction law expertise, before attempting to draft a non-standard set of general conditions.

Supplementary Conditions are best defined as additions to, deletions from, or modifications of the general conditions. They are typically used to tailor a general purpose contract, such as FIDIC's, to specific situations. Provisions for additional insurance, for example, would come under a supplementary conditions section.

A Special Conditions section covers circumstances and situations unique to a project. Examples of special conditions include clauses dealing with access to streets or freeways by construction equipment, protection of buried public utilities, noise suppression while working in the vicinity of a hospital, and observance of or relief from particular regulations. A well-planned contract will contain an appropriate special conditions section and thus eliminate a likely area of dispute.

SPECIFICATION REVIEW

Technical specifications must be carefully coordinated with plans. The specifications provide information on fabrication, quality, methods of installation, field testing, guarantees, cleaning, and finishes. The plans show the method of connection, locations, size, shape and the relationships of materials.

Insufficient attention to specification coordination can lead to mistakes. Past experience has shown that a pattern often develops when mistakes occur, with most mistakes happening at the meeting point of design disciplines. A common mistake is lack of coordination between these disciplines, leading to inconsistent drawings which describe the same item. For example, a mechanical designer showed, in his drawings, that the electrical wiring to a motor was to be done by a separate trade, electricians, and referred the reader to the electrical drawing. However, the electrical blueprints only showed a wiring plan up to the motor and noted: “See mechanical drawing.” Neither drawing contained the instructions nor responsibility for connecting the wiring to the motor. A careful analysis of the plans and specifications, placing emphasis on their interrelationship, would eliminate this problem.

Potential problems might arise on large grading projects, such as airfields, where it is common to find several civil engineers working on contour drawings of floor and grade levels. On one such project, a comparison of the civil and architectural drawings revealed that the contours did not match. The drawings, which had been prepared by a number of different consulting firms, made merging drawing numbers difficult. Even when the drawings were merged, they were difficult to follow.

Therefore, it is important to utilize a standard sheet numbering system and title block layout as well as a revision block and a system of identifying revisions. Each revision should be identified chronologically, and sequential numbers or letters should be assigned. The changed work should be identified on the drawings so it can be easily found.
Whenever a change is made, a reproducible copy of the way it was should be filed; being able to trace changes on design drawings after the contract is signed is essential. Each addendum with changes to the drawings adds to potential confusion, so it must always be clear to the contractor what the new drawings do to the contract requirement. A copy of the design directive covering the change helps people understand the change. An in-house record of all design directives and the history of a drawing are important in controlling the cost of a job and controlling future claims. It is important that the history of changes be traceable through these drawing revision blocks and design directives.

Technical specifications can disrupt progress when they stipulate materials which are no longer available. A contractor who has delayed procurement may discover this fact too late and at a pivotal point in construction, necessitating a time extension until an equivalent product can be selected, purchased and delivered. An alert owner can avoid this situation by careful attention to specifications and continuous supervision of contractor progress.

Although it is important that drawings and specifications be consistent, understandable and unambiguous, it is even more important that field personnel be thoroughly familiar with them and the purposes they serve.

RECOGNIZING PROBLEMS AT THE SITE

Contract drawings often contain errors even after they have been reviewed. An alert field staff can save money by acting quickly to correct a mistake when one is uncovered during construction.

An inspector on a hospital project carefully examined the route nurses would take in moving newborn babies from the delivery room to the infant intensive care area. The inspector discovered that, according to the plans, the shortest route for this trip was to be blocked by two autoclaves which were to be built across the corridor. If the wall were built according to the plans, nurses would have had to carry the newborns to the intensive care unit by a circuitous route, taking them through the contaminated linen area. The wall installation was halted and the tile setters were instructed to tile straight through this section of the hall. Subsequently, it was learned that the mechanical engineer had made his design decision without consulting the hospital staff. The inspector's quick thinking kept correction costs low and avoided the expense of removal or reinstallation of the wall.

As is apparent, coordination among field personnel is critical to the completion of a project in the most efficient manner.

CHANGE ORDER REVIEW

Change orders which require modifications in contract price and/or time may be issued for a variety of reasons. Examples are: owner-initiated additions; deletions or alterations; substitutions of materials; and unanticipated or changed conditions. The responsibility for change order authorization lies principally with the owner. Unresolved change orders are among the most frequent causes of contract disputes, claims and delays.

If the need for a change arises unexpectedly, it is important for an owner to move quickly. Allowing the resident engineer and contractor to argue the
merits of the change is expensive and imprudent. Instead, an owner should, to the extent possible, analyze the facts impartially, seek prompt legal review whenever the contract seems unclear, and enter into negotiations before additional costs accrue. Should added cost seem unavoidable, it is best to determine this early so as not to delay the remaining work.

 Occasionally, changes requested by owners may appear to involve no additional cost. However, a valid claim for monetary compensation may nevertheless result from such a “no-cost” change. The owner is wise to evaluate in advance whether indirect costs may arise from the change and to offer the contractor a reasonable price. Such an anticipatory offer is often a prudent move in circumventing potential future claims.

Project Planning and Scheduling

PLANNING

Success in construction depends on planning and achieving the efficient use of money and time. Most who have been involved in large construction projects are familiar with the general principles of project planning and scheduling. This section outlines how network planning can be applied effectively.

The planning phase of a project entails identifying the work activities needed to achieve job completion and to sequence these events in such a way as to obtain peak performance. Scheduling (or programming) can be defined as introducing time parameters for all events to determine completion dates of individual activities and the overall completion date of the project. Together, they form a system designed for the most efficient utilization of manpower, money, materials, and time.

The owner and contractor rely on planning and scheduling not only to ensure on-time completion of the project, but also to avoid claims and disputes along the way.

The two most common scheduling techniques are bar charts (or Gantt charts) and network diagrams. The bar chart is commonly used for jobs with few activities. It provides a vertical listing of the project’s major activities; a horizontal axis illustrates the time scale. A bar is then drawn on the graph designating the dates of commencement and completion of each activity, representing only a period of time over which the work is accomplished, but not the exact number of days the actual works performed. The major activities may be broken down into sub-activities for a more detailed schedule.

The simplicity and graphic control effectiveness of bar charts has led to their wide acceptance as an effective planning and scheduling device on certain projects. However, they cannot demonstrate the interrelationships between tasks. Furthermore, the inherent limitations and simplicity of a bar chart reduce its effectiveness in projects involving a large number of varied activities. This led to the development of a more detailed approach, network planning, which incorporates a variety of job activities and graphically depicts their interrelationship.

Several types of network diagrams may be utilized. The Critical Path Method (CPM) is the system commonly preferred. A CPM diagram sequences all construction events in a logical order, indicating the duration of each event.
and the interrelationship between events to determine the path or paths of construction which are critical to the project's timely completion. [See Table 8-1 in Chapter 8 for an illustration.]

A preliminary schedule of construction informs the prospective bidder of the project's critical items—milestones, thereby enabling the contractor to tailor his bid to meet these requirements. Advance knowledge of completion dates for milestones will allow the contractor to estimate the need for adequate supervision, manpower, and material to achieve the owner's goals. Thus, with objectives clearly indicated, the owner can avoid needless expense and misunderstanding which, in effect, reduce the possibility of future claims. At the same time, the owner can solicit from the contractor suggestions for alternative methods of project scheduling and control.

The contractor should likewise not be totally restricted by owner-imposed construction methods, because costs and time may be inflated if a contractor is not free to modify his methods to suit minor variations in the project requirements, weather, or labor force. The contractor should be free to pursue any reasonable method of construction to achieve the designated milestones. However, the owner is vested with the power to issue final approval of any schedule submitted by the contractor. Once the contractor is put on notice by a pre-bid schedule of the required objectives and the time restrictions to meet these objectives, it is his responsibility to base his bid on construction procedures that will satisfy the schedule's requirements. A pre-bid CPM network schedule may be included with the bidding documents to assist the contractor in visualizing the time and phasing requirements of the project.

Certain pitfalls in the scheduling process have led to some disillusionment about scheduling controls. The designer sometimes fails to assess the feasibility of the job schedule. This can result in completion dates determined by special influences and inadequate evaluation of the resources, equipment and work coordination necessary to meet them. In the design stage the schedule can reveal potential conflicts between contractors on site, excess demand for particular trades, or other logistical problems. The owner should realize that fast construction schedules may work against his own interests and the contractor's and eventually lead to claims.

Oftentimes, the specifications fail to adequately describe how and in what manner the CPM should be designed and monitored. If relegated to just a contract expense, the contractor may spend very little on CPM. If the scheduler is not responsible for also monitoring CPM, the updating may be inaccurate or impossible. A contractor's priority will be reporting on pay items rather than CPM activities.

In addition to planning and scheduling the work sequence, CPM is an important base for establishing and assessing most claims. Failure to handle its development in design and start-up construction opens the path to controversy.

**SPECIFICATIONS FOR SCHEDULING**

A set of sample provisions for implementation of CPM, which addresses some of the problems just mentioned, follows in this Section. First, certain features of the clauses merit explanation or amplification.

212 **Avoiding Future Claims**
Procedure

A pre-award conference will be held approximately two weeks prior to bid opening. All prime contractors should plan to attend this meeting. An explanation of the preliminary CPM schedule will be given and various circumstances affecting the construction will be discussed.

After contracts have been awarded, the prime contractors and their principal subcontractor shall meet with the architect, owner and CPM consultant to mutually develop a construction network and schedule.

CPM Schedule

Project Schedule—To enable work on the project to be laid out and prosecuted in an orderly and expeditious manner, to assist the contractors in coordinating work, and to evaluate progress and status at various stages of the project, the owner will utilize the Critical Path Method (CPM) of planning and scheduling, and will retain a CPM engineer.

Construction Schedule

CPM ORIENTATION After contract award, the CPM engineer will conduct a half-day CPM orientation seminar for all contractors' project personnel, and owner's and architect's representatives, plus those subcontractors who have been selected.

INITIAL SCHEDULE Following the orientation seminar, the CPM engineer should meet with the project superintendents and project engineers of the contractors to revise, expand and modify the pre-bid schedule to portray the specific plan of operation envisioned by the contractors, including the sequence of activities among all contractors. It is desirable for the CPM networks to reflect the contractor's actual plan of operation for its prosecution of the work.

Meetings with the other contractors will then commence to enable the logical sequence of work for all contractors to be incorporated in a master network for the project.

As networks are completed for the various phases of construction, the CPM engineer will submit these networks to the contractors for insertion of estimated times and crew sizes required for each individual activity. One calendar week from date of receipt of each network will be allotted to review sequence, insert durations and crew sizes and return networks.

When all networks have been returned, the CPM engineer will process equipment to develop an Initial Schedule which will indicate the early and late start and finish dates of the activities for all contractors.

OFFICIAL PROJECT SCHEDULE Upon submission of the Initial Schedule, the CPM engineers, owner and architect will hold a meeting with the various contractors to discuss the schedule and iron out conflicts. The networks will be revised as required so as to indicate compliance.
with the contractual completion dates as specified. The revised CPM networks and related computer schedule will then be issued as the Official Project Schedule and will be binding upon the contractors. Any contingency (difference in time between the project’s early completion and required contract completion date) in this schedule belongs to the project, not any one party to the contract.

SEPARATE BIDS WILL BE TAKEN AND AWARDED For General Trades, Heating, Ventilation and Air Conditioning, Plumbing and Sewers, Electrical, and Elevators. General Trades contractor will set the pace necessary to achieve the owner’s needs. The other prime contractors shall keep pace with this schedule. In the event of a serious unreconcilable disagreement as to logic, the CPM engineer, owner’s representative, or architect shall act as arbiter.

UPDATED OFFICIAL PROJECT SCHEDULE At the end of the first month following issuance of the Official Project Schedule and every month thereafter as required (or at lesser intervals if deemed necessary), the CPM engineer will hold a meeting at the job site to update the schedule. The contractors will have in attendance at these meetings personnel who are intimately familiar with the project and its current status and who have decision-making authority. They will assist the owner and the CPM engineer in every manner to determine the actual status of the project, and make such decisions as may be necessary to keep the project on schedule.

The Weekly Progress Report forms must be filled in prior to the meeting to indicate the status as of the end of the month of each activity, by indicating the remaining duration and percent complete for all items—shop drawings, procurement of material, etc., as well as actual onsite construction activities. This information will be reviewed with the owner’s representative at the meeting and then will be incorporated in the network.

Revisions or changes to the original plan will be made as they become known. An updated computer schedule will then be issued by the CPM engineer indicating the status of the project as of that date.

The project has liquidated damage provisions (Instructions to Bidders). Information provided by the updating will be utilized in determining responsibility for delay in the schedule. Should construction carry on beyond contract termination date, financial responsibility will be so determined using the Official Project Schedule.

WEEKLY PROGRESS REPORTS Each contractor shall submit a Weekly Progress Report to the owner, using a copy of its portion of the updated Official Project Schedule. This report will consist of a simple checklist on which the contractors will indicate start and finish dates for all activities, as well as percentage of completion. In addition, the contractor will in-
dicate which activities he plans to start the following week. This report will be submitted to the owner's Field Representative every Monday morning.

COMPLIANCE WITH THE SCHEDULE If the contractor fails to adhere to the Official Project Schedule, or to the revised schedule, he must promptly adopt methods of construction which will ensure timely completion of the project. In the event a notice is received of a change in the contract or any extra work to be performed, or other conditions exist which are likely to cause or actually causing delays, the contractor shall notify the owner in writing within ten days of the effect of the change upon the Official Project Schedule.

The cost of preparing and implementing the Critical Path Schedule will be borne by the owner. However, the contractor agrees to bear the cost of furnishing such of his regularly employed personnel as may be necessary for the purpose of working with the owner or its CPM consultant in preparing or maintaining the Critical Path Network.

REQUESTS FOR PAYMENT Contractor's requests for payment shall be keyed to the schedule activities of the CPM Schedule.

TIME EXTENSIONS Time extensions will not be granted unless substantiated by the CPM Schedule and then not until the CPM Project Contingency becomes zero. Time extensions granted to the prime contractor will be granted to all except where two or more contractors experience concurrent delays (as a strike of two different crafts at the same time, used by different contractors), then the greater delay will be awarded.

SAMPLE PROVISIONS FOR IMPLEMENTING CPM

Procedure:
1. A meeting with contractors before bid opening familiarizes them with preliminary schedules and allows them to reflect time goals in their bid.
2. After award of the contract, the schedule is the product of efforts by the A/E, the owner and the contractor.

CPM Schedule:
1. The owner assumes the responsibility for the scheduling by hiring a CPM engineer.
2. An orientation seminar allows the CPM engineer to explain the process to the contractors and subcontractors and the project personnel.
3. The schedule is developed from an interchange of ideas with project people who will be responsible for its implementation. After a master network is developed by the CPM engineer, it is distributed for review and comments and the identification of time periods and crew sizes. The product of this effort becomes the Official Project Schedule.
4. It is important to all future discussions about time, that the specifications mandate that float belongs to the project.
5. The method of updating is described in detail with the CPM engineer responsible for obtaining current status from the A/E and contractor. The CPM is identified as an instrument for determining liquidated damages, which emphasizes the need for continuous reporting on progress for CPM updating.

6. The specifications provide for weekly progress reports on the schedule so that short term problems are kept under surveillance in between the monthly computerized schedule updates.

7. The methods of identifying and approving deviations from the CPM schedule are outlined.

8. The cost of preparation and implementation is borne by the owner with each contractor guaranteeing to assign personnel for assistance in the CPM effort.

9. Payments are tied to the schedule and time extensions are evaluated against the schedule.

Basic guidelines for establishing realistic CPM procedures in construction contracts are:

The clauses should be clearly written and easily understood.

Information for the schedule should be sought from the contractor’s people to the maximum degree.

The contractor should have an early opportunity to participate in the planning and scheduling of a project.

The schedule should be kept current by regular updates.

The updating requirements should be realistic so that information can be readily obtained and reasonably accurate.

Subcontractors should be included in the schedule planning.

Any delays and/or changes in the work should be shown clearly on the schedule.

UPDATING

Updating assesses on-going job status and measures periodic progress. Without careful monitoring of the project on the basis of the CPM schedule and frequent schedule updates to reflect actual job conditions, little will be gained from network scheduling. A properly utilized schedule helps to anticipate and avoid costly delays, and can do much to avoid disagreements as to the impact of critical and noncritical delays. Therefore, the owner should expressly provide in the contract for the method and frequency of updating the schedule.

The owner is placed in a better position if the contract provisions clearly provide for schedule updates, and the contractor fails to keep the schedule current. A future claim by the contractor in relation to the schedule may be rebutted effectively by the owner if the contractor has abandoned the schedule. The same applies to owner-provided schedules, as summarized by the following language from a United States case:

It is essential that any changes in the work and the time extensions due
to the contractor be incorporated into the progress analysis concurrently with the performance of the changes or immediately after the delay and thus integrated into the periodic computer runs to reflect the effect on the critical path. Otherwise the critical path chart produced by the computer will not reflect the current status of work performed or the actual progress being attained.2

Sophisticated management tools are available to permit accurate, logical and comprehensive planning, scheduling, financial and manpower control from the early design stage to the final payment. These tools have been used extensively and are constantly being refined and expanded to solve the complex problem of successfully completing a project on time and within budget. The Critical Path Method, with related manpower and cost features, is generally the backbone of these management tools.

"AS-BUILT"

Application of detailed monitoring techniques, like CPM scheduling, become extremely useful in analyzing claims for delays, suspension of work, acceleration, and loss of productivity. Through network analysis, a delay or a suspension of work can be segregated and identified to reveal its effect on project completion. CPM's usefulness in a claimed loss of productivity and/or acceleration is reflected in its ability to supply valuable proof and to substantiate the facts through a network evaluation of the disputed portion of the work.

Often, two or more types of claims are present in one dispute which create difficulty in isolating any one type. To alleviate this problem, a comparison of an “as-planned” with an “as-built” network schedule can be used in claims presentations to demonstrate the difference between how the project was to progress and how it actually did progress.

In a United States case, an after-the-fact CPM analysis network was prepared (by an outside consultant) at the government's request for the purpose of illustrating that delays in contract completion were attributable to the contractor and not to delays caused by defective government design. It was shown that the total float time was more than adequate to absorb the design delays. The board concluded that comparing an “as-planned” with an “as-built” network provided a sound basis upon which to evaluate various project delays.3

Where there are a number of possible claims in one job, it may be necessary to prepare an “as-built” schedule after every major delay or disruption, which in turn, would become the “as-planned” schedule with respect to the balance of the work. Computer programs currently available show the actual dates of printout, thus producing a series of “as-built” schedules. These are invaluable in claims analysis.

Cost Control Techniques

One function of project cost control is to alert contracting parties as to the profitability of the project on an ongoing basis. A formalized cost control system can sound the first warning that work is being performed outside the
contract, or at a delayed pace, entitling the contractor to additional compensation. It enables the owner to compare the profitability of alternate construction equipment, materials and methods and will flag problem areas requiring intensive management. Through project cost control a contractor can establish a base of reliable costs to aid in preparation of sound estimates, as well as establishing a control program that will illustrate the economy of equipment utilization and the desirability of replacing of obsolete equipment.

The basic method of project cost control is to collect costs related to each item of work, determine units of work done, calculate the unit cost for the component items and compare these costs with some predetermined control budget cost.

The method of contract payment is dependent upon such factors as type of construction, the ability to estimate needed materials, supplies, manpower, etc., as well as other considerations such as the owner's need to anticipate the maximum project cost. The method of payment decided upon will also play an important role in determining contractor claims for extra work, changed conditions, or added (or decreased) quantities (Chapter 2, Section on payment provisions described the types of payment preferred in international contracting.)

ALTERNATE BIDS

When testing for potential cost savings, an owner may request alternate bids on one or more items. It is important that alternate pricing, whether additive or deductive, be simple and clear. Contractors have little time to evaluate complicated alternatives, and, as a consequence, price them conservatively. In general, "add-ons" are more desirable for the owner since experience indicates they are priced more realistically. The contractor often does not expand overhead costs in his base bid in pricing added work, due to the difficulty in determining allocable overhead costs. On the other hand, the contractor does not reduce overhead in pricing a deduct item, so that such a bid contains a measure of costs which is not to be incurred by the contractor.

The owner should not use the alternative bid as a "fishing expedition" to engage the contractor's skill and time to make a selection which should have been accomplished in the design process. If, for good reasons, an alternate bid is sought, a few guidelines should be followed: (1) have "add" alternatives only; (2) have as few of them as possible; (3) keep them simple and straightforward; and (4) use them only for work which is genuinely desirable.

MONITORING

Through cost reporting, actual project costs to date and an estimate of costs to complete can be determined. A comparison of the total estimated cost of completion with the original budget estimate will indicate a variance. Utilizing this information, effective cost controllers may reverse escalating cost trends to ensure that the final project cost does not exceed the total budget.

An effective monitoring system depends primarily upon accurate cost reporting. All personnel should be educated regarding the function, use and importance of cost control in addition to specific instruction concerning cost reporting. Ill-informed personnel may view cost reporting as a check on their
productivity and alter reports, perhaps by reapporportioning work hours to less costly segments of the project. Distortion of the cost picture can be minimized by a well designed reporting system with periodic checks by management personnel.

Cost reports and project schedule are used with trend analyses to determine projected costs and completion dates. Estimates of completion cost should be based on detailed schedules of values and objective measures of actual completion, rather than a subjective estimates of percent completion. Trend analyses permit the identification of problems in the precritical stages, so that suitable corrective measures can be taken.

It is advisable to establish milestones in the project schedule at which points estimated and actual costs can be compared. This will alert the owner and contractor to the present financial status of the work and aid them in projecting future expenses and final costs.

**Contract Administration**

Many agencies, authorities, governments and private owners lack technical and administrative capabilities necessary for managing construction projects. A necessary ingredient of a successful claim avoidance program is a quality contract administration program. Some owners employ a construction manager. In the author's opinion, the managerial functions ought not be carried out by the design professionals. The design professional can hardly make an objective decision on his own proposals and designs.

Outside contract administration services can be performed on behalf of the owner to expedite decisions, monitor the progress and cost of the project, and effectively fulfill the administrative and managerial responsibilities associated with the role of ownership. The contract administrator serves as the owner's impartial and independent representative, and as the link between design professionals, users, owners, and contractors, establishing the onsite organization, lines of authority, and channels of communications necessary to carry out the overall plans and project goals for the owner. Job meetings on such matters as procedures, scheduling, progress and problems can be conducted if procedures are established for coordinating efforts among the owner, the design professionals and the contractors.

Responsibilities of the contract administration service will include taking, transcribing and distributing minutes of such meetings to all parties, providing design review, specification review, cost management analysis, value engineering, scheduling, purchasing, planning, contracting, financial administration services, and establishing computerized systems analysis and control—as required by each particular job.

**Protecting the Record**

What may be “perfectly clear” at the moment it occurs may eventually become a vague memory unless job information is compiled as the work progresses. In the event of a dispute or claim, a complete record of job progress will
facilitate a prompt resolution. The preservation of such information serves as protection for both the owner and the contractor, since recorded facts may sustain or refute the substance of a claim.

FIELD REPORTS

Accurate records of field meetings, conversations, work performed, construction equipment onsite, daily labor force by craft, materials and equipment deliveries, etc., may be indispensable in the event of a contract dispute.

COMMUNICATIONS

Communications between parties through memos, telexes, other correspondence serve as valuable assets for future reference. All such written communication should be preserved. What was unimportant at one stage of the job may develop greater significance later. This is especially true when an outside consultant is called in to review a claim, since he will base his analysis on all available documentation.

Status reports in the form of progress schedules, job meeting minutes, CPM schedule updates and accompanying progress reports, evaluation, and recommendations all serve as valuable data which should be maintained in an accurate filing system. Without such information, an attempt to reconstruct the job “as-planned” vs. “as-built” may itself become a problem, rather than a tool aiding analysis.

Cassette tapes are a convenience when one cannot spend time writing, or when copious notes must be condensed. Oral recordings make a more detailed description of an event possible. To add to their convenience, cassettes need not be transcribed unless a problem has developed. At that time it is desirable to organize them via a written outline so that all topics are covered coherently with a minimum of repetition.

VISUALS

Photographs can be of great significance in proving negligence or in supporting or rebutting claims, in resolving change order disputes, or, ideally, averting potential claims. An “instant” camera has the advantage because the content and clarity of the photos can be evaluated while the photographer is still at the site and before conditions are altered. Such photographs should be immediately identified, dated, and signed.

Video tape recorders best illustrate activities in motion and more vividly tell the story. Therefore such equipment is useful in situations where a still picture would not adequately depict the condition. Motion pictures can be particularly persuasive in claims for loss of productivity where a party is trying to assert or defend against the existence of site problems, interference, loss of momentum, “stacking” of trades, etc.

TESTS

The relative objectivity of properly conducted tests make them an important tool for either party. All data relating to testing, including orders for tests, detailed records of the process, and results of tests (successes, failures and
re-tests) should be carefully organized, dated and clearly identified. This data should be preserved for future reference.

When serious questions arise that are answerable by testing, the preferable course is to conduct the necessary test. The impartial result may settle early on a potentially troublesome dispute.

Dealing with Disputes

A claim should be given a prompt and thorough review when it is first identified and brought to the parties' attention. A minor misunderstanding or dispute might be resolved by quick action, but, postponing resolution may lead to ill will and inflated claims.

The contract documents should be consulted to determine whether contract language addresses the problem. A determination should be made of whether owner-contractor positions can be reconciled, and what adverse effects might occur if an immediate decision on the disputed issue was postponed. A timely examination of the problem will generate a more accurate factual picture and a truer account of alleged costs or damages than if the dispute is ignored or consideration delayed.

When a dispute involves possible deficiencies or errors in the design, the owner should require a timely response from the architect or engineer (A/E, owner's representative). An A/E (because of his combined responsibilities of designing and inspecting construction) is a primary source of information. Occasionally, the A/E may not be capable of the objectivity necessary to evaluate the mistakes and inaccuracies of his own design. In that case an independent party may be required to monitor the problem. As always, the response to the claim should be in writing, including whatever supporting evidence the analysis requires. The owner should, if possible, await the response of the A/E or an independent party before making any commitment to the contractor regarding design changes.

When both parties exhibit good faith in their discussions, an amicable settlement is more easily reached. In the long run, prompt action will result in savings of time, money and aggravation.

ISOLATING THE ISSUES

Settlement of a claim is impossible if the parties cannot agree on the issue in dispute. Sometimes only intense and prolonged discussions reveal the crux of the problem. Therefore, narrowing the scope of disagreement to the primary point of disension early will speed settlement.

The contractor should organize his claims so the central issue is clearly identified and distinguished from concurrent, but unrelated issues. In that way, only applicable contract provisions need be consulted, which should result in a more prompt and pertinent decision.

Postponing resolution of the dispute may lead to a deterioration in relations between the parties, inferior performance by the contractor or delayed payments by the owner. Resolving minor problems quickly alleviates confusion, avoids unnecessary controversy and facilitates the claims resolution process.
EXPOSURE ANALYSIS

Cost
The impact on cost should be analyzed to determine what effect the dispute will have on overall project costs. Other aspects of increased costs should be considered, too. For example, the effects on cash flow, the reasonableness of the costs associated with the dispute, and the future liability of the parties with respect to costs generated indirectly by the dispute.

Time
Time analysis should begin with a review of the time provisions of the contract documents, with emphasis on their relevance to and influence on the disputed issue.

In addition, project records and documentation should be examined to analyze whether and how contract time limits affected contractor progress—whether he was restricted by them or compelled to work in excess of them. Ideally, such records should contain projected vs actual dates of both commencement and completion, a detailed record of the contractor’s progress and an account of all unusual events. Thorough documentation of this sort is persuasive in establishing or defending a claim.

Relationships
In addition to the influence of time and cost factors, relative bargaining power of the parties to the contract may play an important role in the ultimate outcome of a dispute. At some point during a dispute either party, owner or contractor, could find itself in an advantageous bargaining position. A variety of factors may tip the scale. For example, relative financial status of the parties or the degree of completion of the project. Such dominance can affect the other party’s resolve and significantly influence the outcome.

Thorough analysis of the problem in the ways outlined by this chapter can help strengthen even the least favorable position. That’s because sharpening the issues defines the basic points of disagreement, highlights weak spots in either side’s argument, and ultimately facilitates resolution of the dispute.

REFERENCES


222 Avoiding Future Claims
GLOSSARY

The following definitions are brief and intended only to familiarize the reader with the terms. The text contains in-depth discussions of many of these concepts.

A/A.2d—Atlantic Reporter, reporting the decisions of the state district and appellate courts of the states of Maine, Vermont, New Hampshire, Connecticut, Rhode Island, Pennsylvania, New Jersey, Maryland and Delaware. [United States]

AAA—American Arbitration Association, a neutral, nonprofit organization administering arbitration hearings. [United States]

ABA—American Bar Association, an organization of members of the federal or state bars, i.e., licensed attorneys. [United States]


A.C.—Appeals Cases Law Reports, reporting the decisions of the Privy Council Judicial Committee, House of Lords-Peerage Cases, Queens (or Kings) Bench, Equity, Irish and Scottish Tribunals. [United Kingdom]

ACCELERATION—An increase in the rate of progress of the work in order that the project be completed on or prior to the original completion date (including any entitled extensions of time). “Expediting” is a term also used in international contracts to express this concept, although the meanings are not identical.

ACT OF STATE DOCTRINE—Principle that courts of one country have no power or authority to review acts of state, (e.g., acts of legislature or executive orders) of another country.

A. D.—Appellate Division Reports, official decisions of the appellate division of the New York state supreme court, 1896 to date. [United States]

ADVERSE SITE CONDITIONS—Physical conditions at the site which differ unfavorably and materially from those indicated or reasonably anticipated at bidding time. Other terms used to express this concept are “differing site conditions” and “changed conditions.”

AGBCA—Department of Agriculture Board of Contract Appeal, administrative tribunal of that agency. [United States]

A.H.—Anno Hegirae, indicates that a time division falls within the Muslim era.

Ala. L. Rev.—Alabama Law Review. [United States]

ALI—American Law Institute. [United States]
**All.E.R.**—All England Reports, reporting the decisions of the House of Lords, Privy Council, all divisions of the Superior Court and Courts of Special jurisdiction. [England]

**Am. J. Comp. L.**—*American Journal of Comparative Law*. [United States]


**Arb. J.**—*Arbitration Journal*. [United States]

**Arch. Rec.**—*Architectural Record* (McGraw-Hill, Inc.). [United States]

**ASBCA**—Armed Services Board of Contract Appeals, administrative tribunal of that agency. [United States]

**Austral. H.C.**—Australian High Court, official reports of the High Court of Australia. [Australia]

**B.C.A.**—Board of Contract Appeals Decisions, a publication reporting decisions of administrative tribunals of all agencies of the U.S. Government. [United States]

**BILL OF QUANTITIES**—A detailed listing of each item of work required by a contract. In building contracts, a separate bill is issued for each trade; in engineering contracts a separate one is issued for each segment of work (e.g., excavation).

**B.L.R.**—*Business Law Reports*, 1977 to date. [Canada]

**Brit. Y. B. Int'l. L.**—*British Yearbook of International Law*. [United Kingdom]


**CALVO CLAUSE**—Contractual provision in which one party to a transnational contract waives the right to seek his home country's aid in resolving a dispute arising under that contract.

**CARDINAL CHANGE**—Change in the contract work which requires work substantially different from and outside the scope of that originally contemplated by the parties, i.e. a breach of contract.


**CHANGE**—A modification of the work as originally described in the contract documents. (“Change” is generally used only in U.S. and Canada.) The term “variation” is also used in contracts and is interchangeable.

**CIVIL LAW**—System of law in which legal principles are codified. Cases are decided through application of these codes to the facts of each case. Prior decisions on similar facts or legal issues are not binding. Judges actively conduct court proceedings.

**C.L.R.**—*Commonwealth Law Reports*, reporting decisions of the Privy Council and High Court of Australia, 1903 to date. [Australia]

**C.O.**—Contracting Officer, the individual authorized to execute a contract in behalf of a U.S. Government procuring agency.

**Colum. J. Transnat'l L.**—*Columbia Journal of Transnational Law*. [United States]

**COMMON LAW**—System of law in which the prevailing legal principles
are derived from judicial decisions, as well as legislative acts. Prior judicial decisions regarding facts or legal issues similar to a case at bar are binding on the court. Hearings are primarily adversarial proceedings in which the judge plays a relatively passive role.

**Compensable Delay**—Delays caused by acts or omissions of the owner/employer which may result in reimbursement to the contractor.

**Concurrent Delay**—Simultaneous delays in two or more phases of the work caused by one or more of the parties or by a third party.

**Constr. Cont.**—*The Construction Contractor.* [United States]

**Constructive Change**—Informal change order (e.g., the words, acts, omissions or conduct of a party) which does not comply with contract provisions, but which nevertheless effects a change in the work. The term constructive variation is also used.

**Constructive Notice**—Communication which does not comply with contract requirements (e.g., is not in writing), but results in actual knowledge.

**Cost Plus Pricing**—Method of pricing in which the total price for the work is calculated by adding a percentage mark-up to the actual costs incurred in performing the work. (This percentage generally is specified in the contract.)

**CPFF**—Cost-Plus-Fixed-Fee contract, an agreement in which the owner/employer pays the contractor for all reasonable, necessary direct expenses incurred in the construction of the work, plus a pre-determined, lump sum fee.

**C.P.M.**—Critical Path Method, a graphic scheduling network detailing in logical order the sequence, interrelationship and priority of all phases of work on a project, with the object of determining the path of construction critical to the project’s timely completion.

**CPPC**—Cost Plus Percentage of Cost contract, an agreement by which the owner pays the contractor for all reasonable, necessary direct expenses incurred in the construction of the work, plus a specified percentage of the cost.

**Ct.Cl.**—*Claims Court,* official reports of the U.S. Claims Court. Prior to October 1, 1982, was called U.S. Court of Claims. [United States]

**Ct. of Sess. Cas.**—*Court of Session Cases,* reporting decisions of Scotland’s courts having original and appellate jurisdiction over civil cases. [United Kingdom]

**Cum. L. Rev.**—*Cumberland Law Review.* [United States]

**Dall.**—*Dallas,* official reports of the U.S. Supreme Court, 1790—1800. [United States]

**Devel. Forum**—*Development Forum.* [United Nations]

**D.L.R.**—*Dominion Law Reports,* reporting the decisions of all courts of Canada. [Canada]

**DOT CAB**—Department of Transportation Contract Appeals Board. [United States]
Encyc. Brit.—Encyclopedia Britannica. [United States]

ENG BCA—Army Corps of Engineers Board of Contract Appeal, administrative tribunal for that organization. [United States]


Eng. Rep.—English Reports, reporting the decisions of the Privy Council, the House of Lords and lower courts of England and Wales, 1095-1865. [United Kingdom]

ENGINEERS ASSISTANCE AGREEMENT—Agreement between the Saudi Arabian government and the U.S. Corps of Engineers (Corps) by which the Corps administers a substantial number of Saudi construction projects.

EQUITABLE ADJUSTMENT—A modification of the contract price to compensate for a change (variation) in the work.

EQUITY OWNERSHIP REQUIREMENT—Governmental requirement that nationals of the host country own a specified percentage of the business ventures within that country.

EXCULPATORY CLAUSE—An owner-favoring provision which relieves the owner/employer of any alleged fault or liability when a specified event occurs or when the contractor fails to take certain precautions.

EXCUSABLE DELAY—Delay caused by a condition which was reasonably unforeseeable by, beyond the control and without the fault or negligence of an experienced contractor. Generally, the contractor is entitled to an extension of time.

F.2d—Federal Reporter, Second Series, reporting the decisions of the U.S. Court of Appeals (the federal appellate court) and the U.S. Court of Claims. [United States]

FIDIC—Federation International des Ingenieurs Counsels (International Federation of Consulting Engineers), an independent organization which provides standard contract documents for use on international construction projects.

FIXED FEE CONTRACTS—Agreement in which the contract price is expressed as an undifferentiated, lump sum total.

FORCE MAJEURE—Unforeseeable natural or man-made event which significantly disrupts the progress of the work, e.g., flood or act of war.

FORESEEABILITY—The determination of whether a condition could have or should have been anticipated by a party experienced in the work.

FORMAL CHANGES—Changes which comply with requirements set out in the contract, e.g., that the change order be in writing.

FORMAL NOTICE Communication which fulfills contract requirements as to form and timing, e.g., is given within 30 days of the occurrence of a delay.

F.Supp.—Federal Supplement, reporting the decisions of the U.S. District Courts (the federal trial courts). [United States]
G.C.—Government Contractor. [United States]

GENERAL PRINCIPLES OF LAW—Principles of international law recognized by all civilized nations.

Glendale L. Rev.—Glendale Law Review. [United States]

GSBCA—General Services Administration Board of Contract Appeals, administrative tribunal of that agency. [United States]


H. L.—House of Lords, appeals decisions of the English Court of Appeals, Scottish Court of Session, Inner House, Scottish Court Martial Appeal Court (civil cases) and North Ireland Court of Appeal. [United Kingdom]

IBCA—Department of the Interior Board of Contract Appeals, administrative tribunal of that department. [United States]

ICC—International Chamber of Commerce, comprised of approximately 80 member countries, which provides a Court of Arbitration for settlement of international business disputes and is headquartered in Paris, France.

ICE—Institution of Civil Engineers, a British-based organization which provides several standard contracts for use on international construction projects.

I.C.J.—International Court of Justice, (the World Court), the judicial branch of the United Nations Organization. ICJ is the successor to the Permanent Court of International Justice. [United Nations]


Ill. App.—Illinois Appellate Court Reports, official decisions of the state appellate courts of Illinois, 1877 to date. [United States]

I.L.R.—International Law Reports, reporting decisions of international tribunals.

INTERNATIONAL LAW—Law dealing with the relationships between nations in their capacity as sovereign states.

Int'l Bus.—International Business. [United States]

Int'l & Comp. L.Q.—International and Comparative Law Quarterly. [United States]

Int'l Constr. Cont.—International Construction Contractor. [United States]

Int'l Cont. L. & Fin. Rev.—International Contract Law and Finance Review. [Switzerland]

Int'l Law.—International Lawyer, ABA. [United States]

I.R.C.—Internal Revenue Code, federal statutes and regulations on taxation. [United States]

ISLAMIC LAW—Legal system, also called Shari-ah law, a merger of religious, ethical, social, and legal concepts which is based on the Islamic
J.P.—Justice of the Peace, local law reports, 1837 to date. [England]

JOINT VENTURE—Contractual arrangement in which a project is owned and/or constructed by both foreign and national parties. Host countries sometimes specify percentage of ownership required to be held by nationals. Another term for this concept is equitable ownership.

K.B.—Kings Bench, official reports of the Kings Bench division [England].

LETTERS ROGATORY—Formal written communication, sent by a court in which an action is pending to a court or a judge of a foreign country, requesting that the testimony of a witness residing in the latter jurisdiction be taken and transmitted to the first court.

L.G.R.—Local Government Reports [England]

LIQUIDATED DAMAGES—A monetary amount, specified in the contract, which the contractor must pay to the owner throughout the period of time the work is not substantially completed commencing at the date of completion (plus entitled time extensions) and ending at the time of substantial completion or beneficial occupancy.

L.J.K.B.—Law Journal Reports, Kings Bench, New Series, reporting the decisions of the Kings Bench from 1822 to 1949. [England]

Macph.—Macpherson, Court of Session, 1862-1873. [Scotland]

Middle East Exec. Rep.—Middle East Executive Reports. [Saudi Arabia]

N.B.—New Brunswick Reports, reporting decisions of the provincial courts of New Brunswick, 1825 to date. [Canada]

N.E./N.E.2d—North Eastern Reporter, Second Series, reporting the state district and appellate court decisions of New York Massachusetts, Illinois, Indiana and Ohio. [United States]

Nfld. & P.E.I.R.—Newfoundland and Prince Edward Island Reports, 1971 to date. [Canada]


NONEXCUSABLE DELAY—Delay by a contractor caused either by a foreseeable condition or by one within the contractor’s control, which does not entitle a contractor to an extension of time.

NOTICE—Communications between contracting parties regarding the occurrence of events pertinent to the contract work. (See Constructive Notice and Formal Notice)

N.S.W.R.—New South Wales Reports, official reports of the courts of New South Wales, 1960 to date. [Australia].

N.W./N.W.2d—North Western Reporter, reporting decisions of the state district and appellate courts of Iowa, Michigan, Minnesota, Nebraska, North Dakota, South Dakota and Wisconsin. [United States]
N.Y.S./N.Y.S.2d—New York Supplement, reporting the decisions of the Court of Appeals of New York State, 1938 to date. [United States]

Off. Gaz.—Official Gazette. [Hungary]

O.R.—Ontario Reports, reporting decisions of the provincial courts of Ontario, 1931-1973. [Canada]

OVERHEAD—Costs indirectly incurred in administration of work, e.g., home office expenses, supervisory payroll, office equipment costs, communication expenses.

OWNER'S REPRESENTATIVE—An agent who represents the owner at the project site. Other titles used are Architect, Engineer, Contracting Officer, Superintendent Officer, Employer's Agent, Principal's Manager or Field Technical Manager.

P/P.2d—Pacific Reporter, reporting decisions of the state district and appellate courts of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, New Mexico, Oklahoma, Oregon, Utah, Washington and Wyoming. [United States]

PACTA SUNT SERVANTA—Contractual undertakings must be respected.

P.C.I.J.—Permanent Court of International Justice, judicial branch of the League of Nations, established in 1920 and succeeded by the U.N.'s International Court of Justice.

P.L.I.—Practicing Law Institute. [United States]

PODBC—Post Office Department Board of Contract Appeals (Function of the PODBCA have been assumed by the Postal Service Board of Contract Appeals, PSBCA), administrative tribunal of that agency. [United States]

PRACTICAL COMPLETION—The stage of construction at which the work is ready for occupation in all ways relevant to the contract, except for latent, undiscovered or merely trivial defects. Also called substantial completion.

PROFIT—Excess of income over all items of cost.

PSBCA—Postal Service Board of Contract Appeals, administrative tribunal of that agency. [United States]

Pub. L. No.—Public Law Number, numerical designation of statutes enacted by the U.S. Congress. [United States]


Q.B.—Queen's Bench, official reports of the Queen's Bench division. [England]


S.A.L.R.—South African Law Reports, reporting the decisions of the courts of South Africa. [South Africa]

S.A.S.R.—South Australian State Reports, official reports of the South Australian Courts. [Australia]

Glossary 229

Saudy Bus.—Saudi Business. [Saudi Arabia]

SCHEDULE—Detailed plan sequencing the work of a project. An interchangeable term is “programme.”

S.C.R.—Supreme Court Reports, official reports of the Supreme Court of Canada. [Canada]

SHARI-AH LAW—See Islamic Law.

SOVEREIGN IMMUNITY—Legal principles shielding national governments from lawsuits or other adjudicative procedures instituted in their own or foreign countries.

STANDARD FORM—Set of standard general conditions issued by the General Services Administration for use by all U.S. Government agencies. [United States]

STARE DECISIS—Common law principle that a judicial decision settling the legal issues in a given set of facts must be followed in future cases with identical or similar facts.

Stat.—U.S. Statute at Large, official reports of federal sessions law. [United States]

SUBSTANTIAL COMPLETION—The point at which the work is sufficiently complete, in accordance with the contract documents, that the owner may occupy the work for the use for which it was intended. See “Practical Completion.”

SUSPENSION—Temporary and limited cessation of the contract work.

S.W./S.W.2d—South Western Reporter, reporting decisions of the state district and appellate courts of Arkansas, Kentucky, Missouri, Tennessee and Texas. [United States]

TENDER—Quotation of prices for which a contractor is willing to perform work proposed by the owner/employer.

TERMINATION—The cessation of the contractual relationship prior to the scheduled completion of the project by one of the parties. Other terms in use for this concept are determination, cancellation, resolution, removal and forfeiture.

T.I.A.S.—Treaties and other International Acts Series, reports by the U.S. State Department of bilateral or trilateral agreements to which the U.S. is a party, 1945 to date. [United States]

T.L.R.—1) Times Law Reports, reporting the decisions of Queen’s (or King’s) Bench, Court of Appeals, Chancery, House of Lords, Probate Division, Divorce Division and Admiralty Division. [United Kingdom] 2) Tasmania Law Reports, official reports of the decisions of the Supreme Court of Tasmania. [Australia]

TRANSNATIONAL LAW—System of law, embodying general principles of law, which crosses national boundaries and governs the contractual relationships between private parties from different nations.

TURNKEY PROJECT—A venture in which the contractor is responsible
for the design as well as the building of the work. (The contractor may also be involved in land acquisition.) "Package deal" or "design-build" are terms also used to express this arrangement.

**U.C.Q.B.**—*Upper Canada, Queen's Bench Reports*, 1844-1882. [Canada]

**UNCITRAL**—The United Nations Commission on International Trade Law provides a set of arbitration rules for use in settlement of disputes arising out of international commercial relations. [United Nations]

**UN DESI/DPI**—United Nations Division for Economic and Social Information, Development Programme. [United Nations]

**UNIT PRICING CONTRACT**—Method of pricing in which the contract price is expressed on an item by item basis. Overhead and profit are calculated as part of the price of each item.


**U.S.**—When used in legal citations, denotes the official reports of the U.S. Supreme Court, 1875 to date. [United States]

**U.S.C.**—United States Code, the official federal code comprising the general and permanent laws of the U.S. [United States]

**U.S. CORPS OF ENGINEERS**—Branch of U.S. Army, staffed primarily by civilian employees of U.S. government, responsible for all international construction of U.S. Army and Air Force facilities. Upon formation of international agreements, the Corps will also administer contracts for other countries. [United States]

**VARIATION**—A modification of the work as originally described in the contract documents. The term "change" is interchangeable but is generally used only in the U.S. and Canada.

**V.R.**—*Victoria Reports*, official reports of the courts of Victoria, Australia, 1957 to date. [Australia]

**Wall St. J.**—*Wall Street Journal*. [United States]

**W.L.R.**—*Weekly Law Reports*, 1953 to date. [England]

**WORLD BANK**—International Bank for Reconstruction and Development, a United Nations organization headquartered in Washington, D.C., which was founded December 27, 1945. [United Nations]

**World Proj.**—*Worldwide Projects*. [United States]
arbitration of (See Arbitration) clauses, 51-2
negotiation—(See Chapter 11)
owner’s representative, role in, 51-52, 156, 220
Disruption, 126-7
Dominican Republic, 108
Drawings, 8

E
Eichhöy Corp., Formula, 141
Egypt, 11, 15, 34, 57, 200
Enforcement, arbitration award, 175, 177, 187, 195
Engineer (See Owner’s representative)
Engineers Assistance Agreement (EAA), 7, 174
Equipment costs, 141-2
Equitable adjustment (See Pricing)
Equity ownership, 16
Estimated quantities, 77-80
Exchange controls, 14-5
Exchange rate, 13-4, 51
Exculpatory clauses, 52, 99-101
enforcement, 53, 100
examples, 52-3, 99-100
judicial interpretation, 100
site investigation, 54-5, 99-100
Excusable delay, 74-5, 120, 121-3, 124-5, 126
Expedient (See Compressed performance)
Experts, 161-2
Export-Import Bank of U.S. (Eximbank), 195
Expropriation, 10-11
Extensions of time, 75-6, 79-80, 120, 121, 123, 124-5, 134, 135

F
Federation Internationale des Ingenieurs Conseils
(FIDIC), 8, 38-9
FIDIC Conditions of Contract, 8, 38-9, 115, 126
Cl. 1. Definitions, 111, 113
Cl. 5. Languages and Law, 42-3
Cl. 11. Inspection of Site, 52-3, 97
Cl. 12. Adverse Physical Condition, 93-4
Cl. 13. Work . . . to the Satisfaction of the Engineer, 72
Cl. 14. Programme, 75
Cl. 17. Settling Out, 67
Cl. 40. Suspension of Work, 117, 119, 143
Cl. 44. Extension of Time, 119-20
Cl. 46. Site of Progress, 74, 76
Cl. 47. Liquidated Damages for Delay, 136
Cl. 48. Certificate of Completion, 49
Cl. 49. Maintenance and Defects, 50
Cl. 51. Variations, 58-9, 61, 65, 68, 74, 80-1
Cl. 52. Valuation of Variation, 78-9, 106, 111, 112-3, 114, 124
Cl. 55. Quantities, 100
Cl. 60.(1) Certificates and Payment 48
(2) Payment in Foreign Currencies, 51
Cl. 63. Default of Contractor, 127
Cl. 65. Special Risks, 11, 143
Cl. 67. Settlement of Disputes—Arbitration, 51-2
Cl. 69. Default of Employer, 129, 144
Cl. 70. Changes in costs, 44-5, 114
Flasbeach and Moore International Corp., 126
Fixed fee contract, 15, 44-6
Foreseeability, 119, 120-1
Force majeure, 25-9, 48, 72-3, 121-2
Form 23A (See Standard form 23A)
Formal acceptance, 49-50
Formal change order, 58-64
Formal notice, 89-1, 83
Formal variation, 58-64, 70, 74-5
France, 34, 73, 139, 175, 184

G
General principles of international law, 33, 36-8, 177
German Democratic Republic, 181, 193

H
Holdback monies (See Retainage)
Hong Kong, 71, 122

I
ICE Conditions of Contract, 41-2, 115
Cl. 1. Definitions, 113
Cl. 11. Inspection of Site, 92
Cl. 12. Adverse Physical Conditions, 88
Cl. 13. Work . . . to the Satisfaction of the Engineer, 72
Cl. 14. Programme to Be Furnished, 75, 77
Cl. 44. Extension of Time, 126
Cl. 46. Rate of Progress, 74, 76
Cl. 47. Liquidated Damages, 135, 136-7
Cl. 51. Order of Variations, 62, 68, 74-5
Cl. 52. Valuation of Order of Variations, 106-7
Cl. 63. Forfeiture, 127
Iceland, 100, 105, 108
Impossibility of performance, 71-3
actual impossibility, 71
contractual language, lack of, 72
definition, 71
force majeure, 72-3
practical impossibility, 71
superoving impossibility, 73
Immunity, sovereign, 12, 187-91
Implied terms, 67, 69-70, 207-8
India, 20-1, 43, 46, 101-203
Inspection, 69
Institution of Civil Engineers (ICE), 41, 62
Conditions of Contract (See ICE Conditions of Contract)
Insurance, 20, 50, 120, 145
Interference, 126-7
Intl Bank for Reconstruction & Development (See World Bank)
Intl Chamber of Commerce (ICC), 175, 179-80, 198
International considerations, 6-29, 43-44, 105, 109, 175, 184, 187-192
act of state doctrine, 10, 187, 190
arbitration (See Arbitration)
climate, 22, 105, 122
cultural dissimilarities, importance of, 7, 9, 57, 105, 165, 167-8
equity ownership, 16, 105
force majeure (See Force Majeure)
joint venture, 16-9, 105
language, 7-9, 184
litigation, 43-4, 105, 109, 156, 172, 174-5, 187

Index 235
Index

Method of performance, 68
Misrepresentation, 96
Mitigation, contractor duty, 96, 121, 127
Mongolia, 193

N
Nationalization, 10-11
Nations:
  Afghanistan, 11, 20
  Algeria, 14, 139, 200
  Australia, 34, 61, 63-4, 66-7, 127, 141, 181
  Brazil, 21
  Canada, 21, 181, 195
  Chile, 11, 15, 20
  China, 181, 198-200
  Colombia, 23
  Cuba, 10
  Czechoslovakia, 193
  Denmark, 175
  Dominican Republic, 107
  Egypt, 11, 15, 34, 57, 201
  France, 34, 73, 139, 175, 184
  German Democratic Republic, 181, 193
  Hong Kong, 71, 122
  Iceland, 94, 105, 108, 129
  India, 20-1, 43, 46, 181, 203
  Iran, 9-11, 20, 23, 144
  Ireland, 41, 63
  Israel, 11, 15, 22, 203
  Italy, 139, 182
  Ivory Coast, 122
  Japan, 21-2, 182
  Korea, 21, 182
  Kuwait, 15, 23, 35, 181, 193
  Liberia, 11
  Mongolia, 193
  Netherlands, 182
  Northern Ireland, 23, 181
  Norway, 175
  Philippines, 21, 23, 126
  Poland, 182, 203
  Portugal, 23, 175
  Romania, 182
  Saudi Arabia, 7, 8, 16, 23, 35-6, 41, 47, 60, 65, 93, 109-11, 117, 118, 120, 122, 128, 137-8, 174, 196-8
  Scotland, 24
  Spain, 182
  Swaziland, 46, 53, 109
  Sweden, 175, 182
  Switzerland, 14-5, 44, 139, 182
  Thailand, 23
  United Kingdom, 8, 21, 33-4, 41, 43, 52, 57, 60, 63, 67-8, 71-2, 74, 81, 96, 100, 105, 114-5, 121, 122, 128, 181, 182, 195
  United States, 7-8, 10, 12, 15, 22, 34, 37, 41, 43, 57-8, 60-2, 65, 67-8, 135, 141, 174-5, 182, 190, 191-2, 195
  Upper Volta, 22
  USSR, 182
  Venezuela, 24, 105
  West Germany, 182, 195

J
Japan, 22, 182
Joint venture, 16-19, 105
Jurisdiction, 43-4, 155, 174-5, 187

K
Korea, 181
Kuwait, 15, 23, 35, 181, 193

L
Labor, 9, 22-4, 122
climates and, 23
disputes, 122
expatriate, 9, 12, 24
laws affecting 24
Law, 33-8, 44
civil, 33-4, 44
common, 33-4, 44
international, 33-4, 36-9
Islamic, 10, 33-9
general principles of international law, 33-8, 177
Shari‘ah, 33-9
transnational, 36-7
Letters of credit, 20-1, 47-50, 144
Letters rogatory, 175
Liberia, 11
Liquidated damages, 121, 129, 134-6, 138
clauses, 135-8
delay in completion, 121, 129
estimate of loss, 134
extension of time and, 121, 134-5
forfeiture, 121, 135
limitation of contractor liability, 135, 136-8
penalty distinguished, 135
period of assessment, 134-5
practical completion, 135, 138
retention money and, 138
substantial completion, 135, 138
waiver, 135
London Court of Arbitration, 179, 181

M
Maintenance period, 49-50
Index

Pricing, 105-15, 124, 126-7, 139-50
  acceleration costs, 145-6
  added work, 105-111
  capital-employed, 114
  change order, 105-15
  compressed performance, 148-9
  contract clauses, 106
  cost, definition, 111, 113, 114
  cost control, 217
  delay claims, 124, 138-43
  deleted work, 105
  direct costs, 107, 111, 113, 119, 140
  documentation, 106
  echellons/formulas, 141
  equitable adjustment, 107, 115, 124
  escalation, 133
  idle equipment, 142
  idle labor, 141-2
  impact (ripple effect) costs, 126
  international considerations, 105, 109, 113, 149-50
  loss of efficiency, 126-7, 146-9
  methods, 106, 114, 115
    cost plus, 110, 114, 115
    fixed fee, 107
    lump sum, 107, 109
    unit pricing, 107, 109, 112-3, 114
  overhead, 111, 113-4, 140-1
  profit, 112, 114-5, 124, 140, 149
  suspension, 117, 118, 134
  terminations, 129-30, 134-5
  variations, 105-15

Productivity, 117
Profit, 112, 114-5, 124, 140, 149
Programmes (See Schedules)

Raymond Constructors of Africa, Ltd. v. United States, 125

Records, 139, 140, 156-7, 219-20
  importance of documentation, 139, 140, 156, 157
  contemporaneous recordkeeping, 156, 157, 219

Rental costs, 142
Retention (See Retention money)
Retention money, 48-9, 138
  deduction from payments, 138
  purpose of, 48-9
  return of, 49

Rumania, 182, 193

S
Sabbatino, Banco Nacional de Cuba v., 10-11, 28
Sapphire International Petroleum, Ltd. v.
  National Iranian Oil Co., 37, 144
  Saudi Arabia, 7-8, 16, 23, 35-6, 41, 47, 60, 65, 88, 109-11,
  117, 118, 120, 122, 128, 137-8, 174, 196-8
  Grievance Board, 36-7, 42, 174, 196
  Saudi Arabian Tenders Regulations, 48, 59, 93, 100, 107,
  112, 113, 196

Schedules/Programmes, 211-17
  bar charts, 211
  Critical Path Method (CPM), 126, 158-9, 211-13, 215-17
  definition, 211

Pacta sunt servanda, 94
Parsons and Whittmore Overseas Co. v.
  Societe Generale de l'Industrie Du Papier (RATKA),
  11, 26, 191-2

Payment, 44-50
  final, 49-50
  progress, 48
  retention, 48-9
  timing, 47-50
  types, 44-7
  cost plus, 44, 46-7
  fixed fee, 44-7
  unit pricing, 44-5

Penalty clauses, 135-6
Philippines, 23, 126
Plans, (See Specifications)
Poland, 182, 203
Portugal, 23, 175

Practical completion, 135, 138

Owner
  definition of, 127, 129
  financial stability of, 50, 129
  liability of, 67, 123, 128-9, 154-5
  design defects, 67
  interference, 123, 155
  obligations, 50-1, 64, 67, 69-70, 123, 126, 154-5
  drawings, to supply, 123
  implied, 67, 69-70, 123, 126, 154
  instructions, to supply, 64
  not to hinder progress, 123
  payment, prompt, 50-1, 123, 155

Owner's Representative
  dispute resolution, role in, 51-2, 156, 220
  powers, 59-61, 76
  substantial completion, 49
  titles, 59
  variation, 59-61

Overhead, 111, 113-4, 140-1

P
Pacta sunt servanda, 94

Parsons and Whittmore Overseas Co. v.
  Societe Generale de l'Industrie Du Papier (RATKA),
  11, 26, 191-2

Payment, 44-50
  final, 49-50
  progress, 48
  retention, 48-9
  timing, 47-50
  types, 44-7
    cost plus, 44, 46-7
    fixed fee, 44-7
    unit pricing, 44-5

Penalty clauses, 135-6
Philippines, 23, 126
Plans, (See Specifications)
Poland, 182, 203
Portugal, 23, 175

Practical completion, 135, 138

Yugoslavia, 203
Negotiations, (See Chapter 11)
Netherlands, 182
Network schedules, 159, 211-12
Non-excusable delay (See Delay)
Northern Ireland, 23, 181-2
Norway, 175
Notice, 65-6, 68, 77, 80-3, 101-2
  acceleration, 77
  adverse site conditions, 95
  ambiguity in documents, 68
  claims, 82-3
  constructive notice, 65-6, 82, 101
  constructive variations, 77
  defective specifications, 69, 80-3
  delay, 121
  formal notice, 80-3, 101-2
  suspension, 117-19
  termination, 128
  variations, 65-6, 80-3
APPENDIX A

CONDITIONS OF CONTRACT
(INTERNATIONAL)

FOR

WORKS OF

CIVIL ENGINEERING CONSTRUCTION

WITH FORMS OF TENDER AND AGREEMENT

MARCH 1977

Prints may be obtained from

FÉDÉRATION INTERNATIONALE DES INGÉNIEURS-CONSEILS
The Executive Secretary,
Carel van Bylandtlaan 9,
The Hague, The Netherlands.

or

FÉDÉRATION INTERNATIONALE EUROPÉENNE DE LA CONSTRUCTION
The General Secretary,
9 Rue La Perouse, 75116 Paris, France.

or

INTERNATIONAL FEDERATION OF ASIAN AND WESTERN PACIFIC CONTRACTORS’ ASSOCIATIONS
The Executive Director,
PCA Building, Rodrigues Avenue, Barlo Ugong, Pasig, Rizal, Philippines.

or

LA FEDERACION INTERAMERICANA DE LA INDUSTRIA DE LA CONSTRUCCION
La Secretaria General,
Calles Aquilino de la Guardia y 52, Apt. 6793, Panama 5, Panama.

or

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
The Executive Director,
1957 E Street NW,
Washington DC 20006, U.S.A.

or

From the Organisations listed herein.

A-1

FIDIC
Note of Agreement regarding Conditions of Contract (International) for Works of Civil Engineering Construction

The terms of the Third Edition of the Conditions of Contract (International) for Works of Civil Engineering Construction, prepared by the Fédération Internationale des Ingénieurs-Conseils (F.I.D.I.C.) and the Fédération Internationale Européenne de la Construction (F.I.E.C.) are approved by those organisations, and also by the Associated General Contractors of America (A.G.C.A.), the Inter-American Federation for the Construction Industry (F.I.I.C.) and the International Federation of Asian and Western Pacific Contractors’ Associations (I.F.A.W.P.C.A.), and are recommended by them for general use for the purposes of contracts for the construction of such works where tenders are invited on an international basis. It is further agreed that:

(i) Without the derogating from the provisions of Clause 5 (1) of the said Conditions as to the designation in any contract of any specified language as the “Ruling Language” for the purposes of such contract the version in English of the said Conditions shall be considered as the official and authentic text thereof for the purposes of translation thereof into any other language.

(ii) Official translations from English of the said Conditions shall be prepared into French, German and Spanish and into such other languages as F.I.D.I.C. and F.I.E.C. may from time to time jointly agree.

CONDITIONS OF CONTRACT (INTERNATIONAL) FOR WORKS OF CIVIL ENGINEERING CONSTRUCTION

EXPLANATORY MEMORANDUM

In the preparation of the Conditions it was recognised that while there were numerous Clauses which would be universally applicable there were some Clauses which must necessarily vary to take account of the circumstances and locality of the Works. The Clauses of universal application have been grouped together and are referred to as Part I—General Conditions. They have been printed in a form which will facilitate inclusion (without further reproduction) in the contract documents normally prepared.

The General Conditions are linked with the Conditions of Particular Application, referred to as Part II, by the consecutive numbering of the Clauses, so that Parts I and II together comprise the conditions governing the rights and obligations of the parties.

The Clauses in Part II must be specially drafted to suit each particular Contract and to assist those entrusted with their preparation Notes intended as an aide-memoire in relation to the matters which should be covered by the variable Clauses have for convenience been included in the document. These Notes should be detached from the document when inviting tenders.

There is also included under Part III the Conditions of Particular Application to Dredging and Reclamation Work.

It is recommended that Bills of Quantities should be supplied in duplicate to Contractors by Employers when inviting tenders. Only one copy of the Bills of Quantities should be returned with the tender; the Contractor should be permitted to purchase further copies.
TABLE OF CONTENTS

Table of Contents—General Conditions

Index — General Conditions

PART I. General Conditions

PART II. Conditions of Particular Application

PART III. Conditions of Particular Application to Dredging and Reclamation Work

Form of Tender

Form of Agreement

Membership of F.I.D.I.C.

GENERAL CONDITIONS—Table of Contents

DEFINITIONS AND INTERPRETATION

1 (1) Definitions
   (2) Singular and Plural
   (3) Headings or Notes
   (4) Cost

ENGINEER AND ENGINEER’S REPRESENTATIVE

2 Duties and Powers of Engineer and Engineer’s Representative

ASSIGNMENT AND SUB-LETTING

3 Assignment
4 Sub-letting

CONTRACT DOCUMENTS

5 (1) Language/s and Law
   (2) Documents Mutually Explanatory
6 (1) Custody of Drawings
   (2) One Copy of Drawings to be kept on Site
   (3) Disruption of Progress
   (4) Delays and Cost of Delay of Drawings
7 Further Drawings and Instructions

GENERAL OBLIGATIONS

8 Contractor’s General Responsibilities
9 Contract Agreement
10 Performance Bond
11 Inspection of Site
12 Sufficiency of Tender—Adverse Physical Conditions and Artificial Obstructions
13 Work to be to the Satisfaction of Engineer
14 Programme to be Furnished
15 Contractor’s Superintendence
16 Contractor’s Employees
17 Setting Out
18 Borrheles and Exploratory Excavation
19 Watching and Lighting
20 (1) Care of Works
   (2) Exempted Risks
21 Insurance of Works, etc
22 (1) Damage to Persons and Property
   (2) Indemnity by Employer
23 (1) Third Party Insurance
   (2) Minimum Amount of Third Party Insurance
   (3) Provision to Indemnify Employer
24 (1) Accident or Injury to Workmen
   (2) Insurance against Accident, etc., to Workmen
25 Remedy on Contractor’s Failure to Insure
26 (1) Giving of Notices and Payment of Fees
   (2) Compliance with Statutes, Regulations, etc.
27 Fossils, etc.
28 Patent Rights and Royalties
29 Interference with Traffic and Adjoining Properties
30 (1) Extraordinary Traffic
   (2) Special Loads
   (3) Settlement of Extraordinary Traffic Claims
   (4) Waterborne Traffic
31 Opportunities for Other Contractors
32 Contractor to keep Site Clear
33 Clearance of Site on Completion
General Conditions—Table of Contents—continued

CLAUSE

34 (1) Engagement of Labour
(2) Supply of Water
(3) Alcoholic Liquor or Drugs
(4) Arms and Ammunition
(5) Festivals and Religious Customs
(6) Epidemics
(7) Disorderly Conduct, etc.
(8) Observance by Sub-Contractors
(9) Other Conditions affecting Labour and Wages
35 Returns of Labour, etc.

MATERIALS AND WORKMANSHIP

36 (1) Quality of Materials and Workmanship and Tests
(2) Cost of Samples
(3) Cost of Tests
(4) Cost of Tests not Provided for, etc.
37 Inspection of Operations
38 (1) Examination of Work before Covering up
(2) Uncovering and Making Openings
39 (1) Removal of Improper Work and Materials
(2) Default of Contractor in Compliance
40 (1) Suspension of Work
(2) Suspension Lasting more than 90 days

COMMENCEMENT TIME AND DELAYS

41 Commencement of Works
42 (1) Possession of Site
(2) Wayleaves, etc.
43 Time for Completion
44 Extension of Time for Completion
45 No Night or Sunday Work
46 Rate of Progress
47 (1) Liquidated Damages for Delay
(2) Reduction of Liquidated Damages
(3) Bonus for Completion
48 (1) Certification of Completion of Works
(2) Certification of Completion by Stages

MAINTENANCE AND DEFECTS

49 (1) Definition of Period of Maintenance
(2) Execution of Work of Repair, etc.
(3) Cost of Execution of Work of Repair, etc.
(4) Remedy on Contractor's Failure to Carry Out Work Required
50 Contractor to Search

ALTERATIONS, ADDITIONS AND OMISSIONS

51 (1) Variations
(2) Orders for Variations to be in Writing
52 (1) Valuation of Variations
(2) Power of Engineer to Fix Rates
(3) Variations exceeding 10 per cent
(4) Daywork
(5) Claims

PLANT, TEMPORARY WORKS AND MATERIALS

53 (1) Plant, etc., Exclusive Use for the Works
(2) Removal of Plant, etc.
(3) Employer not liable for Damage to Plant, etc.
(4) Re-export of Plant
(5) Customs Clearance
(6) Other Conditions affecting Plant, Temporary Works and Materials
54 Approval of Materials, etc., not implied
General Conditions—Table of Contents—continued

CLAUSE

55
56
57

MEASUREMENT

Quantities
Works to be Measured
Method of Measurement

PROVISIONAL SUMS

58
(1) Definition of Provisional Sums
(2) Use of Provisional Sums ...
(3) Production of Vouchers, etc.

NOMINATED SUB-CONTRACTORS

59
(1) Definition of Nominated Sub-Contractors
(2) Nominated Sub-Contractors, Objection to Nomination
(3) Design Requirements to be Expressly Stated
(4) Payments to Nominated Sub-Contractors
(5) Certification of Payments to Nominated Sub-Contractors
(6) Assignment of Nominated Sub-Contractors’ Obligations

CERTIFICATES AND PAYMENT

60
(1) Certificates and Payment
(2) Advances on Constructional Plant and Materials
(3) Payment in Foreign Currencies
61
Approval only by Maintenance Certificate
62
(1) Maintenance Certificate
(2) Cessation of Employer’s Liability
(3) Unfulfilled Obligations

REMEDIES AND POWERS

63
(1) Default of Contractor
(2) Valuation at Date of Forfeiture
(3) Payment after Forfeiture
64
Urgent Repairs

SPECIAL RISKS

65
(1) No Liability for War, etc., Risks
(2) Damage to Works, etc., by Special Risks
(3) Projectile, Missile, etc.
(4) Increased Costs arising from Special Risks
(5) Special Risks
(6) Outbreak of War
(7) Removal of Plant on Termination
(8) Payment if Contract Terminated

FRUSTRATION

66
Payment in Event of Frustration

SETTLEMENT OF DISPUTES

67
Settlement of Disputes—Arbitration

NOTICES

68
(1) Service of Notices on Contractor
(2) Service of Notices on Employer or Engineer
(3) Change of Address

DEFAULT OF EMPLOYER

69
Default of Employer

CHANGES IN COSTS AND LEGISLATION

70
(1) Increase or Decrease of Costs
(2) Subsequent Legislation

CURRENCY AND RATES OF EXCHANGE

71
Currency Restrictions
72
Rates of Exchange
### GENERAL CONDITIONS—INDEX

<table>
<thead>
<tr>
<th>Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access, to Works</td>
</tr>
<tr>
<td>Access, Contractor to satisfy himself</td>
</tr>
<tr>
<td>Accident or Injury to Workmen—Insurance against</td>
</tr>
<tr>
<td>Accident or Injury to Workmen—Liability for</td>
</tr>
<tr>
<td>Accommodation outside the Site—Contractor to provide</td>
</tr>
<tr>
<td>Address, change of</td>
</tr>
<tr>
<td>Adjustment of Contract Price if variations exceed 10 per cent of Tender Sum</td>
</tr>
<tr>
<td>Advances on Constructional Plant and Materials</td>
</tr>
<tr>
<td>Adverse Physical Conditions and Artificial Obstructions</td>
</tr>
<tr>
<td>Agent of Contractor</td>
</tr>
<tr>
<td>Agreement</td>
</tr>
<tr>
<td>Alcoholic Liquor or Drugs</td>
</tr>
<tr>
<td>Alterations, Additions and Omissions</td>
</tr>
<tr>
<td>Ambiguities in Contract Documents</td>
</tr>
<tr>
<td>Approval of Materials, etc., not implied</td>
</tr>
<tr>
<td>Approval only by Maintenance Certificate</td>
</tr>
<tr>
<td>Arbitration</td>
</tr>
<tr>
<td>Arms and Ammunition</td>
</tr>
<tr>
<td>Assignment of Contract</td>
</tr>
<tr>
<td>Assignment of Nominated Sub-Contractors' obligations</td>
</tr>
<tr>
<td>Bankruptcy of Contractor</td>
</tr>
<tr>
<td>Bills of Quantities—estimated only</td>
</tr>
<tr>
<td>Bond, Performance</td>
</tr>
<tr>
<td>Bonus for Completion</td>
</tr>
<tr>
<td>Boreholes and Exploratory Excavation</td>
</tr>
<tr>
<td>Care of Works</td>
</tr>
<tr>
<td>Certificate, Maintenance</td>
</tr>
<tr>
<td>Certificates and Payment</td>
</tr>
<tr>
<td>Certification of Completion of Works</td>
</tr>
<tr>
<td>Certification of Completion by Stages</td>
</tr>
<tr>
<td>Claims for Extra or Additional Work or Expense</td>
</tr>
<tr>
<td>Clearance of Site</td>
</tr>
<tr>
<td>Commencement of Works</td>
</tr>
<tr>
<td>Completion of Works, Bonus for</td>
</tr>
<tr>
<td>Completion of Works, Time for</td>
</tr>
<tr>
<td>Completion of Works, Time for, Extension of</td>
</tr>
<tr>
<td>Compliance with Statutes, Regulations, etc.</td>
</tr>
<tr>
<td>Constructional Plant, Insurance of</td>
</tr>
<tr>
<td>Contingencies, provisions for</td>
</tr>
<tr>
<td>Contract Agreement</td>
</tr>
<tr>
<td>Contractor's general responsibilities</td>
</tr>
<tr>
<td>Contractor's Superintendence</td>
</tr>
<tr>
<td>Contractor's Employees</td>
</tr>
<tr>
<td>Cost</td>
</tr>
<tr>
<td>Costs, Increase or Decrease of</td>
</tr>
<tr>
<td>Covering up Work, Examination before</td>
</tr>
<tr>
<td>Currencies, Payment in Foreign</td>
</tr>
<tr>
<td>Currencies, Rates of Exchange</td>
</tr>
<tr>
<td>Currency Restrictions</td>
</tr>
<tr>
<td>Customs Clearance</td>
</tr>
<tr>
<td>Clause</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Damage to Persons and Property</td>
</tr>
<tr>
<td>Damage to Works</td>
</tr>
<tr>
<td>Damages, Liquidated</td>
</tr>
<tr>
<td>Daywork</td>
</tr>
<tr>
<td>Decrease or Increase of Costs</td>
</tr>
<tr>
<td>Default of Contractor</td>
</tr>
<tr>
<td>Default of Employer</td>
</tr>
<tr>
<td>Defective Materials and Work</td>
</tr>
<tr>
<td>Defects, Contractor to Search for, if Required</td>
</tr>
<tr>
<td>Definitions</td>
</tr>
<tr>
<td>Delay, Liquidated Damages for</td>
</tr>
<tr>
<td>Delays and Cost on Delivery of Drawings</td>
</tr>
<tr>
<td>Design by Nominated Sub-Contractors</td>
</tr>
<tr>
<td>Discrepancies in Documents</td>
</tr>
<tr>
<td>Dismissal of Contractor’s Employees</td>
</tr>
<tr>
<td>Disorderly Conduct, etc.</td>
</tr>
<tr>
<td>Documents Mutually Explanatory</td>
</tr>
<tr>
<td>Drawings</td>
</tr>
<tr>
<td>Drawings delay in issue</td>
</tr>
<tr>
<td>Drugs or Alcoholic Liquor</td>
</tr>
<tr>
<td>Employer not liable for Damage to Plant, etc.</td>
</tr>
<tr>
<td>Employer’s liability, cessation of</td>
</tr>
<tr>
<td>Engagement: of Labour</td>
</tr>
<tr>
<td>Engineer and Engineer’s Representatives, Duties and Powers of</td>
</tr>
<tr>
<td>Epidemics</td>
</tr>
<tr>
<td>Errors in Setting-Out</td>
</tr>
<tr>
<td>Examinations of Work before Covering up</td>
</tr>
<tr>
<td>Excepted Risks</td>
</tr>
<tr>
<td>Exchange, Rates of</td>
</tr>
<tr>
<td>Extension of Time, due to Employer’s Failure to give Possession of Site</td>
</tr>
<tr>
<td>Extension of Time for Completion</td>
</tr>
<tr>
<td>Extraordinary Traffic</td>
</tr>
<tr>
<td>Faulty Work, Removal of</td>
</tr>
<tr>
<td>Fees and Notices</td>
</tr>
<tr>
<td>Fencing, Watching, Lighting, etc.</td>
</tr>
<tr>
<td>Festivals and Religious Customs</td>
</tr>
<tr>
<td>Foreign Currencies, Payment in</td>
</tr>
<tr>
<td>Fossils, etc.</td>
</tr>
<tr>
<td>Foundations, Examination of</td>
</tr>
<tr>
<td>Frustration</td>
</tr>
<tr>
<td>Giving of Notices—Payment of Fees</td>
</tr>
<tr>
<td>Guarantee of Insurance Company or Bank</td>
</tr>
<tr>
<td>Improper Work and Materials</td>
</tr>
<tr>
<td>Increase or Decrease of Costs</td>
</tr>
<tr>
<td>Indemnity by Contractor</td>
</tr>
<tr>
<td>Indemnity by Employer</td>
</tr>
<tr>
<td>Injury to Persons—Damage to Property</td>
</tr>
<tr>
<td>Inspection and Testing of Materials and Workmanship</td>
</tr>
</tbody>
</table>
Index to General Conditions—continued

<table>
<thead>
<tr>
<th>Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>38 (1)</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>24 (2)</td>
</tr>
<tr>
<td>29</td>
</tr>
<tr>
<td>34 (1)</td>
</tr>
<tr>
<td>34 (9)</td>
</tr>
<tr>
<td>5 (1)</td>
</tr>
<tr>
<td>5 (1)</td>
</tr>
<tr>
<td>70 (2)</td>
</tr>
<tr>
<td>19</td>
</tr>
<tr>
<td>47</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td>61 &amp; 62</td>
</tr>
<tr>
<td>60 (2)</td>
</tr>
<tr>
<td>54</td>
</tr>
<tr>
<td>39</td>
</tr>
<tr>
<td>36 (1)</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>56</td>
</tr>
<tr>
<td>57</td>
</tr>
<tr>
<td>55</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>59 (6)</td>
</tr>
<tr>
<td>59 (5)</td>
</tr>
<tr>
<td>58 (1)</td>
</tr>
<tr>
<td>59 (3)</td>
</tr>
<tr>
<td>59 (2)</td>
</tr>
<tr>
<td>59 (4)</td>
</tr>
<tr>
<td>68</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>51</td>
</tr>
<tr>
<td>38 (2)</td>
</tr>
<tr>
<td>37</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>31</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>65 (9)</td>
</tr>
<tr>
<td>60 (9)</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td>60 (2)</td>
</tr>
<tr>
<td>53 (5)</td>
</tr>
<tr>
<td>Clause</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Plant, Employer not liable for Damage to, etc.</td>
</tr>
<tr>
<td>Plant, etc., Exclusive Use for the Works</td>
</tr>
<tr>
<td>Plant, Other Conditions affecting</td>
</tr>
<tr>
<td>Plant, Re-export of</td>
</tr>
<tr>
<td>Plant, Removal of, etc.</td>
</tr>
<tr>
<td>Plant, Supply of</td>
</tr>
<tr>
<td>Possession of Site</td>
</tr>
<tr>
<td>Power of Engineer to fix Rates</td>
</tr>
<tr>
<td>Programme to be Furnished</td>
</tr>
<tr>
<td>Progress, Rate of</td>
</tr>
<tr>
<td>Provision to Indemnify Contractor</td>
</tr>
<tr>
<td>Provision to Indemnify Employer</td>
</tr>
<tr>
<td>Provisional Sums, Definition</td>
</tr>
<tr>
<td>Provisional Sums, Use of</td>
</tr>
<tr>
<td>Quality of Materials and Workmanship</td>
</tr>
<tr>
<td>Quantities</td>
</tr>
<tr>
<td>Rate of Progress</td>
</tr>
<tr>
<td>Rates of Exchange</td>
</tr>
<tr>
<td>Rates, Power of Engineer to fix</td>
</tr>
<tr>
<td>Re-export of Plant</td>
</tr>
<tr>
<td>Regulations, Statutes, etc., Compliance with</td>
</tr>
<tr>
<td>Religious Customs and Festivals</td>
</tr>
<tr>
<td>Removal of Improper Work and Materials</td>
</tr>
<tr>
<td>Removal of Contractor's Employees</td>
</tr>
<tr>
<td>Removal of Plant, etc.</td>
</tr>
<tr>
<td>Returns of Labour, etc.</td>
</tr>
<tr>
<td>Risks, Excepted</td>
</tr>
<tr>
<td>Risks, Special</td>
</tr>
<tr>
<td>Roads, etc., Damage by Extraordinary Traffic</td>
</tr>
<tr>
<td>Roads, Interference with Access to</td>
</tr>
<tr>
<td>Royalties and Patent Rights</td>
</tr>
<tr>
<td>Safety of Site Operations</td>
</tr>
<tr>
<td>Samples, cost of</td>
</tr>
<tr>
<td>Setting-Out</td>
</tr>
<tr>
<td>Shift working</td>
</tr>
<tr>
<td>Site, Clearance of</td>
</tr>
<tr>
<td>Site, Possession of</td>
</tr>
<tr>
<td>Special Risks</td>
</tr>
<tr>
<td>Statutes, Regulations, etc., Compliance with</td>
</tr>
<tr>
<td>Sub-Contractors, Nominated</td>
</tr>
<tr>
<td>Sub-Contractors, Responsibility of the Contractor for Acts and Default of</td>
</tr>
<tr>
<td>Sub-Contractors, Observance by</td>
</tr>
<tr>
<td>Sub-letting</td>
</tr>
<tr>
<td>Subsequent Legislation</td>
</tr>
<tr>
<td>Sufficiency of Tender</td>
</tr>
<tr>
<td>Sunday and Night Work</td>
</tr>
<tr>
<td>Supply of Plant, Materials and Labour</td>
</tr>
<tr>
<td>Supply of Water</td>
</tr>
<tr>
<td>Suspension of Work</td>
</tr>
<tr>
<td>Index to General Conditions — continued</td>
</tr>
<tr>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Tender documents</td>
</tr>
<tr>
<td>Tender, Sufficiency of</td>
</tr>
<tr>
<td>Termination of Contract</td>
</tr>
<tr>
<td>Tests</td>
</tr>
<tr>
<td>Third Party Insurance</td>
</tr>
<tr>
<td>Time for Completion</td>
</tr>
<tr>
<td>Time for Completion, Extension of</td>
</tr>
<tr>
<td>Traffic, Extraordinary</td>
</tr>
<tr>
<td>Traffic, Interference with</td>
</tr>
<tr>
<td>Uncovering Work and Making Openings</td>
</tr>
<tr>
<td>Unfulfilled Obligations</td>
</tr>
<tr>
<td>Urgent Repairs</td>
</tr>
<tr>
<td>Variations</td>
</tr>
<tr>
<td>Variations, Valuation of</td>
</tr>
<tr>
<td>Variations exceeding 10 per cent</td>
</tr>
<tr>
<td>Vouchers, Production of</td>
</tr>
<tr>
<td>War, Outbreak of</td>
</tr>
<tr>
<td>Watching and Lighting, etc.</td>
</tr>
<tr>
<td>Water, Supply of</td>
</tr>
<tr>
<td>Wayleaves, etc.</td>
</tr>
<tr>
<td>Work, Examination of before Covering up</td>
</tr>
<tr>
<td>Work, Improper, Removal of</td>
</tr>
<tr>
<td>Work, Suspension of</td>
</tr>
<tr>
<td>Work to be to Satisfaction of Engineer</td>
</tr>
<tr>
<td>Workmanship, Quality of</td>
</tr>
<tr>
<td>Works, Care of</td>
</tr>
<tr>
<td>Works, Completion of (Maintenance Certificate)</td>
</tr>
<tr>
<td>Works, Commencement of</td>
</tr>
<tr>
<td>Works, Insurance of</td>
</tr>
<tr>
<td>Works, Repair of</td>
</tr>
<tr>
<td>Works, Time for Completion of</td>
</tr>
<tr>
<td>Works to be measured</td>
</tr>
</tbody>
</table>
Conditions of Contract

PART I—GENERAL CONDITIONS

DEFINITIONS AND INTERPRETATION

1. (1) In the Contract, as hereinafter defined, the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:

(a) “Employer” means the party named in Part II who will employ the Contractor and the legal successors in title to the Employer, but not, except with the consent of the Contractor, any assignee of the Employer.

(b) “Contractor” means the person or persons, firm or company whose tender has been accepted by the Employer and includes the Contractor’s personal representatives, successors and permitted assigns.

(c) “Engineer” means the Engineer designated as such in Part II, or other the Engineer appointed from time to time by the Employer and notified in writing to the Contractor to act as Engineer for the purposes of the Contract in place of the Engineer so designated.

(d) “Engineer’s Representative” means any resident engineer or assistant of the Engineer, or any clerk of works appointed from time to time by the Employer or the Engineer to perform the duties set forth in Clause 2 hereof, whose authority shall be notified in writing to the Contractor by the Engineer.

(e) “Works” shall include both Permanent Works and Temporary Works.


(g) “Contract Price” means the sum named in the Letter of Acceptance, subject to such additions thereto or deductions therefrom as may be made under the provisions hereinafter contained.

(h) “Constructional Plant” means all appliances or things of whatsoever nature required in or about the execution or maintenance of the Works but does not include materials or other things intended to form or forming part of the Permanent Works.

(i) “Temporary Works” means all temporary works of every kind required in or about the execution or maintenance of the Works.

(j) “Permanent Works” means the permanent works to be executed and maintained in accordance with the Contract.

(k) “Specification” means the specification referred to in the Tender and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by the Engineer.

(l) “Drawings” means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.

(m) “Site” means the land and other places on, under, in or through which the Permanent Works or Temporary Works designed by the Engineer are to be executed and any other lands and places provided by the Employer for working space or any other purpose as may be specifically designated in the Contract as forming part of the Site.

(n) “Approved” means approved in writing, including subsequent written confirmation of previous verbal approval and “approval” means approval in writing, including as aforesaid.

(2) Words importing the singular only also include the plural and vice versa where the context requires.

(3) The headings and marginal notes in these Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

(4) The word “cost” shall be deemed to include overhead costs whether on or off the Site.

ENGINEER AND ENGINEER’S REPRESENTATIVE

2. (1) The Engineer shall carry out such duties in issuing decisions, certificates and orders as are specified in the Contract. In the event of the Engineer being required in terms of his appointment by the Employer to obtain the specific approval of the Employer for the execution of any part of these duties, this shall be set out in Part II of these Conditions.
(2) The Engineer's Representative shall be responsible to the Engineer and his duties are to watch and supervise the Works and to test and examine any materials to be used or workmanship employed in connection with the Works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor, except as expressly provided hereunder or elsewhere in the Contract, to order any work involving delay or any extra payment by the Employer, nor to make any variation of or in the Works.

The Engineer may from time to time in writing delegate to the Engineer's Representative any of the powers and authorities vested in the Engineer and shall furnish to the Contractor and to the Employer a copy of all such written delegations of powers and authorities. Any written instruction or approval given by the Engineer's Representative to the Contractor within the terms of such delegation, but not otherwise, shall bind the Contractor and the Employer as though it had been given by the Engineer. Provided always as follows—

(a) Failure of the Engineer's Representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or materials and to order the pulling down, removal or breaking up thereof.

(b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's Representative he shall be entitled to refer the matter to the Engineer, who shall thereupon confirm, reverse or vary such decision.

ASSIGNMENT AND SUB-LETTING

3. The Contractor shall not assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by a charge in favour of the Contractor's bankers of any monies due or to become due under this Contract, without the prior written consent of the Employer.

4. The Contractor shall not sub-let the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not sub-let any part of the Works without the prior written consent of the Engineer, which shall not be unreasonably withheld, and such consent, if given, shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided always that the provision of labour on a piecework basis shall not be deemed to be a sub-letting under this Clause.

CONTRACT DOCUMENTS

5. (1) There shall be stated in Part II of these Conditions:

(a) the language or languages in which the Contract documents shall be drawn up and
(b) the country or state, the law of which is to apply to the Contract and according to which the Contract is to be construed.

If the said documents are written in more than one language, the language according to which the Contract is to be construed and interpreted shall also be designated in Part II, being therein designated the "Ruling Language".

(2) Except as to the extent otherwise provided by the Contract, the provisions of the Conditions of Contract Parts I and II shall prevail over those of any other document forming part of the Contract. Subject to the foregoing, the several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor instructions thereon. Provided always that if, in the opinion of the Engineer, compliance with any such instructions shall involve the Contractor in any cost, which by reason of any such ambiguity or discrepancy could not reasonably have been foreseen by the Contractor, the Engineer shall certify and the Employer shall pay such additional sum as may be reasonable to cover such costs.

6. (1) The Drawings shall remain in the sole custody of the Engineer, but two copies thereof shall be furnished to the Contractor free of charge. The Contractor shall provide and make at his own expense any further copies required by him. At the completion of the Contract the Contractor shall return to the Engineer all Drawings provided under the Contract.

(2) One copy of the Drawings, furnished to the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and the Engineer's Representative and by any other person authorised by the Engineer in writing.

(3) The Contractor shall give written notice to the Engineer whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.
(4) If, by reason of any failure or inability of the Engineer to issue within a time reasonable in all the circumstances any drawing or order requested by the Contractor in accordance with sub-clause (3) of this Clause, the Contractor suffers delay and/or incurs costs then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 hereof and the Contractor shall be paid the amount of such cost as shall be reasonable.

7. The Engineer shall have full power and authority to supply to the Contractor from time to time, during the progress of the Works, such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works. The Contractor shall carry out and be bound by the same.

GENERAL OBLIGATIONS

8. (1) The Contractor shall, subject to the provisions of the Contract, and with due care and diligence, execute and maintain the Works and provide all labour, including the supervision thereof, materials, Constructional Plant and all other things, whether of a temporary or permanent nature, required in and for such execution and maintenance, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

(2) The Contractor shall take full responsibility for the adequacy stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works, or for the design or specification of any Temporary Works prepared by the Engineer.

9. The Contractor shall when called upon so to do enter into and execute a Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed with such modification as may be necessary.

10. If, for the due performance of the Contract, the Tender shall contain an undertaking by the Contractor to obtain, when required, a bond or guarantee of an insurance company or bank, or other approved sureties to be jointly and severally bound with the Contractor to the Employer, in a sum not exceeding that stated in the Letter of Acceptance for such bond or guarantee, the said insurance company or bank or sureties and the terms of the said bond or guarantee shall be such as shall be approved by the Employer. The obtaining of such bond or guarantee or the provision of such sureties and the cost of the bond or guarantee to be so entered into shall be at the expense in all respects of the Contractor, unless the Contract otherwise provides.

11. The Employer shall have made available to the Contractor with the Tender documents such data on hydrological and sub-surface conditions as shall have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works and the Tender shall be deemed to have been based on such data, but the Contractor shall be responsible for his own interpretation thereof.

The Contractor shall also be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his Tender, as to the form and nature thereof, including the sub-surface conditions, the hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the Works, the means of access to the Site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.

12. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the Works and of the rates and prices stated in the priced Bill of Quantities and the Schedule of Rates and Prices, if any, which Tender rates and prices shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and maintenance of the Works. If, however, during the execution of the Works the Contractor shall encounter physical conditions other than climatic conditions on the Site, or artificial obstructions, which conditions or obstructions could, in his opinion, not have been reasonably foreseen by an experienced contractor, the Contractor shall forthwith give written notice thereof to the Engineer's Representative and if, in the opinion of the Engineer, such conditions or artificial obstructions could not have been reasonably foreseen by an experienced contractor, then the Engineer shall certify and the Employer shall pay the additional cost to which the Contractor shall have been put by reason of such conditions, including the proper and reasonable cost

(a) of complying with any instruction which the Engineer may issue to the Contractor in connection therewith, and

(b) of any proper and reasonable measures approved by the Engineer which the Contractor may take in the absence of specific instructions from the Engineer,

as a result of such conditions or obstructions being encountered.
13. Save so far as it is legally or physically impossible, the Contractor shall execute and maintain the Works in strict accordance with the Contract to the satisfaction of the Engineer and shall comply with and adhere strictly to the Engineer's instructions and directions on any matter whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions and directions only from the Engineer or, subject to the limitations referred to in Clause 2 hereof, from the Engineer's Representative.

14. (1) Within the time stated in Part II of these Conditions, the Contractor shall, after the acceptance of his Tender, submit to the Engineer for his approval a programme showing the order of procedure in which he proposes to carry out the Works. The Contractor shall whenever required by the Engineer or Engineers' Representative, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

(2) If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the approved programme referred to in sub-clause (1) of this Clause, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to the approved programme necessary to ensure completion of the Works within the time for completion as defined in Clause 43 hereof.

(3) The submission to and approval by the Engineer of Engineer's Representative of such programmes or the furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

15. The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised agent or representative approved of in writing by the Engineer, which approval may at any time be withdrawn, is to be constantly on the Works and shall give his whole time to the superintendence of the same. If such approval shall be withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving written notice of such withdrawal, remove the agent from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another agent approved by the Engineer. Such authorised agent or representative shall receive, on behalf of the Contractor, directions and instructions from the Engineer or, subject to the limitations of Clause 2 hereof, the Engineer's Representative.

16. (1) The Contractor shall provide and employ on the Site in connection with the execution and maintenance of the Works

(a) only such technical assistants as are skilled and experienced in their respective callings and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and

(b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the Works.

(2) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or maintenance of the Works who, in the opinion of the Engineer, misbehaves himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be again employed upon the Works without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as possible by a competent substitute approved by the Engineer.

17. The Contractor shall be responsible for the true and proper setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the Works, any errors shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer or the Engineer's Representative, shall, at his own cost, rectify such error to the satisfaction of the Engineer or the Engineer's Representative, unless such error is based on incorrect data supplied in writing by the Engineer or the Engineer's Representative, in which case the expense of rectifying the same shall be borne by the Employer. The checking of any setting-out or of any line or level by the Engineer or the Engineer's Representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other things used in setting-out the Works.

18. If, at any time during the execution of the Works, the Engineer shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be ordered in writing and shall be deemed to be an addition ordered under the provisions of Clause 51 hereof, unless a provisional sum in respect of such anticipated work shall have been included in the Bill of Quantities.

A-15  FIDIC
15. The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or the Engineer’s Representative, or by any duly constituted authority, for the protection of the Works, or for the safety and convenience of the public or others.

20. (1) From the commencement of the Works until the date stated in the Certificate of Completion for the whole of the Works pursuant to Clause 48 hereof the Contractor shall take full responsibility for the care thereof. Provided that if the Engineer shall issue a Certificate of Completion in respect of any part of the Permanent Works the Contractor shall cease to be liable for the care of that part and the responsibility for the care of that part shall pass to the Employer. Provided further that the Contractor shall take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the Period of Maintenance until such outstanding work is completed. In case any damage, loss or injury shall happen to the Works, or to any part thereof, from any cause whatsoever, save and except the excepted risks as defined in sub-clause (2) of this Clause, while the Contractor shall be responsible for the care thereof the Contractor shall, at his own cost, repair and make good the same, so that at completion the Permanent Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer’s instructions. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall, if and to the extent required by the Engineer and subject always to the provisions of Clause 65 hereof, repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of completing any outstanding work or complying with his obligations under Clauses 49 or 50 hereof.

(2) The “excepted risks” are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or unless solely restricted to employees of the Contractor or of his sub-contractors and arising from the conduct of the Works, riot, commotion or disorder, or use or occupation by the Employer of any part of the Permanent Works, or a cause solely due to the Engineer’s design of the Works, or ionising radiations or contamination by radio-activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive, nuclear assembly or nuclear component thereof, pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for or insure against all of which are herein collectively referred to as “the excepted risks”.

21. Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising, other than the excepted risks, for which he is responsible under the terms of the Contract and in such manner that the Employer and Contractor are covered for the period stipulated in Clause 20(1) hereof and are also covered during the Period of Maintenance for loss or damage arising from a cause, occurring prior to the commencement of the Period of Maintenance, and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50 hereof:—

(a) The Works for the time being executed to the estimated current contract value thereof, or such additional sum as may be specified in Part II in the Clause numbered 21, together with the materials for incorporation in the Works at their replacement value.

(b) The Constructional Plant and other things brought on to the Site by the Contractor to the replacement value of such Constructional Plant and other things.

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer or the Engineer’s Representative the policy or policies of insurance and the receipts for payment of the current premiums.

22. (1) The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of injuries or damage to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the Works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation or damages for or with respect to—

(a) The permanent use or occupation of land by the Works or any part thereof.

(b) The right of the Employer to execute the Works or any part thereof on, over, under, in or through any land.

(c) Injuries or damage to persons or property which are the unavoidable result of the execution or maintenance of the Works in accordance with the Contract.
(d) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the damage or injury.

(2) The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the proviso to sub-clause (1) of this Clause.

23. (1) Before commencing the execution of the Works the Contractor, but without limiting his obligations and responsibilities under Clause 22 hereof, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the Employer, or to any person, including any employee of the Employer, by or arising out of the execution of the Works or in the carrying out of the Contract, otherwise than due to the matters referred to in the proviso to Clause 22 (1) hereof.

(2) Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount stated in the Appendix to the Tender. The Contractor shall, whenever required, produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

(3) The terms shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy being brought or made against the Employer, the insurer will indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

24. (1) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the Employer, his agents, or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

(2) The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall, when required, produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative, when required, such policy of insurance and the receipt for the payment of the current premium.

25. If the Contractor shall fail to effect and keep in force the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

26. (1) The Contractor shall give all notices and pay all fees required to be given or paid by any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution of the Works and by the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works.

(2) The Contractor shall conform in all respects with the provisions of any such Statute, Ordinance or Law as aforesaid and the regulations and bye-laws of any local or other duly constituted authority which may be applicable to the Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such Statutes, Ordinance or Regulation or bye-law.

(3) The Employer will repay or allow to the Contractor all such sums as the Engineer shall certify to have been properly payable and paid by the Contractor in respect of such fees.

27. All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site of the Works shall be between the Employer and the Contractor be deemed to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and, before removal, acquaint the Engineer's Representative of such discovery and carry out, at the expense of the Employer, the Engineer's Representative's orders as to the disposal of the same.

A-17 FIDIC
28. The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Contractual Plant, machine work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or any of them.

29. All operations necessary for the execution of the Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the convenience of the public, or the access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters in so far as the Contractor is responsible therefor.

30. (1) The Contractor shall use every reasonable means to prevent any of the highways or bridges communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such highways and bridges.

(2) Should it be found necessary for the Contractor to move one or more loads of Contractual Plant, machinery or pre-constructed units or parts of units of work over part of a highway or bridge, the moving whereof is likely to damage any highway or bridge unless special protection or strengthening is carried out, then the Contractor shall before moving the load on such highway or bridge give notice to the Engineer or Engineer's Representative of the weight and other particulars of the load to be moved and his proposals for protecting or strengthening the said highway or bridge. Unless within fourteen days of the receipt of such notice the Engineer shall by counter-notice direct that such protection or strengthening is unnecessary, then the Contractor will carry out such proposals or any modification thereof that the Engineer shall require and, unless there is an item or are items in the Bill of Quantities for pricing by the Contractor of the necessary works for the protection or strengthening aforesaid, the costs thereof shall be paid by the Employer to the Contractor.

31. The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works. If, however, the Contractor shall, on the written request of the Engineer or the Engineer's Representative, make available to any such other contractor, or to the Employer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible, or permit the use by any such of the Contractor's scaffolding or other plant on the Site, or provide any other service of whatsoever nature for any such, the Employer shall pay to the Contractor in respect of such use or service such sum or sums as shall, in the opinion of the Engineer, be reasonable.

32. During the progress of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractual Plant and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

33. On the completion of the Works the Contractor shall clear away and remove from the Site all Contractual Plant, surplus materials, rubbish and Temporary Works of every kind, and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer.
LABOUR

34. (1) The Contractor shall make his own arrangements for the engagement of all labour local or otherwise, and, save as far as the Contract otherwise provides, for the transport, housing, feeding and payment thereof.

(2) The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site, to the satisfaction of the Engineer’s Representative, an adequate supply of drinking and other water for the use of the Contractor’s staff and work people.

(3) The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulations or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor, or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his sub-contractors, agents or employees.

(4) The Contractor shall not give, barter or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid.

(5) The Contractor shall in all dealings with labour in his employment have due regard to all recognised festivals, days of rest and religious or other customs.

(6) In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

(7) The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.

(8) The Contractor shall be responsible for observance by his sub-contractors of the foregoing provisions.

(9) Any other conditions affecting labour and wages shall be as set out in Part II in the clause numbered 34 as may be necessary.

35. The Contractor shall, if required by the Engineer, deliver to the Engineer’s Representative, or at his office, a return in detail in such form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional Plant as the Engineer’s Representative may require.

MATERIALS AND WORKMANSHIP

36. (1) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer’s instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the Works for testing as may be elected and required by the Engineer.

(2) All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract, but if not, then at the cost of the Employer.

(3) The cost of making any test shall be borne by the Contractor if such test is clearly intended by or provided for in the Contract and, in the cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil, is particularised in the Contract in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

(4) If any test is ordered by the Engineer which is either

(a) not so intended by or provided for, or

(b) (in the cases above mentioned) is not so particularised, or

(c) though so intended or provided for is ordered by the Engineer to be carried out by an independent person at any place other than the Site or the place of manufacture or fabrication of the materials tested,

then the cost of such test shall be borne by the Contractor, if the test shows the workmanship or materials not to be in accordance with the provisions of the Contract or the Engineer’s instructions, but otherwise by the Employer.

37. The Engineer and any person authorised by him shall at all times have access to the Works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

A-19 FIDIC
Examination of Work before Covering up.

(1) No work shall be covered up or put out of view without the approval of the Engineer or the Engineer’s Representative and the Contractor shall afford full opportunity for the Engineer or the Engineer’s Representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer’s Representative whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer’s Representative shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations.

(2) The Contractor shall uncover any part or parts of the Works or make openings in or through the same as the Engineer may from time to time direct and shall reinstatet and make good such part or parts to the satisfaction of the Engineer. If any such part or parts have been covered up or put out of view after compliance with the requirement of sub-clause (1) of this Clause and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating and making good the same shall be borne by the Employer, but in any other case all costs shall be borne by the Contractor.

Removal of Improper Work and Materials.

(1) The Engineer shall during the progress of the Works have power to order in writing from time to time

(a) the removal from the Site, within such time or times as may be specified in the order, of any materials which, in the opinion of the Engineer, are not in accordance with the Contract

(b) the substitution of proper and suitable materials and

(c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which in respect of materials or workmanship is not, in the opinion of the Engineer, in accordance with the Contract.

(2) In case of default on the part of the Contractor in carrying out such order, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, or may be deducted by the Employer from any monies due or which may become due to the Contractor.

Default of Contractor in Compliance.

Suspension of Work.

(1) The Contractor shall, on the written order of the Engineer, suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work, so far as is necessary in the opinion of the Engineer. The extra cost incurred by the Contractor in giving effect to the Engineer’s instructions under this Clause shall be borne and paid by the Employer unless such suspension is

(a) otherwise provided for in the Contract, or

(b) necessary by reason of some default on the part of the Contractor, or

(c) necessary by reason of climatic conditions on the Site, or

(d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof so as not to arise from any act or default by the Engineer or the Employer or from any of the excepted risks defined in Clause 20 hereof.

Provided that the Contractor shall not be entitled to recover any such extra cost unless he gives written notice of his intention to claim to the Engineer within twenty-eight days of the Engineer’s order. The Engineer shall settle and determine such extra payment and/or extension of time under Clause 44 hereof to be made to the Contractor in respect of such claim as shall, in the opinion of the Engineer, be fair and reasonable.

(2) If the progress of the Works or any part thereof is suspended on the written order of the Engineer and if permission to resume work is not given by the Engineer within a period of ninety days from the date of suspension then, unless such suspension is within paragraph (a), (b), (c) or (d) of sub-clause (1) of this Clause, the Contractor may serve a written notice on the Engineer requiring permission within twenty-eight days from the receipt thereof to proceed with the Works, or that part thereof in regard to which progress is suspended and, if such permission is not granted within that time, the Contractor by a further written notice so served may, but is not bound to, elect or treat the suspension where it affects part only of the Works as an omission of such part under Clause 51 hereof, or, where it affects the whole Works, as an abandonment of the Contract by the Employer.

Suspension Lasting more than 90 days.

Commencement of Works.

(1) The Contractor shall commence the Works on Site within the period named in the Appendix to the Tender after the receipt by him of a written order to this effect from the Engineer and shall proceed with the same with due expedition and without delay, except as may be expressly sanctioned or ordered by the Engineer, or be wholly beyond the Contractor’s control.
42. (1) Save insofar as the Contract may prescribe, the extent of portions of the Site of which the Contractor is to be given possession from time to time and the order in which such portions shall be made available to him and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 14 hereof, if any, and otherwise in accordance with such reasonable proposals of the Contractor as he shall, by written notice to the Engineer, make and will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due dispatch in accordance with the said programme or proposals, as the case may be. If the Contractor suffers delay or incurs cost from failure on the part of the Employer to give possession in accordance with the terms of this Clause, the Engineer shall grant an extension of time for the completion of the Works and certify such sum as, in his opinion, shall be fair to cover the cost incurred, which sum shall be paid by the Employer.

(2) The Contractor shall bear all costs and charges for special or temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purposes of the Works.

43. Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 48 hereof, within the time stated in the Contract calculated from the last day of the period named in the Appendix to the Tender as that within which the Works are to be commenced, or such extended time as may be allowed under Clause 44 hereof.

44. Should the amount of extra or additional work of any kind or any cause of delay referred to in these Conditions, or exceptional adverse climatic conditions, or other special circumstances of any kind whatsoever which may occur, other than through a default of the Contractor, be such as fairly to entitle the Contractor to an extension of time for the completion of the Works, the Engineer shall determine the amount of such extension and shall notify the Employer and the Contractor accordingly. Provided that the Engineer is not bound to take into account any extra or additional work or other special circumstances unless the Contractor has within twenty-eight days after such work has been commenced, or such circumstances have arisen, or as soon thereafter as is practicable, submitted to the Engineer's Representative full and detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

45. Subject to any provision to the contrary contained in the Contract, none of the Permanent Works shall, save as hereinafter provided, be carried on during the night or on Sundays, if locally recognised as days of rest, or their locally recognised equivalent without the permission in writing of the Engineer's Representative, except when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer's Representative. Provided always that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by rotary or double shifts.

46. If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any section is at any time, in the opinion of the Engineer, too slow to ensure completion by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as are necessary and the Engineer may approve to expedite progress so as to complete the Works or such section by the prescribed time or extended time. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor shall seek the Engineer's permission to do any work at night or on Sundays, if locally recognised as days of rest, or their locally recognised equivalent, such permission shall not be unreasonably refused.

47. (1) If the Contractor shall fail to achieve completion of the Works within the time prescribed by Clause 45 hereof, then the Contractor shall pay to the Employer the sum stated in the Contract as liquidated damages for such default and not as a penalty for every day or part of a day which shall elapse between the time prescribed by Clause 45 hereof and the date of certified completion of the Works. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies in his hands, due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.
Reduction of Liquidated Damages.

Bonus for Completion.

Certification of Completion of Works.

Certification of Completion by Stages.

Definition of 'Period of Maintenance'.

Execution of Work of Repair, etc.

Cost of Execution of Work of Repair, etc.

Remedy on Contractor's Failure to carry out Work Required.

(2) If, before the completion of the whole of the Works any part or section of the Works has been certified by the Engineer as completed, pursuant to Clause 48 hereof, and occupied or used by the Employer, the liquidated damages for delay shall, for any period of delay after such certificate and in the absence of alternative provisions in the Contract be reduced in the proportion which the value of the part or section so certified bears to the value of the whole of the Works.

(3) If it is desired to provide in the Contract for the payment of a bonus in relation to completion of the Works or of any part or section thereof this shall be set out in Part II in the clause numbered 47.

48. (1) When the whole of the Works have been substantially completed and have satisfactorily passed any final test that may be prescribed by the Contract, the Contractor may give a notice to the Engineer or to the Engineer's Representative accompanied by undertaking to finish any outstanding work during the Period of Maintenance. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor for the Engineer to issue a Certificate of Completion in respect of the Works. The Engineer shall, within twenty-one days of the date of delivery of such notice either issue to the Contractor, with a copy to the Employer, a Certificate of Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, requires to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the works specified therein. The Contractor shall be entitled to receive such Certificate of Completion within twenty-one days of completion to the satisfaction of the Engineer of the works so specified and making good any defects so notified.

(2) Similarly, in accordance with the procedure set out in sub-clause (1) of this Clause, the Contractor may request and the Engineer shall issue a Certificate of Completion in respect of—

(a) any section of the Permanent Works in respect of which a separate time for completion is provided in the Contract and

(b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and occupied or used by the Employer.

(3) If any part of the Permanent Works shall have been substantially completed and shall have satisfactorily passed any final test that may be prescribed by the Contract, the Engineer may issue a Certificate of Completion in respect of that part of the Permanent Works before completion of the whole of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete any outstanding work in that part of the Works during the Period of Maintenance.

(4) Provided always that a Certificate of Completion given in respect of any section or part of the Permanent Works before completion of the whole shall not be deemed to certify completion of any ground or surfaces requiring reinstatement, unless such Certificate shall expressly so state.

MAINTENANCE AND DEFECTS

49. (1) In these Conditions the expression "Period of Maintenance" shall mean the period of maintenance named in the Appendix to the Tender, calculated from the date of completion of the Works, certified by the Engineer in accordance with Clause 48 hereof, or, in the event of more than one certificate having been issued by the Engineer under the said Clause, from the respective dates so certified and in relation to the Period of Maintenance the expression "the Works" shall be construed accordingly.

(2) To the intent that the Works shall at or as soon as practicable after the expiration of the Period of Maintenance be delivered to the Employer in the condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall finish the work, if any, outstanding at the date of completion, as certified under Clause 48 hereof, as soon as practicable after such date and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Period of Maintenance, or within fourteen days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration.

(3) All such work shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer, be due to the use of materials or workmanship not in accordance with the Contract, or to neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract. If, in the opinion of the Engineer, such necessity shall be due to any other cause, the value of such work shall be ascertained and paid for as if it were additional work.

(4) If the Contractor shall fail to do any such work as aforesaid required by the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and if such work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contract, then all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, or may be deducted by the Employer from any monies due or which may become due to the Contractor.
50. The Contractor shall, if required by the Engineer in writing, search under the directions of the Engineer for the cause of any defect, imperfection or fault appearing during the progress of the Works or in the Period of Maintenance. Unless such defect, imperfection or fault shall be one for which the Contractor is liable under the Contract, the cost of the work carried out by the Contractor in searching as aforesaid shall be borne by the Employer. If such defect, imperfection or fault shall be one for which the Contractor is liable as aforesaid, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case repair, rectify and make good such defect, imperfection or fault at his own expense in accordance with the provisions of Clause 49 hereof.

ALTERNATIONS, ADDITIONS AND OMISIONS

51. (1) The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:—
(a) increase or decrease the quantity of any work included in the Contract,
(b) omit any such work,
(c) change the character or quality or kind of any such work,
(d) change the levels, lines, position and dimensions of any part of the Works, and
(e) execute additional work of any kind necessary for the completion of the Works and no such variation shall in any way vitiate or invalidate the Contract, but the value, if any, of all such variations shall be taken into account in ascertaining the amount of the Contract Price.

(2) No such variations shall be made by the Contractor without an order in writing of the Engineer. Provided that no order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities. Provided also that if for any reason the Engineer shall consider it desirable to give any such order verbally, the Contractor shall comply with such order and any confirmation in writing of such verbal order given by the Engineer, whether before or after the carrying out of the order, shall be deemed to be an order in writing within the meaning of this Clause. Provided further that if the Contractor shall within seven days confirm in writing to the Engineer and such confirmation shall not be contradicted in writing within fourteen days by the Engineer, it shall be deemed to be an order in writing by the Engineer.

52. (1) All extra or additional work done or work omitted by order of the Engineer shall be valued at the rates and prices set out in the Contract if, in the opinion of the Engineer, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the extra or additional work, then suitable rates or prices shall be agreed upon between the Engineer and the Contractor. In the event of disagreement the Engineer shall fix such rates or prices as shall, in his opinion, be reasonable and proper.

(2) Provided that if the nature or amount of any omission or addition relative to the nature or amount of the whole of the Works or to any part thereof shall be such that, in the opinion of the Engineer, the rate or price contained in the Contract for any item of the Works is, by reason of such omission or addition, rendered unreasonable or inapplicable, then a suitable rate or price shall be agreed upon between the Engineer and the Contractor. In the event of disagreement the Engineer shall fix such other rate or price as shall, in his opinion, be reasonable and proper having regard to the circumstances.

Provided also that no increase or decrease under sub-clause (1) of this Clause or variation of rates or price under sub-clause (2) of this Clause shall be made unless, as soon after the date of the order as is practicable and, in the case of extra or additional work, before the commencement of the work or as soon thereafter as is practicable, notice shall have been given in writing:—
(a) by the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price, or
(b) by the Engineer to the Contractor of his intention to vary a rate or price.

(3) If, on certified completion of the whole of the Works it shall be found that a reduction or increase greater than ten per cent of the sum named in the Letter of Acceptance, excluding all fixed sums, provisional sums and allowance for dayworks, if any, results from:—
(a) the aggregate effect of all Variation Orders, and
(b) all adjustments upon measurement of the estimated quantities set out in the Bill of Quantities, excluding all provisional sums, dayworks and adjustments of price made under Clause 70 (1) hereof,
but not from any other cause, the amount of the Contract Price shall be adjusted by such sum as may be agreed between the Contractor and the Engineer or, failing agreement, fixed by the Engineer having regard to all material and relevant factors, including the Contractor’s Site and general overhead costs of the Contract.
Daywork.

(4) The Engineer may, if, in his opinion it is necessary or desirable, order in writing that any additional or substituted work shall be executed on a daywork basis. The Contractor shall then be paid for such work under the conditions set out in the Daywork Schedule included in the Contract and at the rates and prices affixed thereto by him in his Tender.

The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and, before ordering materials, shall submit to the Engineer quotations for the same for his approval.

In respect of all work executed on a daywork basis, the Contractor shall, during the continuance of such work, deliver each day to the Engineer's Representative an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and plant used thereon or therefor (other than plant which is included in the percentage addition in accordance with the Schedule hereinbefore referred to). One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer's Representative and returned to the Contractor.

At the end of each month the Contractor shall deliver to the Engineer’s Representative a priced statement of the labour, material and plant, except as aforesaid, used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. Provided always that if the Engineer shall consider that for any reason the sending of such lists or statements by the Contractor, in accordance with the foregoing provision, was impracticable he shall nevertheless be entitled to authorise payment for such work, either as daywork, on being satisfied as to the time employed and plant and materials used on such work, or at such value therefor as shall, in his opinion, be fair and reasonable.

(5) The Contractor shall send to the Engineer’s Representative once in every month an account giving particulars, as full and detailed as possible, of all claims for any additional payment to which the Contractor may consider himself entitled and of all extra or additional work ordered by the Engineer which he has executed during the preceding month.

No final or Interim claim for payment for any such work or expense will be considered which has not been included in such particulars. Provided always that the Engineer shall be entitled to authorise payment to be made for any such work or expense, notwithstanding the Contractor’s failure to comply with this condition, if the Contractor has, at the earliest practicable opportunity, notified the Engineer in writing that he intends to make a claim for such work.

PLANT, TEMPORARY WORKS AND MATERIALS

53. (1) All Constructional Plant, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent, in writing, of the Engineer, which shall not be unreasonably withheld.

(2) Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor.

(3) The Employer shall not at any time be liable for the loss or damage to any of the said Constructional Plant, Temporary Works or materials as mentioned in Clauses 20 and 65 hereof.

(4) In respect of any Constructional Plant which the Contractor shall have imported for the purposes of the Works, the Employer will assist the Contractor, where required, in procuring any necessary Government consent to the re-export of such Constructional Plant by the Contractor upon the removal thereof as aforesaid.

(5) The Employer will assist the Contractor, where required, in obtaining clearance through the Customs of Constructional Plant, materials and other things required for the Works.

(6) Any other conditions affecting Constructional Plant, Temporary Works and materials, shall be set out in Part II in the Clause numbered 53 as may be necessary.

Approval of Materials, etc., not implied.

54. The operation of Clause 55 hereof shall not be deemed to imply any approval by the Engineer of the materials or other matter referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

MEASUREMENT

55. The quantities set out in the Bill of Quantities are the estimated quantities of the work, but they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.
56. The Engineer shall, except as otherwise stated, ascertain and determine by measurement the value in terms of the Contract of work done in accordance with the Contract. He shall, when required by any part or parts of the Works to be measured, give notice to the Contractor's authorised agent or representative, who shall forthwith attend or send a qualified agent to assist the Engineer or the Engineer's Representative in making such measurement, and shall furnish all particulars required by either of them. Should the Contractor not attend, or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. For the purpose of measuring such permanent work as is to be measured by records and drawings, the Engineer's Representative shall prepare records and drawings month by month of such work and the Contractor, as and when called upon to do so in writing, shall, within fourteen days, attend to examine and agree such records and drawings with the Engineer's Representative and shall sign the same when so agreed. If the Contractor does not so attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor shall, within fourteen days of such examination, lodge with the Engineer's Representative, for decision by the Engineer, notice in writing of the respects in which such records and drawings are claimed by him to be incorrect.

57. The Works shall be measured net, notwithstanding any general or local custom, except where otherwise specifically described or prescrib'd in the Contract.

PROVISIONAL SUMS

58. (1) "Provisional Sum" means a sum included in the Contract and so designated in the Bill of Quantities for the execution of work or the supply of goods, materials or services, for contingencies, which sum may be used, in whole or in part, or not at all, at the discretion of the Engineer. The Contract Price shall include only such amounts in respect of the work, supply or services to which such Provisional Sums relate as the Engineer shall approve or determine in accordance with this Clause.

(2) In respect of every Provisional Sum the Engineer shall have power to order:

(a) Work to be executed, including goods, materials or services to be supplied by the Contractor. The Contract Price shall include the value of such work executed or such goods, materials or services supplied determined in accordance with Clause 52 hereof.

(b) Work to be executed or goods, materials or services to be supplied by a nominated Sub-Contractor as hereinafter defined. The sum to be paid to the Contractor therefor shall be determined and paid in accordance with Clause 59 (4) hereof.

(c) Goods and materials to be purchased by the Contractor. The sum to be paid to the Contractor therefor shall be determined and paid in accordance with Clause 59 (4) hereof.

(3) The Contractor shall, when required by the Engineer, produce all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of Provisional Sums.

NOMINATED SUB-CONTRACTORS

59. (1) All specialists, merchants, tradesmen and others executing any work or supplying any goods, materials or services for which Provisional Sums are included in the Contract, who may be nominated or selected or approved by the Employer or the Engineer, and all persons to whom by virtue of the provisions of the Contract the Contractor is required to sub-let any work shall, in the execution of such work or the supply of such goods, materials or services, be deemed to be sub-contractors employed by the Contractor and are referred to in this Contract as "nominated Sub-Contractors".

(2) The Contractor shall not be required by the Employer or the Engineer or be deemed to be under any obligation to employ any nominated Sub-Contractor against whom the Contractor may raise reasonable objection, or who shall decline to enter into a sub-contract with the Contractor containing provisions:

(a) that in respect of the work, goods, materials or services the subject of the sub-contract, the nominated Sub-Contractor will undertake towards the Employer the like obligations and liabilities as are imposed on the Contractor by the terms of the Contract and will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection therewith, or arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities, and

(b) that the nominated Sub-Contractor will save harmless and indemnify the Contractor from and against any negligence by the nominated Sub-Contractor, his agents, workmen and servants and from and against any misuse by him or them of any Constructions Plant or Temporary Works provided by the Contractor for the purposes of the Contract and from all claims as aforesaid.
(3) If in connection with any Provisional Sum the services to be provided include any matter of design or specification of any part of the Permanent Works or of any equipment or plant to be incorporated therein, such requirement shall be expressly stated in the Contract and shall be included in any nominated Sub-Contract. The nominated Sub-Contract shall specify that the nominated Sub-Contractor providing such services will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities.

(4) For all work executed or goods, materials, or services supplied by any nominated Sub-Contractor, there shall be included in the Contract Price:—

(a) the actual price paid or due to be paid by the Contractor, on the direction of the Engineer, and in accordance with the Sub-Contract;

(b) the sum, if any, entered in the Bill of Quantities for labour supplied by the Contractor in connection therewith, or if ordered by the Engineer pursuant to Clause 58 (2) (b) hereof, as may be determined in accordance with Clause 52 hereof;

(c) in respect of all other charges and profit, a sum being a percentage rate of the actual price paid or due to be paid calculated, where provision has been made in the Bill of Quantities for a rate to be set against the relevant Provisional Sum, at the rate inserted by the Contractor against that item or, where no such provision has been made, at the rate inserted by the Contractor in the Appendix to the Tender and repeated where provision for such is made in a special item provided in the Bill of Quantities for such purpose.

(5) Before issuing, under Clause 60 hereof, any certificate, which includes any payment in respect of work done or goods, materials or services supplied by any nominated Sub-Contractor, the Engineer shall be entitled to demand from the Contractor reasonable proof that all payments, less retentions, included in previous certificates in respect of the work or goods, materials or services of such nominated Sub-Contractor have been paid or discharged by the Contractor, in default whereof unless the Contractor shall

(a) inform the Engineer in writing that he has reasonable cause for withholding or refusing to make such payments and

(b) produce to the Engineer reasonable proof that he has so informed such nominated Sub-Contractor in writing,

the Employer shall be entitled to pay to such nominated Sub-Contractor direct, upon the certificate of the Engineer, all payments, less retentions, provided for in the Sub-Contract, which the Contractor has failed to make to such nominated Sub-Contractor and to deduct by way of set-off the amount so paid by the Employer from any sums due or which may become due from the Employer to the Contractor.

Provided always that, where the Engineer has certified and the Employer has paid direct as aforesaid, the Engineer shall be issuing any further certificate in favour of the Contractor deduct from the amount thereof the amount so paid, direct as aforesaid, but shall not withhold or delay the issue of the certificate itself when due to be issued under the terms of the Contract.

(6) In the event of a nominated Sub-Contractor, as herebefore defined, having undertaken towards the Contractor in respect of the work executed, or the goods, materials or services supplied by such nominated Sub-Contractor, any continuing obligation extending for a period exceeding that of the Period of Maintenance under the Contract, the Contractor shall at any time, after the expiration of the Period of Maintenance, assign to the Employer, at the Employer’s request and cost, the benefit of such obligation for the unexpired duration thereof.

CERTIFICATES AND PAYMENT

60. (1) Unless otherwise provided, payments shall be made at monthly intervals in accordance with the conditions set out in Part II in the Clause numbered 60.

(2) Where advances are to be made by the Employer to the Contractor in respect of Constructional Plant and Materials, the conditions of payment and repayment shall be as set out in Part II in the Clause numbered 60.

(3) If the execution of the Works shall necessitate the importation of materials, plant or equipment from a country other than that in which the Works are being executed, or if the Works or any part thereof are to be executed by labour imported from any other such country, or if any other circumstances shall render it necessary or desirable, a proportion of the payments to be made under the Contract shall be made in the appropriate foreign currencies and in accordance with the provisions of Clause 72 hereof. The conditions under which such payments are to be made shall be as set out in Part II in the Clause numbered 60.

61. No certificate other than the Maintenance Certificate referred to in Clause 62 hereof shall be deemed to constitute approval of the Works.

62. (1) The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer and delivered to the Employer stating that the Works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the

FIDIC  A-26
Engineer within twenty-eight days after the expiration of the Period of Maintenance, or, if different periods of maintenance shall become applicable to different sections or parts of the Works, the expiration of the latest such period, or as soon thereafter as any works ordered during such period, pursuant to Clauses 49 and 50 hereof, shall have been completed to the satisfaction of the Engineer and full effect shall be given to this Clause, notwithstanding any previous entry on the Works or the taking possession, working or using thereof or any part thereof by the Employer. Provided always that the issue of the Maintenance Certificate shall not be a condition precedent to payment to the Contractor of the second portion of the retention money in accordance with the conditions set out in Part II in the Clause numbered 60.

(2) The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or the execution of the Works, unless the Contractor shall have made a claim in writing in respect thereof before the giving of the Maintenance Certificate under this Clause.

(3) Notwithstanding the issue of the Maintenance Certificate the Contractor and, subject to sub-clause (2) of this Clause, the Employer shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such Certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties hereto.

**REMEDIES AND POWERS**

63. (1) If the Contractor shall become bankrupt, or have a receiving order made against him, or shall present his petition in bankruptcy, or shall make an arrangement with or assignment in favour of his creditors, or shall agree to carry out the Contract under a committee of inspection of his creditors or, being a corporation, shall go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or if the Contractor shall assign the Contract, without the consent in writing of the Employer first obtained, or shall have an execution levied on his goods, or if the Engineer shall certify in writing to the Employer that in his opinion the Contractor:

(a) has abandoned the Contract, or
(b) without reasonable excuse has failed to commence the Works or has suspended the progress of the Works for twenty-eight days after receiving from the Engineer written notice to proceed, or
(c) has failed to remove materials from the Site or to pull down and replace work for twenty-eight days after receiving from the Engineer written notice that the said materials or work had been condemned and rejected by the Engineer under these conditions, or
(d) despite previous warnings by the Engineer, in writing, is not executing the Works in accordance with the Contract, or is persistently or flagrantly neglecting to carry out his obligations under the Contract, or
(e) has, to the detriment of good workmanship, or in defiance of the Engineer's instructions to the contrary, sub-let any part of the Contract

then the Employer may, after giving fourteen days' notice in writing to the Contractor, enter upon the Site and the Works and expel the Contractor therefrom without thereby voiding the Contract, or releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and powers conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Constructional Plant, Temporary Works and materials, which have been deemed to be reserved exclusively for the execution of the Works, under the provisions of the Contract, as he or they may think proper, and the Employer may, at any time, sell any of the said Constructional Plant, Temporary Works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

(2) The Engineer shall, as soon as may be practicable after any such entry and expulsion by the Employer, fix and determine ex parte, or by or after reference to the parties, or after such investigation or enquiries as he may think fit to make or institute, and shall certify what amount, if any, had at the time of such entry and expulsion been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract and the value of any of the said unused or partially used materials, any Constructional Plant and any Temporary Works.

(3) If the Employer shall enter and expel the Contractor under this Clause, he shall not be liable to pay to the Contractor any money on account of the Contract until the expiration of the Period of Maintenance and thereafter until the cost of execution and maintenance, damages for delay in completion, if any, and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums, if any, as the Engineer may certify would have been payable to him upon due
completion by him after deducting the said amount. If such amount shall exceed the sum which
would have been payable to the Contractor on due completion by him, then the Contractor shall,
upon demand, pay to the Employer the amount of such excess and it shall be deemed a debt due by
the Contractor to the Employer and shall be recoverable accordingly.

44. If, by reason of any accident, or failure, or other event occurring to in or in connection with
the Works, or any part thereof, either during the execution of the Works, or during the Period of
Maintenance, any remedial or other work or repair shall, in the opinion of the Engineer or the
Engineer’s Representative, be urgently necessary for the safety of the Works and the Contractor is
unable or unwilling at once to do such work or repair, the Employer may employ and pay other
persons to carry out such work or repair as the Engineer or the Engineer’s Representative may
consider necessary. If the work or repair so done by the Employer is work which, in the opinion of
the Engineer, the Contractor was liable to do at his own expense under the Contract, all expenses
properly incurred by the Employer in so doing shall be recoverable from the Contractor by the
Employer, or may be deducted by the Employer from any monies due or which may become due to
the Contractor. Provided always that the Engineer or the Engineer’s Representative, as the case
may be, shall, as soon after the occurrence of any such emergency as may be reasonably practicable,
notify the Contractor thereof in writing.

SPECIAL RISKS

65. Notwithstanding anything in the Contract contained—

(1) The Contractor shall be under no liability whatsoever whether by way of indemnity or
otherwise for or in respect of destruction of or damage to the Works, save to work condemned under
the provisions of Clause 39 hereof prior to the occurrence of any special risk hereinafter mentioned,
or to property whether of the Employer or third parties, or for or in respect of injury or loss of life
which is the consequence of any special risk as hereinafter defined. The Employer shall indemnify
and save harmless the Contractor against and from the same and against from all claims,
proceedings, damages, costs, charges and expenses whatsoever arising thereout or in connection therewith.

(2) If the Works or any materials on or near or in transit to the Site, or any other property of
the Contractor used or intended to be used for the purposes of the Works, shall sustain destruction
or damage by reason of any of the said special risks the Contractor shall be entitled to payment for—

(a) any permanent work and for any materials so destroyed or damaged,

and, so far as may be required by the Engineer, or as may be necessary for the completion of the
Works, on the basis of cost plus such profit as the Engineer may certify to be reasonable;

(b) replacing or making good any such destruction or damage to the Works;

(c) replacing or making good such materials or other property of the Contractor used or
intended to be used for the purposes of the Works.

(3) Destruction, damage, injury or loss of life caused by the explosion or impact whenever
and wherever occurring of any mine, bomb, shell, grenade, or other projectile, missile, munition, or
explosive of war, shall be deemed to be a consequence of the said special risks.

(4) The Employer shall repay to the Contractor any increased cost of or incidental to the
execution of the Works, other than such as may be attributable to the cost of reconstructing work
condemned under the provisions of Clause 39 hereof, prior to the occurrence of any special risk,
which is however attributable to or consequent on or the result of or in any way whatsoever
connected with the said special risks, subject however to the provisions in this Clause hereinafter contained
in respect of outbreak of war, but the Contractor shall as soon as any such increase of cost shall come
to his knowledge forthwith notify the Engineer thereof in writing.

(5) The special risks are war, hostilities (whether war be declared or not), invasion, act of
foreign enemies, the nuclear and pressurawaves risk described in Clause 20 (2) hereof, or insofar as
it relates to the country in which the Works are being or are to be executed or maintained, rebellion,
revolution, insurrection, military or usurped power, civil war, or, unless solely restricted to the
employees of the Contractor or of his Sub-Contractors and arising from the conduct of the Works,
riot, commotion or disorder.

(6) If, during the currency of the Contract, there shall be an outbreak of war, whether war
is declared or not, in any part of the world which, whether financially or otherwise, materially affects
the execution of the Works, the Contractor shall, unless and until the Contract is terminated under
the provisions of this Clause, continue to use his best endeavours to complete the execution of the
Works. Provided always that the Employer shall be entitled at any time after such outbreak of war
to terminate the Contract by giving written notice to the Contractor and, upon such notice being
given, this Contract shall, except as to the rights of the parties under this Clause and to the operation
of Clause 67 hereof, terminate, but without prejudice to the rights of either party in respect of any
antecedent breach thereof.
(7) If the Contract shall be terminated under the provisions of the last preceding sub-clause, the Contractor shall, with all reasonable despatch, remove from the Site all Constractional Plant and shall give similar facilities to his Sub-Contractors to do so.

(8) If the Contract shall be terminated as aforesaid, the Contractor shall be paid by the Employer, in so far as such amounts or items shall not have already been covered by payments on account made to the Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition:

(a) The amount payable in respect of any preliminary items, so far as the work or service comprised therein has been carried out or performed, and a proper proportion as certified by the Engineer of any such items, the work or service comprised in which has been partially carried out or performed.

(b) The cost of materials or goods reasonably ordered for the Works which shall have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials or goods becoming the property of the Employer upon such payments being made by him.

(c) A sum to be certified by the Engineer, being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works in so far as such expenditure shall not have been covered by the payments in this sub-clause before mentioned.

(d) Any additional sum payable under the provisions of sub-clauses (1), (2) and (4) of this Clause.

(e) The reasonable cost of removal of Constractional Plant under sub-clause (7) of this Clause and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost.

(f) The reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

Provided always that against any payments due from the Employer under this sub-clause, the Employer shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of Constractional Plant and materials and any other sums which at the date of termination were recoverable by the Employer from the Contractor under the terms of the Contract.

FRUSTRATION

66. If a war, or other circumstances outside the control of both parties, arises after the Contract is made so that either party is prevented from fulfilling his contractual obligations, or under the law governing the Contract, the parties are released from further performance, then the sum payable by the Employer to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 65 hereof if the Contract had been terminated under the provisions of Clause 65 hereof.

SETTLEMENT OF DISPUTES

67. If any dispute or difference of any kind whatsoever shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with, or arising out of the Contract, or the execution of the Works, whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall, in the first place, be referred to and settled by the Engineer who shall, within a period of ninety days after being requested by either party to do so, give written notice of his decision to the Employer and the Contractor. Subject to arbitration, as hereinafter provided, such decision in respect of every matter so referred shall be final and binding upon the Employer and the Contractor and shall forthwith be given effect to by the Employer and by the Contractor, who shall proceed with the execution of the Works with all due diligence whether he or the Contractor requires arbitration, as hereinafter provided, or not. If the Engineer has given written notice of his decision to the Employer and the Contractor and no claim to arbitration has been communicated to him by either the Employer or the Contractor within a period of ninety days from receipt of such notice, the said decision shall remain final and binding upon the Employer and the Contractor. If the Engineer fails to give notice of his decision, as aforesaid, within a period of ninety days after being requested as aforesaid, or if either the Employer or the Contractor be dissatisfied with any such decision, then and in any such case either the Employer or the Contractor may within ninety days after receiving notice of such decision, or within ninety days after the expiration of the first-named period of ninety days, as the case may be, require that the matter or matters in dispute be referred to arbitration as hereinafter provided. All disputes or differences in respect of which the decision, if any, of the Engineer has not become final and binding as aforesaid shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed under such Rules. The said arbitrators shall have full power to open up, revise and review any decision, opinion, direction, certificate or valuation of the Engineer. Neither party shall be limited in the proceedings.
before such arbitrator/s to the evidence or arguments put before the Engineer for the purpose of obtaining his said decision. No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator/s on any matter whatsoever relevant to the dispute or difference referred to the arbitrator/s as aforesaid. The reference to arbitration may proceed notwithstanding that the Works shall not then be or be alleged to be complete, provided always that the obligations of the Employer, the Engineer and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works.

NOTICES

68. (1) All certificates, notices or written orders to be given by the Employer or by the Engineer to the Contractor under the terms of the Contract shall be served by sending by post to or delivering the same to the Contractor’s principal place of business, or such other address as the Contractor shall nominate for this purpose.

(2) All notices to be given to the Employer or to the Engineer under the terms of the Contract shall be served by sending by post or delivering the same to the respective addresses nominated for that purpose in Part II of these Conditions.

(3) Either party may change a nominated address to another address in the country where the Works are being executed by prior written notice to the other party and the Engineer may do so by prior written notice to both parties.

DEFAULT OF EMPLOYER

69. (1) In the event of the Employer—

(a) failing to pay to the Contractor the amount due under any certificate of the Engineer within thirty days after the same shall have become due under the terms of the Contract, subject to any deduction that the Employer is entitled to make under the Contract, or

(b) interfering with or obstructing or refusing any required approval to the issue of any such certificate, or

(c) becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or

(d) giving formal notice to the Contractor that for unforeseen reasons, due to economic dislocation, it is impossible for him to continue to meet his contractual obligations

the Contractor shall be entitled to terminate his employment under the Contract after giving fourteen days’ prior written notice to the Employer, with a copy to the Engineer.

(2) Upon the expiry of the fourteen days’ notice referred to in sub-clause (1) of this Clause, the Contractor shall, notwithstanding the provisions of Clause 58 (1) hereof, with all reasonable despatch, remove from the Site all Constructionsal Plant brought by him thereon.

(3) In the event of such termination the Employer shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions of Clause 65 hereof, but, in addition to the payments specified in Clause 65 (8) hereof, the Employer shall pay to the Contractor the amount of any loss or damage to the Contractor arising out of or in connection with or by consequence of such termination.

CHANGES IN COSTS AND LEGISLATION

70. (1) Adjustments to the Contract Price shall be made in respect of rise or fall in the costs of labour and/or materials or any other matters affecting the cost of the execution of the Works, as set out in Part II in the Clause numbered 70.

(2) If, after the date thirty days prior to the latest date for submission of tenders for the Works there occur in the country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under sub-clause (1) of this Clause, in the execution of the Works, such additional or reduced cost shall be certified by the Engineer and shall be paid by or credited to the Employer and the Contract Price adjusted accordingly.

CURRENCY AND RATES OF EXCHANGE

71. If, after the date thirty days prior to the latest date for submission of tenders for the Works the Government or authorised agency of the Government of the country in which the Works are being or are to be executed imposes currency restrictions and/or transfer of currency restrictions in relation to the currency or currencies in which the Contract Price is to be paid, the Employer shall
reimburse any loss or damage to the Contractor arising therefrom, without prejudice to the right of the Contractor to exercise any other rights or remedies to which he is entitled in such event.

72.  (1) Where the Contract provides for payment in whole or in part to be made to the Contractor in foreign currency or currencies, such payment shall not be subject to variations in the rate or rates of exchange between such specified foreign currency or currencies and the currency of the country in which the Works are to be executed.

(2) Where the Employer shall have required the Tender to be expressed in a single currency but with payment to be made in more than one currency and the Contractor has stated the proportions or amounts of other currency or currencies in which he requires payment to be made, the rate or rates of exchange applicable for calculating the payment of such proportions or amounts shall be those prevailing, as determined by the Central Bank of the country in which the Works are to be executed, on the date thirty days prior to the latest date for the submission of tenders for the Works, as shall have been notified to the Contractor by the Employer prior to the submission of tenders or as provided for in the tender documents.

(3) Where the Contract provides for payment in more than one currency, the proportions or amounts to be paid in foreign currencies in respect of Provisional Sum items shall be determined in accordance with the principles set forth in sub-clauses (1) and (2) of this Clause as and when these sums are utilised in whole or in part in accordance with the provisions of Clauses 58 and 59 hereof.

NOTE

FOR CONDITIONS OF PARTICULAR APPLICATION—SEE PART II

FOR CONDITIONS OF PARTICULAR APPLICATION TO DREDGING AND RECLAMATION WORK—SEE PART III
Conditions of Contract

PART II—CONDITIONS OF PARTICULAR APPLICATION

The following notes are intended as an aide-memoire in the preparation of clauses (some of which are dealt with but not exhaustively in Part I) which will vary as necessary to take account of the circumstances and locality of the Works. These variable clauses which must be specially prepared to suit each particular contract should cover such of the under-mentioned matters and any others as are applicable.

Clause 1—Definitions
Employer: The Employer is ____________________________________________________________
Engineer: The Engineer is ______________________________________________________________

Further definitions as necessary.

Clause 2—Powers and Duties of Engineer.

Define Clauses under which specific approval of the Employer is required.

Clause 5—Language/s and Law

The language is/arc _________________________________________________________________

The Ruling Language is ____________________________________________________________

The Law to which the Contract is to be subject is ______________________________________

Clause 8—Contractor’s General Responsibilities

Employment of local personnel and purchase of local supplies.

Clause 10—Performance Bond

Form and percentage of Performance Bond (if required). Time limit for submission.

Clause 14—Programme

Time limit for submission of programme.

Clause 15—Contractor’s Superintendence

Languages to be spoken by Contractor’s Agent; registration of expatriate personnel.

Clause 16—Contractor’s Employees

Languages to be spoken by other members of Contractor’s staff; employment of locally recruited staff; currency of payments to Contractor’s Site staff.

Clause 19—Insurance of Works

Availability of insurance cover note before work commences. Use of local insurance companies; notification by Contractor of changes in the nature or extent of the Works. Additional insurance of Works as required in special circumstances.

Clause 24—Accident or Injury to Workmen

Payments (if any) to be made as dues to a State organisation in respect of Employer’s liability, in relation to Contractor’s responsibilities under Clause 24 (2).

Clause 34—Labour

Permits and registration of expatriate employees; repatriation to place of recruitment; provision of temporary housing for employees; requirements in respect of accommodation for staff of Employer and Engineer; standards of accommodation to be provided; provision of access roads, hospital, school, power, water, drainage, fire services, refuse collection, communal buildings, shops, telephones; hours and conditions of working; rates of pay; compliance with labour legislation; maintenance of records of safety and health.

Notes: Full details to be included in the Specification.

Clause 36—Quality of Materials

Utilisation of local materials.

Clause 43—Time for Completion

Reference to completion by stages, if required.

Clause 45—Night or Sunday

Reference to any special requirements to working by night or on locally recognised holidays.

Clause 47—Bonus and Liquidated Damages

Bonus (if any) for achievement of target date; if none, insert “Nil” in Appendix to the Tender; details of both liquidated damages and bonus (if any) to be included in the Specification including relation to interim dates; in the case of liquidated damages, calculation of amount; method of deducting, upper limit, currency, reduction as work is substantially completed; in the case of bonus, currency of payments.

Clause 49—Maintenance and Defects

In appropriate cases, where the permanent reinstatement is not being carried out by the Contractor, an additional sub-clause should be added to Clause 49 to cover making good all subsidence, etc. in the temporary reinstatement of any highway broken into for the purposes of the execution of the Works and the liability for damage and injury resulting therefrom up to the end of the Period of Maintenance or until possession of the Site has been taken for the purpose of carrying out permanent reinstatement (whichever is the earlier).
Clause 53—Plant
Hire of plant, sale or disposal of plant, payment of or relief from Customs or other import duties, harbour and port dues, wharfage, landing, pilotage and any other charges or dues, any other conditions affecting plant, Deine, if used, "Hired Plant", "Essential Hired Plant", "Hire Purchase", "Agreement to Hire", "Ownership". Exclude from the provisions of Clause 53, any vehicles engaged in the transport of labour, plant, equipment or materials to and from the Site.

Clause 59—Nominated Sub-Contractors
Provisions for design by Nominated Sub-Contractor (if any).

Clause 60—Certificates and Payments
Advances on plant and materials where made, conditions covering such advances and their repayment; monthly claims for work executed and certificates of Engineer as to amount due to Contractor for permanent work executed in the month and for temporary works included in the Bill of Quantities and also, if there are no advances for materials and plant amounts, as certified by the Engineer for any materials for permanent work on the Site.

Arrangements for deduction and subsequent release of Retention Money, Percentage and limit of Retention as in Appendix to the Tender.

Correction and withholding of certificates; place of payment; frequency of payment (if not monthly). Minimum amount of Interim Certificates and time within which payments to be made after the issue of the Certificate, as in Appendix to the Tender.

Currency or currencies, proportions of various currencies, rates of exchange and conditions applicable thereto, in and under which payments and/or deductions are to be made, to be included in Clause 60 or, if not to be predetermined, to be as inserted by the Contractor in the Tender, for approval by the Employer and inclusion in the Contract as an Appendix to the Bill of Quantities.

As it is desirable to have all financial matters settled as soon as practicable after completion of a contract, it is suggested that the following or equivalent paragraph be included in Clause 60:—

"Not later than... months after the issue of the Maintenance Certificate the Contractor shall submit to the Engineer a statement of final account with supporting documents showing in detail the value of the work done in accordance with the Contract together with all further sums which the Contractor considers to be due to him under the Contract. Within... months after receipt of this final account and of all information reasonably required for its verification the Engineer shall issue a final certificate stating

(a) the amount which in his opinion is finally due under the Contract and (after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled under the Contract),

(b) the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be. Such balance shall, subject to Clause 47 hereof, be paid to or by the Contractor as the case may require within twenty-eight days of the Certificate."

Clause 68—Notices

Employer's address

Engineer's address

Clause 70—Changes in Costs and Legislation

This Clause should cover such matters as:—

Adjustment of Contract Price, in both local and foreign currency expenditure, by reason of alteration in rates of wages and allowances payable to labour and local staff, changes in cost of materials for permanent or temporary works, or in consumable stores, fuel and power, variation in freight and insurance rates, Customs or other import duties, the operation of any law, statute, etc.; price adjustment formulae to be used, if any.

Clause 73—Taxation

Taxation—payment of or exemption from local income or other taxes both as regards the Contractor and his staff.

Clause 74 etc.—Miscellaneous (To be inserted if required)

Regulations governing importation and use of explosives for blasting; bribery and corruption; photographs of the Works and advertising; undertakings regarding non-disclosure of secret information; submissions of shipping and other documents, etc.
Conditions of Contract

PART III—CONDITIONS OF PARTICULAR APPLICATION TO DREDGING AND RECLAMATION WORK

Introduction

In Dredging and Reclamation Work the Contractor is not normally held responsible for the maintenance of the Works after takeover; the Works are usually taken over in sections as they are completed; the Contractor can only work economically if he is allowed to work continuously by day and by night; the incidence of Plant Costs (mobilisation, supply and demobilisation) forms a much higher proportion of total cost in the case of a dredging contract than is generally the case with construction contracts; as plant supplied by the Contractor almost invariably includes ships and at times includes ships taken on charter by the Contractor he cannot give to the Employer the unrestricted right to sell such plant. The Employer may find cover against the risks of non-completion by an increase of the amount of the performance bond.

Quantities included in the tender documents must necessarily be estimates, the accuracy of which is inherently less than normally experienced on construction contracts.

Part III—Conditions of Particular Application to Dredging and Reclamation Work

The Conditions of Contract (International) for Works of Civil Engineering Construction shall be amended by the addition, as Part III, of the following provisions.

Part I and Part II of the Conditions

(a) References to “Constructional Plant” shall be understood to relate to all dredging and reclamation plant and appliances and all ancillary plant required for use in the execution of the Works.

(b) References to “Essential Hired Plant” shall be understood to relate to “Constructional Plant” (as defined in Parts I and III of the Conditions of Contract (International) for Works of Civil Engineering Construction) the withdrawal of which in the event of a forfeiture under Clause 63 might (having regard to the methods of construction, dredging or reclamation employed prior to the forfeiture) endanger the safety or stability of or result in serious disturbance to the execution of any part of the Works and which is held by the Contractor under any agreement for hire thereof.

(c) References to “Maintenance” and “Period of Maintenance” shall have effect only if it is agreed between the parties that the Contractor shall specifically be responsible for Maintenance of the Works or any part thereof.

Clause 5 (2)

For “Parts I and II” there shall be substituted “Parts I, II and III”.

Clause 10

For “stated in the Letter of Acceptance” there shall be substituted “indicated in the Tender documents”.

Clause 11

The Employer shall have made available to the Contractor with the Tender documents such data on soil specifications and hydraulic conditions as shall have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works and furthermore depending on the nature and situation of the Works such additional data necessary in connection with the execution of the Works like navigation conditions, environmental conditions, clumping places and such particular data and the Tender shall be deemed to have been based on such data, but the Contractor shall be responsible for his own interpretation thereof. The Contractor shall also be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his Tender, as to the form and nature thereof, but he shall not normally be called upon to satisfy himself as to the quantities of materials to be dredged more accurately than he can deduce from the Tender documents and inspection of the Site only.

Clause 12

The words (“other than climatic conditions on the Site”) shall be deleted.

Clause 18

Exploratory excavation shall be deemed to include dredging.

Clause 20 (1)

Where arrangements are made for sections of the Works to be taken over as they are completed the Contractor’s responsibility for any such section shall cease forthwith upon its acceptance.

Clause 29 (2)

In view of the relatively small but highly specialised labour force employed, the “excepted risks” shall include epidemic disease.
Clause 21

The Contractor’s obligation to insure under this Clause shall be limited, unless otherwise specially agreed, to the insurance against normal marine risks of all Plant (including ships) supplied by the Contractor for use on the Works whether owned or taken on charter by the Contractor. Such insurance shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld).

Clause 40 (1)

(a) In the event of suspension of work by either the Engineer or the Employer, the extra cost to be borne by the Employer shall in case of Plant chartered by the Contractor include the bare boat charter hire of such Plant in lieu of its depreciation.

(b) The stipulation under (c) shall be deleted.

Clause 45

The Contractor shall have the option to work continuously by day and by night and on locally recognised holidays subject only to any specific restrictions stipulated in the Contract.

Clause 51

The alterations, additions and omissions (provided for in Clause 51) shall be imposed upon the Contractor only insofar as they can be executed by means of the Plant used or intended to be used in the execution of the Works as originally specified by the Contractor in his tender documents.

Where no order has been given by the Engineer under Clause 51 (1) for the variation of any item of the Bill of Quantities and it is found on completion of the Works that the actual quantity of such item differ from the estimated quantity stated in the Bill, a variation shall be deemed to have been made by the Engineer for which no written order is required and to which the scheduled rate for that item shall apply.

For “within seven days” under Clause 51 (2) there shall be substituted “within fourteen days”.

Clause 61

For “Maintenance Certificate” there shall be substituted “Final Completion Certificate”.

Clause 62

For “Maintenance Certificate” there shall be substituted “Final Completion Certificate”.

The Final Completion Certificate shall be issued within 14 days of completion of the Works.

Clause 63 (1)

The last sentence of this Clause commencing “and the Employer may at any time sell” shall be deleted.

Clause 63 (4)

In the case of Essential Hired Plant the Employer shall not be entitled to sell such Plant as is specified in sub-clause 63 (5).

Clause 63 (5)

With a view to securing in the event of a forfeiture under Clause 63 hereof the continued availability for the purpose of executing the Works of any Essential Hired Plant the Contractor shall not bring on to the Site any Essential Hired Plant unless the agreement for hire thereof contains a provision that the owner thereof will on request in writing made by the Employer within 7 days after the date on which any such forfeiture has become effective and on the Employer undertaking to pay all hire charges in respect thereof from such date hire such Essential Plant to the Employer on the same terms in all respects as the same was hired to the Contractor save that the Employer shall be entitled to permit the use thereof by any other contractor employed by him for the purpose of completing the Works under the terms of the said Clause 63.

Clause 63 (6)

The Contractor shall upon written request made by the Engineer (which request shall not be questioned by any arbitrator) at any time in relation to any item of Essential Hired Plant submit to the Engineer a certificate, officially certified by an Authority (e.g. notary public) to the satisfaction of the Engineer stating that the agreement for the hire thereof contains a provision in accordance with the requirements of sub-clause 63 (5).

Clause 63 (7)

In the event of the Employer entering into any agreement for hire of Essential Hired Plant pursuant to the provisions of sub-clause 63 (5) of this Clause all sums properly paid by the Employer under the provisions of any such agreement and all expenses incurred by him (including stamp duties) in entering into such agreement shall be deemed for the purpose of Clause 63 hereof to be part of the cost of completing the Works.
SHORT DESCRIPTION
OF WORKS

Form of Tender

(Notes:—The Appendix forms part of the Tender.
Tenderers are required to fill up all the blank spaces in this Tender Form and Appendix.)

To:........................................................................................................................................

GENTLEMEN,

Having examined the Drawings, Conditions of Contract, Specification and Bill of Quantities for the execution of the above-named Works, we, the undersigned, offer to execute complete and maintain the whole of the said Works in conformity with the said Drawings, Conditions of Contract, Specification and Bill of Quantities for the sum of.........................................................................................................................................................................................................................

................................................................................................................................................. (£................................................................................)... or such other sums as may be ascertained in accordance with the said Conditions.

2. We undertake if our Tender is accepted to commence the Works within.......................days of receipt of the Engineer's order to commence, and to complete and deliver the whole of the Works comprised in the Contract within.......................days calculated from the last day of the aforesaid period in which the Works are to be commenced.

3. If our tender is accepted we will, if required, obtain the guarantee of an Insurance Company or Bank or other sureties (to be approved by you) to be jointly and severally bound with us in a sum not exceeding ...... per cent. of the above-named sum for the due performance of the Contract under the terms of a Bond to be approved by you.

4. We agree to abide by this Tender for the period of .......................days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. Unless and until a formal Agreement is prepared and executed this Tender, together with your written acceptance thereof, shall constitute a binding Contract between us.

6. We understand that you are not bound to accept the lowest or any tender you may receive.
### Appendix

<table>
<thead>
<tr>
<th>Clause</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Bond or Guarantee (if any)</td>
<td>10 ( )</td>
</tr>
<tr>
<td>Minimum Amount of Third Party Insurance</td>
<td>23 (2)</td>
</tr>
<tr>
<td>Period for commencement, from Engineer's order to commence</td>
<td>41</td>
</tr>
<tr>
<td>Time for completion</td>
<td>43</td>
</tr>
<tr>
<td>Amount of Liquidated Damages</td>
<td>47 (1)</td>
</tr>
<tr>
<td>Limit of Liquidated Damages</td>
<td>47 ( )</td>
</tr>
<tr>
<td>Amount of Bonus (if any)</td>
<td>47 (3)</td>
</tr>
<tr>
<td>Period of Maintenance</td>
<td>49</td>
</tr>
<tr>
<td>Percentage for Adjustment of Provisional Sums</td>
<td>59 (4) (c)</td>
</tr>
<tr>
<td>Percentage of Retention</td>
<td>60 ( )</td>
</tr>
<tr>
<td>Limit of Retention Money</td>
<td>60 ( )</td>
</tr>
<tr>
<td>Minimum Amount of Interim Certificates</td>
<td>60 ( )</td>
</tr>
<tr>
<td>Time within which payment to be made after Certificate</td>
<td>60 ( )</td>
</tr>
</tbody>
</table>

---

Dated this........................................................................day of ............................................ 19 ....

Signature........................................................................ in the capacity of ............................................

duly authorised to sign tenders for and on behalf of................................................................. ............................

................................................................................................. (IN BLOCK CAPITALS)

Witness................................................................................... Address .........................................................

Address..................................................................................

Occupation ............................................................................

A-37 FIDIC
Form of Agreement

THIS AGREEMENT made the ........................................ day of ........................................

19................................ Between .......................................................... .......................................................... ..........................................................

of .......................................................... .......................................................... ..........................................................

(hereinafter called "the Employer") of the one part and .......................................................... ..........................................................

(hereinafter called "the Contractor") of the other part

WHEREAS the Employer is desirous that certain Works should be executed, viz.......................................................... ..........................................................

.......................................................... .......................................................... and has accepted a

Tender by the Contractor for the execution completion and maintenance of such Works NOW

THIS AGREEMENT WITNESSETH as follows:—

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:—

(a) The said Tender.

(b) The Drawings.

(c) The Conditions of Contract (Parts I, II and III*).

(d) The Specification.

(e) The Bill of Quantities.

(f) The Schedule of Rates and Prices (if any).

(g) The Letter of Acceptance.

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Employer to execute complete and maintain the Works in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution completion and maintenance of the Works the Contract Price at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused their respective Common Seals to be hereunto affixed (or have hereunto set their respective hands and seals) the day and year first above written

The Common Seal of .......................................................... ..........................................................

.......................................................... .......................................................... Limited

was hereunto affixed in the presence of:—

or

SIGNED SEALED AND DELIVERED by the

said .......................................................... ..........................................................

.......................................................... ..........................................................

in the presence of:—

* Delete where inapplicable.
These Conditions have been approved on behalf of the following

Members of FÉDÉRATION INTERNATIONAL DES INGÉNIEURS CONSEILS

AUSTRALIA
The Association of Consulting Engineers Australia
73 Miller Street,
P.O. Box 1002,
NORTH SYDNEY, NSW 2060

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Kamer van Raadgevende Ingenieurs van België
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RIO DE JANEIRO-RJ

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431 Park Avenue,
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UNITED STATES OF AMERICA
American Consulting Engineers Council
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1155, 15th Street, N.W.,
WASHINGTON, DC 20005

A-39
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organisations from whom Prints may also be obtained:

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INTERNATIONAL FEDERATION OF ASIAN AND WESTERN PACIFIC CONTRACTORS ASSOCIATIONS
INTER AMERICAN FEDERATION OF THE CONSTRUCTION INDUSTRY
and also
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

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Ciudadela Bolivariana
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The Federation of Civil Engineering Contractors
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The Export Group for the Constructional Industries
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Association D'ingénieurs Diplômés
Entrepreneurs de Travaux Publics
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Construction Building,
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U.S.A.
The Associated General Contractors of America
1957 E Street, N.W.,
WASHINGTON, D.C. 20006

VENUELSA
Cámara Venezolana de de la Construcción
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Centro Profesional del Este,
CARACAS
APPENDIX B
CONDITIONS OF CONTRACT
AND
FORMS OF TENDER, AGREEMENT AND BOND
FOR USE IN CONNECTION WITH
WORKS OF CIVIL ENGINEERING CONSTRUCTION

Fifth Edition (June 1973) (Revised January 1979)

These documents, commonly known as “the ICE Conditions of Contract”, were first issued in December 1945, having been agreed by the Institution of Civil Engineers and the Federation of Civil Engineering Contractors.

The Second, Third and Fourth Editions (approved by the Institution and the Federation and also by the Association of Consulting Engineers) were issued, respectively, in January 1950, March 1951 and January 1955. This Fifth Edition was similarly issued in June 1973 and revised in January 1979.


Prints may be obtained from
The Secretary,
The Institution of Civil Engineers,
Great George Street, Westminster, SW1P 3AA,
or
The Secretary,
The Association of Consulting Engineers,
Alliance House,
12 Caxton Street, Westminster, SW1H 0QL,
or
The General Secretary,
The Federation of Civil Engineering Contractors,
Cowdray House,
6 Portugal Street, London WC2A 2HH
The Institution of Civil Engineers, The Association of Consulting Engineers and The Federation of Civil Engineering Contractors have, as sponsoring authorities, approved this revised, fifth, edition of the document commonly known as the ICE Conditions of Contract, for all works of civil engineering construction.

A permanent joint committee will keep under review the use of the document and will consider any suggestions for amendment, which should be addressed to the Secretary, the Institution of Civil Engineers, Great George Street, London SW1P 3AA. Revision to the document will be made when such action seems warranted.
# TABLE OF CONTENTS

**DEFINITIONS AND INTERPRETATION**

1 (1) Definitions  
(2) Singular and Plural  
(3) Headings and Marginal Notes  
(4) Clause References  
(5) Cost

**ENGINEER'S REPRESENTATIVE**

2 (1) Functions and Powers of Engineer's Representative  
(2) Appointment of Assistants  
(3) Delegation by Engineer  
(4) Reference to Engineer or Engineer's Representative

**ASSIGNMENT AND SUB-LETTING**

3 Assignment  
4 Sub-Leasing

**CONTRACT DOCUMENTS**

5 Documents Mutually Explanatory  
6 Supply of Documents  
7 (1) Further Drawings and Instructions  
(2) Notice by Contractor  
(3) Delay in Issue  
(4) One Copy of Documents to be kept on Site

**GENERAL OBLIGATIONS**

8 (1) Contractor's General Responsibilities  
(2) Contractor Responsible for Safety of Site Operations  
9 Contract Agreement  
10 Sureties  
11 (1) Inspection of Site  
(2) Sufficiency of Tender  
12 (1) Adverse Physical Conditions and Artificial Obstructions  
(2) Measures to be Taken  
(3) Delay and Extra Cost  
(4) Conditions Reasonably Foreseeable  
13 (1) Work to be to Satisfaction of Engineer  
(2) Mode and Manner of Construction  
(3) Delay and Extra Cost  
14 (1) Programme to be Furnished  
(2) Revision of Programme  
(3) Methods of Construction  
(4) Engineer's Consent  
(5) Design Criteria  
(6) Delay and Extra Cost  
(7) Responsibility Unaffected by Approval  
15 (1) Contractor's Superintendence  
(2) Contractor's Agent  
16 Removal of Contractor's Employees  
17 Setting-out  
18 Boreholes and Exploratory Excavation  
19 (1) Safety and Security  
(2) Employer's Responsibilities  
20 (1) Care of the Works  
(2) Responsibility for Reinstatement  
(3) Excepted Risks  
21 Insurance of Works, etc.  
22 (1) Damage to Persons and Property  
(2) Indemnity by Employer  
23 (1) Insurance against Damage to Persons and Property  
(2) Amount and Terms of Insurance
TABLE OF CONTENTS—continued

<table>
<thead>
<tr>
<th>CLAUSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Accident or Injury to Workmen</td>
</tr>
<tr>
<td>25</td>
<td>Remedy on Contractor's Failure to Insure</td>
</tr>
<tr>
<td>26 (1)</td>
<td>Giving of Notices and Payment of Fees</td>
</tr>
<tr>
<td>26 (2)</td>
<td>Contractor to Conform with Statutes, etc.</td>
</tr>
<tr>
<td>27</td>
<td>Public Utilities Street Works Act 1950</td>
</tr>
<tr>
<td>27 (1)</td>
<td>Definitions</td>
</tr>
<tr>
<td>27 (2)</td>
<td>Notifications by Employer to Contractor</td>
</tr>
<tr>
<td>27 (3)</td>
<td>Service of Notices by Employer</td>
</tr>
<tr>
<td>27 (4)</td>
<td>Notices by Contractor to Employer</td>
</tr>
<tr>
<td>27 (5)</td>
<td>Failure to Commence Street Works</td>
</tr>
<tr>
<td>27 (6)</td>
<td>Delays Attributable to Variations</td>
</tr>
<tr>
<td>27 (7)</td>
<td>Contractor to Comply with Other Obligations of Act</td>
</tr>
<tr>
<td>28</td>
<td>Patent Rights</td>
</tr>
<tr>
<td>29 (1)</td>
<td>Interference with Traffic and Adjoining Properties</td>
</tr>
<tr>
<td>29 (2)</td>
<td>Noise and Disturbance</td>
</tr>
<tr>
<td>30</td>
<td>Avoidance of Damage to Highways, etc.</td>
</tr>
<tr>
<td>30 (1)</td>
<td>Avoidance of Damage to Highways, etc.</td>
</tr>
<tr>
<td>30 (2)</td>
<td>Transport of Constructional Plant</td>
</tr>
<tr>
<td>30 (3)</td>
<td>Transport of Materials</td>
</tr>
<tr>
<td>31</td>
<td>Facilities for Other Contractors</td>
</tr>
<tr>
<td>31 (1)</td>
<td>Facilities for Other Contractors</td>
</tr>
<tr>
<td>32</td>
<td>Fossils, etc.</td>
</tr>
<tr>
<td>33</td>
<td>Clearance of Site on Completion</td>
</tr>
</tbody>
</table>

LABOUR

<table>
<thead>
<tr>
<th>CLAUSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 (1)</td>
<td>Rates of Wages/Hours and Conditions of Labour</td>
</tr>
<tr>
<td>34</td>
<td>(Extract from Fair Wages Resolution)</td>
</tr>
<tr>
<td>35</td>
<td>Civil Engineering Construction Conciliation Board</td>
</tr>
<tr>
<td>35</td>
<td>Returns of Labour and Plant</td>
</tr>
</tbody>
</table>

WORKMANSHIP AND MATERIALS

<table>
<thead>
<tr>
<th>CLAUSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 (1)</td>
<td>Quality of Materials and Workmanship and Tests</td>
</tr>
<tr>
<td>36 (2)</td>
<td>Cost of Samples</td>
</tr>
<tr>
<td>36 (3)</td>
<td>Cost of Tests</td>
</tr>
<tr>
<td>37</td>
<td>Access to Site</td>
</tr>
<tr>
<td>38 (1)</td>
<td>Examination of Work before Covering up</td>
</tr>
<tr>
<td>38 (2)</td>
<td>Uncovering and Making Openings</td>
</tr>
<tr>
<td>39</td>
<td>Removal of Improper Work and Materials</td>
</tr>
<tr>
<td>39 (1)</td>
<td>Removal of Improper Work and Materials</td>
</tr>
<tr>
<td>39 (2)</td>
<td>Default of Contractor in Compliance</td>
</tr>
<tr>
<td>39 (3)</td>
<td>Failure to Disapprove</td>
</tr>
<tr>
<td>40 (1)</td>
<td>Suspension of Work</td>
</tr>
<tr>
<td>40 (2)</td>
<td>Suspension lasting more than Three Months</td>
</tr>
</tbody>
</table>

COMMENCEMENT TIME AND DELAYS

<table>
<thead>
<tr>
<th>CLAUSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Commencement of Works.</td>
</tr>
<tr>
<td>42 (1)</td>
<td>Possession of Site</td>
</tr>
<tr>
<td>42 (2)</td>
<td>Wayleaves, etc.</td>
</tr>
<tr>
<td>43</td>
<td>Time for Completion</td>
</tr>
<tr>
<td>44 (1)</td>
<td>Extension of Time for Completion</td>
</tr>
<tr>
<td>44 (2)</td>
<td>Interim Assessment of Extension</td>
</tr>
<tr>
<td>44 (3)</td>
<td>Assessment at Due Date for Completion</td>
</tr>
<tr>
<td>44 (4)</td>
<td>Final Determination of Extension</td>
</tr>
<tr>
<td>45</td>
<td>Night and Sunday Work</td>
</tr>
<tr>
<td>46</td>
<td>Rate of Progress</td>
</tr>
</tbody>
</table>

LIQUIDATED DAMAGES AND LIMITATION OF DAMAGES FOR DELAYED COMPLETION

<table>
<thead>
<tr>
<th>CLAUSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 (1)</td>
<td>Liquidated Damages for Whole of Works</td>
</tr>
<tr>
<td>47 (2)</td>
<td>Liquidated Damages for Sections</td>
</tr>
<tr>
<td>47 (3)</td>
<td>Damages not a Penalty</td>
</tr>
<tr>
<td>47 (4)</td>
<td>Deduction of Liquidated Damages</td>
</tr>
<tr>
<td>47 (5)</td>
<td>Reimbursement of Liquidated Damages</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS—continued

COMPLETION CERTIFICATE
48 (1) Certificate of Completion of Works
(2) Completion of Sections and Occupied Parts
(3) Completion of Other Parts of Works
(4) Reinstatement of Ground

MAINTENANCE AND DEFECTS
49 (1) Definition of "Period of Maintenance"
(2) Execution of Work of Repair, etc.
(3) Cost of Execution of Work of Repair, etc.
(4) Remedy on Contractor's Failure to Carry out Work Required
(5) Temporary Reinstatement

ALTERATIONS ADDITIONS AND OMISSIONS
50 Contractor to Search

PROPERTY IN MATERIALS AND PLANT
51 (1) Ordered Variations
(2) Ordered Variations to be in Writing
(3) Changes in Quantities

52 (1) Valuation of Ordered Variations
(2) Engineer to fix Rates
(3) Daywork
(4) Notice of Claims

MEASUREMENT

PROVISIONAL AND PRIME COST SUMS AND NOMINATED SUB-CONTRACTS
53 Plant, etc.—Definitions
(2) Vesting of Plant
(3) Conditions of Hire of Plant
(4) Costs for Purposes of Clause 63
(5) Notification of Plant Ownership
(6) Irremovability of Plant, etc.
(7) Revesting and Removal of Plant
(8) Disposal of Plant
(9) Liability for Loss or Injury to Plant
(10) Incorporation of Clause in Sub-contracts
(11) No Approval by Vesting

54 (1) Vesting of Goods and Materials not on Site
(2) Action by Contractor
(3) Vesting in Employer
(4) Lien on Goods or Materials
(5) Delivery to the Employer of Vested Goods or Materials
(6) Incorporation in sub-contracts

55 (1) Quantities
(2) Correction of Errors

56 (1) Measurement and Valuation
(2) Increase or Decrease of Rate
(3) Attending for Measurement

57 Method of Measurement

ICE B-5
TABLE OF CONTENTS—continued

CLAUSE

59B(1) Forfeiture of Sub-contract
    (2) Termination of Sub-contract
    (3) Engineer's Action upon Termination
    (4) Delay and Extra Cost
    (5) Termination Without Consent
    (6) Recovery of Employer's Loss
59C Payment to Nominated Sub-contractors

CERTIFICATES AND PAYMENT

60 (1) Monthly Statements
    (2) Monthly Payments
    (3) Final Account
    (4) Retention
    (5) Payment of Retention Money
    (6) Interest on Overdue Payments
    (7) Correction and Withholding of Certificates
    (8) Copy Certificate for Contractor

61 (1) Maintenance Certificate
    (2) Unfulfilled Obligations

REMEDIES AND POWERS

62 Urgent Repairs
63 (1) Forfeiture
    (2) Assignment to Employer
    (3) Valuation at Date of Forfeiture
    (4) Payment after Forfeiture

FRUSTRATION

64 Payment in Event of Frustration

WAR CLAUSE

65 (1) Works to Continue for 28 Days on Outbreak of War
    (2) Effect of Completion Within 28 Days
    (3) Right of Employer to Determine Contract
    (4) Removal of Plant on Determination
    (5) Payment on Determination
    (6) Provisions to Apply as from Outbreak of War

SETTLEMENT OF DISPUTES

66 (1) Settlement of Disputes—Arbitration
    (2) Interim Arbitration
    (3) Vice-President to Act

APPLICATION TO SCOTLAND

67 Application to Scotland

NOTICES

68 (1) Service of Notice on Contractor
    (2) Service of Notice on Employer

TAX MATTERS

69 Tax Fluctuations
70 Value Added Tax

METRICATION

71 Metrification

SPECIAL CONDITIONS

72 Special Conditions
<table>
<thead>
<tr>
<th>Clause</th>
<th>Index to Conditions of Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandonment of Contract by Contractor</td>
<td>63(1)</td>
</tr>
<tr>
<td>Access to Site</td>
<td>37</td>
</tr>
<tr>
<td>Accident or injury to workmen</td>
<td>24</td>
</tr>
<tr>
<td>Admeasurement of work</td>
<td>56(1)</td>
</tr>
<tr>
<td>Adverse physical conditions and obstructions</td>
<td>12</td>
</tr>
<tr>
<td>Agent, Contractor's</td>
<td>15(2)</td>
</tr>
<tr>
<td>Responsibility for safety</td>
<td>15(2)</td>
</tr>
<tr>
<td>Agreement, Contract</td>
<td>9</td>
</tr>
<tr>
<td>Agreement for hire, Definition</td>
<td>53(1)</td>
</tr>
<tr>
<td>Arbitration</td>
<td>66</td>
</tr>
<tr>
<td>Interim</td>
<td>66(2)</td>
</tr>
<tr>
<td>Vice-President to act in certain circumstances</td>
<td>66(3)</td>
</tr>
<tr>
<td>Archaeological finds</td>
<td>32</td>
</tr>
<tr>
<td>Assignment</td>
<td>3</td>
</tr>
<tr>
<td>Assignment to Employer (after forfeiture)</td>
<td>63(2)</td>
</tr>
<tr>
<td>Bill of Quantities (see Quantities)</td>
<td>10</td>
</tr>
<tr>
<td>Bond</td>
<td>18</td>
</tr>
<tr>
<td>Boreholes and exploratory excavation</td>
<td>18</td>
</tr>
<tr>
<td>Breach of contract (see Abandonment, Forfeiture)</td>
<td></td>
</tr>
<tr>
<td>Breach of nominated sub-contract by Sub-contractor</td>
<td>59a(6)</td>
</tr>
<tr>
<td>Care of the Works</td>
<td>20(1)</td>
</tr>
<tr>
<td>Certificate of Completion</td>
<td>48</td>
</tr>
<tr>
<td>Payment of retention money after</td>
<td>60(5)</td>
</tr>
<tr>
<td>and reinstatement of ground</td>
<td>48(4)</td>
</tr>
<tr>
<td>Certificates, Copy to Contractor</td>
<td>60(8)</td>
</tr>
<tr>
<td>Correction and withholding of</td>
<td>60(7)</td>
</tr>
<tr>
<td>Final</td>
<td>60(3)</td>
</tr>
<tr>
<td>Interim</td>
<td>60(2)</td>
</tr>
<tr>
<td>Maintenance</td>
<td>61</td>
</tr>
<tr>
<td>Civil Engineering Construction Conciliation Board</td>
<td>34(2)</td>
</tr>
<tr>
<td>Claims, Notice of</td>
<td>52(4)</td>
</tr>
<tr>
<td>(see also Delay, Monthly statements)</td>
<td></td>
</tr>
<tr>
<td>Clause references, Interpretation of</td>
<td>16(4)</td>
</tr>
<tr>
<td>Clearance of Site on completion</td>
<td>33</td>
</tr>
<tr>
<td>Commencement of Works</td>
<td>41</td>
</tr>
<tr>
<td>Completion, Certificate of</td>
<td>48</td>
</tr>
<tr>
<td>Extension of time for</td>
<td>44</td>
</tr>
<tr>
<td>Time for</td>
<td>43</td>
</tr>
<tr>
<td>Completion of Sections and occupied parts</td>
<td>48(2)</td>
</tr>
<tr>
<td>(unoccupied parts</td>
<td>48(3)</td>
</tr>
<tr>
<td>whole of Works</td>
<td>48(1)</td>
</tr>
<tr>
<td>within 28 days (in wartime)</td>
<td>65(2)</td>
</tr>
<tr>
<td>Conditions of contract, Special</td>
<td>72</td>
</tr>
<tr>
<td>Construction, Contractor to submit details of methods of</td>
<td>14(3)</td>
</tr>
<tr>
<td>Mode and manner of</td>
<td>13(2)</td>
</tr>
<tr>
<td>Constructional Plant, Definition</td>
<td>21</td>
</tr>
<tr>
<td>Insurance of</td>
<td></td>
</tr>
<tr>
<td>Transport of</td>
<td>30(2)</td>
</tr>
<tr>
<td>Contract, Abandonment of (by Contractor)</td>
<td>63(1)</td>
</tr>
<tr>
<td>(by Employer)</td>
<td>60(2)</td>
</tr>
<tr>
<td>Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>Determination (due to war) of</td>
<td>65(3)</td>
</tr>
<tr>
<td>Forfeiture of</td>
<td>63</td>
</tr>
<tr>
<td>(Nominated sub-contract)</td>
<td>59a</td>
</tr>
<tr>
<td>Right of Employer (in wartime) to determine</td>
<td>65(3)</td>
</tr>
<tr>
<td>Contract Agreement</td>
<td>9</td>
</tr>
<tr>
<td>Contract Price, Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>Contract value</td>
<td>60(1)</td>
</tr>
<tr>
<td>INDEX TO CONDITIONS OF CONTRACT—continued</td>
<td></td>
</tr>
<tr>
<td>CLAUSE</td>
<td></td>
</tr>
<tr>
<td>Contractor, Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Failure to insure</td>
<td>25</td>
</tr>
<tr>
<td>&quot; General responsibilities of</td>
<td>8(1)</td>
</tr>
<tr>
<td>&quot; Safety of site operations</td>
<td>8(2)</td>
</tr>
<tr>
<td>&quot; Superintendence by</td>
<td>15(1)</td>
</tr>
<tr>
<td>Contractor responsible for Nominated Sub-contracts</td>
<td>59(a)(6)</td>
</tr>
<tr>
<td>Controlled Land</td>
<td>27</td>
</tr>
<tr>
<td>Copy of certificate for Contractor</td>
<td>60(8)</td>
</tr>
<tr>
<td>Correction and withholding of certificates</td>
<td>60(7)</td>
</tr>
<tr>
<td>Cost, Interpretation of</td>
<td>1(5)</td>
</tr>
<tr>
<td>Crops, Damage to</td>
<td>22(1)</td>
</tr>
<tr>
<td>Damage to highways or bridges</td>
<td>30(1)</td>
</tr>
<tr>
<td>Damages, Liquidated</td>
<td>47</td>
</tr>
<tr>
<td>Daywork</td>
<td>52(3)</td>
</tr>
<tr>
<td>Default of Contractor (replacement of work and materials)</td>
<td>39(2)</td>
</tr>
<tr>
<td>Definition of Agreement for hire</td>
<td>53(1)</td>
</tr>
<tr>
<td>&quot; Constructional Plant</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Contract</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Contract Price</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Contractor</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Drawings</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Employer</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Employer's loss</td>
<td>59(4)</td>
</tr>
<tr>
<td>&quot; Engineer</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Engineer’s Representative</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Excepted Risks</td>
<td>20(3)</td>
</tr>
<tr>
<td>&quot; Forfeiture Clause in Nominated Sub-Contracts</td>
<td>59(1)</td>
</tr>
<tr>
<td>&quot; Nominated Sub-contractors</td>
<td>58(5)</td>
</tr>
<tr>
<td>&quot; Period of Maintenance</td>
<td>49(1)</td>
</tr>
<tr>
<td>&quot; Permanent Works</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Plant</td>
<td>53(1)</td>
</tr>
<tr>
<td>&quot; Prime Cost Item</td>
<td>58(2)</td>
</tr>
<tr>
<td>&quot; Provisional Sum</td>
<td>58(1)</td>
</tr>
<tr>
<td>&quot; Section</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Site</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Specification</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Temporary Works</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Tender Total</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Works</td>
<td>1(1)</td>
</tr>
<tr>
<td>Definitions under P.U.S.W. Act, 1930</td>
<td>27(1)</td>
</tr>
<tr>
<td>Delay, Liquidated damages for</td>
<td>47</td>
</tr>
<tr>
<td>Delay and extra cost, Claims in respect of</td>
<td>52(4)</td>
</tr>
<tr>
<td>&quot; in nominated sub-contracts</td>
<td>59(4)</td>
</tr>
<tr>
<td>&quot; drawings and instructions</td>
<td>7(3)</td>
</tr>
<tr>
<td>&quot; on account of design criteria</td>
<td>14(6)</td>
</tr>
<tr>
<td>&quot; through adverse conditions</td>
<td>12(3)</td>
</tr>
<tr>
<td>&quot; through Engineer's instructions</td>
<td>13(3)</td>
</tr>
<tr>
<td>&quot; through other contractors</td>
<td>31(2)</td>
</tr>
<tr>
<td>&quot; through variations in Street Works</td>
<td>27(6)</td>
</tr>
<tr>
<td>Delay in giving Contractor possession of Site</td>
<td>42(1)</td>
</tr>
<tr>
<td>Delay giving rise to extension of time</td>
<td>44</td>
</tr>
<tr>
<td>Design criteria</td>
<td>14(5)</td>
</tr>
<tr>
<td>&quot; Delay on account of</td>
<td>14(6)</td>
</tr>
<tr>
<td>Design requirements to be expressly stated</td>
<td>58(3)</td>
</tr>
<tr>
<td>Determination (in wartime)</td>
<td>65</td>
</tr>
<tr>
<td>&quot; Payment on</td>
<td>65(5)</td>
</tr>
<tr>
<td>&quot; Removal of Plant on</td>
<td>65(4)</td>
</tr>
<tr>
<td>Disputes, Settlement of</td>
<td>66</td>
</tr>
<tr>
<td>Documents, Copy to be kept on Site</td>
<td>7(4)</td>
</tr>
<tr>
<td>&quot; Supply of</td>
<td>6</td>
</tr>
<tr>
<td>&quot; mutually explanatory</td>
<td>3</td>
</tr>
<tr>
<td>Drawings, Definition</td>
<td>1(1)</td>
</tr>
</tbody>
</table>
INDEX TO CONDITIONS OF CONTRACT—continued

<table>
<thead>
<tr>
<th>DRAWINGS AND INSTRUCTIONS</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in issue of drawings and instructions</td>
<td>7(3)</td>
</tr>
<tr>
<td>Further</td>
<td>7(1)</td>
</tr>
<tr>
<td>Notice requiring further drawings and specification</td>
<td>7(2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYER, DEFINITION</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>Loss, Definition</td>
<td>59a(4)</td>
</tr>
<tr>
<td>Recovery of</td>
<td>59a(6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENGINEER, DEFINITION</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delegation of powers by Engineer</td>
<td>2(3)</td>
</tr>
<tr>
<td>Power to disapprove work or materials</td>
<td>39(3)</td>
</tr>
<tr>
<td>Work to satisfy</td>
<td>13(1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENGINEER’S REPRESENTATIVE, ASSISTANTS TO</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>Functions of</td>
<td>2(1)</td>
</tr>
<tr>
<td>References to and from</td>
<td>2(4)</td>
</tr>
<tr>
<td>Errors in Bills of Quantities</td>
<td>55(2)</td>
</tr>
<tr>
<td>Examination of work before covering up</td>
<td>38(1)</td>
</tr>
<tr>
<td>Excepted Risks</td>
<td>20(3)</td>
</tr>
<tr>
<td>Exploratory excavation</td>
<td>18</td>
</tr>
<tr>
<td>Extension of time, Assessment at due date</td>
<td>44(3)</td>
</tr>
<tr>
<td>Claims in respect of</td>
<td>52(4)</td>
</tr>
<tr>
<td>Final determination of</td>
<td>44(4)</td>
</tr>
<tr>
<td>Interim assessment of</td>
<td>44(2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXTENSION OF TIME FOR COMPLETION</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra cost, Claims in respect of (see also Delay)</td>
<td>52(4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACILITIES FOR OTHER CONTRACTORS</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay through providing</td>
<td>31(1)</td>
</tr>
<tr>
<td>31(2)</td>
<td></td>
</tr>
<tr>
<td>Failure by Contractor to insure</td>
<td>25</td>
</tr>
<tr>
<td>Fair Wages Resolution</td>
<td>34(1)</td>
</tr>
<tr>
<td>Fees, Payment of</td>
<td>26(1)</td>
</tr>
<tr>
<td>Final account</td>
<td>60(3)</td>
</tr>
<tr>
<td>Final certificate</td>
<td>60(3)</td>
</tr>
<tr>
<td>Forfeiture, Assignment to Employer after Payment after Valuation at date of</td>
<td>63(2)</td>
</tr>
<tr>
<td>Forfeiture Clause in Nominated Sub-contracts, Definition</td>
<td>59a(1)</td>
</tr>
<tr>
<td>Forfeiture of Contract</td>
<td>63</td>
</tr>
<tr>
<td>Forfeiture of nominated sub-contract, Delay due to Effect on Contract Price of Engineer’s action on Notice enforcing Recovery by Employer following without Employer’s consent</td>
<td>59a(4)</td>
</tr>
<tr>
<td>59a(3)</td>
<td></td>
</tr>
<tr>
<td>59a(2)</td>
<td></td>
</tr>
<tr>
<td>59a(4)</td>
<td></td>
</tr>
<tr>
<td>59a(6)</td>
<td></td>
</tr>
<tr>
<td>59a(5)</td>
<td></td>
</tr>
<tr>
<td>Fossils</td>
<td>32</td>
</tr>
<tr>
<td>Frustration of contract</td>
<td>64</td>
</tr>
<tr>
<td>Functions of Engineer’s Representative</td>
<td>2(1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GOODS (SEE MATERIALS)</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantees</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEADINGS AND MARGINAL NOTES</th>
<th>CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(3)</td>
<td></td>
</tr>
<tr>
<td>HIGHWAYS, DAMAGE TO</td>
<td>30(1)</td>
</tr>
<tr>
<td>Temporary reinstatement of</td>
<td>49(5)</td>
</tr>
<tr>
<td>HIRE OF PLANT, AGREEMENT FOR</td>
<td>53</td>
</tr>
<tr>
<td>Costs of</td>
<td>53(4)</td>
</tr>
<tr>
<td>Provisions in agreement for</td>
<td>53(3)</td>
</tr>
<tr>
<td>Hours and conditions of labour</td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Night and Sunday work</td>
</tr>
<tr>
<td>29(2)</td>
<td>Noise and disturbance</td>
</tr>
<tr>
<td>59A</td>
<td>Nominated sub-contracts</td>
</tr>
<tr>
<td>59A(6)</td>
<td>Breach of contract</td>
</tr>
<tr>
<td>59A(4)</td>
<td>Contractor responsible for loss</td>
</tr>
<tr>
<td>59B</td>
<td>Forfeiture of contract</td>
</tr>
<tr>
<td>59A(5)</td>
<td>Payments to Contractor in respect of contract</td>
</tr>
<tr>
<td>58(5)</td>
<td>Nominated Sub-contractors, Definition</td>
</tr>
<tr>
<td>59A(3)</td>
<td>Direction to Contractor to contract with other contractors</td>
</tr>
<tr>
<td>59A(2)</td>
<td>Engineer's action on objection to notice</td>
</tr>
<tr>
<td>59A(1)</td>
<td>Objection to nomination of Contractor</td>
</tr>
<tr>
<td>59C</td>
<td>Payment direct to Contractor</td>
</tr>
<tr>
<td>59W(2)</td>
<td>Notice enforcing forfeiture of nominated sub-contract</td>
</tr>
<tr>
<td>12(2)</td>
<td>Notice re adverse conditions, Action by Engineer receiving notice</td>
</tr>
<tr>
<td>68</td>
<td>Notices, Service of</td>
</tr>
<tr>
<td>27(2)-(4)</td>
<td>Notices under P.U.S.W. Act, 1950</td>
</tr>
<tr>
<td>26(1)</td>
<td>Notices and fees</td>
</tr>
<tr>
<td>29</td>
<td>Nuisance</td>
</tr>
<tr>
<td>59A(1)</td>
<td>Objection to nomination of Nominated Sub-contractors</td>
</tr>
<tr>
<td>12</td>
<td>Obstructions</td>
</tr>
<tr>
<td>51</td>
<td>Ordered variations</td>
</tr>
<tr>
<td>51(2)</td>
<td>Confirmation of oral orders</td>
</tr>
<tr>
<td>52(2)</td>
<td>Rates fixed by Engineer</td>
</tr>
<tr>
<td>51(2)</td>
<td>to be in writing</td>
</tr>
<tr>
<td>31</td>
<td>Other contractors, Facilities for</td>
</tr>
<tr>
<td>45</td>
<td>Overtime (Night and Sunday work)</td>
</tr>
<tr>
<td>46</td>
<td>(Rate of progress)</td>
</tr>
<tr>
<td>27(4)</td>
<td>Owning Undertaker</td>
</tr>
<tr>
<td>28(1)</td>
<td>Patent rights</td>
</tr>
<tr>
<td>63(4)</td>
<td>Payment after forfeiture</td>
</tr>
<tr>
<td>64</td>
<td>Payment in event of frustration of contract</td>
</tr>
<tr>
<td>60(6)</td>
<td>Payments, Interest on overdue</td>
</tr>
<tr>
<td>59C</td>
<td>direct to Nominated Sub-contractors</td>
</tr>
<tr>
<td>59A(5)</td>
<td>to Contractor in respect of Nominated Sub-contractors</td>
</tr>
<tr>
<td>1(1)</td>
<td>Permanent Works, Definition</td>
</tr>
<tr>
<td>49(1)</td>
<td>Period of Maintenance, Definition</td>
</tr>
<tr>
<td>60(5)</td>
<td>Persons and property, Damage to</td>
</tr>
<tr>
<td>22(1)</td>
<td>Employer to indemnify re</td>
</tr>
<tr>
<td>22(2)</td>
<td>Insurance against damage to</td>
</tr>
<tr>
<td>23</td>
<td>Planning permission</td>
</tr>
<tr>
<td>26(2)</td>
<td>Plant, Definition</td>
</tr>
<tr>
<td>53(1)</td>
<td>Disposal of</td>
</tr>
<tr>
<td>53(8)</td>
<td>Hire of</td>
</tr>
<tr>
<td>53(3)</td>
<td>Irremovability of</td>
</tr>
<tr>
<td>53(6)</td>
<td>Liability for loss or injury to</td>
</tr>
<tr>
<td>53(9)</td>
<td>Restoring and removal of</td>
</tr>
<tr>
<td>53(7)</td>
<td>Plant ownership, Notification of</td>
</tr>
<tr>
<td>53(5)</td>
<td>Possession of Site</td>
</tr>
<tr>
<td>42(1)</td>
<td>Price fluctuations, on outbreak of war</td>
</tr>
<tr>
<td>65(6)</td>
<td>Prime Cost Item, Definition</td>
</tr>
<tr>
<td>58(2)</td>
<td>Use of</td>
</tr>
<tr>
<td>58(4)</td>
<td>Programme, Revision of</td>
</tr>
<tr>
<td>14(2)</td>
<td>to be furnished</td>
</tr>
<tr>
<td>14(1)</td>
<td>Progress, Rate of</td>
</tr>
<tr>
<td>46</td>
<td>Properties, Interference with traffic and adjoining</td>
</tr>
<tr>
<td>29(1)</td>
<td>Property in Materials and Plant Clause in sub-contracts</td>
</tr>
<tr>
<td>53</td>
<td>Prospectively Maintainable Highway</td>
</tr>
<tr>
<td>27</td>
<td>Provisional Sum, Definition</td>
</tr>
<tr>
<td>58(1)</td>
<td>Use of</td>
</tr>
<tr>
<td>58(7)</td>
<td></td>
</tr>
<tr>
<td>Provision</td>
<td>Clause</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Provisions to apply as from outbreak of war</td>
<td>65(6)</td>
</tr>
<tr>
<td>Public Utilities Street Works Act, 1950</td>
<td>27</td>
</tr>
<tr>
<td>Quality of materials and workmanship</td>
<td>36(1)</td>
</tr>
<tr>
<td>Quantities</td>
<td>55</td>
</tr>
<tr>
<td>&quot; Changes in rates arising from changes in</td>
<td>56(2)</td>
</tr>
<tr>
<td>&quot; Errors in Bill of</td>
<td>55(2)</td>
</tr>
<tr>
<td>&quot; No order required for certain changes in</td>
<td>51(3)</td>
</tr>
<tr>
<td>&quot; Preparation of Bill of</td>
<td>57</td>
</tr>
<tr>
<td>Quantities in Bill estimated only</td>
<td>55(1)</td>
</tr>
<tr>
<td>Rate of progress</td>
<td>46</td>
</tr>
<tr>
<td>Rates and taxes—Site and temporarily (used) structures</td>
<td>26(1)</td>
</tr>
<tr>
<td>Rates of wages</td>
<td>34</td>
</tr>
<tr>
<td>Reinstatement in case of damage to the Works</td>
<td>20(2)</td>
</tr>
<tr>
<td>&quot; of ground on completion of highways or roads</td>
<td>49(5)</td>
</tr>
<tr>
<td>Removal of Contractor’s employees</td>
<td>16</td>
</tr>
<tr>
<td>Removal of improper work and materials</td>
<td>39(1)</td>
</tr>
<tr>
<td>Repair, Cost of execution of work of</td>
<td>49(3)</td>
</tr>
<tr>
<td>&quot; Execution of work of</td>
<td>49(2)</td>
</tr>
<tr>
<td>Repairs, Urgent</td>
<td>62</td>
</tr>
<tr>
<td>Repudiated, Nominated sub-contract treated as</td>
<td>59(3)</td>
</tr>
<tr>
<td>Retention money, Amount of</td>
<td>60(4)</td>
</tr>
<tr>
<td>&quot; Arbitration on withholding of</td>
<td>66(2)</td>
</tr>
<tr>
<td>&quot; Deduction from monthly statements of</td>
<td>60(2)</td>
</tr>
<tr>
<td>&quot; Payment of</td>
<td>60(5)</td>
</tr>
<tr>
<td>Returns of labour and plant</td>
<td>35</td>
</tr>
<tr>
<td>Right of Employer to determine Contract (in wartime)</td>
<td>65(3)</td>
</tr>
<tr>
<td>Risks, Excepted</td>
<td>20(3)</td>
</tr>
<tr>
<td>Roads (see Highways)</td>
<td></td>
</tr>
<tr>
<td>Royalties</td>
<td>28(2)</td>
</tr>
<tr>
<td>Samples, Cost of</td>
<td>36(2)</td>
</tr>
<tr>
<td>Safety, Employer’s responsibilities for</td>
<td>19(2)</td>
</tr>
<tr>
<td>&quot; of persons</td>
<td>19(1)</td>
</tr>
<tr>
<td>&quot; of site operations</td>
<td>8(2)</td>
</tr>
<tr>
<td>Schedule of Dayworks</td>
<td>34</td>
</tr>
<tr>
<td>Scotland, Application to</td>
<td>52(3)</td>
</tr>
<tr>
<td>Searches, tests or trials during maintenance</td>
<td>67</td>
</tr>
<tr>
<td>Section, Certificate of Completion for a</td>
<td>50</td>
</tr>
<tr>
<td>&quot; Definition</td>
<td>48(2)</td>
</tr>
<tr>
<td>&quot; Retention from payment on completion of a</td>
<td>60(5)</td>
</tr>
<tr>
<td>Service of notice on Contractor</td>
<td>68(1)</td>
</tr>
<tr>
<td>&quot; Employer</td>
<td>68(2)</td>
</tr>
<tr>
<td>Setting out</td>
<td>17</td>
</tr>
<tr>
<td>Settlement of disputes</td>
<td>66</td>
</tr>
<tr>
<td>Singular and plural, Interpretation of</td>
<td>1(2)</td>
</tr>
<tr>
<td>Site, Access to</td>
<td>37</td>
</tr>
<tr>
<td>&quot; Articles discovered on</td>
<td>32</td>
</tr>
<tr>
<td>&quot; Clearance on completion</td>
<td>33</td>
</tr>
<tr>
<td>&quot; Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>&quot; Inspection of</td>
<td>11(1)</td>
</tr>
<tr>
<td>&quot; Possession of</td>
<td>42(1)</td>
</tr>
<tr>
<td>Special conditions of contract</td>
<td>72</td>
</tr>
<tr>
<td>Specification, Definition</td>
<td>1(1)</td>
</tr>
<tr>
<td>Standard Method of Measurement</td>
<td>57</td>
</tr>
<tr>
<td>Statutes, Contractor to conform with</td>
<td>26(2)</td>
</tr>
<tr>
<td>Street works, Failure to commence</td>
<td>27(5)</td>
</tr>
<tr>
<td>Structures discovered on the Site</td>
<td>32</td>
</tr>
<tr>
<td>Sub-contractors, Contractor responsible for acts etc. of</td>
<td>4</td>
</tr>
<tr>
<td>&quot; Observance of Fair Wages Resolution by</td>
<td>34(1)</td>
</tr>
<tr>
<td>Clause</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>9w(1)</td>
<td>59(1)</td>
</tr>
<tr>
<td>54(6)</td>
<td>53(10)</td>
</tr>
<tr>
<td>69(5)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>11(2)</td>
<td></td>
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<td>45</td>
<td></td>
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<tr>
<td>15(1)</td>
<td></td>
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<td>10</td>
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<td>40(1)</td>
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<td>40(2)</td>
<td></td>
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<td>69</td>
<td></td>
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<td>1(1)</td>
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<td>1(2)</td>
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<td></td>
</tr>
<tr>
<td>66(3)</td>
<td></td>
</tr>
<tr>
<td>59c</td>
<td></td>
</tr>
<tr>
<td>58(6)</td>
<td></td>
</tr>
<tr>
<td>52(4)</td>
<td></td>
</tr>
<tr>
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<td></td>
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<td>65(6)</td>
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<td>42(2)</td>
<td></td>
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<td>60(7)</td>
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<td>66(2)</td>
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<td>38(1)</td>
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<td>56</td>
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<td>40</td>
<td></td>
</tr>
<tr>
<td>13(1)</td>
<td></td>
</tr>
<tr>
<td>Work of repair, Cost of execution of</td>
<td>...</td>
</tr>
<tr>
<td>&quot; &quot; Execution of</td>
<td>...</td>
</tr>
<tr>
<td>&quot; &quot; Failure to carry out</td>
<td>...</td>
</tr>
<tr>
<td>Workmen, Accident or injury to</td>
<td>...</td>
</tr>
<tr>
<td>&quot; Removal of</td>
<td>...</td>
</tr>
<tr>
<td>Works, Care of the</td>
<td>...</td>
</tr>
<tr>
<td>&quot; Commencement of</td>
<td>...</td>
</tr>
<tr>
<td>&quot; Definition</td>
<td>...</td>
</tr>
<tr>
<td>&quot; Insurance of</td>
<td>...</td>
</tr>
<tr>
<td>Works to continue for 28 days on outbreak of war</td>
<td>...</td>
</tr>
</tbody>
</table>
Conditions of Contract

DEFINITIONS AND INTERPRETATION

1. (1) In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

(a) "Employer" means [definition]
   and includes the Employer's personal representatives or successors;

(b) "Contractor" means the person or persons firm or company whose tender has been accepted by the Employer and includes the Contractor's personal representatives successors and permitted assigns;

(c) "Engineer" means [definition]
or other the Engineer appointed from time to time by the Employer and notified in writing to the Contractor to act as Engineer for the purposes of the Contract in place of the said [definition];

(d) "Engineer's Representative" means a person being the resident engineer or assistant of the Engineer or clerk of works appointed from time to time by the Employer or the Engineer and notified in writing to the Contractor by the Engineer to perform the functions set forth in Clause 2(1);

(e) "Contract" means the Conditions of Contract Specification Drawings Priced Bill of Quantities the Tender the written acceptance thereof and the Contract Agreement (if completed);

(f) "Specification" means the specification referred to in the Tender and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by the Engineer;

(g) "Drawings" means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer;

(h) "Tender Total" means the total of the Priced Bill of Quantities at the date of acceptance of the Contractor's Tender for the Works;

(i) "Contract Price" means the sum to be ascertained and paid in accordance with the provisions hereinafter contained for the construction completion and maintenance of the Works in accordance with the Contract;

(j) "Permanent Works" means the permanent works to be constructed completed and maintained in accordance with the Contract;

(k) "Temporary Works" means all temporary works of every kind required in or about the construction completion and maintenance of the Works;

(l) "Works" means the Permanent Works together with the Temporary Works;

(m) "Section" means a part of the Works separately identified in the Appendix to the Form of Tender;

(n) "Site" means the lands and other places on under in or through which the Works are to be executed and any other lands or places provided by the Employer for the purposes of the Contract;

(o) "Constructional Plant" means all appliances or things of whatsoever nature required in or about the construction completion and maintenance of the Works but does not include materials or other things intended to form or forming part of the Permanent Works.

(2) Words importing the singular also include the plural and vice-versa where the context requires.

(3) The headings and marginal notes in the Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

(4) All references herein to clauses are references to clauses numbered in the Conditions of Contract and not to those in any other document forming part of the Contract.

(5) The word "cost" when used in the Conditions of Contract shall be deemed to include overhead costs whether on or off the Site except where the contrary is expressly stated.

Definitions.

Singular and Plural.

Headings and Marginal Notes.

Clause References.

Cost.

ICE B-15
ENGINEER'S REPRESENTATIVE

2. (1) The functions of the Engineer's Representative are to watch and supervise the construction completion and maintenance of the Works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor except as expressly provided hereunder to order any work involving delay or any extra payment by the Employer nor to make any variation of or in the Works.

(2) The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in the exercise of his functions under sub-clause (1) of this Clause. He shall notify to the Contractor the names and functions of such persons. The said assistants shall have no power to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to discharge their functions and to secure their acceptance of materials or workmanship as being in accordance with the Specification and Drawings and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative.

(3) The Engineer may from time to time in writing authorise the Engineer's Representative or any other person responsible to the Engineer to act on behalf of the Engineer either generally in respect of the Contract or specifically in respect of particular Clauses of these Conditions of Contract and any act of any such person within the scope of his authority shall for the purposes of the contract constitute an act of the Engineer. Prior notice in writing of any such authorisation shall be given by the Engineer to the Contractor. Such authorisation shall continue in force until such time as the Engineer shall notify the Contractor in writing that the same is determined. Provided that such authorisation shall not be given in respect of any decision to be taken or certificate to be issued under Clauses 12(3) 44 48 60(3) 61 63 and 66.

(4) If the Contractor shall be dissatisfied by reason of any instruction of any assistant of the Engineer's Representative duly appointed under sub-clause (2) of this Clause he shall be entitled to refer the matter to the Engineer's Representative who shall thereupon confirm reverse or vary such instruction. Similarly if the Contractor shall be dissatisfied by reason of any act of the Engineer's Representative or other person duly authorised by the Engineer under sub-clause (3) of this Clause he shall be entitled to refer the matter to the Engineer for his decision.

ASSIGNMENT AND SUB-LETTING

Assignment.

3. The Contractor shall not assign the Contract or any part thereof or any benefit or interest therein or thereunder without the written consent of the Employer.

Sub-Leasing.

4. The Contractor shall not sub-let the whole of the Works. Except where otherwise provided by the Contract the Contractor shall not sub-let any part of the Works without the written consent of the Engineer and such consent if given shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts defaults and neglects of any sub-contractor his agents servants or workmen as fully as if they were the acts defaults or neglects of the Contractor his agents servants or workmen. Provided always that the provision of labour on a piece-work basis shall not be deemed to be a sub-letting under this Clause.

CONTRACT DOCUMENTS

5. The several documents forming the Contract are to be taken as mutually explanatory of one another and in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor appropriate instructions in writing which shall be regarded as instructions issued in accordance with Clause 13.

Supply of Documents.

6. Upon acceptance of the Tender 2 copies of the drawings referred to in the Specification and of the Conditions of Contract the Specification and (unpriced) Bill of Quantities shall be furnished to the Contractor free of charge. Copyright of the Drawings and Specification and of the Bill of Quantities (except the pricing thereof) shall remain in the Engineer but the Contractor may obtain or make at his own expense any further copies required by him. At the completion of the Contract the Contractor shall return to the Engineer all Drawings and the Specification whether provided by the Engineer or obtained or made by the Contractor.

Further Drawings and Instructions.

7. (1) The Engineer shall have full power and authority to supply and shall supply to the Contractor from time to time during the progress of the Works such modified or further drawings and instructions as shall in the Engineer's opinion be necessary for the purpose of the proper and adequate construction completion and maintenance of the Works and the Contractor shall carry out and be bound by the same.

(2) The Contractor shall give adequate notice in writing to the Engineer of any further drawing or specification that the Contractor may require for the execution of the Works or otherwise under the Contract.
(3) If by reason of any failure or inability of the Engineer to issue at a time reasonable in all the circumstances drawings or instructions requested by the Contractor and considered necessary by the Engineer in accordance with sub-clause (1) of this Clause the Contractor suffers delay or incurs cost then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) be paid in accordance with Clause 60 the amount of such cost as may be reasonable. If such drawings or instructions require any variation to any part of the Works the same shall be deemed to have been issued pursuant to Clause 51.

(4) One copy of the Drawings and Specification furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and the Engineer’s Representative and by any other person authorised by the Engineer in writing.

GENERAL OBLIGATIONS

8. (1) The Contractor shall subject to the provisions of the Contract construct complete and maintain the Works and provide all labour materials Constructional Plant Temporary Works transport to and from and in or about the Site and everything whether of a temporary or permanent nature required in and for such construction completion and maintenance so far as the necessity for providing the same is specified in or reasonably to be inferred from the Contract.

(2) The Contractor shall take full responsibility for the adequacy stability and safety of all site operations and methods of construction provided that the Contractor shall not be responsible for the design or specification of the Permanent Works (except as may be expressly provided in the Contract) or of any Temporary Works designed by the Engineer.

9. The Contractor shall when called upon so to do enter into and execute a Contract Agreement (to be prepared at the cost of the Employer) in the form annexed.

10. If the Tender shall contain an undertaking by the Contractor to provide when required 2 good and sufficient sureties or to obtain the guarantee of an Insurance Company or Bank to be jointly and severally bound with the Contractor in a sum not exceeding 10 per cent of the Tender Total for the due performance of the Contract under the terms of a Bond the said sureties Insurance Company or Bank and the terms of the said Bond shall be such as shall be approved by the Employer and the provision of such sureties or the obtaining of such guarantee and the cost of the Bond to be so entered into shall be at the expense in all respects of the Contractor unless the Contract otherwise provides. Provided always that if the form of Bond approved by the Employer shall contain provisions for the determination by an arbitrator of any dispute or difference concerning the relevant date for the discharge of the Sureties’/Surety’s obligations under the said Bond:—

(a) the Employer shall be deemed to be a party to the said Bond for the purpose of doing all things necessary to carry such provisions into effect;
(b) any agreement decision award or other determination touching or concerning the relevant date for the discharge of the Sureties’/Surety’s obligations under the said Bond shall be wholly without prejudice to the resolution or determination of any dispute or difference between the Employer and the Contractor pursuant to the provisions of Clause 66.

11. (1) The Contractor shall be deemed to have inspected and examined the Site and its surroundings and to have satisfied himself before submitting his tender as to the nature of the ground and sub-soil (so far as is practicable and having taken into account any information in connection therewith which may have been provided by or on behalf of the Employer) the form and nature of the Site the extent and nature of the work and materials necessary for the completion of the Works the means of communication with and access to the Site the accommodation he may require and in general to have obtained for himself all necessary information (subject as above-mentioned) as to risks contingencies and all other circumstances influencing or affecting his tender.

(2) The Contractor shall be deemed to have satisfied himself before submitting his tender as to the correctness and sufficiency of the rates and prices stated by him in the Priced Bill of Quantities which shall (except in so far as is otherwise provided in the Contract) cover all his obligations under the Contract.

12. (1) If during the execution of the Works the Contractor shall encounter physical conditions (other than weather conditions or conditions due to weather conditions) or artificial obstructions which conditions or obstructions he considers could not reasonably have been foreseen by an experienced contractor and the Contractor is of opinion that additional cost will be incurred which would not have been incurred if the physical conditions or artificial obstructions had not been encountered he shall if he intends to make any claim for additional payment give notice to the Engineer pursuant to Clause 52(4) and shall specify in such notice the physical conditions and/or artificial obstructions encountered and with the notice if practicable or as soon as possible thereafter give details of the anticipated effects thereof the measures he is taking or is proposing to take
and the extent of the anticipated delay in or interference with the execution of the Works.

(2) Following receipt of a notice under sub-clause (1) of this Clause the Engineer may if he thinks fit inter alia:

(a) require the Contractor to provide an estimate of the cost of the measures he is taking or is proposing to take;
(b) approve in writing such measures with or without modification;
(c) give written instructions as to how the physical conditions or artificial obstructions are to be dealt with;
(d) order a suspension under Clause 40 or a variation under Clause 51.

(3) To the extent that the Engineer shall decide that the whole or some part of the said physical conditions or artificial obstructions could not reasonably have been foreseen by an experienced contractor the Engineer shall take any delay suffered by the Contractor as a result of such conditions or obstructions into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) (notwithstanding that the Engineer may not have given any instructions or orders pursuant to sub-clause (2) of this Clause) be paid in accordance with Clause 60 such sum as represents the reasonable cost of carrying out any additional work done and additional Constructional Plant used which would not have been done or used had such conditions or obstructions or such part thereof as the case may be not been encountered together with a reasonable percentage addition thereto in respect of profit and the reasonable costs incurred by the Contractor by reason of any unavoidable delay or disruption of working suffered as a consequence of encountering the said conditions or obstructions or such part thereof.

(4) If the Engineer shall decide that the physical conditions or artificial obstructions could in whole or in part have been reasonably foreseen by an experienced contractor he shall so inform the Contractor in writing as soon as he shall have reached that decision but the value of any variation previously ordered by him pursuant to sub-clause (2)(d) of this Clause shall be ascertained in accordance with Clause 52 and included in the Contract Price.

13. (1) Save in so far as it is legally or physically impossible the Contractor shall construct complete and maintain the Works in strict accordance with the Contract to the satisfaction of the Engineer and shall comply with and adhere strictly to the Engineer's instructions and directions on any matter connected therewith (whether mentioned in the Contract or not). The Contractor shall take instructions and directions only from the Engineer or (subject to the limitations referred to in Clause 2) from the Engineer's Representative.

(2) The whole of the materials plant and labour to be provided by the Contractor under Clause 8 and the mode manner and speed of construction and maintenance of the Works are of a kind and conducted in a manner approved of by the Engineer.

(3) If in pursuance of Clause 5 or sub-clause (1) of this Clause the Engineer shall issue instructions or directions which involve the Contractor in delay or disrupt his arrangements or methods of construction so as to cause him to incur cost beyond that reasonably to have been foreseen by an experienced contractor at the time of tender then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) be paid in accordance with Clause 60 the amount of such cost as may be reasonable. If such instructions or directions require any variation to any part of the Works the same shall be deemed to have been given pursuant to Clause 51.

14. (1) Within 21 days after the acceptance of his Tender the Contractor shall submit to the Engineer for his approval a programme showing the order of procedure in which he proposes to carry out the Works and thereafter shall furnish such further details and information as the Engineer may reasonably require in regard thereto. The Contractor shall at the same time also provide in writing for the information of the Engineer a general description of the arrangements and methods of construction which the Contractor proposes to adopt for the carrying out of the Works.

(2) Should it appear to the Engineer at any time that the actual progress of the Works does not conform with the approved programme referred to in sub-clause (1) of this Clause the Engineer shall be entitled to require the Contractor to produce a revised programme showing the modifications to the original programme necessary to ensure completion of the Works or any Section within the time for completion as defined in Clause 43 or extended time granted pursuant to Clause 44(2).

(3) If requested by the Engineer the Contractor shall submit at such times and in such detail as the Engineer may reasonably require such information pertaining to the methods of construction (including Temporary Works and the use of Constructional Plant) which the Contractor proposes to adopt or use and such calculations of stresses strains and deflections that will
arise in the Permanent Works or any parts thereof during construction from the use of such methods as will enable the Engineer to decide whether these methods are adhered to the Works can be executed in accordance with the Drawings and Specification and without detriment to the Permanent Works when completed.

(4) The Engineer shall inform the Contractor in writing within a reasonable period after receipt of the information submitted in accordance with sub-clause (3) of this Clause either:

(a) that the Contractor's proposed methods have the consent of the Engineer; or
(b) that in the opinion of the Engineer they fail to meet the requirements of the Drawings or Specification or will be detrimental to the Permanent Works.

In the latter event the Contractor shall take such steps or make such changes in the said methods as may be necessary to meet the Engineer's requirements and to obtain his consent. The Contractor shall not change the methods which have received the Engineer's consent without the further consent in writing of the Engineer which shall not be unreasonably withheld.

(5) The Engineer shall provide to the Contractor such design criteria relevant to the Permanent Works or any Temporary Works designed by the Engineer as may be necessary to enable the Contractor to comply with sub-clauses (3) and (4) of this Clause.

(6) If the Engineer's consent to the proposed methods of construction shall be unreasonably delayed or if the requirements of the Engineer pursuant to sub-clause (4) of this Clause or any limitations imposed by any of the design criteria supplied by the Engineer pursuant to sub-clause (5) of this Clause could not reasonably have been foreseen by an experienced contractor at the time of tender and if in consequence of any of the aforesaid the Contractor unavoidably incurs delay or cost the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) be paid in accordance with Clause 60 such sum in respect of the cost incurred as the Engineer considers fair in all the circumstances.

(7) Approval by the Engineer of the Contractor's programme in accordance with sub-clauses (1) and (2) of this Clause and the consent of the Engineer to the Contractor's proposed methods of construction in accordance with sub-clause (4) of this Clause shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

15. (1) The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary. Such superintendence shall be given by sufficient persons having adequate knowledge of the operations to be carried out (including the methods and techniques required the hazards likely to be encountered and methods of preventing accidents) as may be requisite for the satisfactory construction of the Works.

(2) The Contractor or a competent and authorised agent or representative approved of in writing by the Engineer (which approval may at any time be withdrawn) is to be constantly on the Works and shall give his whole time to the superintendence of the same. Such authorised agent or representative shall be in full charge of the Works and shall receive on behalf of the Contractor directions and instructions from the Engineer or (subject to the limitations of Clause 2) the Engineer’s Representative. The Contractor or such authorised agent or representative shall be responsible for the safety of all operations.

16. The Contractor shall employ or cause to be employed in and about the execution of the Works and in the superintendence thereof only such persons as are careful skilled and experienced in their several trades and callings and the Engineer shall be at liberty to object to and require the Contractor to remove from the Works any person employed by the Contractor in or about the execution of the Works who in the opinion of the Engineer misbehaves himself or is incompetent or negligent in the performance of his duties or fails to conform with any particular provisions with regard to safety which may be set out in the Specification or persists in any conduct which is prejudicial to safety or health and such persons shall not be again employed upon the Works without the permission of the Engineer.

17. The Contractor shall be responsible for the true and proper setting-out of the Works and for the correctness of the position levels dimensions and alignment of all parts of the Works and for the provision of all necessary instruments appliances and labour in connection therewith. If at any time during the progress of the Works any error shall appear or arise in the position levels dimensions or alignment of any part of the Works the Contractor on being required so to do by the Engineer shall at his own cost rectify such error to the satisfaction of the Engineer unless such error is based on incorrect data supplied in writing by the Engineer or the Engineer’s Representative in which case the cost of rectifying the same shall be borne by the Employer. The checking of any setting-out or of any line or level by the Engineer or the Engineer’s Representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench-marks sight rails pegs and other things used in setting out the Works.
18. If at any time during the execution of the Works the Engineer shall require the Contractor to make boreholes or to carry out exploratory excavation such requirement shall be ordered in writing and shall be deemed to be a variation ordered under Clause 51 unless a Provisional Sum or Prime Cost Item in respect of such anticipated work shall have been included in the Bill of Quantities.

19. (1) The Contractor shall throughout the progress of the Works have full regard for the safety of all persons entitled to be upon the Site and shall keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons and shall inter alia in connection with the Works provide and maintain at his own cost all lights guards fencing warning signs and watching and when necessary or required by the Engineer or by any competent statutory or other authority for the protection of the Works or for the safety and convenience of the public or others.

(2) If under Clause 31 the Employer shall carry out work on the Site with his own workmen he shall in respect of such work:
- have full regard to the safety of all persons entitled to be upon the Site;
- keep the Site in an orderly state appropriate to the avoidance of danger to such persons.

If under Clause 31 the Employer shall employ other contractors on the Site he shall require them to have the same regard for safety and avoidance of danger.

20. (1) The Contractor shall take full responsibility for the care of the Works from the date of the commencement thereof until 14 days after the Engineer shall have issued a Certificate of Completion for the whole of the Works pursuant to Clause 48. Provided that if the Engineer shall issue a Certificate of Completion in respect of any Section or part of the Permanent Works before he shall issue a Certificate of Completion in respect of the whole of the Works the Contractor shall cease to be responsible for the care of that Section or part of the Permanent Works 14 days after the Engineer shall have issued the Certificate of Completion in respect of that Section or part and the responsibility for the care thereof shall thereupon pass to the Employer. Provided further that the Contractor shall take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the Period of Maintenance until such outstanding work is complete.

(2) In case any damage loss or injury from any cause whatsoever (save and except the Excepted Risks as defined in sub-clause (3) of this Clause) shall happen to the Works or any part thereof while the Contractor shall be responsible for the care thereof the Contractor shall at his own cost repair and make good the same so that at completion the Permanent Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer’s instructions. To the extent that any such damage loss or injury arises from any of the Excepted Risks the Contractor shall if required by the Engineer repair and make good the same as aforesaid at the expense of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of completing any outstanding work or of complying with his obligations under Clauses 49 and 50.

21. Without limiting his obligations and responsibilities under Clause 20 the Contractor shall insure in the joint names of the Employer and the Contractor:
- the Permanent Works and the Temporary Works (including for the purposes of this Clause any unfixed materials or other things delivered to the Site for incorporation therein) to their full value;
- the Constructional Plant to its full value;

against all loss or damage from whatever cause arising (other than the Excepted Risks) for which he is responsible under the terms of the Contract and in such manner that the Employer and Contractor are covered for the period stipulated in Clause 20(1) and are also covered for loss or damage arising during the Period of Maintenance from such cause occurring prior to the commencement of the Period of Maintenance and for any loss or damage occasioned by the Contractor in the course of any operation carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.
Provided that without limiting its obligations and responsibilities as aforesaid nothing in this Clause contained shall render the Contractor liable to insure against the necessity for the repair or reconstruction of any work constructed with materials and workmanship not in accordance with the requirements of the Contract unless the Bill of Quantities shall provide a special item for this insurance.

Such insurances shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld) and the Contractor shall whenever required produce to the Employer the policy or policies of insurance and the receipts for payment of the current premiums.

22. (1) The Contractor shall (except if and so far as the Contract otherwise provides) indemnify and keep indemnified the Employer against all losses and claims for injuries or damage to any person or property whatsoever (other than the Works for which insurance is required under Clause 21 but including surface or other damage to land being the Site suffered by any persons in beneficial occupation of such land) which may arise out of or in consequence of the construction and maintenance of the Works and against all claims demands proceedings damages costs charges and expenses whatsoever in respect thereof or in relation thereto. Provided always that:

(a) the Contractor's liability to indemnify the Employer as aforesaid shall be reduced proportionately to the extent that the act or neglect of the Employer his servants or agents may have contributed to the said loss injury or damage;

(b) nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the Employer against any compensation or damages for or with respect to:

(i) damage to crops being on the Site (save in so far as possession has not been given to the Contractor);

(ii) the use or occupation of land (which has been provided by the Employer) by the Works or any part thereof or for the purpose of constructing completing and maintaining the Works (including consequent losses of crops) or interference whether temporary or permanent with any right of way light air or water or other easement or quasi easement which are the unavoidable result of the construction of the Works in accordance with the Contract;

(iii) the right of the Employer to construct the Works or any part thereof on or over under in or through any land;

(iv) damage which is the unavoidable result of the construction of the Works in accordance with the Contract;

(v) injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the Engineer or the Employer his agents servants or other contractors (not being employed by the Contractor) or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto.

(2) The Employer will save harmless and indemnify the Contractor from and against all claims demands proceedings damages costs charges and expenses in respect of the matters referred to in the proviso to sub-clause (1) of this Clause. Provided always that the Employer's liability to indemnify the Contractor under paragraph (v) of proviso (b) to sub-clause (1) of this Clause shall be reduced proportionately to the extent that the act or neglect of the Contractor or his sub-contractors servants or agents may have contributed to the said injury or damage.

23. (1) Throughout the execution of the Works the Contractor (but without limiting his obligations and responsibilities under Clause 22) shall insure against any damage loss or injury which may occur to any property or to any person by or arising out of the execution of the Works or in the carrying out of the Contract otherwise than due to the matters referred to in proviso (b) to Clause 22(1).

(2) Such insurance shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld) and for at least the amount stated in the Appendix to the Form of Tender. The terms shall include a provision whereby in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy being brought or made against the Employer the insurer will indemnify the Employer against such claims and any costs charges and expenses in respect thereof. The Contractor shall whenever required produce to the Employer the policy or policies of insurance and the receipts for payment of the current premiums.

24. The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor save and except to the extent that such accident or injury results from or is contributed to by any act or default of the Employer his agents or servants and the Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation (save and except as aforesaid) and against all claims demands proceedings costs charges and expenses whatsoever in respect thereof or in relation thereto.
Remedy on Contractor's Failure to Insure.

25. If the Contractor shall fail upon request to produce to the Employer satisfactory evidence that there is in force the insurance referred to in Clauses 21 and 23 or any other insurance which he may be required to effect under the terms of the Contract then and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor or recover the same as a debt due from the Contractor.

Giving of Notices and Payment of Fees.

26. (1) The Contractor shall save as provided in Clause 27 give all notices and pay all fees required to be given or paid by any Act of Parliament or any Regulation or Bye-law of any local or other statutory authority in relation to the execution of the Works and by the rules and regulations of all public bodies and companies whose property or rights are or may be affected in any way by the Works. The Employer shall repay or allow to the Contractor all such sums as the Engineer shall certify to have been properly payable and paid by the Contractor in respect of such fees and also all rates and taxes paid by the Contractor in respect of the Site or any part thereof or anything constructed or erected thereon or on any part thereof or any temporary structures situate elsewhere but used exclusively for the purposes of the Works or any structures used temporarily and exclusively for the purposes of the Works.

(2) The Contractor shall ascertain and conform in all respects with the provisions of any general or local Act of Parliament and the Regulations and Bye-laws of any local or other statutory authority which may be applicable to the Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such Act Regulation or Bye-law. Provided always that:

- the Contractor shall not be required to indemnify the Employer against the consequences of any such breach which is the unavoidable result of complying with the Drawings Specification or instructions of the Engineer;
- if the Drawings Specification or instructions of the Engineer shall at any time be found not to be in conformity with any such Act Regulation or Bye-law the Engineer shall issue such instructions including the ordering of a variation under Clause 51 as may be necessary to ensure conformity with such Act Regulation or Bye-law;
- the Contractor shall not be responsible for obtaining any planning permission which may be necessary in respect of the Permanent Works or any Temporary Works specified or designed by the Engineer and the Employer hereby warrants that all the said permissions have been or will in due time be obtained.

Contractor to Conform with Statutes, etc.


27. (1) For the purposes of this Clause:

- the expression "the Act" shall mean and include the Public Utilities Street Works Act 1950 and any statutory modification or re-enactment thereof for the time being in force;
- all other expressions common to the Act and to this Clause shall have the same meaning as that assigned to them by the Act.

(2) The Employer shall before the commencement of the Works notify the Contractor in writing:

- whether the Works or any parts thereof (and so which parts) are Emergency Works; and
- which (if any) parts of the Works are to be carried out in Controlled Land or in a Prospectively Maintainable Highway.

If any duly authorised variation of the Works shall involve the execution thereof in a Street or in Controlled Land or in a Prospectively Maintainable Highway or are Emergency Works the Employer shall notify the Contractor in writing accordingly at the time such variation is ordered.

(3) The Employer shall (subject to the obligations of the Contractor under sub-clause (4) of this Clause) serve all such notices as may from time to time whether before or during the course of or after completion of the Works be required to be served under the Act.

(4) The Contractor shall in relation to any part of the Works (other than Emergency Works) and subject to the compliance by the Employer with sub-clause (2) of this Clause give not less than 21 days' notice in writing to the Employer before:

- commencing any part of the Works in a Street (as defined by Sections 1(3) and 38(1) of the Act); or
- commencing any part of the Works in Controlled Land or in a Prospectively Maintainable Highway; or
- commencing in a Street or in Controlled Land or in a Prospectively Maintainable Highway any part of the Works which is likely to affect the apparatus of any Owning Undertaker (within the meaning of Section 26 of the Act).

Such notice shall state the date on which and the place at which the Contractor intends to commence the execution of the work referred to therein.
(5) If the Contractor having given any such notice as is required by sub-clause (4) of this Clause shall not commence the part of the Works to which such notice relates within 2 months after the date when such notice is given such notice shall be treated as invalid and compliance with the said sub-clause (4) shall be requisite as if such notice had not been given.

(6) In the event of such a variation of the Works as is referred to in sub-clause (2) of this Clause being ordered by or on behalf of the Employer and resulting in delay in the execution of the Works by reason of the necessity of compliance by the Contractor with sub-clause (4) of this Clause the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52 be paid in accordance with Clause 60 such additional cost as the Engineer shall consider to have been reasonably attributable to such delay.

(7) Except as otherwise provided by this Clause where in relation to the carrying out of the Works the Act imposes any requirements or obligations upon the Employer the Contractor shall subject to Clause 49(5) comply with such requirements and obligations and shall (subject as aforesaid) indemnify the Employer against any liability which the Employer may incur in consequence of any failure to comply with the said requirements and obligations.

28. (1) The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights design trade-mark or name or other protected rights in respect of any Constructional Plant machine work or material used for or in connection with the Works and from and against all claims demands proceedings damages costs charges and expenses whatsoever arising out of or in relation to any such matters.

(2) Except where otherwise specified the Contractor shall pay all tonnage and other royalties rent and other payments or compensation (if any) for getting stone sand gravel clay or other materials required for the Works.

29. (1) All operations necessary for the execution of the Works shall so far as compliance with the requirements of the Contract permits be carried on so as not to interfere unnecessarily or improperly with the public convenience or the access to or use or occupation of public or private roads and foot-paths or of or over or of and under or over or under any of or any of the above fixtures or any of or any part of the land adjacent the land forming a part of or forming part of the Works and the Contractor shall save harmless and indemnify the Employer in respect of all claims demands proceedings damages costs charges and expenses whatsoever arising out of or in relation to any such matters.

(2) All work shall be carried out without unreasonable noise and disturbance. The Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbance created while or in carrying out the work and from and against all claims demands proceedings damages costs charges and expenses whatsoever in regard to or in relation to such liability.

30. (1) The Contractor shall use every reasonable means to prevent any of the highways or bridges communicating with or on the routes to the Site from being subjected to extraordinary traffic within the meaning of the Highways Act 1930 or in Scotland the Road Traffic Act 1930 or any statutory modification or re-enactment thereof by any traffic of the Contractor or any of his sub-contractors and in particular shall select routes and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of Constructional Plant and materials or manufactured or fabricated articles from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage or injury may be occasioned to such highways and bridges.

(2) Save insofar as the Contract otherwise provides the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any highway communicating with the Site to facilitate the movement of Constructional Plant equipment or Temporary Works required in the execution of the Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any highway or bridge communicating with the Site caused by such movement including such claims as may be made by any competent authority directly against the Employer pursuant to any Act of Parliament or other Statutory Instrument and shall negotiate and pay all claims arising solely out of such damage.

(3) If notwithstanding sub-clause (1) of this Clause any damage shall occur to any bridge or highway communicating with the Site arising from the transport of materials or manufactured or fabricated articles in the execution of the Works the Contractor shall notify the Engineer as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. Where under any Act of Parliament or other Statutory Instrument the haulier of such materials or manufactured or fabricated articles is required to indemnify the highway authority against damage the Employer shall not be liable for any costs charges or expenses in respect thereof or in relation thereto. In other cases the Employer shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor in respect thereof and in respect of all claims demands proceedings damages costs charges and expenses in relation thereto. Provided always that if and so far as any such claim or part thereof shall in the
Facilities for Other Contractors.

31. (1) The Contractor shall in accordance with the requirements of the Engineer afford all reasonable facilities for any other contractors employed by the Employer and their workmen and for the workmen of the Employer and of any other properly authorised authorities or statutory bodies who may be employed in the execution of or near the Site of any work not in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works.

(2) If compliance with sub-clause (1) of this Clause shall involve the Contractor in delay or cost beyond that reasonably to be foreseen by an experienced contractor at the time of tender then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) be paid in accordance with Clause 60 the amount of such cost as may be reasonable.

Fossils, etc.

32. All fossils coins, articles of value or antiquity and structures or other remains or things of geological or archaeological interest discovered on the Site shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer and the Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Engineer of such discovery and carry out at the expense of the Employer the Engineer’s orders as to the disposal of the same.

Clearance of Site on Completion.

33. On the completion of the Works the Contractor shall clear away and remove from the Site all Constructional Plant surplus material rubbish and Temporary Works of every kind and leave the whole of the Site and Permanent Works clean and in a workmanlike condition to the satisfaction of the Engineer.

LABOUR

34. (1) The Contractor shall in the execution of the Contract observe and fulfil the obligations upon contractors specified in the Fair Wages Resolution passed by the House of Commons on the 14 October 1946 of which the following is an extract:

"1 (a) The contractor shall pay rates of wages and observe hours and conditions of labour not less favourable than those established for the trade or industry in the district where the work is carried out by machinery of negotiation or arbitration to which the parties are organisations of employers and trade unions representative respectively of substantial proportions of the employers and workers engaged in the trade or industry in the district.

(b) In the absence of any rates of wages, hours or conditions of labour so established the contractor shall pay rates of wages and observe hours and conditions of labour which are not less favourable than the general level of wages, hours and conditions observed by other employers whose general circumstances in the trade or industry in which the contractor is engaged are similar.

2 The contractor shall in respect of all persons employed by him (whether in execution of the contract or otherwise) in every factory workshop or place occupied or used by him for the execution of the contract comply with the general conditions required by this Resolution.

3 In the event of any question arising as to whether the requirements of this Resolution are being observed, the question shall, if not otherwise disposed of, be referred to the Minister of Labour and National Service to an Independent Tribunal for decision.

4 The contractor shall recognise the freedom of his workpeople to be members of Trade Unions.

5 The contractor shall at all times during the continuance of a contract display, for the information of his workpeople, in every factory, workshop or place occupied or used by him for the execution of the contract a copy of this Resolution.

6 The contractor shall be responsible for the observance of this Resolution by subcontractors employed in the execution of the contract."

(2) The wages, hours and conditions of employment above referred to shall be those prescribed for the time being by the Civil Engineering Construction Conciliation Board for Great Britain save that the rates of wages payable to any class of labour in respect of which the said Board does not prescribe a rate shall be governed by the provisions of sub-clause (1) of this Clause.
35. The Contractor shall if required by the Engineer deliver to the Engineer or at his office a return in such form and at such intervals as the Engineer may prescribe showing in detail the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional Plant as the Engineer may require. The Contractor shall require his sub-contractors to observe the provisions of this Clause.

WORKMANSHIP AND MATERIALS

36. (1) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication or on the Site or such other place or places as may be specified in the Contract. The Contractor shall provide such assistance instruments machines labour and materials as are normally required for examining measuring and testing any work and the quality weight or quantity of any materials used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer.

(2) All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract but if not then at the cost of the Employer.

(3) The cost of making any test shall be borne by the Contractor if such test is clearly intended by or provided for in the Contract and (in the cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) is particularised in the Specification or Bill of Quantities in sufficient detail to enable the Contractor to have priced or allowed for the same in his Tender. If any test is ordered by the Engineer which is either:

(a) not so intended by or provided for;
(b) (in the cases above mentioned) is not so particularised;

then the cost of such test shall be borne by the Contractor if the test shows the workmanship or materials not to be in accordance with the provisions of the Contract or the Engineer's instructions but otherwise by the Employer.

37. The Engineer and any person authorised by him shall at all times have access to the Works and to the Site and to all workshops and places where work is being prepared or whence materials manufactured articles and machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

38. (1) No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining and measuring such work or of examining such foundations.

(2) The Contractor shall uncover any part or parts of the Works or make openings in or through the same as the Engineer may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Engineer. If any such part or parts have been covered up or put out of view after compliance with the requirements of sub-clause (1) of this Clause and are found to be executed in accordance with the Contract the cost of uncovering making openings in or through reinstating and making good the same shall be borne by the Employer but in any other case all such cost shall be borne by the Contractor.

39. (1) The Engineer shall during the progress of the Works have power to order in writing:

(a) the removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;
(b) the substitution of proper and suitable materials; and
(c) the removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefor) of any work which in respect of materials or workmanship is not in the opinion of the Engineer in accordance with the Contract.

(2) In case of default on the part of the Contractor in carrying out such order the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Employer or may be deducted from any monies due or which may become due to the Contractor.

(3) Failure of the Engineer or any person acting under him pursuant to Clause 2 to disapprove any work or materials shall not prejudice the power of the Engineer or any of them subsequently to disapprove such work or materials.
40. (1) The Contractor shall on the written order of the Engineer suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer. Subject to Clause 52(4) the Contractor shall be paid in accordance with Clause 60 the extra cost (if any) incurred in giving effect to the Engineer’s instructions under this Clause except to the extent that such suspension is:

(a) otherwise provided for in the Contract; or
(b) necessary by reason of weather conditions or by some default on the part of the Contractor; or
(c) necessary for the proper execution of the work or for the safety of the Works or any part thereof inasmuch as such necessity does not arise from any act or default of the Engineer or the Employer or from any of the Excepted Risks defined in Clause 20.

The Engineer shall take any delay occasioned by a suspension ordered under this Clause (including that arising from any act or default of the Engineer or the Employer) into account in determining any extension of time to which the Contractor is entitled under Clause 44 except when such suspension is otherwise provided for in the Contract or is necessary by reason of some default on the part of the Contractor.

(2) If the progress of the Works or any part thereof is suspended on the written order of the Engineer and if permission to resume work is not given by the Engineer within a period of 3 months from the date of suspension then the Contractor may unless such suspension is otherwise provided for in the Contract or continues to be necessary by reason of some default on the part of the Contractor serve a written notice on the Engineer requiring permission within 28 days from the receipt of such notice to proceed with the Works or that part thereof in regard to which progress is suspended. If within the said 28 days the Engineer does not grant such permission the Contractor by a further written notice so served may (but is not bound to) elect to treat the suspension where it affects part only of the Works as an omission of such part under Clause 51 or where it affects the whole Works as an abandonment of the Contract by the Employer.

COMMENCEMENT TIME AND DELAYS

41. The Contractor shall commence the Works on or as soon as is reasonably possible after the Date for Commencement of the Works to be notified by the Engineer in writing which date shall be within a reasonable time after the date of acceptance of the Tender. Thereafter the Contractor shall proceed with the Works with due expedition and without delay in accordance with the Contract.

42. (1) Save in so far as the Contract may prescribe the extent of portions of the Site of which the Contractor is to be given possession from time to time and the order in which such portions shall be made available to him and subject to any requirement in the Contract as to the order in which the Works shall be executed the Employer will at the Date for Commencement of the Works notified under Clause 41 give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works in accordance with the programme referred to in Clause 14 and will from time to time as the Works proceed give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the construction of the Works with due dispatch in accordance with the said programme. If the Contractor suffers delay or incurs cost from failure on the part of the Employer to give possession in accordance with the terms of this Clause then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) be paid in accordance with Clause 60 the amount of such cost as may be reasonable.

(2) The Contractor shall bear all expenses and charges for special or temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purposes of the Works.

43. The whole of the Works and any Section required to be completed within a particular time as stated in the Appendix to the Form of Tender shall be completed within the time so stated for such extended time as may be allowed under Clause 44 calculated from the Date for Commencement of the Works notified under Clause 41.

44. (1) Should any variation ordered under Clause 51(1) or increased quantities referred to in Clause 51(3) or any other cause of delay referred to in these Conditions or exceptional adverse weather conditions or other special circumstances of any kind whatsoever which may occur be such as fairly to entitle the Contractor to an extension of time for the completion of the Works or (where different periods for completion of different Sections are provided for in the Appendix to the Form
of Tender) of the relevant Section the Contractor shall within 28 days after the cause of the delay has arisen or as soon thereafter as is reasonable in all the circumstances deliver to the Engineer full and detailed particulars of any claim to extension of time to which he may consider himself entitled in order that such claim may be investigated at the time.

(2) The Engineer shall upon receipt of such particulars or if he thinks fit in the absence of any such claim consider all the circumstances known to him at that time and make an assessment of the extension of time (if any) to which he considers the Contractor entitled for the completion of the Works or relevant Section and shall by notice in writing to the Contractor grant such extension of time for completion. In the event that the Contractor shall have made a claim for an extension of time but the Engineer considers the Contractor not entitled thereto the Engineer shall so inform the Contractor.

(3) The Engineer shall at or as soon as possible after the due date or extended date for completion (and whether or not the Contractor shall have made any claim for an extension of time) consider all the circumstances known to him at that time and take action similar to that provided for in sub-clause (2) of this Clause. Should the Engineer consider that the Contractor is not entitled to an extension of time he shall so notify the Employer and the Contractor.

(4) The Engineer shall upon the issue of the Certificate of Completion of the Works or of the relevant Section review all the circumstances of the kind referred to in sub-clause (1) of this Clause and shall, finally determine and certify to the Contractor the overall extension of time (if any) to which he considers the Contractor entitled in respect of the Works or any relevant Section. No such final review of the circumstances shall result in a decrease in any extension of time already granted by the Engineer pursuant to sub-clauses (2) or (3) of this Clause.

45. Subject to any provision to the contrary contained in the Contract none of the Works shall be executed during the night or on Sundays without the permission in writing of the Engineer save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works in which case the Contractor shall immediately advise the Engineer or the Engineer's Representative. Provided always that this Clause shall not be applicable in the case of any work which it is customary to carry out outside normal working hours or by rotary or double shifts.

46. If for any reason which does not entitle the Contractor to an extension of time the rate of progress of the Works or any Section is at any time in the opinion of the Engineer too slow to ensure completion by the prescribed time or extended time for completion the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as are necessary and the Engineer may approve to expedite progress so as to complete the Works or such Section by the prescribed time or extended time. The Contractor shall not be entitled to any additional payment for taking such steps. If as a result of any notice given by the Engineer under this Clause the Contractor shall seek the Engineer's permission to do any work at night or on Sundays such permission shall not be unreasonably refused.

LIQUIDATED DAMAGES AND LIMITATION OF DAMAGES FOR DELAYED COMPLETION

47. (1) (a) In the Appendix to the Form of Tender under the heading “Liquidated Damages for Delay” there is stated in column 1 the sum which represents the Employer’s genuine pre-estimate (expressed as a rate per week or per day as the case may be) of the damages likely to be suffered by him in the event that the whole of the Works shall not be completed within the time prescribed by Clause 43.

Provided that in lieu of such sum there may be stated such lesser sum as represents the limit of the Contractor’s liability for damages for failure to complete the whole of the Works within the time for completion therefor or any extension thereof granted under Clause 44.

(b) If the Contractor should fail to complete the whole of the Works within the prescribed time or any extension thereof granted under Clause 44 the Contractor shall pay to the Employer for such default the sum stated in column 1 aforesaid for every week or day as the case may be which shall elapse between the date on which the prescribed time or any extension thereof expired and the date of completion of the whole of the Works. Provided that if any part of the Works not being a Section or part of a Section shall be certified as complete pursuant to Clause 48 before completion of the whole of the Works the sum stated in column 1 shall be reduced by the proportion which the value of the part completed bears to the value of the whole of the Works.

(2) (a) In cases where any Section shall be required to be completed within a particular time as stated in the Appendix to the Form of Tender there shall also be stated in the said Appendix under the heading “Liquidated Damages for Delay” in column 2 the sum by which the damages stated in column 1 or the limit of the Contractor’s
said liability as the case may be shall be reduced upon completion of each such Section and in column 3 the sum which represents the Employer's genuine pre-estimate (expressed as aforesaid) of any specific damage likely to be suffered by him in the event that such Section shall not be completed within that time.

Provided that there may be stated in column 3 in lieu of such sum such lesser sum as represents the limit of the Contractor's liability for failure to complete the relevant Section within the relevant time.

(b) If the Contractor should fail to complete any Section within the relevant time for completion or any extension thereof granted under Clause 44 the Contractor shall pay to the Employer for such default the sum stated in column 3 aforesaid for every week or day as the case may be which shall elapse between the date on which the relevant time or any extension thereof expired and the date of completion of the relevant Section. Provided that:

(i) if completion of a Section shall be delayed beyond the due date for completion of the whole of the Works the damages payable under sub-clauses (1) and (2) of this Clause until completion of that Section shall be the sum stated in column 1 plus in respect of that Section the sum stated in column 3 less the sum stated in column 2;

(ii) if any part of a Section shall be certified as complete pursuant to Clause 48 before completion of the whole thereof the sums stated in columns 2 and 3 in respect of that Section shall be reduced by the proportion which the value of the part bears to the value of the Section and the sum stated in column 1 shall be reduced by the same amount as the sum in column 2 is reduced; and

(iii) upon completion of any such Section the sum stated in column 1 shall be reduced by the sum stated in column 2 in respect of that Section at the date of such completion.

(3) All sums payable by the Contractor to the Employer pursuant to this Clause shall be paid as liquidated damages for delay and not as a penalty.

(4) If the Engineer shall under Clause 44 (3) or (4) have determined and certified any extension of time to which he considers the Contractor entitled or shall have notified the Employer and the Contractor that he is of the opinion that the Contractor is not entitled to any or any further extension of time the Employer may deduct and retain from any sum otherwise payable by the Employer to the Contractor hereunder the amount which in the event that the Engineer's said opinion should not be subsequently revised would be the amount of the liquidated damages payable by the Contractor under this Clause.

(5) If upon a subsequent or final review of the circumstances causing delay the Engineer shall grant an extension or further extension of time or if an arbitrator appointed under Clause 66 shall decide that the Engineer should have granted such an extension or further extension of time the Employer shall no longer be entitled to liquidated damages in respect of the period of such extension of time. Any sums in respect of such period which may have been recovered pursuant to sub-clause (3) of this Clause shall be reimbursable forthwith to the Contractor together with interest at the rate provided for in Clause 60(6) from the date on which such liquidated damages were recovered from the Contractor.

**COMPLETION CERTIFICATE**

48. (1) When the Contractor shall consider that the whole of the Works has been substantially completed and has satisfactorily passed any final test that may be prescribed by the Contract he may give a notice to that effect to the Engineer or to the Engineer's Representative accompanied by an undertaking to finish any outstanding work during the Period of Maintenance. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor for the Engineer to issue a Certificate of Completion in respect of the Works and the Engineer shall within 21 days of the date of delivery of such notice either issue to the Contractor (with a copy to the Employer) a Certificate of Completion stating the date on which in his opinion the Works were substantially completed in accordance with the Contract or else give instructions in writing to the Contractor specifying all the work which in the Engineer's opinion requires to be done by the Contractor before the issue of such certificate. If the Engineer shall give such instructions the Contractor shall be entitled to receive such Certificate of Completion within 21 days of completion of the satisfaction of the Engineer of the work specified by the said instructions.

(2) Similarly in accordance with the procedure set out in sub-clause (1) of this Clause the Contractor may request and the Engineer shall issue a Certificate of Completion in respect of:

(a) any Section in respect of which a separate time for completion is provided in the Appendix to the Form of Tender; and

(b) any substantial part of the Works which has been both completed to the satisfaction of the Engineer and occupied or used by the Employer.

(3) If the Engineer shall be of the opinion that any part of the Works shall have been substantially completed and shall have satisfactorily passed any final test that may be prescribed by
the Contract he may issue a Certificate of Completion in respect of that part of the Works before completion of the whole of the Works and upon the issue of such certificate the Contractor shall be deemed to have undertaken to complete any outstanding work in that part of the Works during the Period of Maintenance.

(4) Provided always that a Certificate of Completion given in respect of any Section or part of the Works before completion of the whole shall not be deemed to certify completion of any ground or surfaces requiring reinstatement unless such certificate shall expressly so state.

MAINTENANCE AND DEFECTS

49. (1) In these Conditions the expression "Period of Maintenance" shall mean the period of maintenance named in the Appendix to the Form of Tender calculated from the date of completion of the Works or any Section or part thereof certified by the Engineer in accordance with Clause 48 as the case may be.

(2) To the intent that the Works and each Section and part thereof shall be delivered up to the Employer in the condition required by the Contract (fair wear and tear excepted) to the satisfaction of the Engineer the Contractor shall finish the work (if any) outstanding at the date of completion as certified under Clause 48 as soon as may be practicable after such date and shall execute all such work of repair and rectification and making good of defects imperfections shrinkages or other faults as may during the Period of Maintenance or within 14 days after its expiration be required by the Contractor, by the Engineer as a result of an inspection made by or on behalf of the Employer prior to its expiration.

(3) All such work shall be carried out by the Contractor at his own expense if the necessity thereof shall in the opinion of the Engineer be due to the use of materials or workmanship not in accordance with the Contract or to neglect or failure on the part of the Contractor to comply with any obligation expressed or implied on the Contractor's part under the Contract. If in the opinion of the Engineer such necessity shall be due to any cause other than the value of such work shall be ascertained and paid for as if it were additional work.

(4) If the Contractor shall fail to do any such work as aforesaid required by the Engineer the Employer shall be entitled to carry out such work by his own workmen or by other contractors and if such work is work which the Contractor should have carried out at the Contractor's own cost shall be entitled to recover from the Contractor the cost thereof or may deduct the same from any monies due or that become due to the Contractor.

(5) Provided always that if in the course or for the purposes of the execution of the Works or any part thereof any highway or road or way shall have been broken into then notwithstanding anything herein contained:—

(a) If the permanent reinstatement of such highway or other road or way is to be carried out by the appropriate Highway Authority or by some person other than the Contractor (or any sub-contractor to him) the Contractor shall at his own cost and independently of any requirement of or notice from the Engineer be responsible for the making good of any subsidence or shrinkage or other defect imperfection or fault in the temporary reinstatement of such highway or other road or way and for the execution of any necessary repair or amendment thereof from whatever cause the necessity arises until the end of the Period of Maintenance in respect of the works beneath such highway or other road or way or until the Highway Authority or other person as aforesaid shall have taken possession of the Site for the purpose of carrying out permanent reinstatement (whichever is the earlier) and shall indemnify and save harmless the Employer against and from any damage or injury to the Employer or to third parties arising out or in consequence of any neglect or failure of the Contractor to comply with the foregoing obligations or any of them and against and from all claims demands proceedings damages costs charges and expenses whatsoever in respect thereof or in relation thereto. As from the end of such Period of Maintenance or the taking of possession as aforesaid (whichever shall first happen) the Employer shall indemnify and save harmless the Contractor against and from any damage or injury as aforesaid arising out or in consequence of or in connection with the said permanent reinstatement or any defect imperfection or failure of or in such work of permanent reinstatement and against and from all claims demands proceedings damages costs charges and expenses whatsoever in respect thereof or in relation thereto.

(b) Where the Highway Authority or other person as aforesaid shall take possession of the Site as aforesaid in sections or lengths the responsibility of the Contractor under paragraph (a) of this sub-clause shall cease in regard to any such section or length at the time possession thereof is so taken but shall during the continuance of the said Period of Maintenance continue in regard to any length of which possession has not been so taken and the indemnities given by the Contractor and the Employer respectively under the said paragraph shall be construed and have effect accordingly.
50. The Contractor shall if required by the Engineer in writing carry out such searches tests or trials as may be necessary to determine the cause of any defect imperfection or fault under the directions of the Engineer. Unless such defect imperfection or fault shall be one for which the Contractor is liable under the Contract the cost of the work carried out by the Contractor as aforesaid shall be borne by the Employer. But if such defect imperfection or fault shall be one for which the Contractor is liable the cost of the work carried out as aforesaid shall be borne by the Contractor and he shall in such case repair rectify and make good such defect imperfection or fault at his own expense in accordance with Clause 49.

ALTERATIONS ADDITIONS AND OMISSIONS

51. (1) The Engineer shall order any variation to any part of the Works that may in his opinion be necessary for the completion of the Works and shall have power to order any variation that for any other reason shall in his opinion be desirable for the satisfactory completion and functioning of the Works. Such variations may include additions omissions substitutions alterations changes in quality form character kind position dimension level or line and changes in the specified sequence method or timing or construction (if any).

(2) No such variation shall be made by the Contractor without an order by the Engineer. All such orders shall be given in writing provided that if for any reason the Engineer shall find it necessary to give any such order orally in the first instance the Contractor shall comply with such oral order. Such oral order shall be confirmed in writing by the Engineer as soon as is possible in the circumstances. If the Contractor shall confirm in writing to the Engineer any oral order by the Engineer and such confirmation shall not be contradicted in writing by the Engineer forthwith it shall be deemed to be an order in writing by the Engineer. No variation ordered or deemed to be ordered in writing in accordance with sub-clauses (1) and (2) of this Clause shall in any way vitiate or invalidate the Contract but the value (if any) of all such variations shall be taken into account in ascertaining the amount of the Contract Price.

(3) No order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

52. (1) The value of all variations ordered by the Engineer in accordance with Clause 51 shall be ascertained by the Engineer after consultation with the Contractor in accordance with the following principles. Where work is of similar character and executed under similar conditions to work priced in the Bill of Quantities it shall be valued at such rates and prices contained therein as may be applicable. Where work is not of a similar character or is not executed under similar conditions the rates and prices in the Bill of Quantities shall be used as the basis for valuation so far as may be reasonable failing which a fair valuation shall be made. Failing agreement between the Engineer and the Contractor as to any rate or price to be applied in the valuation of any variation the Engineer shall determine the rate or price in accordance with the foregoing principles and he shall notify the Contractor accordingly.

(2) Provided that if the nature or amount of any variation relative to the nature or amount of the whole of the contract work or to any part thereof shall be such that in the opinion of the Engineer or the Contractor any rate or price contained in the Contract for any item of work is by reason of such variation rendered unreasonable or inapplicable either the Engineer shall give to the Contractor or the Contractor shall give to the Engineer notice before the varied work is commenced or as soon thereafter as is reasonable in all the circumstances that such rate or price should be varied and the Engineer shall fix such rate or price as in the circumstances he shall think reasonable and proper.

(3) The Engineer may if in his opinion it is necessary or desirable order in writing that any additional or substituted work shall be executed on a daywork basis. The Contractor shall then be paid for such work under the conditions set out in the Daywork Schedule included in the Bill of Quantities and at the rates and prices affixed thereto by him in his Tender and failing the provision of a Daywork Schedule he shall be paid at the rates and prices and under the conditions contained in the "Schedules of Dayworks carried out incidental to Contract Work" issued by The Federation of Civil Engineering Contractors current at the date of the execution of the Daywork.

The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and before ordering materials shall submit to the Engineer quotations for the same for his approval.

In respect of all work executed on a daywork basis the Contractor shall during the continuance of such work deliver each day to the Engineer's Representative an exact list in duplicate of the names occupation and time of all workmen employed on such work and a statement also in duplicate showing the description and quantity of all materials and plant used thereon or therefor (other than plant which is included in the percentage addition in accordance with the Schedule under which payment for daywork is made). One copy of each list and statement will if correct
or when agreed be signed by the Engineer's Representative and returned to the Contractor. At the end of each month the Contractor shall deliver to the Engineer's Representative a priced statement of the labour material and plant (except as aforesaid) used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. Provided always that if the Engineer shall consider that for any reason the sending of such list or statement by the Contractor in accordance with the foregoing provision was impracticable he shall nevertheless be entitled to authorise payment for such work either as daywork (on being satisfied as to the time employed and plant and materials used on such work) or at such value therefor as he shall consider fair and reasonable.

(4) (a) If the Contractor intends to claim a higher rate or price than one notified to him by the Engineer pursuant to sub-clauses (1) and (2) of this Clause or Clause 56(2) the Contractor shall within 28 days after such notification give notice in writing of his intention to the Engineer.

(b) If the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions other than sub-clauses (1) and (2) of this Clause he shall give notice in writing of his intention to the Engineer as soon as reasonably possible after the happening of the events giving rise to the claim. Upon the happening of such events the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make.

(c) Without necessarily admitting the Employer's liability the Engineer may upon receipt of a notice under this Clause instruct the Contractor to keep such contemporary records or further contemporary records as the case may be as are reasonable and may be material to the claim of which notice has been given and the Contractor shall keep such records. The Contractor shall permit the Engineer to inspect all records kept pursuant to this Clause and shall supply him with copies thereof as and when the Engineer shall so instruct.

(d) After the giving of a notice to the Engineer under this Clause the Contractor shall as soon as is reasonable in all the circumstances send to the Engineer a first interim account giving full and detailed particulars of the amount claimed to that date and of the grounds upon which the claim is based. Thereafter at such intervals as the Engineer may reasonably require the Contractor shall send to the Engineer further up to date accounts giving the accumulated total of the claim and any further grounds upon which it is based.

(e) If the Contractor fails to comply with any of the provisions of this Clause in respect of any claim which he shall seek to make then the Contractor shall be entitled to payment in respect thereof only to the extent that the Engineer has not been prevented from or substantially prejudiced by such failure in investigating the said claim.

(f) The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to Clause 60 such amount in respect of any claim as the Engineer may consider due to the Contractor provided that the Contractor shall have supplied sufficient particulars to enable the Engineer to determine the amount due. If such particulars are insufficient to substantiate the whole of the claim the Contractor shall be entitled to payment in respect of such part of the claim as the particulars may substantiate to the satisfaction of the Engineer.

### PROPERTY IN MATERIALS AND PLANT

53. (1) For the purpose of this Clause:

(a) the expression "Plant" shall mean any Constructional Plant Temporary Works and materials for Temporary Works but shall exclude any vehicles engaged in transporting any labour plant or materials to or from the Site;

(b) the expression "agreement for hire" shall be deemed not to include an agreement for hire purchase.

(2) All Plant goods and materials owned by the Contractor or by any company in which the Contractor has a controlling interest shall when on the Site be deemed to be the property of the Employer.

(3) With a view to securing in the event of a forfeiture under Clause 63 the continued availability for the purpose of executing the Works of any hired Plant the Contractor shall not bring on to the Site any hired Plant unless there is an agreement for the hire thereof which contains a provision that the owner thereof will on request in writing made by the Employer within 7 days after the date on which any forfeiture has become effective and on the Employer undertaking to pay all hire charges in respect thereof from such date hire such Plant to the Employer on the same terms in all respects as the same was hired to the Contractor save that the Employer shall be entitled to permit the use thereof by any other contractor employed by him for the purpose of completing the Works under the terms of the said Clause 63.
(4) In the event of the Employer entering into any agreement for the hire of Plant pursuant to sub-clause (3) of this Clause all sums properly paid by the Employer under the provisions of any such agreement and all expenses incurred by him (including stamp duties) in entering into such agreement shall be deemed for the purpose of Clause 63 to be part of the cost of completing the Works.

(5) The Contractor shall upon request made by the Engineer at any time in relation to any item of Plant forthwith notify to the Engineer in writing the name and address of the owner thereof and shall in the case of hired Plant certify that the agreement for the hire thereof contains a provision in accordance with the requirements of sub-clause (3) of this Clause.

(6) No Plant (except hired Plant) goods or materials or any part thereof shall be removed from the Site without the written consent of the Engineer which consent shall not be unreasonably withheld where the same are no longer immediately required for the purposes of the completion of the Works but the Employer will permit the Contractor the exclusive use of all such Plant goods and materials in and for the completion of the Works until the occurrence of any event which gives the Employer the right to exclude the Contractor from the Site and proceed with the completion of the Works.

(7) Upon the removal of any such Plant goods or materials as have been deemed to have become the property of the Employer under sub-clause (2) of this Clause with the consent as aforesaid the property therein shall be deemed to vest in the Contractor and upon completion of the Works the property in the remainder of such Plant goods and materials as aforesaid shall subject to Clause 63 be deemed to vest in the Contractor.

(8) If the Contractor shall fail to remove any Plant goods or materials as required pursuant to Clause 33 within such reasonable time after completion of the Works as may be allowed by the Engineer then the Employer may:
   (a) sell any which are the property of the Contractor; and
   (b) return any not the property of the Contractor to the owner thereof at the Contractor's expense;
and after deducting from any proceeds of sale the costs charges and expenses of and in connection with such sale and of and in connection with return as aforesaid shall pay the balance (if any) to the Contractor but to the extent that the proceeds of any sale are insufficient to meet all such costs charges and expenses the excess shall be a debt due from the Contractor to the Employer and shall be recoverable by the Employer from the proceeds of any monies due to the Contractor under the contract or may be recovered by the Employer from the Contractor at law.

(9) The Employer shall not at any time be liable for the loss of or injury to any of the Plant goods or materials which have been deemed to become the property of the Employer under sub-clause (2) of this Clause save as mentioned in Clauses 29 and 65.

(10) The Contractor shall where entering into any sub-contract for the execution of any part of the Works incorporate in such sub-contract (by reference or otherwise) the provisions of this Clause in relation to Plant goods or materials brought on to the Site by the sub-contractor.

(11) The operation of this Clause shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to herein nor shall it prevent the rejection of any such materials at any time by the Engineer.

54. (1) The Contractor may with a view to securing payment under Clause 60(1)(c) in respect of goods and materials listed in the Appendix to the Form of Tender before the same are delivered to the Site transfer the property in the same to the Employer before delivery to the Site provided that
   (a) such goods and materials have been manufactured or prepared and are substantially ready for incorporation in the Works; and
   (b) the said goods and materials are the property of the Contractor or the contract for the supply of the same expressly provides that the property therein shall pass unconditionally to the Contractor upon the Contractor taking the action referred to in sub-clause (2) of this Clause.

(2) The intention of the Contractor to transfer the property in any goods or materials to the Employer in accordance with this Clause shall be evidenced by the Contractor taking or causing the supplier of the said goods or materials to take the following action:
   (a) provide to the Engineer documentary evidence that the property in the said goods or materials has vested in the Contractor;
   (b) suitably mark or otherwise plainly identify the said goods and materials so as to show that their destination is the Site that they are the property of the Employer and (where they are not stored at the premises of the Contractor) to whose order they are held;
   (c) set aside and store the said goods and materials so marked or identified to the satisfaction of the Engineer; and
   (d) send to the Engineer a schedule listing and giving the value of every item of the goods and materials so set aside and stored and inviting him to inspect the same.
(3) Upon the Engineer approving in writing the said goods and materials for the purposes of this Clause the same shall vest in and become the absolute property of the Employer and thereafter shall be in the possession of the Contractor for the sole purpose of delivering them to the Employer and incorporating them in the Works and shall not be within the ownership control or disposition of the Contractor.

Provided always that:—

(a) approval by the Engineer for the purposes of this Clause or any payment certified by him in respect of goods and materials pursuant to Clause 60 shall be without prejudice to the exercise of any power of the Engineer contained in this Contract to reject any goods or materials which are not in accordance with the provisions of the Contract and upon any such rejection the property in the rejected goods or materials shall immediately vest in the Contractor;

(b) the Contractor shall be responsible for any loss or damage to such goods and materials and for the cost of storing handling and transporting the same and shall effect such additional insurance as may be necessary to cover the risk of such loss or damage from any cause.

(4) Neither the Contractor nor a sub-contractor nor any other person shall have a lien on any goods or materials which have vested in the Employer under sub-clause (3) of this Clause for any sum due to the Contractor sub-contractor or other person and the Contractor shall take all such steps as may reasonably be necessary to ensure that the title of the Employer and the exclusion of any such lien are brought to the notice of sub-contractors and other persons dealing with any such goods or materials.

(5) Upon cessation of the employment of the Contractor under this contract before the completion of the Works whether as a result of the operation of Clause 63 or otherwise the Contractor shall deliver to the Employer any goods or materials the property in which has vested in the Employer by virtue of sub-clause (3) of this Clause and if he shall fail to do so the Employer may enter any premises of the Contractor or of any sub-contractor and remove such goods and materials and recover the cost of so doing from the Contractor.

(6) The Contractor shall incorporate provisions equivalent to those provided in this Clause in every sub-contract in which provision is to be made for payment in respect of goods or materials before the same have been delivered to the Site.

MEASUREMENT

55. (1) The quantities set out in the Bill of Quantities are the estimated quantities of the work but they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.

(2) Any error in description in the Bill of Quantities or omission therefrom shall not vitiate the Contract nor release the Contractor from the execution of the whole or any part of the Works according to the Drawings and Specification or from any of his obligations or liabilities under the Contract. Any such error or omission shall be corrected by the Engineer and the value of the work actually carried out shall be ascertained in accordance with Clause 52. Provided that there shall be no rectification of any errors or omissions in descriptions rates and prices inserted by the Contractor in the Bill of Quantities.

56. (1) The Engineer shall except as otherwise stated ascertain and determine by admeasurement the value in accordance with the Contract of the work done in accordance with the Contract.

(2) Should the actual quantities executed in respect of any item be greater or less than those stated in the Bill of Quantities and if in the opinion of the Engineer such increase or decrease of itself shall so warrant the Engineer shall after consultation with the Contractor determine an appropriate increase or decrease of any rates or prices rendered unreasonable or inapplicable in consequence thereof and shall notify the Contractor accordingly.

(3) The Engineer shall when he requires any part or parts of the work to be measured give reasonable notice to the Contractor who shall attend or send a qualified agent to assist the Engineer or the Engineer's Representative in making such measurement and shall furnish all particulars required by either of them. Should the Contractor not attend or neglect or omit to send such agent then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work.

57. Except where any statement or general or detailed description of the work in the Bill of Quantities expressly shows to the contrary Bills of Quantities shall be deemed to have been prepared and measurements shall be made according to the procedure set forth in the "Civil Engineering Standard Method of Measurement" approved by the Institution of Civil Engineers and the Federation of Civil Engineering Contractors in association with the Association of Consulting Engineers in 1976 or such later or amended edition thereof as may be stated in the Appendix to the Form of Tender to have been adopted in its preparation notwithstanding any general or local custom.
PROVISIONAL AND PRIME COST SUMS AND NOMINATED SUB-CONTRACTS

Provisional Sum. 58. (1) "Provisional Sum" means a sum included in the Contract and so designated for the execution of work or the supply of goods materials or services for or for contingencies which sum may be used in whole or in part or not at all at the direction and discretion of the Engineer.

(2) "Prime Cost (PC) Item" means an item in the Contract which contains (either wholly or in part) a sum referred to as Prime Cost (PC) which will be used for the execution of work or for the supply of goods materials or services for the Works.

Design Requirements to be Expressed Stated.

Use of Prime Cost Items.

(3) If in connection with any Provisional Sum or Prime Cost Item the services to be provided include any matter of design or specification of any part of the Permanent Works or of any equipment or plant to be incorporated therein such requirement shall be expressly stated in the Contract and shall be included in any Nominated Sub-contract. The obligation of the Contractor in respect thereof shall be only that which has been expressly stated in accordance with this sub-clause.

(4) In respect of every Prime Cost Item the Engineer shall have power to order the Contractor to employ a sub-contractor nominated by the Engineer for the execution of any work or the supply of any goods materials or services included therein. The Engineer shall also have power with the consent of the Contractor to order the Contractor to execute any such work or to supply any such goods materials or services in which event the Contractor shall be paid in accordance with the terms of a quotation submitted by him and accepted by the Engineer or in the absence thereof the value shall be determined in accordance with Clause 52.

(5) All specialists merchants tradesmen and others nominated in the Contract for a Prime Cost Item or ordered by the Engineer to be employed by the Contractor in accordance with sub-clause (4) or sub-clause (7) of this Clause for the execution of any work or the supply of any goods materials or services are referred to in this Contract as "Nominated Sub-contractors".

Production of Vouchers, etc.

(6) The Contractor shall when required by the Engineer produce all quotations invoices vouchers sub-contract documents accounts and receipts in connection with expenditure in respect of work carried out by all Nominated Sub-contractors.

Use of Provisional Sums.

(7) In respect of every Provisional Sum the Engineer shall have power to order either or both of the following:

(a) work to be executed or goods materials or services to be supplied by the Contractor the value of such work executed or goods materials or services supplied being determined in accordance with Clause 52 and included in the Contract Price;

(b) work to be executed or goods materials or services to be supplied by a Nominated Sub-contractor in accordance with Clause 59A.

Nominated Sub-contractors—Definition.

59A. (1) Subject to sub-clause (2)(c) of this Clause the Contractor shall not be under any obligation to enter into any sub-contract with any Nominated Sub-contractor against whom the Contractor may raise reasonable objection or who shall decline to enter into a sub-contract with the Contractor containing provisions:—

(a) that in respect of the work goods materials or services the subject of the sub-contract the Nominated Sub-contractor will undertake towards the Contractor such obligations and liabilities as will enable the Contractor to discharge his own obligations and liabilities towards the Employer under the terms of the Contract;

(b) that the Nominated Sub-contractor will save harmless and indemnify the Contractor against all claims demands and proceedings damages costs charges and expenses whatsoever arising out of or in connection with any failure by the Nominated Sub-contractor to perform such obligations or fulfill such liabilities;

(c) that the Nominated Sub-contractor will save harmless and indemnify the Contractor from and against any negligence by the Nominated Sub-contractor his agents workmen and servants and against any misuse by him or them of any Constructional Plant or Temporary Works provided by the Contractor for the purposes of the Contract and for all claims as aforesaid;

(d) equivalent to those contained in Clause 63.

(2) If pursuant to sub-clause (1) of this Clause the Contractor shall not be obliged to enter into a sub-contract with a Nominated Sub-contractor and shall decline to do so the Engineer shall do one or more of the following:—

(a) nominate an alternative sub-contractor in which case sub-clause (1) of this Clause shall apply;

(b) by order under Clause 51 vary the Works or the work goods materials or services the subject of the Provisional Sum or Prime Cost Item including if necessary the omission of any such work goods materials or services so that they may be provided by workmen contractors or suppliers as the case may be employed by the Employer either concurrently with the Works (in which case Clause 51 shall apply) or at
some other date. Provided that in respect of the omission of any Prime Cost
Item there shall be included in the Contract Price a sum in respect of the Con-
tractor's charges and profit being a percentage of the estimated value of such work
material or services omitted at the rate provided in the Bill of Quantities or
inserted in the Appendix to the Form of Tender as the case may be;

(c) subject to the Employer's consent where the Contractor declines to enter into a
contract with the Nominated Sub-contractor only on the grounds of unwillingness of
the Nominated Sub-contractor to contract on the basis of the provisions contained
in paragraphs (a) (b) (c) or (d) of sub-clause (i) of this Clause direct the Contractor
to enter into a contract with the Nominated Sub-contractor on such other terms
as the Engineer shall specify in which case sub-clause (3) of this Clause shall apply;

(d) in accordance with Clause 58 arrange for the Contractor to execute such work or to
supply such goods materials or services.

(3) If the Engineer shall direct the Contractor pursuant to sub-clause (2) of this Clause
to enter into a sub-contract which does not contain all the provisions referred to in sub-clause (1)
of this Clause:

(a) the Contractor shall not be bound to discharge his obligations and liabilities under
the Contract to the extent that the sub-contract terms so specified by the Engineer
are inconsistent with the discharge of the same;

(b) in the event of the Contractor incurring loss or expense or suffering damage arising
out of the refusal of the Nominated Sub-contractor to accept such provisions the Con-
tractor shall subject to Clause 59B(4) be paid in accordance with Clause 60 the amount
of such loss expense or damage as the Contractor could not reasonably avoid.

(4) Except as otherwise provided in this Clause and in Clause 59B the Contractor shall
be as responsible for the work executed or goods materials or services supplied by a Nominated
Sub-contractor employed by him as if he had himself executed such work or supplied such goods
materials or services or had sub-let the same in accordance with Clause 4.

(5) For all work executed or goods materials or services supplied by Nominated Sub-
contractors there shall be included in the Contract Price:

(a) the actual price paid or due to be paid by the Contractor in accordance with the terms
of the sub-contract (unless and to the extent that any such payment is the result of a
default of the Contractor) net of all trade and other discounts rebates and allow-
ances other than any discount obtainable by the Contractor for prompt payment;

(b) the sum (if any) provided in the Bill of Quantities for labours in connection there-
with or if ordered pursuant to Clause 59B(6) as may be determined by the
Engineer;

(c) in respect of all other charges and profit a sum being a percentage of the actual
price paid or due to be paid calculated (where provision has been made in the
Bill of Quantities for a rate to be set against the relevant item of prime cost) at the
rate inserted by the Contractor against that item or (where no such provision has
been made) at the rate inserted by the Contractor in the Appendix to the Form of
Tender as the percentage for adjustment of sums set against Prime Cost Items.

(6) In the event that the Nominated Sub-contractor shall be in breach of the sub-contract
which breach causes the Contractor to be in breach of contract the Employer shall not enforce any
award of any arbitrator or judgment which may obtain against the Contractor in respect of
such breach of contract except to the extent that the Contractor may have been able to recover
the amount thereof from the Sub-contractor. Provided always that if the Contractor shall not
comply with Clause 59B (6) the Employer may enforce any such award or judgment in full.

59B. (1) Subject to Clause 59A(2)(c) the Contractor shall in every sub-contract with a Nominated
Sub-contractor incorporate provisions equivalent to those provided in Clause 63 and such provisions
are hereinafter referred to as " the Forfeiture Clause ".

(2) If any event arises which in the opinion of the Contractor would entitle the Contractor
to exercise his right under the Forfeiture Clause or in the event that there shall be no Forfeiture
Clause in the sub-contract his right to treat the sub-contract as repudiated by the Nominated Sub-
contractor he shall at once notify the Engineer in writing and if he desires to exercise such right by
such notice seek the Employer's consent to his so doing. The Engineer shall by notice in
writing to the Contractor inform him whether or not the Employer does so consent and if the
Engineer does not give notice withholding consent within 7 days of receipt of the Contractor's
notice the Employer shall be deemed to have consented to the exercise of the said right. If notice
is given by the Contractor to the Engineer under this sub-clause and has not been withdrawn then
notwithstanding that the Contractor has not sought the Employer's consent as aforesaid the
Engineer may with the Employer's consent direct the Contractor to give notice to the Nominated
Sub-contractor expelling the Nominated Sub-contractor from the sub-contract Works pursuant

Direction by Engineer.

Contractor Responsible for Nominated Sub-contracts.

Payments.

Breach of Sub-contract.

Forfeiture of Sub-contract.

Termination of Sub-contract.
to the Forfeiture Clause or rescinding the sub-contract as the case may be. Any such notice given to the Nominated Sub-contractor is hereinafter referred to as a notice enforcing forfeiture of the sub-contract.

(3) If the Contractor shall give a notice enforcing forfeiture of the sub-contract whether under and in accordance with the Forfeiture Clause in the sub-contract or in purported exercise of his right to treat the sub-contract as repudiated the Engineer shall do any one or more of the things described in paragraphs (a), (b) and (d) of Clause 59A(2).

(4) If a notice enforcing forfeiture of the sub-contract shall have been given with the consent of the Employer or by the direction of the Engineer or if it shall have been given without the Employer's consent in circumstances which entitled the Contractor to give such a notice—

(a) there shall be included in the Contract Price:

(i) the value determined in accordance with Clause 52 of any work the Contractor may have executed or goods or materials he may have provided subsequent to the forfeiture taking effect and pursuant to the Engineer's direction;

(ii) such amount calculated in accordance with paragraph (a) of Clause 59A(5) as may be due in respect of any work goods materials or services provided by an alternative Nominated Sub-contractor together with reasonable sums for labours and for all other charges and profit as may be determined by the Engineer;

(iii) any such amount as may be due in respect of the forfeited sub-contract in accordance with Clause 59A(5);

(b) the Engineer shall take any delay to the completion of the Works consequent upon the forfeiture into account in determining any extension of time to which the Contractor is entitled under Clause 44 and the Contractor shall subject to Clause 52(4) be paid in accordance with Clause 60 the amount of any additional cost which he may have necessarily and properly incurred as a result of such delay;

(c) the Employer shall subject to Clause 60(7) be entitled to recover from the Contractor upon the certificate of the Engineer issued in accordance with Clause 60(3):—

(i) the amount by which the total sum to be included in the Contract Price pursuant to paragraphs (a) and (b) of this sub-clause exceeds the sum which would but for the forfeiture have been included in the Contract Price in respect of work materials goods and services done supplied or performed under the forfeited sub-contract;

(ii) all such other loss expense and damage as the Employer may have suffered in consequence of the breach of the sub-contract;

all of which are hereinafter collectively called "the Employer's loss". Provided always that if the Contractor shall show that despite his having complied with sub-clause (6) of this Clause he has been unable to recover the whole or any part of the Employer's loss from the Sub-contractor the Employer shall allow or (if he has already recovered the same from the Contractor) shall repay to the Contractor so much of the Employer's loss as was irrecoverable from the Sub-contractor except and to the extent that the same was irrecoverable by reason of some breach of the sub-contract or other default towards the Sub-contractor by the Contractor or except to the extent that any act or default of the Contractor may have caused or contributed to any of the Employer's loss. Any such repayment by the Employer shall carry interest at the rate stipulated in Clause 60(6) from the date of the recovery by the Employer from the Contractor of the sum repaid.

(5) If notice enforcing forfeiture of the sub-contract shall have been given without the consent of the Employer and in circumstances which did not entitle the Contractor to give such a notice:

(a) there shall be included in the Contract Price in respect of the whole of the work covered by the Nominated Sub-contract only the amount that would have been payable to the Nominated Sub-contractor on due completion of the sub-contract had it not been terminated;

(b) the Contractor shall not be entitled to any extension of time because of such termination nor to any additional expense incurred as a result of the work having been carried out and completed otherwise than by the said Sub-contractor;

(c) the Employer shall be entitled to recover from the Contractor any additional expense he may incur beyond that which he would have incurred had the sub-contract not been terminated.

(6) The Contractor shall take all necessary steps and proceedings as may be required by the Employer to enforce the provisions of the sub-contract and/or all other rights and/or remedies available to him so as to recover the Employer's loss from the Sub-contractor. Except in the case where notice enforcing forfeiture of the sub-contract shall have been given without the consent
of the Employer and in circumstances which did not entitle the Contractor to give such a notice
the Employer shall pay to the Contractor so much of the reasonable costs and expenses of such
steps and proceedings as are irrecoverable from the Sub-contractor provided that if the Contractor
shall seek to recover by the same steps and proceedings any loss damage or expense additional to
the Employer's loss the said irrecoverable costs and expenses shall be borne by the Contractor
and the Employer in such proportions as may be fair in all the circumstances.

59C. Before issuing any certificate under Clause 60 the Engineer shall be entitled to demand from
the Contractor reasonable proof that all sums (less retentions provided for in the sub-contract)
included in previous certificates in respect of the work executed or goods or materials or services
supplied by Nominated Sub-contractors have been paid to the Nominated Sub-contractors or
discharged by the Contractor in default whereof unless the Contractor shall:—

(a) give details to the Engineer in writing of any reasonable cause he may have for
withholding or refusing to make such payment; and
(b) produce to the Engineer reasonable proof that he has so informed such Nominated
Sub-contractor in writing;

the Employer shall be entitled to pay to such Nominated Sub-contractor direct upon the certification
of the Engineer all payments (less retentions provided for in the sub-contract) which the Contractor
has failed to make to such Nominated Sub-contractor and to deduct by way of set-off the amount
so paid by the Employer from any sums due or which become due from the Employer to the Con-
tractor. Provided always that where the Engineer has certified and the Employer has paid direct
as aforesaid the Engineer shall issue any further certificate in favour of the Contractor deduct
from the amount thereof the amount so paid direct as aforesaid but shall not withhold or delay
the issue of the certificate itself when due to be issued under the terms of the Contract.

CERTIFICATES AND PAYMENT

60. (1) The Contractor shall submit to the Engineer after the end of each month a statement
(in such form if any as may be prescribed in the Specification) showing:—

(a) the estimated contract value of the Permanent Works executed up to the end of
that month;
(b) a list of any goods or materials delivered to the Site for but not yet incorporated
in the Permanent Works and their value;
(c) a list of any goods or materials listed in the Appendix to the Form of Tender which
have not yet been delivered to the Site but of which the property has vested in the
Employer pursuant to Clause 54 and their value;
(d) the estimated amounts to which the Contractor considers himself entitled in
connection with all other matters for which provision is made under the Contract
including any Temporary Works or Constructional Plant for which separate
amounts are included in the Bill of Quantities;

unless in the opinion of the Contractor such values and amounts together will not justify the issue
of an interim certificate.

Amounts payable in respect of Nominated Sub-contractors are to be listed separately.

(2) Within 28 days of the date of delivery to the Engineer or Engineer's Representative in
accordance with sub-clause (1) of this Clause of the Contractor's monthly statement the Engineer
shall certify and the Employer shall pay to the Contractor (after deducting any previous payments
on account):—

(a) the amount which in the opinion of the Engineer on the basis of the monthly
statement is due to the Contractor on account of sub-clause (1)(a) and (d) of this
Clause less a retention as provided in sub-clause (4) of this Clause;
(b) such amounts (if any) as the Engineer may consider proper (but in no case exceeding
the percentage of the value stated in the Appendix to the Form of Tender) in
respect of (b) and (c) of sub-clause (1) of this Clause which amounts shall not be
subject to a retention under sub-clause (4) of this Clause.

The amounts certified in respect of Nominated Sub-contracts shall be shown separately in
the certificate. The Engineer shall not be bound to issue an interim certificate for a sum less
than that named in the Appendix to the Form of Tender.

(3) Not later than 3 months after the date of the Maintenance Certificate the Contractor
shall submit to the Engineer a statement of final account and supporting documentation showing
in detail the value in accordance with the Contract of the work done in accordance with the Contract
together with all further sums which the Contractor considers to be due to him under the Contract
up to the date of the Maintenance Certificate. Within 3 months after receipt of this final account
and of all information reasonably required for its verification the Engineer shall issue a final
certificate stating the amount which in his opinion is finally due under the Contract up to the date

ICE B-37
of the Maintenance Certificate and after giving credit to the Employer for all amounts previously
paid by the Employer and for all sums to which the Employer is entitled under the Contract up
to the date of the Maintenance Certificate the balance if any due from the Employer to the Con-
tractor or from the Contractor to the Employer as the case may be. Such balance shall subject
to Clause 47 be paid to or by the Contractor as the case may require within 28 days of the date
of the certificate.

(4) The retention to be made pursuant to sub-clause (2)(a) of this Clause shall be a sum
equal to 5 per cent of the amount due to the Contractor until a reserve shall have accumulated
in the hand of the Employer up to the following limits:

(a) where the Tender Total does not exceed £50,000 5 per cent of the Tender Total but
not exceeding £1,500; or
(b) where the Tender Total exceeds £50,000 3 per cent of the Tender Total;

except that the limit shall be reduced by the amount of any payment that shall have been made
pursuant to sub-clause (5) of this Clause.

(5) (a) If the Engineer shall issue a Certificate of Completion in respect of any Section or part of
the Works pursuant to Clause 48(2) or (3) there shall become due on the date of
issue of such certificate and shall be paid to the Contractor within 14 days thereof a sum
equal to 1½ per cent of the amount due to the Contractor at that date in respect of
such Section or part as certified for payment pursuant to sub-clause (2) of this Clause
provided that any sum or sums paid under this sub-clause shall not exceed in aggregate
one-third of the reserve or any money deducted in accordance with sub-clause (2)(a) of
this Clause from the payments made to the Contractor at the date of issue by the Engineer
of the aforesaid Certificate of Completion.

(b) One half of the retention money less any sums paid pursuant to sub-clause (5)(a)
of this Clause shall be paid to the Contractor within 14 days after the date on which
the Engineer shall have issued a Certificate of Completion for the whole of the Works
pursuant to Clause 48(1).

(c) The other half of the retention money shall be paid to the Contractor within 14 days
after the expiration of the Period of Maintenance notwithstanding that at such time
there may be outstanding claims by the Contractor against the Employer. Provided
always that if at such time there shall remain to be executed by the Contractor any
outstanding work referred to under Clause 48 or any works ordered during such
period pursuant to Clauses 49 and 50 the Employer shall be entitled to withhold
payment until the completion of such works of so much of the second half of retention
money as shall in the opinion of the Engineer represent the cost of the works so
remaining to be executed.

Provided further that in the event of different maintenance periods having
become applicable to different Sections or parts of the Works pursuant to Clause 48
the expression "expiration of the Period of Maintenance" shall for the purposes
of this sub-clause be deemed to mean the expiration of the latest of such periods.

(6) In the event of failure by the Engineer to certify or the Employer to make payment in
accordance with sub-clauses (2)(3) and (5) of this Clause the Employer shall pay to the Contractor
interest upon any payment overdue thereunder at a rate per annum equivalent to ½ per cent plus
the minimum rate at which the Bank of England will lend to a discount house having access to the
Discount Office of the Bank current on the date upon which such payment first becomes overdue.
In the event of any variation in the said Bank Rate being announced whilst such payment remains
overdue the interest payable to the Contractor for the period that such payment remains overdue
shall be correspondingly varied from the date of each such variation.

(7) The Engineer shall have power to omit from any certificate the value of any work done
goods or materials supplied or services rendered with which he may for the time being be dissatisfied
and for that purpose or for any other reason which to him may seem proper may by any certificate
delete correct or modify any sum previously certified by him.

Provided always that:

(a) the Engineer shall not in any interim certificete delete or reduce any sum previously
certified in respect of work done goods or materials supplied or services rendered by a
Nominated Sub-contractor if the Contractor shall have already paid or be bound to
pay that sum to the Nominated Sub-contractor;

(b) if the Engineer in the final certificate shall delete or reduce any sum previously certi-
fied in respect of work done goods or materials supplied or services rendered by a
Nominated Sub-contractor which sum shall have been already paid by the Contractor
to the Nominated Sub-contractor the Employer shall reimburse to the Contractor the
amount of any sum overpaid by the Contractor to the Sub-contractor in accordance
with the certificates issued under sub-clause (2) of this Clause which the Contractor
despite compliance with Clause 59B(6) shall be unable to recover from the Nominated Sub-contractor together with interest thereon at the rate stated in Clause 60(6) from 28 days after the date of the final certificate issued under sub-clause (3) of this Clause until the date of such reimbursement.

(8) Every certificate issued by the Engineer pursuant to this Clause shall be sent to the Employer and at the same time a copy thereof shall be sent to the Contractor.

61. (1) Upon the expiration of the Period of Maintenance or where there is more than one such period upon the expiration of the latest period and when all outstanding work referred to under Clause 48 and all work of repair amendment reconstruction rectification and making good of defects imperfections shrinkages and other faults referred to under Clauses 49 and 50 shall have been completed the Engineer shall issue to the Employer (with a copy to the Contractor) a Maintenance Certificate stating the date on which the Contractor shall have completed his obligations to construct complete and maintain the Works to the Engineer's satisfaction.

(2) The issue of the Maintenance Certificate shall not be taken as relieving either the Contractor or the Employer from any liability the one towards the other arising out of or in any way connected with the performance of their respective obligations under the Contract.

REMEDIES AND POWERS

62. If by reason of any accident or failure or other event occurring to in or in connection with the Works or any part thereof during the execution of the Works or during the Period of Maintenance any remedial or other work or repair shall in the opinion of the Engineer be urgently necessary and the Contractor is unable or unwilling at once to do such work or repair the Employer may by his own or other workmen do such work or repair as the Engineer may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer the Contractor was liable to do at his own expense under the Contract all costs and charges properly incurred by the Employer in so doing shall be paid by the Contractor to the Employer or may be deducted by the Employer from any monies due or which may become due to the Contractor. Provided always that the Engineer shall as soon after the occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.

63. (1) If the Contractor shall become bankrupt or have a receiving order made against him or shall present his petition in bankruptcy or shall make an arrangement with or assignment in favour of his creditors or shall agree to carry out the Contract under a committee of inspection of his creditors or (being a corporation) shall go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction) or if the Contractor shall assign the Contract without the consent in writing of the Employer first obtained or shall have an execution levied on his goods or if the Engineer shall certify in writing to the Employer that in his opinion the Contractor:

(a) has abandoned the Contract; or
(b) without reasonable excuse has failed to commence the Works in accordance with Clause 41 or has suspended the progress of the Works for 14 days after receiving from the Engineer written notice to proceed; or
(c) has failed to remove goods or materials from the Site or to pull down and replace work for 14 days after receiving from the Engineer written notice that the said goods materials or work have been condemned and rejected by the Engineer; or
(d) despite previous warning by the Engineer in writing is failing to proceed with the Works with due diligence or is otherwise persistently or fundamentally in breach of his obligations under the Contract; or
(e) has to the detriment of good workmanship or in defiance of the Engineer's instruction to the contrary sub-let any part of the Contract;

then the Employer may after giving 7 days' notice in writing to the Contractor enter upon the Site and the Works and expel the Contractor therefrom without thereby avoiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract or affecting the rights and powers conferred on the Employer or the Engineer by the Contract and may himself complete the Works or may employ any other contractor to complete the Works and the Employer or such other contractor may use for such completion so much of the Constructional Plant Temporary Works goods and materials which have been deemed to become the property of the Employer under Clauses 53 and 54 as he or they may think proper and the Employer may at any time sell any of the said Constructional Plant Temporary Works and unused goods and materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

(2) By the said notice or by further notice in writing within 14 days of the date thereof the Engineer may require the Contractor to assign to the Employer and if so required the Contractor shall forthwith assign to the Employer the benefit of any agreement for the supply of any goods or
materials and/or for the execution of any work for the purposes of this Contract which the Contractor may have entered into.

(3) The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer fix and determine ex parte or by or after reference to the parties or after such investigation or enquiry as he may think fit to make or institute and shall certify what amount (if any) had at the time of such entry and expulsion been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract and what was the value of any unused or partially used goods and materials any Constructional Plant and any Temporary Works which have been deemed to become the property of the Employer under Clauses 53 and 54.

(4) If the Employer shall enter and expel the Contractor under this Clause he shall not be liable to pay to the Contractor any money on account of the Contract until the expiration of the Period of Maintenance and thereafter until the costs of completion and maintenance damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums (if any) as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount. But if such amount shall exceed the sum which would have been payable to the Contractor on due completion by him then the Contractor shall upon demand pay to the Employer the amount of such excess and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.

FRUSTRATION

64. In the event of the Contract being frustrated whether by war or by any other supervening event which may occur independently of the will of the parties the sum payable by the Employer to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 65(5) if the Contract had been determined by the Employer under Clause 65.

WAR CLAUSE

65. (1) If during the currency of the Contract there shall be an outbreak of war (whether war is declared or not) in which Great Britain shall be engaged on a scale involving general mobilisation of the armed forces of the Crown the Contractor shall for a period of 28 days reckoned from midnight on the date that the order for general mobilisation is given continue so far as is physically possible to execute the Works in accordance with the Contract.

(2) If at any time before the expiration of the said period of 28 days the Works shall have been completed or completed so far as to be usable all provisions of the Contract shall continue to have full force and effect save that:—

(a) the Contractor shall in lieu of fulfilling his obligations under Clauses 49 and 50 be entitled at his option to allow against the sum due to him under the provisions hereof the cost (calculated at the prices ruling at the beginning of the said period of 28 days) ascertained by the Engineer at the expiration of the Period of Maintenance of repair rectification and making good any work for the repair rectification or making good of which the Contractor would have been liable under the said Clauses had they continued to be applicable;

(b) the Employer shall not be entitled at the expiration of the Period of Maintenance to withhold payment under Clause 60(3)(c) of the second half of the retention money or any part thereof except such sum as may be allowable by the Contractor under the provisions of the last preceding paragraph which sum may (without prejudice to any other mode of recovery thereof) be deducted by the Employer from such second half.

Right of Employer to Determine Contract.

(3) If the Works shall not have been completed as aforesaid the Employer shall be entitled to determine the Contract (with the exception of this Clause and Clauses 66 and 68) by giving notice in writing to the Contractor at any time after the aforesaid period of 28 days has expired and upon such notice being given the Contract shall (except as above mentioned) forthwith determine but without prejudice to the claims of either party in respect of any antecedent breach thereof.

Removal of Plant on Determination.

(4) If the Contract shall be determined under the provisions of the last preceding sub-clause the Contractor shall with all reasonable despatch remove from the Site all his Constructional Plant and shall give facilities to his sub-contractors to remove similarly all Constructional Plant belonging to them and in the event of any failure so to do the Employer shall have the like powers as are contained in Clause 53(8) in regard to failure to remove Constructional Plant on completion of the Works but subject to the same condition as is contained in Clause 53(9).

Payment on Determination.

(5) If the Contract shall be determined as aforesaid the Contractor shall be paid by the Employer (insofar as such amounts or items shall not have been already covered by payment on
account made to the Contractor) for all work executed prior to the date of determination at the
rates and prices provided in the Contract and in addition:—

(a) the amounts payable in respect of any preliminary items so far as the work or
service comprised therein has been carried out or performed and a proper proportion
as certified by the Engineer of any such items the work or service comprised in
which has been partially carried out or performed;

(b) the cost of materials or goods reasonably ordered for the Works which shall have
been delivered to the Contractor or of which the Contractor is legally liable to
accept delivery (such materials or goods becoming the property of the Employer
upon such payment being made by him);

(c) a sum to be certified by the Engineer being the amount of any expenditure reasonably
incurred by the Contractor in the expectation of completing the whole of the Works
in so far as such expenditure shall not have been covered by the payments in this
sub-clause before mentioned;

(d) any additional sum payable under sub-clause (b)(c) and (d) of this Clause;

(e) the reasonable cost of removal under sub-clause (4) of this Clause.

(6) Whether the Contract shall be determined under the provisions of sub-clause (3) of this
Clause or not the following provisions shall apply or be deemed to have applied as from the date
of the said outbreak of war notwithstanding anything expressed in or implied by the other terms
of the Contract viz:—

(a) The Contractor shall be under no liability whatsoever whether by way of indemnity
or otherwise for or in respect of damage to the Works or to property (other than
property of the Contractor or property hired by him for the purposes of executing
the Works) whether of the Employer or of third parties or for or in respect of
injury or loss of life to persons which is the consequence whether direct or indirect
of war hostilities (whether war has been declared or not) invasion act of the Queen’s
enemies civil war revolution revolution insurrection military or usurped power
and the Employer shall indemnify the Contractor against all such liabilities and against
all claims demands proceedings damages costs charges and expenses whatsoever
arising thereout or in connection therewith.

(b) If the Works shall sustain destruction or any damage by reason of any of the
causes mentioned in the last preceding paragraph the Contractor shall nevertheless
be entitled to payment for any part of the Works so destroyed or damaged and the
Contractor shall be entitled to be paid by the Employer the cost of making good
any such destruction or damage so far as may be necessary for the completion of the Works on a cost basis plus such profit
as the Engineer may certify to be reasonable.

(c) In the event that the Contract includes the Contract Price Fluctuations Clause the
terms of that Clause shall continue to apply but if subsequent to the outbreak of
war the index figures therein referred to shall cease to be published or in the event
that the contract shall not include a Price Fluctuations Clause in that form the
following paragraph shall have effect:—

If under decision of the Civil Engineering Construction Conciliation Board
or of any other body recognised as an appropriate body for regulating the rates
of wages in any trade or industry other than the Civil Engineering Construction
Industry to which Contractors undertaking works of civil engineering construction
give effect by agreement or in practice or by reason of any Statute or Statutory
Instrument there shall during the currency of the Contract be any increase or
decrease in the wages or the rates of wages or in the allowances or rates of allowances
(including allowances in respect of holidays payable to or in respect of labour of
any kind prevailing at the date of outbreak of war as then fixed by the said Board
or such other body as aforesaid or by Statute or Statutory Instrument or any
increase in the amount payable by the Contractor by virtue or in respect of any
Scheme of State Insurance or if there shall be any increase or decrease in the cost
prevailing at the date of the said outbreak of war of any materials consumable
stores fuel or power (and whether for permanent or temporary works) which
increase or increases decrease or decreases shall result in an increase or decrease
of cost to the Contractor in carrying out the Works the net increase or decrease
of cost shall form an addition or deduction as the case may be to or from the
Contract Price and be paid to or allowed by the Contractor accordingly.

(d) If the cost of the Works to the Contractor shall be increased or decreased by reason
of the provisions of any Statute or Statutory Instrument or other Government or
Local Government Order or Regulation becoming applicable to the Works after
the date of the said outbreak of war or by reason of any trade or industrial agreement entered into after such date to which the Civil Engineering Construction Conciliation Board or any other body as aforesaid is party or gives effect or by reason of any amendment of whatsoever nature of the Working Rule Agreement of the said Board or of any other body as aforesaid or by reason of any other circumstance or thing attributable to or consequent on such outbreak of war such increase or decrease of cost as certified by the Engineer shall be reimbursed by the Employer to the Contractor or allowed by the Contractor as the case may be.

(e) Damage or injury caused by the explosion whenever occurring of any mine bomb shell grenade or other projectile missile or munition of war and whether occurring before or after the cessation of hostilities shall be deemed to be the consequence of any of the events mentioned in sub-clause (6)(a) of this Clause.

**SETTLEMENT OF DISPUTES**

66. (1) If any dispute or difference of any kind whatsoever shall arise between the Employer and the Contractor in connection with or arising out of the Contract or the carrying out of the Works including any dispute as to any decision opinion instruction direction certificate or valuation of the Engineer (whether during the progress of the Works or after their completion and whether before or after the determination abandonment or breach of the Contract) it shall be referred to and settled by the Engineer who shall state his decision in writing and give notice of the same to the Employer and the Contractor. Unless the Contract shall have been already determined or abandoned the Contractor shall in every case continue to proceed with the Works with all due diligence and he shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised by an arbitrator as hereinafter provided. Such decisions shall be final and binding upon the Contractor and the Employer unless either of them shall require that the matter be referred to arbitration as hereinafter provided. If the Engineer shall fail to give such decision for a period of 3 calendar months after being requested to do so or if either the Employer or the Contractor be dissatisfied with any such decision of the Engineer then in any such case either the Employer or the Contractor may within 3 calendar months after receiving notice of such decision or within 3 calendar months after the expiration of the said period of 3 months (as the case may be) require that the matter shall be referred to the arbitration of a person to be agreed upon between the parties or (if the parties fail to appoint an arbitrator within one calendar month of either party serving on the other party a written notice to concur in the appointment of an arbitrator) a person to be appointed on the application of either party by the President for the time being of the Institution of Civil Engineers. If an arbitrator declines the appointment or after appointment is removed by order of a competent court or is incapable of acting or dies and the parties do not within one calendar month of the vacancy arising fill the vacancy then the President for the time being of the Institution of Civil Engineers may on the application of either party appoint an arbitrator to fill the vacancy. Any such reference to arbitration shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1950 or the Arbitration (Scotland) Act 1894 or any statutory re-enactment or amendment thereof for the time being in force.

Any such reference to arbitration may be conducted in accordance with the Institution of Civil Engineers' Arbitration Procedure (1973) or any amendment or modification thereof being in force at the time of the appointment of the arbitrator and in cases where the President of the Institution of Civil Engineers is requested to appoint the arbitrator he may direct that the arbitration is conducted in accordance with the aforementioned Procedure or any amendment or modification thereof. Such arbitrator shall have full power to open up review and revise any decision opinion instruction direction certificate or valuation of the Engineer and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the Engineer for the purpose of obtaining his decision above referred to. The award of the arbitrator shall be final and binding on the parties. Save as provided for in sub-clause (2) of this Clause no steps shall be taken in the reference to the arbitrator until after the completion or alleged completion of the Works unless with the written consent of the Employer and the Contractor. Provided always:

(a) that the giving of a Certificate of Completion under Clause 48 shall not be a condition precedent to the taking of any step in such reference;

(b) that no decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matter whatsoever relevant to the dispute or difference so referred to the arbitrator as aforesaid.

(2) In the case of any dispute or difference as to any matter arising under Clause 12 or the withholding by the Engineer of any certificate or the withholding of any portion of the retention money under Clause 60 to which the Contractor claims to be entitled or as to the exercise of the Engineer's power to give a certificate under Clause 63(1) the reference to the arbitrator may proceed notwithstanding that the Works shall not then be or be alleged to be complete.
(3) In any case where the President for the time being of the Institution of Civil Engineers is not able to exercise the functions conferred on him by this Clause the said functions may be exercised on his behalf by a Vice-President for the time being of the said Institution.

APPLICATION TO SCOTLAND

67. If the Works are situated in Scotland the Contract shall in all respects be construed and operate as a Scottish contract and shall be interpreted in accordance with Scots law.

NOTICES

68. (1) Any notice to be given to the Contractor under the terms of the Contract shall be served by sending the same by post to or leaving the same at the Contractor's principal place of business (or in the event of the Contractor being a Company to or at its registered office).

(2) Any notice to be given to the Employer under the terms of the Contract shall be served by sending the same by post to or leaving the same at the Employer's last known address (or in the event of the Employer being a Company to or at its registered office).

TAX MATTERS

69. (1) The rates and prices contained in the Bill of Quantities take account of the levels and incidence at the date for return of tenders (hereinafter called "the relevant date") of the taxes levies and contributions (including national insurance contributions but excluding income tax and any levy payable under the Industrial Training Act 1964) which are by law payable by the Contractor in respect of his workpeople and the premiums and refunds (if any) which are by law payable to the Contractor in respect of his workpeople. Any such matter is hereinafter called "a labour-tax matter".

The rates and prices contained in the Bill of Quantities do not take account of any level or incidence of the aforesaid matters where at the relevant date such level or incidence does not then have effect but although then known is to take effect at some later date. The taking effect of any such level or incidence at the later date shall for the purposes of sub-clause (2) of this Clause be treated as the occurrence of an event.

(2) If after the relevant date there shall occur any of the events specified in sub-clause (3) of this Clause and as a consequence thereof the cost to the Contractor of performing his obligations under the Contract shall be increased or decreased then subject to the provisions of sub-clause (4) of this Clause the net amount of such increase or decrease shall constitute an addition to or deduction from the sums otherwise payable to the Contractor under the Contract as the case may require.

(3) The events referred to in the preceding sub-clause are as follows:

(a) any change in the level of any labour-tax matter;
(b) any change in the incidence of any labour-tax matter including the imposition of any new such matter or the abolition of any previously existing such matter.

(4) In this Clause workpeople means persons employed by the Contractor on manual labour whether skilled or unskilled but for the purpose of ascertaining what if any additions or deductions are to be paid or allowed under this Clause account shall not be taken of any labour-tax matter in relation to any workpeople of the Contractor unless at the relevant time their normal place of employment is the Site.

(5) Subject to the provisions of the Contract as to the placing of sub-contracts with Nominated Sub-contractors the Contractor may incorporate in any sub-contract made for the purpose of performing his obligations under the Contract provisions which are mutatis mutandis the same as the provisions of this Clause and in such event additions or deductions to be made in accordance with any such sub-contract shall also be made under the Contract as if the increase or decrease of cost to the sub-contractor had been directly incurred by the Contractor.

(6) As soon as practicable after the occurrence of any of the events specified in sub-clause (3) of this Clause the Contractor shall give the Engineer notice thereof. The Contractor shall keep such contemporary records as are necessary for the purpose of ascertaining the amount of any addition or deduction to be made in accordance with this Clause and shall permit the Engineer to inspect such records. The Contractor shall submit to the Engineer with his monthly statements full details of every addition or deduction to be made in accordance with this Clause. All certificates for payment issued after submission of such details shall take due account of the additions or deductions to which such details relate. Provided that the Engineer may if the Contractor fails to submit full details of any deduction nevertheless take account of such deduction when issuing any certificate for payment.
70. (1) In this Clause "tax exempt supply" "invoice" "tax" "taxable person" and "taxable supply" have the same meanings as in Part I of the Finance Act 1972 (hereinafter referred to as "the Act") including any amendment or re-enactment thereof and any reference to the Value Added Tax (General) Regulations 1972 (S.I. 1972/1147) (hereinafter referred to as the V.A.T. Regulations) shall be treated as a reference to any enactment corresponding to those regulations for the time being in force in consequence of any amendment or re-enactment of those regulations.

(2) The Contractor shall be deemed not to have allowed in his tender for the tax payable by him as a taxpayable person to the Commissioners of Customs and Excise being tax chargeable on any taxable supplies to the Employer which are to be made under the Contract.

(3) (a) The Contractor shall not in any statement submitted under Clause 60 include any element on account of tax in any item or claim contained in or submitted with the statement.

(b) The Contractor shall concurrently with the submission of the statement referred to in sub-clause (3)(a) of this Clause furnish the Employer with a written estimate showing those supplies of goods and services and the values thereof included in the said statement and on which tax will be chargeable under Regulation 21 of the V.A.T. Regulations at a rate other than zero.

(4) At the same time as payment (other than payment in accordance with this sub-clause) for goods or services which were the subject of a taxable supply provided by the Contractor as a taxpayable person to the Employer in made in accordance with the Contract there shall also be paid by the Employer a sum (separately identified by the Employer and in this Clause referred to as "the tax payment") equal to the amount of tax payable by the Contractor on that supply. Within seven days of each payment the Contractor shall:

(a) if he agrees with that tax payment or any part thereof issue to the Employer an authenticated receipt of the kind referred to in Regulation 21(2) of the V.A.T. Regulations in respect of that payment or that part; and

(b) if he disagrees with that tax payment or any part thereof notify the Employer in writing stating the grounds of his disagreement.

(5) (a) If any dispute or question arises between the Employer and the Contractor in relation to any of the matters specified in Section 40(1) of the Act then:

(i) if the Employer so requires the Contractor shall refer the matter to the said Commissioners for their decision on it

(ii) if the Contractor refers the matter to the said Commissioners (whether or not in pursuance of sub-paragraph (i) above) and the Employer is dissatisfied with their decision on the matter the Contractor shall at the Employer's request refer the matter to a Value Added Tax Tribunal by way of appeal under Section 40 of the Act whether the Contractor is so dissatisfied or not

(iii) a sum of money equal to the amount of tax which the Contractor in making a deposit with the said Commissioners under Section 40(3)(a) of the Act is required so to deposit shall be paid to the Contractor; and

(iv) if the Employer requires the Contractor to refer such a matter to the Tribunal in accordance with sub-paragraph (ii) above then he shall reimburse the Contractor any costs and any expenses reasonably and properly incurred in making that reference less any costs awarded to the Contractor by the Tribunal and the decision of the Tribunal shall be binding on the Employer to the same extent as it binds the Contractor.

(b) Clause 66 shall not apply to any dispute or question arising under paragraph (a) of this sub-clause.

(6) (a) The Employer shall without prejudice to his rights under any other Clause hereof be entitled to recover from the Contractor:

(i) any tax payment made to the Contractor of a sum which is in excess of the sum (if any) which in all the circumstances was due in accordance with sub-clause (4) of this Clause

(ii) in respect of any sum of money deposited by the Contractor pursuant to sub-clause (5)(a)(iii) of this Clause a sum equal to the amount repaid under Section 40(4) of the Act together with any interest thereon which may have been determined thereunder.
(b) If the Contractor shall establish that the Commissioners have charged him in respect of a taxable supply for which he has received payment under this Clause tax greater in amount than the sum paid to him by the Employer the Employer shall subject to the provisions of sub-clause (5) of this Clause pay to the Contractor a sum equal to the difference between the tax previously paid and the tax charged to the Contractor by the Commissioners.

(7) If after the date for return of tenders the descriptions of any supplies of goods or services which at the date of tender are taxable or exempt supplies are with effect after the date for return of tenders modified or extended by or under the Act and that modification or extension shall result in the Contractor having to pay either more or less tax or greater or smaller amounts attributable to tax and that tax or those amounts as the case may be shall be a direct expense or direct saving to the Contractor in carrying out the Works and not recoverable or allowable under the Contract or otherwise then there shall be paid to or allowed by the Contractor as appropriate a sum equivalent to that tax or amounts as the case may be.

Provided always that before that tax is included in any payment by the Employer or those amounts are included in any certificate by the Engineer as the case may be the Contractor shall supply all the information the Engineer requires to satisfy himself as to the Contractor's entitlement under this sub-clause.

(8) The Contractor shall upon demand pay to the Employer the amount of any sum due in accordance with sub-clauses (6) and (7) of this Clause and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.

METRICATION

71. (1) If any materials described in the Contract or ordered by the Engineer are described by dimensions in the metric or imperial measure and having used his best endeavours the Contractor cannot without undue delay or additional expense or at all procure such materials in the measure specified in the Contract but can obtain such materials in the other measure approximating to those described in the Contract or ordered by the Engineer then the Contractor shall forthwith give written notice to the Engineer of these facts stating the dimensions to which such materials are procurable in the other measure. Such notice shall where practicable be given in sufficient time to enable the Engineer to consider and if necessary give effect to any design change which may be required and to avoid delay in the performance of the Contractor's other obligations under the Contract. Any additional cost or expense incurred by the Contractor as a result of any delay arising out of the Contractor's default under this sub-clause shall be borne by the Contractor.

(2) As soon as practicable after the receipt of any such notice under the preceding sub-clause the Engineer shall if he is satisfied that the Contractor has used his best endeavours to obtain materials to the dimensions described in the Contract or ordered by the Engineer and that they are not obtainable without undue delay or without putting the Contractor to additional expense either:

(a) instruct the Contractor pursuant to Clause 13 to supply such materials (despite such delay or expense) in the dimensions described in the Contract or originally ordered by the Engineer; or

(b) give an order to the Contractor pursuant to Clause 51:

(i) to supply such materials to the dimensions stated in his said notice to be procurable instead of to the dimensions described in the Contract or originally ordered by the Engineer; or

(ii) to make some other variation whereby the need to supply such materials to the dimensions described in the Contract or originally ordered by the Engineer will be avoided.

(3) This Clause shall apply irrespective of whether the materials in question are to be supplied in accordance with the Contract directly by the Contractor or indirectly by a Nominated Sub-contractor.

SPECIAL CONDITIONS

72. The following special conditions form part of the Conditions of Contract.

(Note: Any special conditions which it is desired to incorporate in the conditions of contract should be numbered consecutively with the foregoing conditions of contract.)
SHORT DESCRIPTION
OF WORKS:—

All Permanent and Temporary Works in connection with* ...........................................

----------------------------------------------------------------------------------------

Form of Tender

(NOTE: The Appendix forms part of the Tender)

To ...........................................................................................................................................

----------------------------------------------------------------------------------------

GENTLEMEN,

Having examined the Drawings, Conditions of Contract, Specification and Bill of Quantities
for the construction of the above-mentioned Works (and the matters set out in the Appendix
hereto), we offer to construct and complete the whole of the said Works and maintain the Permanent
Works in conformity with the said Drawings, Conditions of Contract, Specification and Bill of
Quantities for such sum as may be ascertained in accordance with the said Conditions of Contract.

We undertake to complete and deliver the whole of the Permanent Works comprised in the
Contract within the time stated in the Appendix hereto.

If our tender is accepted we will, when required, provide two good and sufficient sureties or
obtain the guarantee of a Bank or Insurance Company (to be approved in either case by you) to
be jointly and severally bound with us in a sum equal to the percentage of the Tender Total as
defined in the said Conditions of Contract for the due performance of the Contract under the
terms of a Bond in the form annexed to the Conditions of Contract.

Unless and until a formal Agreement is prepared and executed this Tender, together with
your written acceptance thereof, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any tender you may receive.

† To the best of our knowledge and belief we have complied with the general conditions required
by the Fair Wages Resolution for the three months immediately preceding the date of this tender.

We are, Gentlemen,

Yours faithfully,

Signature................................................................................................................................

Address...................................................................................................................................

----------------------------------------------------------------------------------------

Date ..........................................................................................................................................

* Complete as appropriate
† Delete if not required
### Form of Tender (Appendix)

**Appendix**

Note: Relevant Clause numbers are shown in brackets following the description.

<table>
<thead>
<tr>
<th>Amount of Bond (if any)</th>
<th>(10)</th>
<th>% of Tender Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Amount of Insurance</td>
<td>(23 (2))</td>
<td>£</td>
</tr>
<tr>
<td>Time for Completion</td>
<td>(43)</td>
<td>Liquidated Damages for Delay (47)</td>
</tr>
</tbody>
</table>

**Column 1**
(see Clause 47 (1))

For the Whole of the Works —— (a) Weeks

<table>
<thead>
<tr>
<th>£</th>
<th>(b) per Day/Week (c)</th>
</tr>
</thead>
</table>

**Column 2**
(see Clause 47 (2))

For the following Sections

<table>
<thead>
<tr>
<th>£</th>
<th>(d) per Day/Week (e)</th>
</tr>
</thead>
</table>

**Column 3**

<table>
<thead>
<tr>
<th>£</th>
<th>(d) per Day/Week (e)</th>
</tr>
</thead>
</table>

Period of Maintenance | (49 (1)) | Weeks |

Vesting of Materials not on Site | (54 (1) and 60 (1)) |

1. | 4 |
2. | 5 |
3. | 6 |

Standard Method of Measurement adopted in preparation of Bills of Quantities (57(f))

<table>
<thead>
<tr>
<th>Percentage for adjustment of P.C. Sums</th>
<th>(59A (2)(b) and (5) (c))</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of the Value of Goods and Materials to be included in Interim Certificates</td>
<td>(60 (2)(b))</td>
<td>%</td>
</tr>
<tr>
<td>Minimum Amount of Interim Certificates</td>
<td>(60 (2))</td>
<td>£</td>
</tr>
</tbody>
</table>

(a) To be completed in every case (by Contractor if not already stipulated).
(b) To be completed by Engineer in every case.
(c) Delete which not required.
(d) To be completed if required, with brief description.
(e) (If used) materials to which clauses apply are to be filled in by Engineer prior to inviting tenders.
(f) Insert here any amendment or modification adopted if different from that stated in Clause 37.
Form of Agreement

THIS AGREEMENT made the __________________ day of ____________________________
19_________________ BETWEEN _______________________________ in the County of ____________________________ (hereinafter called "the Employer") of the one part and _______________________________ in the County of ____________________________ (hereinafter called "the Contractor") of the other part WHEREAS the Employer is desirous that certain Works should be constructed, viz. the Permanent and Temporary Works in connection with______________________________ and has accepted a Tender by the Contractor for the construction and completion of such Works and maintenance of the Permanent Works NOW THIS AGREEMENT WITNESSETH as follows:—

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:—
   (a) The said Tender.
   (b) The Drawings.
   (c) The Conditions of Contract.
   (d) The Specification.
   (e) The Priced Bill of Quantities.

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Employer to construct and complete the Works and maintain the Permanent Works in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay to the Contractor in consideration of the construction and completion of the Works and maintenance of the Permanent Works the Contract Price at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused their respective Common Seals to be hereunto affixed (or have hereunto set their respective hands and seals) the day and year first above written

The Common Seal of ________________________________ Limited

was hereunto affixed in the presence of:—

or

SIGNED SEALED AND DELIVERED by the said ________________________________

in the presence of:—

______________________________
Form of Bond

BY THIS BOND We

of .............................................. in the County of ................................. Limited

whose registered office is at ................................................................................................. in the County of .................................

and ................................................................................................................................. carrying on business in partnership under the name or style of .................................................................

at ............................................................................................................................. in the County of .................................................................

and ................................................................................................................................. in the County of .................................................................

(hereinafter called “the Contractor”) and ........................................................................

in the County of ................................................................. and ........................................................................

in the County of ................................................................. Limited whose registered office is at .................................................................................................

County of ................................................................. (hereinafter called “the Sureties/Surety”) are held and firmly bound unto ................................................................................................. (hereinafter called “the Employer”) in the sum of ................................................................. pounds (£..................................................) for the payment of which sum the Contractor and the Sureties/Surety bind themselves their successors and assigns jointly and severally by these presents.

Sealed with our respective seals and dated this .................. day of ................................. 19..................

WHEREAS the Contractor by an Agreement made between the Employer of the one part and the Contractor of the other part has entered into a Contract (hereinafter called “the said Contract”) for the construction and completion of the Works and maintenance of the Permanent Works as therein mentioned in conformity with the provisions of the said Contract.

NOW THE CONDITIONS of the above-written Bond are such that if—

(a) the Contractor shall subject to Condition (c) hereof duly perform and observe all the terms provisions conditions and stipulations of the said Contract on the Contractor’s part to be performed and observed according to the true purport intent and meaning thereof or if

(b) on default by the Contractor the Sureties/Surety shall satisfy and discharge the damages sustained by the Employer thereby up to the amount of the above-written Bond or if

(c) the Engineer named in Clause 1 of the said Contract shall pursuant to the provisions of Clause 61 thereof issue a Maintenance Certificate then upon the date stated therein (hereinafter called “the Relevant Date”)

this obligation shall be null and void but otherwise shall remain in full force and effect but no alteration in the terms of the said Contract made by agreement between the Employer and the Contractor or in the extent or nature of the Works to be constructed completed and maintained thereunder and no allowance of time by the Employer or the Engineer under the said Contract nor any forbearance or forgiveness in in or respect of any matter or thing concerning the said Contract on the part of the Employer or the said Engineer shall in any way release the Sureties/Surety from any liability under the above-written Bond.

PROVIDED ALWAYS that if any dispute or difference shall arise between the Employer and the Contractor concerning the Relevant Date or otherwise as to the withholding of the Maintenance Certificate then for the purposes of this Bond only and without prejudice to the resolution or
determination pursuant to the provisions of the said Contract of any dispute or difference whatsoever
between the Employer and Contractor the Relevant Date shall be such as may be:—

(a) agreed in writing between the Employer and the Contractor or
(b) if either the Employer or the Contractor shall be aggrieved at the date stated in the
said Maintenance Certificate or otherwise as to the issue or withholding of the said
Maintenance Certificate the party so aggrieved shall forthwith by notice in writing
to the other refer any such dispute or difference to the arbitration of a person to be
agreed upon between the parties or (if the parties fail to appoint an arbitrator within
one calendar month of the service of the notice as aforesaid) a person to be appointed
on the application of either party by the President for the time being of the Institution
of Civil Engineers and such arbitrator shall forthwith and with all due expedition
enter upon the reference and make an award thereon which award shall be final and
conclusive to determine the Relevant Date for the purposes of this Bond. If the
arbitrator declines the appointment or after appointment is removed by order of a
competent court or is incapable of acting or dies and the parties do not within
one calendar month of the vacancy arising fill the vacancy then the President for
the time being of the Institution of Civil Engineers may on the application of either
party appoint an arbitrator to fill the vacancy. In any case where the President
for the time being of the Institution of Civil Engineers is not able to exercise the
aforesaid functions conferred upon him the said functions may be exercised on his
behalf by a Vice-President for the time being of the said Institution.

Signed Sealed and Delivered by the said
in the presence of:—

The Common Seal of LIMITED
was hereunto affixed in the presence of:—

(Similar forms of Attestation Clause for the
Sureties or Surety)
APPENDIX C

TENDERS REGULATIONS
AND RULES FOR IMPLEMENTATION

Issued By Royal Decree No. M/14 Dated 7.4.1397 A.H.
(MARCH 27, 1977)

COMMERCIAL OFFICE
ROYAL EMBASSY OF SAUDI ARABIA
1155 15th St., N.W., Suite 428
Washington, D.C. 20005
Tel: (202) 331-0422
TENDERS REGULATION

Basic Rules

Article 1:
On procurement of government purchases and implementation of projects and works needed by it, the following basic rules shall be observed:

a) All individuals and establishments wishing to deal with the government and possessing the qualifications to do so shall be given equal opportunity and treated equally.

b) The competing bidders shall be given adequate and standard information about the work required and shall be enabled to obtain such information at the same time and a specific date shall be set for the submission of bids by all of the bidders.

c) In order to secure its purchases and execute its projects and works, the government shall deal with the individuals and establishments licenced to exercise the type of work within which the necessary works or purchases fall, in accordance with the established rules and procedures.

d) Saudi individuals and companies licensed to operate in accordance with the existing laws and regulations shall have priority in dealing with the government followed by establishments consisting of Saudis and non-Saudis whenever Saudi interests in the capital amounts to 50% or more.

e) Manufactured goods and products of Saudi origin shall be preferred over similar foreign goods and products if they serve the purpose for which the tender was announced, even though they possess lower qualities than similar foreign goods and products.

When such goods and products are available, they may be purchased directly if they are produced by a single factory; if more than one factory produces them, a tender shall be arranged among them provided that the Ministry of Industry defines the appropriate purchase price in both cases.

Manufactured goods and products shall not be considered of Saudi origin unless they are produced by a Saudi industrial establishment licenced to operate inside the Kingdom and the said establishment has submitted a certificate from the Ministry of Industry and Electricity testifying that local raw materials or local manpower have contributed a reasonable percentage to the production of these goods and products.

f) Purchase or implementation of works shall be carried out at fair prices that do not exceed prevailing rates and competition among those working in this area according to the regulations shall be considered the practical method to arrive at this.

g) Offers shall not be accepted and contracts shall not be concluded according to such offers except in accordance with the prescribed conditions and specifications.

Bid Submission Rules

Article 2:
a) Bidders shall be notified by announcement in the Official Gazette twice at least or by means of official letters addressed to those invited to participate in a tender in case it is restricted to a number of bidders.

b) The soliciting agency may invite bids in two stages:
First: Send invitations to those wishing to compete for the supply of requirements or undertake works from among those in the required activity to select the acceptable bidders.
Second: Ask bidders to submit their offers and the soliciting agency selects those to be invited for the tender in the light of the information it may obtain if the nature of work is within its field of specialisation; if not, the invitation is to be sent on nomination by one of the competent departments of the government.

If such information is not available at any government agency, resort may be made to one of the specialised establishments or international bodies.

c) The tender notice shall specify the date and place for the submission of offers. The bids shall be presented in sealed envelopes that shall not be opened except at
the specified deadline unless there is a provision in these regulations that allows the submission of open bids.

d) A bid shall be accompanied by a preliminary deposit of 1-2% of its value in accordance with the conditions and specifications. This deposit shall not be necessary in case of direct purchase or open bids referred to hereunder.

e) Offers submitted inside sealed envelopes shall be opened by a committee that meets at the date prescribed for the opening of bid envelopes and the quoted prices shall be announced to the bidders or their representatives attending the session. The committee for opening of bids shall consist of three members at least to be presided over by an employee whose grade shall not be less than the tenth.

f) Bidders may not decrease or increase their quoted prices after the presentation thereof unless in cases wherein negotiations are allowed under these regulations.

Methods Of Procurement And Performance

Article 3:

Material purchases and performance of works shall be carried out as follows:

a) **Construction Works**: No less than five contractors officially classified within the group qualified to carry out the required work and licenced to operate in the Kingdom in accordance with the established rules shall be invited to present their offers within a period that should not be less than one month. In the invitation shall be specified the day and the hour on which the bids will be opened.

b) **Machinery and Equipment** of various kinds, including motor vehicles of all types such as passenger, transport and unloading vehicles, special purpose vehicles such as those used for fire-fighting, and transport of garbage; and heavy equipment both stationary and mobile such as agricultural machinery, road equipment, cranes, electric equipment such as generators and transformers, water pumps, wires and cables shall be procured through the selection of three acceptable types that serve the purpose.

Saudi agents of such equipment and machinery licenced to act as their agents shall be invited to submit—after notifying them about the specifications—their open bids within three days at least and 20 days at most according to what the soliciting agency defines. If such equipment do not have an official agent in the Kingdom, purchase may be made from the manufacturing companies.

c) **Office equipment and articles** including cameras, typewriters, calculating machines, filing cabinets and cupboards, arm-chairs, drapes, floor carpeting, cutting, tying and stapling machines, printed matter and other stationary and interior decoration operations shall be procured by direct purchase from those who deal with them if the value is less than one million Riyals. If the value is more than that, open bids shall be solicited from three individuals who deal in these articles at least.

d) **Operation and maintenance works**, whether related to electrical or mechanical equipment or buildings, shall be carried out through invitation of at least three specialised contractors licenced to exercise these activities to present their offers inside sealed envelopes within a period to be determined by the soliciting agency.

e) **Supply of food** including cooked meals, and foodstuffs whether the required service is confined to provision of meals only or delivery thereof also, shall take place through invitation of at least three specialised Saudi caterers to submit their respective bids inside sealed envelopes within a period to be specified by the soliciting agency.

f) **Drilling of wells** shall take place through the invitation of at least three specialised contractors who are licenced to carry out such operations to submit their bids inside sealed envelopes within the period to be specified by the soliciting agency.

g) **Spare parts** shall be procured through direct purchase from the official agent or others regardless of cost.

h) **All kinds of purchases and work** whether those in the above-mentioned paragraphs or others, shall be carried out by direct purchase if the value of the requirement does not exceed one million Riyals. The Minister or the head of the soliciting agency shall exercise this prerogative and shall not delegate authority to exercise it save within the SR 500,000 limit.

i) **Consulting operations**, studies, drawing up of specifications and supervision of
implementation shall be made by direct procurement if within the one million Riyals limit. If the value is in excess of this level, the procurement shall be carried out by inviting at least three consulting bureaux to submit bids within a period to be specified by the government agency concerned and the Minister shall select the best of these offers. Agreement on studies and designs shall be against lump sum amounts. As for supervision of implementation, it may be for lump sum amounts or recurring at a certain percentage of the work value performed.

j) Procurement of medicines shall take place by inviting at least three Saudi agents of international pharmaceutical companies of repute. These international firms shall be selected by a technical committee to be appointed by the competent Minister. The committee shall choose the companies to be invited from the list that is annually endorsed by a decision of the Health Minister.

This committee shall seek the help of an international body to obtain the practical technical information on the said firms.

k) Arms shall be procured by direct agreement with producing firms, and selection from among these firms shall be effected after prior approval of the Council of Ministers.

l) Major projects involving civil engineering and mechanical and electrical operations requiring a high degree of execution or the use of patents or certain scientific methods shall be carried out by inviting at least three specialised international companies in two stages according to the provisions of Article 2 - (b) of these regulations.

m) Unless specifically mentioned in this article, anything required by a government department shall be procured by inviting at least three competitors to submit bids and select the best offer made.

Article 4: The soliciting agency shall give opportunity to the largest number of those qualified parties operating in the field for which the procurement is required so that its dealing is not confined to certain individuals or establishments.

**Contract Award Rules**

Article 5:

a) A committee or more consisting of three persons at least shall be formed at every ministry or government department to examine the bids. A committee shall be chaired by an official whose grade is not less than the 12th to present its recommendations for the contract award to the best bidder. The committee shall seek the help of a report to be prepared by specialised technicians in making its recommendations for the contract award.

b) If the committee is formed in a place other than the headquarters of a ministry or government department, its chairman may be of a grade less than the 12th.

c) The committee shall adopt its recommendations in the presence of all members. If a member is absent he shall be replaced by an official who acts for him in his absence. If the member is appointed for his person he shall be replaced by a standby member to be appointed by the Minister. The committee’s decision shall be by majority of votes and the resolution shall be recorded in the minutes of the session with reference to the opposing viewpoint, if any, and the opinions of each side for submission to the competent authority which will decide on the recommendation.

d) A committee may conduct negotiations with the party with the lowest bid that meets the conditions and specifications, or any other bidder, in the following cases: 1. In case the bids are markedly higher than the market prices, the committee may ask the tenderer with the lowest bid to decrease it. If he declines or does not lower it to a reasonable level, the committee may negotiate with the second lowest bidder, or ask the competing bidders to lower their bids.

2. In case the lowest bid is accompanied with reservations, negotiations may be carried out with the bidder to withdraw his reservations in whole or in part to reach the acceptable bid. If he refuses and insists on keeping some or all of them and if such reservations were unreasonable and do not make the bid the best one, the committee may negotiate with the next bidder and so forth until it arrives at the best offer.
e) A tender or bids may be cancelled when the need no longer exists or when the committee sees that all the bids are unsuitable from the viewpoint of price, conditions or specifications and it was not possible to reach a result by negotiations in accordance with the preceding paragraph.

Bid Award And Contracting Authority

Article 6: The authority to decide on materials purchase and work implementation whose value exceeds SR 3 million shall rest with the Minister or head of the independent agency, and for lesser amounts with the Deputy Minister or whoever acts in his place. Delegation of authority to other officials for lesser amounts may take place provided it is compatible with the authority of the delegated person.

Contract Conditions

Article 7:
  a) Whoever enters into contract with the government shall submit a final deposit (performance guarantee) amounting to 5% of the contract value.
  b) The final deposit shall not be required in case of contracts for consultancy work, direct purchase or purchase of spare parts.
  c) The final deposit may be gradually reduced in operation and maintenance contracts in accordance with work performance provided it does not become less than the required deposit for the remaining work under the contract.
  d) The deposit shall meet any of the methods mentioned in Article 2 (d) above. If the deposit is in the form of a guarantee from an insurance company, it shall not be less than 25% of the contract value.

Advance Payments

Article 8:
  a) The soliciting agency may effect to the contractor with whom it enters into contract an advance payment of the amounts due to him within the 20% limit on signing of the contract in exchange for a letter of guarantee equal to this amount. This payment is to be deducted in instalments in accordance with the work performance statement.
  b) The remaining portion of the amounts due to the contractor shall be paid gradually in instalments according to work progress provided that the amount paid to the contractor does not exceed the value of the work performed. Payment of a certain percentage of the value shall be postponed until supply of purchased materials has been completed or on preliminary delivery of works and after presentation of a certificate from the Zakat and Income Tax Department proving that the contractor has paid amounts due from him. The contract shall specify the dates and methods of payments for the contractor.

Delay Fine

Article 9:
  a) A contractor to the government shall be subject to a delay fine of not more than 4% of the value of supply contracts and not more than 10% of the value of public works performance, operation and maintenance, or consultancy contracts in accordance with the details specified by the contracts and the Rules for Implementation unless the delay is the result of force majeure, emergency or an action beyond the contractor’s control.
  b) The Minister or head of the soliciting agency may extend the contract period if the delay was the result of the following:
     1. Assigning new works to the contractor if he was ordered to do them within a period that does not allow the performance thereof in the remaining period agreed in the contract.
2. A previous order from the department concerned for reasons that are not related to the contractor.

3. If the delay was caused by factors other than those mentioned in the previous paragraph, exemption from the delay fine shall not be granted except with the approval of the Ministry of Finance and National Economy.

**Contract Forms**

**Article 10:** Forms for public works, supply and other types of administrative contracts shall be issued by a resolution of the Council of Ministers on the recommendation of the Finance and National Economy Ministry. Pending the issuance of these forms, the contracts to be concluded by government departments shall specify the conditions that safeguard the rights of the government agency and deal with any disputes that may arise.

**Article 11:** Materials that exceed the requirements of the government department may be sold to other government departments after appraising their value by a committee consisting of at least three officials which should first check market prices and provided that the sale price is not less than the estimate made by the said committee. If the value of these materials exceeds SR 100,000, the sale shall only take place by public auction in accordance with the procedures provided for in the Rules for Implementation of these Regulations.

Government employees may not purchase items sold by the Government unless the sale takes place in public auction and the purchased items are for the purchaser’s personal use.

**Article 12:** If the need arises for consultation over certain provisions of the Regulations, the government department shall refer the matter to a committee consisting of four cabinet ministers including the Finance Minister and the Minister concerned, who will be nominated by the Council of Ministers. This committee shall submit its recommendations to the Prime Minister or his deputy for issuance of the appropriate resolution.

**Article 13:** The Minister of Finance and National Economy shall issue Rules for implementation explaining the details of these Regulations.

**Article 14:** These Regulations shall cancel and supersede all contradictory rules.

**RULES FOR IMPLEMENTATION OF TENDERS REGULATIONS**

*(Issued by Ministerial Resolution No. 2131/87 dated 5.5.1397 Corresponding to April 23, 1977)*

**Article 1:** a) Before inviting bids for the supply of materials or work and other material it may want a soliciting agency shall prepare detailed and sufficient specifications provided that no reference is made to the type, description or number mentioned in producers’ catalogues or to specific trade marks, or draw up specifications that correspond to certain trade mark descriptions.

b) On preparing specifications, soliciting agencies must give priority to products of national industries if they fulfill the desired objective.

**Article 2:** Tender conditions and specifications may have a provision allowing the fractioning of offers if such a fractioning is in the interest of the soliciting agency. Delivery may also be in accordance with a sample to be designated by the soliciting agency or presented by the bidder.

**Article 3:** A specific date and place shall be mentioned in the tender notice for the submission and opening of bids and for bid award. The date for opening of bids may be the closing date for presentation of such bids.

**Article 4:** The announcement or notice for tender shall be advertised twice at least in the official gazette, or it may be communicated officially in writing to the invites. The first announcement or notice shall precede the closing date for presentation of bids by one month at least, unless otherwise provided by the regulations.

**Article 5:** Bids shall be delivered to soliciting agency by registered mail or by hand
against a receipt wherein shall be mentioned the date and hour of delivery of the bid. The bids shall be presented on the forms prepared for this purpose which the bidder obtains from the soliciting agency against payment of value thereof and inside an envelope sealed with wax.

Article 6: Bids that are delivered or reach the soliciting agency after opening any bid envelopes shall be rejected.

Article 7: In preparing the offer, the bidder must observe the following:

a) Prices shall be written in ink, in figures and words, and quoted in Saudi currency, unless the declared tender conditions and specifications allow quotation of the bid value in another currency.

b) It should be mentioned in the quoted price list whether the item to be supplied is produced or manufactured in the Kingdom of Saudi Arabia, any Arab League country or any other foreign country.

c) A bid must be duly signed by the bidder; if it is presented by a company or body, it must be signed by a person who is officially authorised to represent the company or body.

d) No obliteration or erasure may be made in the quotation list. Any correction of prices or other data must be rewritten in ink in both figures and words and duly signed.

e) The soliciting agency shall have the right to check the details and totals of the quotations submitted to it, and make the necessary corrections of material errors therein. If a discrepancy is found between the price shown in figures and that shown in words, the latter shall prevail. If a disparity exists between the unit price and total, the unit price shall prevail.

f) The unit prices fixed by the contractor in the quotation list shall include and cover all expenses and liabilities, of whatever kind, the contractor may incur in respect of any item.

g) No consideration shall be given to any bid based on allowing a certain percentage or amount of discount on the lowest bid submitted by other bidders.

Article 8: Before submitting his bids on work, maintenance and operation contracts, a bidder must personally investigate the nature of the work and local conditions and must obtain adequate information on all matters which, in any way, may affect his rates or prices or his risks and obligations. The soliciting agency must, however, provide all such information as may be requested of it in this respect, and which may be available, before the closing date for bids presentation.

Article 9: A bidder shall accompany his bid with any of the guarantees mentioned in Article 2, paragraph (d) of the Regulations, and such guarantee shall be valid until the date specified for award of the bids.

Article 10: A bid shall remain open for acceptance and irrevocable until the date of the award and the soliciting agency shall be entitled to ask the bidder to extend the period of its validity. A bidder shall be considered as agreeing to continue his adherence to his bid if on expiry of the guarantee period he does not withdraw his offer and regain his guarantee. If the bidder withdraws his offer before the bid award, the soliciting agency shall have the right to confiscate the temporary deposit presented by him without any advance notice or take any other measures.

Article 11: The Minister or head of the independent government agency shall issue a resolution providing for the formation of the Bids Opening Committee and the Bids Examination Committee in accordance with the provisions of Articles 2-E and 3-A of the Regulations, provided that a standby member is appointed for each committee to replace any of the absent members.

Article 12: On commencing operation, the Bids Opening Committee shall ascertain the marks of envelopes containing the bids, mention this in its report, set down the number of bids, give each bid a serial number in the form of a fraction whose numerator shall be the serial number of the particular bid and whose denominator shall be the total number of bids. The committee’s chairman or any of its members shall then read the name of the bidder, and the total amount of his bid so that the attending bidders or their representatives may hear this information. The committee’s chairman and all members shall sign the bids sheets and the report of its minutes and procedures.
Article 13: The Bids Opening Committee shall sign the samples and catalogues that are submitted with the bids or the letters of guarantee that are presented during the bids opening session, set them down on a list or include them in the report (minutes) of the meeting.

Article 14: The bids opening shall take place on the hour and day specified for this purpose provided that the soliciting agency concerned receives the incoming daily mail arriving in the morning of the day designated for bids opening. The committee shall finalise its work on the same day.

Article 15: The bids, report (minutes) of the Bids Opening Committee and samples shall be delivered to the competent administrative department to analyse the samples if necessary in preparation for presentation thereof to the special committee for bids analysis to carry out its assignment. This shall take place as quickly as possible so that the bids examination committee may adopt the recommendations deemed necessary and present them to the competent authority for bid award before the designated date.

Article 16: The bids examination committee shall make sure the bids meet the conditions and specifications and it may seek the help of technical experts it sees fit, and recommend the bid that is best from the financial and technical viewpoints after excluding those bids that contradict the conditions and specifications in accordance with the provisions of Article 5 of the Regulations.

Article 17: On making its recommendation, the bids examination committee shall seek guidance from the prices of previous local or foreign transactions as well as the market prices.

Article 18: The bids examination committee’s deliberations shall be recorded in minutes to be duly signed by its chairman and members for presentation to the person authorized to award the bid.

Article 19: A single bid shall not be accepted unless endorsed by the competent minister and the urgent nature of the work does not permit another invitation for bids.

Article 20: Temporary deposits (guarantees) shall be immediately returned to bidders of unsuccessful offers after the bid award without any need on the part of such bidders to file applications for this purpose.

Article 21: The successful bidder shall, within a period of not more than 10 days following the day on which he was notified by registered letter that his bid has been accepted, deposit any of the guarantees provided for in Article 7 of the Regulations unless otherwise provided by the rules.

Article 22: The final guarantee shall not take place if the successful bidder has supplied all the items for which he was given the contract and the soliciting agency has accepted them in final manner within the period specified for deposit of the final guarantee or if he has supplied a part of such items and such part was accepted and its price was sufficient to cover the guarantee’s (deposit’s) value, provided that no part of this price may be paid to cover the deposit’s value until the contractor has fulfilled all his obligations.

Article 23: If the successful bidder fails to submit the final deposit within the specified period, the soliciting agency may grant him a grace period of not more than 10 days; and if he also fails to deliver within this period, the soliciting agency may confiscate the temporary deposit or implement the contract at the expense of the successful bidder and ask him to pay compensations.

Article 24: Without prejudice to provisions of Article 7 of the Regulations, the final deposit shall be kept until the contractor or supplier has fulfilled his obligations.

Article 25: The soliciting agency may increase or decrease the obligations of a contractor or supplier within a limit of 20% of his obligations.

Article 26: A contractor shall perform his obligations within the specified period including the grace period mentioned in the previous article unless the order to the contractor to perform the contract was issued on a date that does not allow the contractor or supplier to perform within that period, in which case the appropriate grace period shall be added to the performance period for completion of work under the contract.
Article 27: If the contract's value is less than SR 100,000, exchanged correspondence shall suffice as a binding contract instead of concluding contract; if the contract's value exceeds this amount, written contract between the soliciting agency and the contractor or supplier shall be drawn up as soon as a notice has been served on the successful bidder and the final deposit is submitted. The contract shall be executed in four copies at least, a copy of which will be handed over to the contractor, another to the accounting authority and a third to the Zakat and Income Department.

Article 28: A contractor or supplier may not assign the contract in whole or in part without the written approval of the soliciting agency. Nevertheless, the contractor or supplier shall remain jointly responsible with the assignee or sub-contractor for the contract performance.

Article 29: The soliciting agency and contractor or supplier shall perform the contract in accordance with its terms: if the contractor fails to do so, the soliciting agency may, after serving a notice on him by registered mail and the elapse of 15 days without rectification of this situation, perform the contract at his expense or annul the contract, and in both cases the agency shall be entitled to compensation. If the soliciting agency fails to carry out its commitments, the contractor may claim compensations after serving notice on it by registered letter to correct the situation within 15 (fifteen) days. The contractor may not halt performance of the contract on the grounds that the soliciting agency has failed to fulfill its commitments.

Article 30: A contractor shall stand answerable for a period of ten years, for any collapse, whether total or partial, that may occur as a result of defective execution in the buildings or structures erected by him, unless it is agreed in the contract that such buildings or structures shall serve for a period of less than ten years.

Article 31: The contractor shall be held responsible for reviewing in detail the engineering and technical designs and shall notify the soliciting agency about the technical errors he may discover in the designs and which would undermine the structures' safety.

Article 32: In case work is withdrawn from a contractor, the soliciting agency shall perform, in any way it uses to get its requirements (including direct purchase), the contract at the expense of the contractor.
General Conditions of Government Contracts for Building and Civil Engineering Works

Edition 2 — September 1977

D-1 GC: Government Works, England
Contents

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Definitions, etc</td>
</tr>
<tr>
<td>2</td>
<td>Contractor deemed to have satisfied himself as to conditions affecting execution of the Works</td>
</tr>
<tr>
<td>3</td>
<td>Vesting of Works etc in the Authority. Things not to be removed</td>
</tr>
<tr>
<td>4</td>
<td>Specifications, Bills of Quantities and Drawings</td>
</tr>
<tr>
<td>5</td>
<td>Bills of Quantities (applicable if so stated in the tender)</td>
</tr>
<tr>
<td>5A</td>
<td>The Authority’s Schedule of Rates (applicable if so stated in the tender)</td>
</tr>
<tr>
<td>5B</td>
<td>The Contractor’s Schedule of Rates</td>
</tr>
<tr>
<td>6</td>
<td>Progress of the Works</td>
</tr>
<tr>
<td>7</td>
<td>SO’s instructions</td>
</tr>
<tr>
<td>8</td>
<td>Failure of Contractor to comply with SO’s instructions</td>
</tr>
<tr>
<td>9</td>
<td>Valuation of the SO’s instructions</td>
</tr>
<tr>
<td>10</td>
<td>Valuation by measurement</td>
</tr>
<tr>
<td>11G</td>
<td>Variation of price (Labour-tax matters)</td>
</tr>
<tr>
<td>12</td>
<td>Setting out Works</td>
</tr>
<tr>
<td>13</td>
<td>Things for incorporation and workmanship to conform to description</td>
</tr>
<tr>
<td>14</td>
<td>Local and other authorities’ notices and fees</td>
</tr>
<tr>
<td>15</td>
<td>Patent rights</td>
</tr>
<tr>
<td>16</td>
<td>Appointment of Resident Engineer or Clerk of Works</td>
</tr>
<tr>
<td>17</td>
<td>Watching, lighting and protection of Works</td>
</tr>
<tr>
<td>18</td>
<td>Precautions to prevent nuisance</td>
</tr>
<tr>
<td>19</td>
<td>Removal of rubbish</td>
</tr>
<tr>
<td>20</td>
<td>Excavations and material arising therefrom</td>
</tr>
<tr>
<td>21</td>
<td>Foundations</td>
</tr>
<tr>
<td>22</td>
<td>Contractor to give due notice prior to covering work</td>
</tr>
<tr>
<td>23</td>
<td>Suspension for frost, etc.</td>
</tr>
<tr>
<td>24</td>
<td>Daywork</td>
</tr>
<tr>
<td>25</td>
<td>Precautions against fire and other risks</td>
</tr>
<tr>
<td>26</td>
<td>Damage to Works or other things</td>
</tr>
<tr>
<td>27</td>
<td>Assignment or transfer of Contract</td>
</tr>
<tr>
<td>28</td>
<td>Date for completion: Extensions of time</td>
</tr>
<tr>
<td>28A</td>
<td>Partial possession before completion</td>
</tr>
<tr>
<td>29</td>
<td>Liquidated damages</td>
</tr>
<tr>
<td>30</td>
<td>Sub-letting</td>
</tr>
<tr>
<td>31</td>
<td>Sub-contractors and suppliers</td>
</tr>
<tr>
<td>32</td>
<td>Defects liability</td>
</tr>
<tr>
<td>33</td>
<td>Contractor’s agent</td>
</tr>
<tr>
<td>34</td>
<td>Daily returns</td>
</tr>
<tr>
<td>35</td>
<td>Contractor to conform to regulations</td>
</tr>
</tbody>
</table>
Replacement of Contractor's employees
Attending for measurement and provision of information
Prime Cost items
Provisional sums and provisional quantities
Advances on account
Payment on and after completion
Certificates
Recovery of sums due from the Contractor
Special powers of determination
Determination of Contract due to default or failure of Contractor
Provisions in case of determination of Contract
Injury to persons: Loss of property
Damage to public roads
Emergency powers
Facilities for other works
Fair wages, etc.
Racial discrimination
Prolongation and disruption expenses
Corrupt gifts and payments of commission
Admission to the Site
Passes
Photographs
Secrecy
Arbitration
Index to Conditions
Notes
1 (1) 'the Contract' means the documents forming the tender and acceptance thereof, together with the documents referred to therein including these Conditions (except as set out in the Abstract of Particulars), the Specification, the Bills of Quantities and the Drawings, and all these documents taken together shall be deemed to form one contract. When there are no Bills of Quantities all reference to Bills of Quantities in the Contract shall be treated as cancelled, except that where the context so admits the Schedule of Rates shall be substituted therefor.

(2) In the Contract the following expressions shall, unless the context otherwise requires, have the meanings hereby respectively assigned to them:—

'the accepted risks' means the risks of—

(a) fire or explosion,
(b) storm, lightning, tempest, flood or earthquake,
(c) aircraft or other aerial devices or objects dropped therefrom, including pressure waves caused by aircraft or such devices whether travelling at sonic or supersonic speeds,
(d) ionizing radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel,
(e) the radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
(f) riot, civil commotion, civil war, rebellion, revolution, insurrection, military or usurped power or King's enemy risks (within the definition of that expression contained in section 15(1)(e) of the War Risks Insurance Act 1939 as for the time being in force);

'the Authority' means the person so designated in the Abstract of Particulars;

'Bills of Quantities' includes Provisional Bills of Quantities and Bills of Approximate Quantities;

'the Contract Sum' means the sum accepted, or the sum calculated in accordance with the prices accepted, by the Authority as payable to the Contractor for the full and entire execution and completion of the Works before taking into account the effect of Conditions 9, 11G, 38, 39, 50 and 53;

'the Contractor' means the person or persons whose tender is accepted by the Authority and his or their legal personal representatives or permitted assigns;

'the date for completion' shall be the date set out in or ascertained in accordance with the Abstract of Particulars or the date on which such extension or extensions of time (if any) as the Contractor may be allowed under the provisions of these Conditions shall expire;

'the Final Account' means the document prepared by the Quantity Surveyor showing the calculation of the Final Sum;

'the Final Sum' means the amount payable under the Contract by the Authority to the Contractor for the full and entire execution and completion of the Works;

'the Quantity Surveyor' means the person so designated in the Abstract of Particulars;

'the Schedule of Rates' means the Authority's Schedule of Rates in the form stated in the tender or the Contractor's Schedule of Rates provided in accordance with Condition 5B;

'the Site' means the land or place where work is to be executed under the Contract and any adjacent land or place which may be allotted or used for the purpose of carrying out the Contract;

'the SO' means the person designated as the Superintending Officer in the Abstract of Particulars;

'the Works' means the works described in the Specification and/or Bills of Quantities and/or shown on the Drawings, including all modified extra or additional works to be executed under the Contract.
(3) In these Conditions, references to things for incorporation are references to things for incorporation in the Works and references to things not for incorporation are references to things provided for the execution of the Works but not for incorporation therein.

(4) Any decision to be made by the Authority under the Contract may be made by any person or persons authorised to act for him for that purpose and may be made in such manner and on such evidence or information as he or such person or persons shall think fit.

(5) The headings to these Conditions shall not affect the interpretation thereof.

(6) Any notice to be given under the Contract shall be in writing, typescript or printed and if sent by registered post or recorded delivery to the last known place of abode or business of the Contractor shall be deemed to have been served on the date when in the ordinary course of post it would have been delivered to him.

2 (1) The Contractor shall be deemed to have satisfied himself as regards existing roads, railways, or other means of communication with and access to the Site, the contours thereof, the risk of injury or damage to property adjacent to the Site or to the occupiers of such property, the nature of the materials (whether natural or otherwise) to be excavated, the conditions under which the Works will have to be carried out, the supply of and conditions affecting labour, the facilities for obtaining any things whether or not for incorporation and generally to have obtained his own information on all matters affecting the execution of the Works and the prices tendered therefor except information given or referred to in the Bills of Quantities which is required to be given in accordance with the method of measurement expressed in the Bills of Quantities.

(2) No claim by the Contractor for additional payment will be allowed on the ground of any misunderstanding or misinterpretation in respect of any such matter nor shall the Contractor be released from any risks or obligations imposed on or undertaken by him under the Contract on any such ground or on the ground that he did not or could not foresee any matter which might affect or have affected the execution of the Works.

3 (1) From the commencement to the completion of the Works, the Works and any things (whether or not for incorporation) brought on the Site in connection with the Contract and which are owned by the Contractor or vest in him under any contract shall become the property of and vest in the Authority subject to his right of rejection of any things for incorporation which are not approved, but the Authority shall not, subject to the provisions of Conditions 26 and 50, be responsible or chargeable for any thing lost, stolen, damaged, destroyed or removed from the Site or that shall fall in any way and the Contractor shall be responsible for the protection and preservation of the Works and any things (whether or not for incorporation) brought on the Site until the termination of the Contract.

(2) None of the things referred to in paragraph (1) above which are brought on the Site shall be removed therefrom without the consent in writing of the SO, but the SO may order or permit the Contractor in writing at any time during the progress of the Works to remove from the Site any such things which are unused and thereupon the Contractor shall forthwith remove the same and upon removal the property shall vest in the Contractor. The decision of the SO upon any matter arising under this paragraph shall be final and conclusive.

4 (1) In case of discrepancy between these Conditions and the Specification and/or the Bills of Quantities and/or the Drawings, the provisions of these Conditions shall prevail.
(2) Figured dimensions on the Drawings shall be followed in preference to the scale.

(3) The SO shall provide free to the Contractor three copies of the Contract Drawings and of the Specification and of the blank Bills of Quantities, and two copies of all further drawings issued during the progress of the Works. The Contractor shall keep one copy of all Drawings and of the Specification on the Site and the SO or his representative shall at all reasonable times have access to them.

(4) The Specification, the Bills of Quantities, the Drawings and all copies thereof and extracts therefrom shall if required be returned to the SO on the completion of the Works or the earlier determination of the Contract.

5 (1) The Bills of Quantities shall be deemed to have been prepared in accordance with the principles of the method of measurement expressed therein, except where otherwise stated.

5A The descriptions of work given in the Authority's Schedule of Rates shall not define or limit the work to be executed under the Contract.

5B If neither Bills of Quantities nor the Authority's Schedule of Rates are provided in respect of the Works or in respect of any work or things to which Condition 38 applies the Contractor shall, if required by the Authority, supply forthwith to the Authority a full and detailed Schedule of Rates which was properly and reasonably used for calculating the Contract Sum or sub-contract sum.

6 Possession of the Site or the order to commence shall be given to the Contractor by notice and the Contractor shall thereupon commence the execution of the Works and shall proceed with diligence and expedition in regular progression or as may be directed by the SO under Condition 7 so that the whole of the Works shall be completed by the date for completion.

7 (1) The Contractor shall carry out and complete the execution of the Works to the satisfaction of the SO who may from time to time issue further drawings, details and/or instructions, directions and explanations (all of which are hereafter referred to as 'the SO's instructions') in regard to:

(a) the variation or modification of the design, quality or quantity of the Works or the addition or omission or substitution of any work;

(b) any discrepancy in or between the Specification and/or Bills of Quantities and/or Drawings;

SO's instructions

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(c) the removal from the Site of any things for incorporation which are brought thereon by the Contractor and the substitution therefor of any other such things;
(d) the removal and/or re-execution of any work executed by the contractor;
(e) the order of execution of the Works or any part thereof;
(f) the hours of working and the extent of overtime or nightwork to be adopted;
(g) the suspension of the execution of the Works or any part thereof;
(h) the replacement of any foreman or person below that grade employed in connection with the Contract;
(i) the opening up for inspection of any work covered up;
(j) the amending and making good of any defects under Condition 32;
(k) the execution in an emergency of work necessary for security;
(l) the use of materials obtained from excavations in the Site;
(m) any other matter as to which it is necessary or expedient for the SO to issue instructions, directions or explanations.

(2) If any of the SO's instructions issued orally have not been confirmed in writing by him such confirmation shall be given upon a reasonable request by the Contractor made within fourteen days of the issue of such instructions.

(3) The decision of the SO that any such instructions are necessary or expedient shall be final and conclusive and the Contracts shall forthwith comply therewith.

(4) The Contractor shall not make any alteration to, addition to or omission from the Works described in the Specification and/or Bills of Quantities and/or shown on the Drawings except in pursuance of the SO's instructions issued in accordance with this Condition and such alterations, additions or omissions shall not invalidate the Contract.

8 If the Contractor, after receipt of a notice from the SO requiring compliance with any of the SO's instructions within a period to be specified in the notice by the SO, fails to comply with such instruction, the Authority may, without prejudice to the exercise of his powers under Condition 45, provide labour and/or any things (whether or not for incorporation), or enter into a contract for the execution of any work which may be necessary to give effect thereto and any additional costs and expenses incurred by the Authority in connection therewith over and above those which would have been incurred had the Contractor complied with such instruction shall be recoverable from the Contractor.

9 (1) The value of alterations in, additions to and omissions from the Works made in compliance with SO's instructions shall be added to or deducted from the Contract Sum, as the case may be, and shall be ascertained by the Quantity Surveyor as follows:

(a) by measurement and valuation at the rates and prices for similar work in the Bills of Quantities or Schedules of Rates in so far as such rates and prices apply;
(b) if such rates and prices do not apply, by measurement and valuation at rates and prices deduced therefrom in so far as it is practicable to do so;
(c) if such rates and prices do not apply and it is not practicable to deduce rates and prices therefrom, by measurement and valuation at fair rates and prices; or
(d) If the value of alterations or additions cannot properly be ascertained by measurement and valuation, by the value of the materials used and plant and labour employed thereon in accordance with the basis of charge for daywork described in the Contract:

Provided that where an alteration in or addition to the Works would otherwise fall to be valued under sub-paragraph (a) or (b) above but the Quantity Surveyor is of the opinion that the instruction therefor was issued at such a time or was of such content as to make it unreasonable for the alteration or addition to be so valued, he shall ascertain the value by measurement and valuation at fair rates and prices.

(2) (a) If the Contractor—

(i) properly and directly incurs any expense beyond that otherwise provided for in or reasonably contemplated by the Contract in complying with any of the SO’s instructions (other than instructions for alterations in, additions to or omissions from the Works), or

(ii) can reasonably effect any saving in the cost of the execution of the Works in or as a result of complying with any of the SO’s instructions,

the Contract Sum shall, subject to sub-paragraph (b) of this paragraph and to Condition 23, be increased by the amount of that expense, or shall be decreased by the amount of that saving, as ascertained by the Quantity Surveyor.

(b) It shall be a condition precedent to the Contract Sum being increased under sub-paragraph (a) of this paragraph that—

(i) the SO’s instruction shall have been given or confirmed in writing;

(ii) as soon as reasonably practicable after incurring the expense the Contractor shall have provided such documents and information in respect of the expense as he is required to provide under Condition 37(2); and

(iii) the instruction shall not have been rendered necessary as a result of any default on the part of the Contractor.

(3) If any alterations or additions (other than those authorised to be executed by daywork) have been covered up by the Contractor without his having given notice in pursuance of the provisions of Condition 22 of his intention to do so, the Quantity Surveyor shall be entitled to appraise the value thereof and his decision thereon shall be final and conclusive.

10 When the Contract is based upon Provisional Bills of Quantities, Bills of Approximate Quantities or the Schedule of Rates the value of the whole of the work executed to the satisfaction of the SO shall be ascertained by measurement and valuation in accordance with Condition 9(1) (except as may otherwise be provided in respect of any item to which Condition 38 applies).

11A to F (Separate Condition, applicable if so stated in the Abstract of Particulars)

Variation of price (Labour-tax matters)

11G (1) In this Condition:

(a) ‘workpeople’ means persons employed directly by the Contractor on the Site on manual labour, whether skilled or unskilled, and includes such persons chargeable to overheads, and ‘workperson’ means one of such persons.

GC: Government Works, England  D-8
(b) 'labour-tax matter' means any tax levy or contribution (including National Insurance contributions but excluding Value Added Tax, Income Tax and any levy payable under the Industrial Training Act 1964) which is by law payable by the Contractor in respect of his workpeople and any premiums and refunds which are by law payable to the Contractor in respect of his workpeople.

(2) (a) If, as a result of the coming into effect after the date for return of tenders of any change in the level of any labour-tax matter or any change in the incidence of any labour-tax including the imposition of any new such matter or the abolition of any such matter previously existing, the cost to the Contractor of performing his obligations under the Contract is increased or decreased the Contract Sum shall, subject to the provisions of these Conditions, be increased or decreased, as the case may be, by the net additional cost or the net saving which the Contractor thereby incurs or makes.

(b) Where any workperson is employed by the Contractor in any week partly on the Site and partly off the Site, there shall only be taken into account for the purpose of calculating in respect of that workperson any increases or decreases in the Contract Sum under paragraph (2)(a) of this Condition one fifth of any additional costs or savings incurred or made by the Contractor in respect of a change in a labour-tax matter for each day in that week on which that workperson is employed by the Contractor on the Site provided that if such workperson is so employed for more than five days in that week any such additional days shall be disregarded for this purpose.

(3) Subject to the provisions of this Condition, the Contract Sum shall be reduced by the maximum amount which the Contractor could save by securing all the reductions obtainable in the prices payable under the provisions of any sub-contracts (being sub-contracts which involve the carrying out of work by a sub-contractor on the Site) by reason of such provisions being included therein in pursuance of Condition 30(3) and shall be increased by the amount which the Contractor necessarily spends in meeting the increases payable under such provisions by reason of their being so included.

(4) (a) The Contractor shall, within a reasonable time, give notice to the SO of any changes mentioned in paragraph (2) of this Condition giving rise to additional costs or savings in respect of any workpeople and of any such reductions obtainable or increases payable in sub-contract prices as are mentioned in paragraph (3) of this Condition and shall thereafter furnish such further information on these matters as the Authority may require.

(b) The Contractor shall keep such books, accounts, and other documents and records as are necessary to show the additional costs or savings relevant for the purposes of paragraph (2) of this Condition and shall at the request of the Authority furnish, verified in such manner as the Authority may require, any accounts, documents or records so kept and such other information as the Authority may reasonably require.

(c) The decision of the Authority as to the amount of any variation in the Contract Sum to be made under this Condition shall be final and conclusive. Unless the parties otherwise agree, any increase or decrease in the Contract Sum shall be adjusted on the completion of the Contract.

**Setting out Works**

12 The SO shall supply dimensioned drawings, levels and other information necessary to enable the Contractor to set out the Works. The Contractor shall set out the Works in accordance therewith and shall provide all necessary instruments, profiles, templates and rods and be solely responsible for the correctness of such setting out. The Contractor shall provide, fix and be responsible for the maintenance of all stakes, templates, profiles, levelmarks,
13 (1) All things for incorporation shall be of the respective kinds described in the Specification and/or Bills of Quantities and/or Drawings and the Contractor shall upon the request of the SO prove to the SO's satisfaction that such things do so conform.

(2) The SO and his representative shall have power at any time to inspect and examine any part of the Works or any thing for incorporation either on the Site or at any factory or workshop or other place where any such part or thing is being constructed or manufactured or at any place where it is lying or from which it is being obtained, and the Contractor shall give all such facilities as the SO or his representative may require to be given for such inspection and examination.

(3) The SO shall be entitled to have tests made of any things for incorporation supplied. For this purpose the Contractor shall, subject to any provision to the contrary, provide all facilities that the SO may require. Where procedures are provided for or referred to in the Specification regarding specific tests the same shall be complied with. If at the discretion of the SO an independent expert is employed to make any such tests as are referred to in this paragraph, his charges shall be borne by the Contractor only if the tests disclose that such things are not in accordance with the provisions of the Contract. The report of the independent experts shall be final and conclusive.

(4) The Works shall be executed in a workmanlike manner and to the satisfaction in all respects of the SO. If any things for incorporation do not accord with the provisions of the Contract or if any workmanship does not so accord the same shall at the cost of the Contractor be replaced, rectified or reconstructed as the case may be, and all such things which are rejected shall be removed from the Site.

14 The Contractor shall (so far as may be applicable to the Works) give all notices required by any Act of Parliament (whether general, local or personal) or by the regulations and/or bye-laws of any local authority and/or of any public service, company or authority affected by the Works or with whose systems the same are or will be connected, and he shall pay and indemnify the Authority against any fees or charges demandable by law under such Acts, regulations and/or bye-laws in respect of the Works and shall make and supply all drawings and plans required in connection with any such notices.

15 All royalties, licence fees or similar expenses in respect of the supply or use for or in connection with the Works of any invention, process, drawing, model, plan or information shall be deemed to have been included in the Contract Sum and the Contractor shall indemnify the Authority from and against all claims and proceedings, which may be made or brought against the Authority and any damages, costs and expenses incurred by the Authority by reason of such supply or use:

Provided that where such supply or use has been necessary in order to comply with any instructions given by the SO under the Contract, any royalty, licence fee or similar expense payable by the Contractor in respect of such supply or use and not provided for or reasonably contemplated by the Contract, shall be deemed for the purpose of Condition 9(2) to be an expense properly and directly incurred in complying with an SO's instruction other than one for an alteration in, addition to, or omission from the Works.

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16 The Authority may appoint a Resident Engineer or a Clerk of Works and the Contractor shall admit him and his assistants to the Site. The Resident Engineer or Clerk of Works may exercise all the powers of the SO under Condition 13(1) and (2) and such other powers of the SO under the Contract as the SO may give notice of to the Contractor. The exercise of or failure to exercise such powers by the Resident Engineer or the Clerk of Works shall in no way limit or vary the ability of the SO to exercise such powers subsequently.

17 The Contractor shall provide all watchmen necessary for the protection of the Site, the Works, and of all things (whether or not for incorporation) on the Site, during the progress of the execution of the Works, and shall be solely responsible for and shall take all reasonable and proper steps for protecting, securing, lighting and watching all places on or about the Works and the Site which may be dangerous to his workpeople or to any other person.

18 The Contractor shall take all reasonable precautions to prevent a nuisance or inconvenience to the owners, tenants or occupiers of other properties and to the public generally and to secure the efficient protection of all streams and waterways against pollution.

19 The Contractor shall at all times keep the Site free from all rubbish and debris arising from the execution of the Works.

20 (1) Subject to the provisions of paragraph (2) of this Condition, material of any kind obtained from the excavations shall remain the property of the Authority. Such material shall be dealt with as provided in the Contract, but the SO shall have power to direct its use in the Works or disposal by other means. When the Authority's property is permitted to be used in substitution for any things (whether or not for incorporation) which the Contractor would otherwise have provided the Quantity Surveyor shall ascertain the amount of any saving in the cost of the execution of the Works and the Contract Sum shall be reduced by the amount of any such saving.

(2) All fossils, antiquities and other objects of interest or value which may be found on the Site or in carrying out excavations in the execution of the Works shall (so far as may be) remain or become the property of the Authority, and upon discovery of such an object the Contractor shall forthwith—
(a) use his best endeavours not to disturb the object;
(b) cease work if and in so far as the continuance of work would endanger the object or prevent or impede its excavation or its removal;
(c) take all steps which may be necessary to preserve the object in the exact position and condition in which it was found; and
(d) inform the SO of the discovery and precise location of the object.

(3) The SO shall issue instructions in regard to what is to be done concerning an object the finding of which is reported to him by the Contractor under paragraph (2) of this Condition, which may include instructions requiring the Contractor to permit the examination, excavation or removal of the object by a third party.

21 The Contractor shall not lay any foundations until the excavations for the same have been examined and approved by the SO.

22 The Contractor shall give reasonable notice to the SO whenever any work or thing for incorporation is intended to be covered in with earth or otherwise, and in default of so doing shall, if required by the SO, uncover such work and thing at his own expense.
23 If the SO shall be of the opinion that the execution of the Works or any part thereof should be suspended to avoid risk of damage from frost, inclement weather or other like causes, then, without prejudice to the responsibility of the Contractor to make good defective and/or damaged work, the SO shall have power to instruct the Contractor to suspend the execution of the Works or any part thereof and the Contractor shall not resume work so suspended until permitted to do so by the SO. The Contractor shall not be entitled to any increase in the Contract Sum under Conditions 9(2) or 53(1) in respect of any expense incurred in consequence of any such instruction unless he can show that he has complied with all the requirements of the Specification relating to the avoidance of damage due to frost, inclement weather or other like causes.

24 The Contractor shall give to the SO reasonable notice of the commencement of any work ordered to be executed by daywork and shall deliver to the SO within one week of the end of each pay week vouchers in the form required by the SO giving full detailed accounts of labour, materials and plant for that pay week. A copy of each voucher, if found correct, will be certified by the SO and returned to the Contractor.

25 (1) The Contractor shall take all reasonable precautions to prevent loss or damage from any of the accepted risks, and to minimise the amount of any such loss or damage or any loss or damage caused by a servant of the Crown. The Contractor shall comply with such instructions to this end as may be given to him from time to time in writing by the SO.

(2) The Contractor shall comply with all statutory regulations (whether or not binding on the Crown) which govern the storage of explosives, petrol, or other things (whether or not for incorporation) which are brought on the Site.

26 (1) All things not for incorporation which are on the Site and are provided by or on behalf of the Contractor for the construction of the Works shall stand at the risk and be in the sole charge of the Contractor, and the Contractor shall be responsible for, and with all possible speed make good, any loss or damage thereto arising from any cause whatsoever, including the accepted risks.

(2) (a) The Contractor shall (unless the Authority exercises his powers to determine the Contract) with all possible speed make good any loss or damage arising from any cause whatsoever occasioned to the Works or to any things for incorporation on the Site (including any things provided by the Authority) and shall notwithstanding such loss or damage proceed with the execution and completion of the Works in accordance with the Contract.

(b) The cost of making good such loss or damage shall be wholly borne by the Contractor, save that—

(i) where the loss or damage is wholly caused by the neglect or default of a servant of the Crown acting in the course of his employment as such, the Authority shall pay the Contractor for making good the loss or damage, and where it is partly caused by such neglect or default, the Authority shall pay the Contractor such sum as is proportionate to that servant's share in the responsibility for the loss or damage, and

(ii) where the loss or damage is wholly caused by any of the accepted risks the Authority shall pay the Contractor for making good the loss or damage and where it is partly so caused the Authority shall pay the Contractor such sum as is proportionate to the share of any of the accepted risks in causing the loss or damage.

(c) Any sum payable by the Authority under sub-paragraph (2)(b) of this Condition shall be ascertained in the same manner as a sum payable
in respect of an alteration or addition under the Contract and shall be added to the Contract Sum.

**Assignment or transfer of Contract**

27 The Contractor shall not, without the consent in writing of the Authority, assign or transfer the Contract, or any part, share or interest therein. No instalment or other sum of money to become payable under the Contract shall be payable to any other person than the Contractor unless the consent of the Authority in writing to the assignment or transfer of such money to such person be produced when such payment is claimed as due.

**Date for completion: Extensions of time**

28 (1) The Works shall be carried on and completed to the satisfaction of the SO and all unused things for incorporation and all things not for incorporation, the removal of which is ordered by the SO, shall be removed and the Site and the Works cleared of rubbish and delivered up to his satisfaction on or before the date for completion.

(2) The Contractor shall be allowed by the Authority a reasonable extension of time for the completion of the Works in respect of any delay in such completion which has been caused or which the Authority is satisfied will be caused by any of the following circumstances—

(a) the execution of any modified or additional work;

(b) weather conditions which make continuance of work impracticable;

(c) any act or default of the Authority;

(d) strikes or lock-outs of workpeople employed in any of the building, civil engineering or analogous trades in the district in which the Works are being executed or employed elsewhere in the preparation or manufacture of things for incorporation;

(e) any of the accepted risks; or

(f) any other circumstance which is wholly beyond the control of the Contractor:

Provided that—

(i) except in so far as the Authority shall otherwise decide, it shall be a condition upon the observance of which the Contractor's right to any such extension of time shall depend that the Contractor shall, immediately upon becoming aware that any such delay has been or will be caused, give notice to the SO specifying therein the circumstances causing or likely to cause the delay and the actual or estimated extent of the delay caused or likely to be caused thereby;

(ii) the Contractor shall not be entitled to any extension of time in respect of a delay caused by any circumstance mentioned in sub-paragraph (2)(f) of this Condition if he could reasonably be expected to have foreseen at the date of the Contract that a delay caused by that circumstance would, or was likely to, occur;

(iii) in determining what extension of time the Contractor is entitled to the Authority shall be entitled to take into account the effect of any authorised omission from the Works;

(iv) it shall be the duty of the Contractor at all times to use his best endeavours to prevent any delay being caused by any of the above-mentioned circumstances and to minimise any such delay as may be caused thereby and to do all that may reasonably be required, to the satisfaction of the SO, to proceed with the Works; and

(v) the Contractor shall not be entitled to an extension of time if any such delay is attributable to any negligence, default or improper conduct on his part.

**Partial possession before completion**

28A (1) The Authority may, before the completion of the Works, take possession of any part of the Works (in this Condition referred to as a 'completed part')

D-13	GC: Government Works, England
which is certified by the SO as having been completed to his satisfaction and is either—

(a) a section specified in the Abstract of Particulars; or

(b) a part of the Works (including a part of a section) in respect of which the parties agree, or the SO has given an instruction, that possession shall be given before the completion of the Works;

and such completed part, on and after the date on which the certificate is given, shall no longer be deemed to form part of the Works for the purposes of Conditions 3 and 26.

(2) The provisions of Condition 32 shall have effect in relation to a completed part as if the maintenance period or periods in respect of the completed part or any sub-contract works comprised therein, commenced on the date of certification under paragraph (1) of this Condition.

(3) As soon as possible after certification under paragraph (1) of this Condition the SO shall certify the value of the completed part for the purposes of paragraphs (4) and (5) of this Condition.

(4) The provisions of Condition 29 shall have effect notwithstanding that the Authority has taken possession of a completed part, but—

(a) where the completed part comprises part of the Works but not a section or part of a section, the rate of liquidated damages specified in the Abstract of Particulars in respect of the Works shall be reduced by an amount bearing the same ratio to the specified rate as the value of the completed part bears to the Contract Sum; and

(b) where the completed part comprises part of a section, the rate of liquidated damages specified in the Abstract of Particulars in respect of that section shall be reduced by an amount bearing the same ratio to the specified rate as the value of the completed part bears to such sum representing the value of the relevant section as shall be determined by the SO.

(5) The reserve accumulated in accordance with Condition 40(1) shall be apportioned by the Authority as at the date of certification under paragraph (1) of this Condition in such manner that the share of the reserve apportioned in respect of a completed part shall bear the same ratio to the whole of the reserve as the value of the completed part bears to such sum representing the value of the Works as shall be estimated by the SO at that date, and the Authority shall pay to the Contractor—

(a) one half of the share so apportioned in respect of the completed part on certification; and

(b) the remaining one half of that share, when the SO has certified, after the end of the maintenance period in respect of the completed part, that the Works comprising the completed part are in a satisfactory state.

(6) Any decision of the SO under this Condition shall be final and conclusive.
the right of the Authority to recover such damages unless such waiver has been expressly stated in writing signed by or on behalf of the Authority.

(3) If at any time the Authority (whether or not he has previously allowed the Contractor any extension of time under Condition 28) gives notice to the Contractor that, in the opinion of the Authority, the Contractor is not entitled to any or (as the case may be) any further extension, then any sum which at that time would represent the amount of liquidated damages payable by the Contractor under this Condition or this Condition as modified by Condition 28A(4) (as the case may be) shall be treated for the purposes of Condition 43 as a sum recoverable from or payable by the Contractor.

Sub-letting

30 (1) The Contractor shall not sub-let any part of the Contract without the previous consent in writing of the SO.

(2) In every case of sub-letting in connection with the Contract the Contractor shall enter into a sub-contract which, in addition to the power to determine referred to in Condition 44(6) shall include—

(a) a provision to the effect that from the commencement to the completion of the sub-contract all things for incorporation belonging to the person who enters into the sub-contract which are brought on the Site in connection with the sub-contract shall vest in the Contractor subject to any right of the Contractor to reject the same;

(b) such provisions as may be necessary to enable the Contractor to fulfil his obligations to the Authority under the Contract, including the obligations of the Contractor under Conditions 3(2), 4(4), 13(2) and (3), 35, 51, 56, 57 and 58;

(c) such provisions as will impose on the person who enters into the sub-contract liabilities similar to those imposed on the Contractor by Conditions 27, 36, 55 and 59; and

(d) a provision to the effect that no part of the sub-contract work shall be further sub-let without the consent of the Contractor.

(3) In the case of a sub-contract which involves the execution of work on the Site, the Contractor shall also include provisions similar to those in Condition 11G(1) and (2).

(4) Without prejudice to the obligations of the Contractor under any of the provisions of the Contract, the Contractor shall, whenever so requested by the Authority, take such action as shall be necessary to secure that a person who has entered into a sub-contract complies with and performs all obligations imposed upon him pursuant to paragraph (2) of this Condition.

Sub-contractors and suppliers

31 (1) No person against whom the Contractor shall make reasonable objection shall be employed as a nominated sub-contractor or nominated supplier upon or in connection with the Works.

(2) The Contractor shall be responsible for any sub-contractor or supplier employed by him in connection with the Works whether he shall be nominated or approved by the Authority or the SO, or shall be appointed by the Contractor in accordance with the directions of the Authority or the SO or otherwise.

(3) The Contractor shall make good any loss suffered or expense incurred by the Authority by reason of any default or failure, whether total or partial, on the part of any sub-contractor or supplier.

Defects liability

32 (1) This Condition applies—

(a) to any defects (excluding any defects specified in sub-paragraph (b)
below) which may appear within the maintenance period specified in the Abstract of Particulars in respect of the Works; and

(b) to any defects in any sub-contract works in respect of which a separate sub-contract maintenance period is specified in the Abstract of Particulars, which may appear within the appropriate sub-contract maintenance period,

being (in either case), defects which arise from any failure or neglect on the part of the Contractor or any sub-contractor or supplier in the proper performance of the Contract or from frost occurring before completion of the Works.

(2) The Contractor shall make good at his own cost to the satisfaction of the SO any defects to which this Condition applies:

Provided that he shall not be required to make good at his own cost any damage by frost which may appear after completion unless the cause of such damage arose at a time before completion.

(3) In case of default the Authority may provide labour and/or any things necessary, or may enter into a contract or contracts, in order to repair and make good any defects to which this Condition applies, and all costs and expenses consequent thereon shall be borne by the Contractor and shall be recoverable from the Contractor by the Authority.

(4) In the case of any defects specified in paragraph (1)(b) of this Condition which have been made good, the provisions of paragraphs (2) and (3) of this Condition shall apply to the sub-contract works which have been made good until the expiration of either the appropriate sub-contract maintenance period or a period of six months from the date of making good (whichever is the later).

33 The Contractor shall employ a competent agent to whom directions may be given by the SO. The agent shall superintend the execution of the Works generally with such assistance in each trade as the SO may consider necessary. Such agent shall be in attendance at the Site during all working hours except that when required to do so he shall attend at the office of the SO.

34 The Contractor's agent shall provide the SO each day with a distribution return of the number and description of workpeople employed on the Works.

35 Where the Works are to be executed within the boundaries of a Government Establishment, the Contractor shall comply with those Rules and Regulations of the Establishment which are described in the Contract.

36 (1) The SO shall have power to require the Contractor, subject to compliance with any statutory requirements, immediately to cease to employ in connection with the Contract and to replace any foreman or person below that grade whose continued employment thereon is in the opinion of the SO undesirable.

(2) The Authority shall have power to require the Contractor immediately to cease to employ in connection with the Contract and to replace any person above the grade of foreman, including the Contractor's agent, whose continued employment in connection therewith is in the opinion of the Authority undesirable.

(3) Any decision of the Authority or the SO under this Condition shall be final and conclusive.

GC: Government Works, England D-16
37 (1) The Contractor's representative shall from time to time, when required on reasonable notice by the Quantity Surveyor, attend at the Works to take joint with the Quantity Surveyor any measurements of the work executed that may be necessary for the preparation of the Final Account. Any such measurements when ascertained and any differences arising thereon shall be recorded in the manner required by the Quantity Surveyor. The Contractor shall without extra charge provide assistance with every appliance and other thing necessary for measuring the work. If the Contractor's representative fails to attend when so required, the Quantity Surveyor shall have power to proceed by himself to take such measurements.

(2) The Contractor shall provide to the Quantity Surveyor all documents and information necessary for the calculation of the Final Sum (including for Conditions 9, 20 and 53) certified in such manner as the Quantity Surveyor may require.

38 (1) The words 'Prime Cost' or the initials 'PC' applied in the Contract to any work to be executed or any things to be supplied by a sub-contractor or supplier shall mean that in respect of such an item the sum to be paid by the Authority shall be the sum (inclusive of proper charges for packing, carriage and delivery to the Site) due to the sub-contractor or supplier, after adjustment in respect of over-payment or over-measurement or otherwise and after deduction of all discounts obtainable for cash in so far as such discounts exceed 2½ per cent and of all trade discounts, rebates and allowances.

(2) The Contractor shall also be entitled to payment for fixing in accordance with the rates included in the Bills of Quantities or the Schedule of Rates and to Contractor's profit where applicable. The payment for fixing shall cover loading, getting in, unpacking, return of empty and other incidental expense. The Contractor's profit at the rate included in the Bills of Quantities or the Schedule of Rates shall be adjusted pro rata on the prime cost excluding any alterations in that prime cost due to the operation of any conditions incorporated in the sub-contract pursuant to Condition 30(3).

(3) Any increases or decreases in the prime cost sums included in the Contract resulting from these adjustments shall be added to or deducted from the Contract Sum. The Contractor shall produce to the Quantity Surveyor such quotations, invoices and bills (properly receipted) as may be necessary to show the actual details of the sums paid by the Contractor.

(4) All prime cost items shall be reserved for the execution of work or the supply of things by persons to be nominated or appointed in such ways as may be directed by the Authority or the SO and the Contractor shall not order work or things under such items without the written instruction of the SO or consent of the Authority. The Authority reserves the right to order and pay for all or any part of such items direct and to deduct the sums included therefor from the Contract Sum less an amount in respect of Contractor’s profit at the rate included in the Bills of Quantities or Schedule of Rates adjusted pro rata on the amount paid direct by the Authority.

(5) In the event of the termination of a sub-contract to which this Condition applies, the Contractor shall, subject to the consent in writing of the Authority, either select another sub-contractor or supplier to undertake or complete the execution of work or the supply of things in question, or himself undertake or complete the execution of that work or the supply of those things and the Authority shall pay the Contractor the sum which would have been payable to him under paragraph (1) of this Condition if termination of the said sub-contract had not occurred, together with any allowances for profit and attendance which are contained in the Bills of Quantities.

39 The full amount of the provisional lump sums included in the Contract and the net value annexed to each of the provisional items inserted in the Bills of Quantities shall be deducted from the Contract Sum and the value of work
ordered and executed thereunder shall be ascertained as provided by Conditions 9(1) or 10 as the case may be. No work under these items is to be commenced without instructions in writing from the SO.

40 (1) The Contractor shall be entitled to be paid during the progress of the execution of the Works 97 per cent of the value of the work executed on the Site to the satisfaction of the SO and the Authority shall accumulate the balance as a reserve.

(2) The Contractor shall also be entitled to be paid during the progress of the execution of the Works 97 per cent of the value of any things for incorporation which are in the opinion of the SO in accordance with the Contract and which have been reasonably brought on the Site and are adequately stored and protected against damage by weather or other causes, but which have not at the time of the advance been incorporated in the Works. When any things on account of which an advance has been made under this paragraph are incorporated in the Works the amount of such advance shall be deducted from the next payment made under paragraph (1) of this Condition.

(3) The Contractor may at intervals of not less than one month submit claims for payment of advances on account of work done and of things for incorporation which have been delivered. Such claims shall be supported by a valuation of the work done and of things so delivered, which valuation shall be made on the basis of the rates in the Bills of Quantities or in the Schedule of Rates or, where such rates are not applicable, on the appropriate alternative basis of valuation set forth in Conditions 9(1) or 10. When the valuation has been agreed by the SO, the SO shall certify the sum to be paid by way of advance:

Provided that if the Contract Sum exceeds £100,000 there shall be paid to the Contractor on his application at the end of the second week in each monthly period an interim advance on account of the further work done or things for incorporation supplied since the date of the last valuation. The amount of any such interim advance shall be an approximate estimate only and the decision of the SO in regard thereto shall be final and conclusive.

(4) Any sum agreed to be credited by the Contractor for old materials may be deducted from the first or any subsequent advance.

(5) Without prejudice to the Contractor’s entitlement to an increase in the Contract Sum under Conditions 9(2) or 53(1), to the Authority’s entitlement to a decrease in that sum under Condition 9(2), or to the amount of any such increase or decrease, where the SO is of the opinion that there is to be any such increase or decrease he shall decide an amount to be added on account of that increase, or to be deducted on account of that decrease, to or from any sum falling to be paid to the Contractor under paragraph (3) of this Condition and a sum equal to the amount so decided shall be added or deducted, as the case may be, to or from a sum falling to be so paid.

(6) Before the payment of any advance or the issue of the final certificate for payment the Contractor shall, if requested by the SO, satisfy him that any amount due to a sub-contractor or supplier of things for incorporation which is covered by any previous advance has been paid. In any case where the SO is not satisfied as aforesaid—

(a) the Authority may withhold payment to the Contractor of the amount in question until the SO is so satisfied; and

(b) in the case of a nominated sub-contractor or supplier, if the SO certifies that the amount in question has not been paid, the Authority may pay to the sub-contractor or supplier the whole or part of any such amount, which shall thereupon be immediately recoverable by the Authority from the Contractor.
The decision of the SO as to whether any such amount has not been paid and of the Authority as to the sum (if any) to be paid to the nominated sub-contractor or nominated supplier shall be final and conclusive.

(7) In paragraph (6) of this Condition, the expression ‘nominated sub-contractor or nominated supplier’ means a person with whom the Contractor, in compliance with a nomination by the SO or the Authority, has entered into a contract for the execution of work or the supply of things designated as a ‘Prime Cost’ or ‘PC’ item in accordance with Condition 38.

41 (1) Upon the completion of the Works to the satisfaction of the SO the Contractor shall be entitled to be paid the amount which the Authority estimates will represent the Final Sum less one half the amount of the reserve, and thereafter the Authority may, if he thinks fit, pay further sums in reduction of the reserve.

(2) As soon as possible after the completion of the Works to the satisfaction of the SO the Quantity Surveyor shall forward one copy of the Final Account to the Contractor.

(3) If after the end of the maintenance period specified in the Abstract of Particulars the SO has certified that the Works are in a satisfactory state, and the Final Sum has been calculated and agreed (or in default of agreement has been determined by an arbitrator appointed under Condition 61) then—

(i) if the Final Sum exceeds the total amount paid to the Contractor, the excess shall be paid to the Contractor by the Authority; or

(ii) if the total amount paid to the Contractor exceeds the Final Sum, the excess shall be paid to the Authority by the Contractor.

(4) If the Final Sum has been calculated and agreed before the end of the said maintenance period, then—

(i) if the balance of that sum due to the Contractor exceeds any reserve which the Authority is for the time being entitled to retain, that excess shall be paid to the Contractor by the Authority; or

(ii) if the total amount paid to the Contractor exceeds the Final Sum, the excess shall be paid by the Contractor to the Authority.

42 (1) The SO shall from time to time certify the sums to which the Contractor is entitled under Conditions 40 and 41. The SO shall also certify the date on which the Works are completed to his satisfaction and after the end of the said maintenance period he shall issue a certificate when the Works are in a satisfactory state.

(2) Any interim certificate relating to payment for work done or things for incorporation delivered may be modified or corrected by any subsequent interim certificate or by the final certificate for payment, and no interim certificate of the SO shall of itself be conclusive evidence that any work or things to which it relates are in accordance with the Contract.

(3) Any dispute as to the Contractor’s right to a certificate or as to the sums to be certified from time to time, shall be referred to the Authority whose decision shall be final and conclusive:

Provided that this paragraph shall not apply to a dispute—

(i) as to a matter in respect of which Condition 40 provides for the decision of the SO to be final and conclusive;

(ii) as to the Contractor’s right to a certificate regarding the satisfactory state of the Works after the end of the maintenance period; or

(iii) as to the amount of the balance of the Final Sum due to the Contractor.
Whenever under the Contract any sum of money shall be recoverable from or payable by the Contractor such sum may be deducted from or reduced by the amount of any sum or sums then due or which at any time thereafter may become due to the Contractor under or in respect of the Contract or any other contract with the Authority or with any Department or Office of Her Majesty's Government.

44 (1) The Authority shall, in addition to any other power enabling him to determine the Contract, have power to determine the Contract at any time by notice to the Contractor, and upon receipt by the Contractor of the notice the Contract shall be determined but without prejudice to the rights of the parties accrued to the date of determination and to the operation of the following provisions of this Condition.

(2) (a) The Authority shall as soon as practicable, and in any case not later than the expiration of three months from the date of such notice or of the period up to the date for completion, whichever is the shorter, give directions (with which the Contractor shall comply with all reasonable despatch) as to all or any of the following matters—

(i) the performance of further work in accordance with the provisions of the Contract;
(ii) the protection of work executed under the Contract in compliance with directions given under sub-paragraph (i) above;
(iii) the removal from the Site of all things whether or not they were for incorporation;
(iv) the removal of any debris or rubbish and the clearing and making good of the Site;
(v) the termination or transfer of any sub-contracts and contracts (including those for the hire of plant, services and insurance) entered into by the Contractor for the purposes of or in connection with the Contract; or
(vi) any other matter arising out of the Contract with regard to which the Authority (whose decision on the matter shall be final and conclusive) decides that directions are necessary or expedient.

(b) The Authority may at any time within the period referred to in sub-paragraph (a) above by notice to the Contractor vary any direction so given or give fresh directions as to all or any of the matters specified in that sub-paragraph.

(3) (a) In the event of the determination of the Contract under this Condition there shall be paid to the Contractor—

(i) the net amount due, ascertained in the same manner as alterations, additions and omissions under the Contract, in respect of work executed in accordance with the Contract up to the date of determination;
(ii) the net amount due, ascertained in the same manner, in respect of any works or services executed in compliance with directions given by the Authority under paragraph 2(a)(i), (ii), (iii), (except in so far as it relates to things which were for incorporation being things which the Contractor elects to retain), (iv) and (vi) of this Condition;
(iii) the net amount due on the basis of fair and reasonable prices for any things for incorporation which the Contractor, with the consent of the Authority, has elected not to retain as his own property and which at the date of determination—

(a) had been supplied by the Contractor and properly brought on the Site by him and at his expense in connection with and for the purpose of the Contract, but had not been incorporated in the Works; or
(b) were in course of manufacture by the Contractor in connection with and for the purposes of the Contract and were not lost or damaged by reason of any of the accepted risks; and
(iv) any sum expended by the Contractor on account of the determination of the Contract in respect of the uncompleted portion of any sub-contract and contracts (including those for the hire of plant, services and insurance) entered into by the Contractor for the purposes of or in connection with the Contract, to the extent to which it is reasonable and proper that the Authority should reimburse that sum; and

(v) any sum expended by the Contractor in respect of any contract of employment which is expended on account of the determination of the Contract or which, but for this provision, would represent an unavoidable loss by reason of the determination, to the extent to which it is reasonable and proper that the Authority should reimburse that sum.

(b) If the Works or any part thereof or any things to which sub-paragraph (a)(iii)(c) above relates are at the date of determination, or if directions are given in pursuance of paragraph (2)(a) of this Condition at the date for completion of the Works, lost or damaged by reason of any of the accepted risks and such loss or damage was not occasioned by any failure on the part of the Contractor to perform his obligations under Condition 25, the net amount due shall be ascertained as if no loss or damage had occurred.

(c) There shall be deducted from any sum payable to the Contractor under this paragraph the amount of all payments previously made to the Contractor in respect of the Contract, and the Authority shall have the right to retain any reserves accumulated in his possession at the date of determination until the final settlement of all claims made by the Contractor under this paragraph.

(d) The Contractor shall for the purposes of this paragraph keep such wage-books, time-sheets, books of account and other documents as are necessary to ascertain the sums payable hereunder and shall at the request of the Authority provide (verified in such manner as he may require) any documents so kept and such other information as he may reasonably require in connection with matters arising out of this Condition.

(4) All things not for incorporation which are brought on the Site at the Contractor's expense shall (whether damaged or not) re-vest in and be removed by him as and when they cease to be required in connection with the directions given by the Authority under paragraphs (2)(a)(i), (ii), (iii), (iv) and (vi) of this Condition. The Authority shall be under no liability to the Contractor in respect of the loss thereof or damage thereto caused by reason of any of the accepted risks.

(5) If upon the determination of the Contract under this Condition the Contractor is of the opinion that he has suffered hardship by reason of the operation of this Condition he may refer the circumstances to the Authority, who, on being satisfied that such hardship exists, or has existed, shall make such allowance, if any, as in his opinion is reasonable, and his decision on that matter shall be final and conclusive.

(6) The Contractor shall, in any substantial sub-contract or contract made by him in connection with or for the purposes of the Contract, take power to determine such sub-contract or contract in the event of the determination of the Contract by the Authority upon terms similar to the terms of this Condition, save that the name of the Contractor shall be substituted for the Authority throughout except in paragraphs (3)(a)(iii), (3)(d) and (5).

Determination of Contract due to default or failure of Contractor

45 The Authority may without prejudice to the provisions contained in Condition 46 and without prejudice to his rights against the Contractor in respect of any delay or inferior workmanship or otherwise, or to any claim for damage in respect of any breaches of the Contract and whether the date for completion
has or has not elapsed, by notice absolutely determine the Contract in any of the following cases, additional to those mentioned in Condition 55 hereof:

(a) if the Contractor, having been given by the SO a notice to rectify, reconstruct or replace any defective work or a notice that the work is being performed in an inefficient or otherwise improper manner, shall fail to comply with the requirements of such notice within seven days from the service thereof, or if the Contractor shall delay or suspend the execution of the Works so that either in the judgment of the SO he will be unable to secure the completion of the Works by the date for completion or he has already failed to complete the Works by that date;

(b) (i) if the Contractor, being an individual, or where the Contractor is a firm, any partner in that firm, shall at any time become bankrupt, or shall have a receiving order or administration order made against him or shall make any composition or arrangement with or for the benefit of his creditors, or shall make any conveyance or assignment for the benefit of his creditors, or shall purport to do so, or if in Scotland he shall become insolvent or notour bankrupt, or any application shall be made under any Bankruptcy Act for the time being in force for sequestration of his estate, or a trust deed shall be granted by him for the benefit of his creditors; or

(ii) if the Contractor, being a company, shall pass a resolution, or if the Court shall make an order, that the company shall be wound up, or if the Contractor shall make an arrangement with his creditors or if a receiver or manager on behalf of a creditor shall be appointed, or if circumstances shall arise which entitle the Court or a creditor to appoint a receiver or manager or which entitle the Court to make a winding-up order; or

(c) in a case where the Contractor has failed to comply with Condition 56, the Authority (whose decision on this matter shall be final and conclusive) shall decide that such failure is prejudicial to the interests of the State:

Provided that such determination shall not prejudice or affect any right of action or remedy which shall have accrued or shall accrue thereafter to the Authority.

46 If the Authority, in the exercise of the power contained in Conditions 45 or 55, shall determine the Contract, the following provisions shall take effect:

(a) all sums of money that may then be due or accruing due from the Authority to the Contractor shall cease to be due or to accrue due;

(b) the Authority may hire any persons in the employment of the Contractor and with them and/or any other persons provided by the Authority may enter upon and take possession of the Site and of all things (whether or not for incorporation) which are on the Site, and may purchase or do anything requisite for the completion of the Works, or may employ other contractors to complete the same, and the Contractor shall have no claim whatsoever in respect of such action by the Authority;

(c) the Contractor shall (except where determination occurs by reason of any of the circumstances described in Condition 45(b)(i) and (ii)), if required by the Authority, assign to the Authority without further payment, the benefit of any sub-contract or contract for the supply of any things for incorporation which he may have made in connection with the Contract and the Authority shall pay to any such sub-contractor or supplier the price (or the balance thereof remaining unpaid) which the Contractor may have agreed to pay thereunder:

Provided that any part of the price (or balance) so paid which the SO has certified as having been covered by any previous advance shall be forthwith recoverable by the Authority from the Contractor;
(d) notwithstanding that the Authority has not required assignment in accordance with sub-paragraph (c) above, the Authority may pay to any nominated sub-contractor or nominated supplier any amount due to him which the SO has certified as having been covered by any previous advance and the amount so paid shall be forthwith recoverable by the Authority from the Contractor; and

(e) the SO shall certify the cost of completion, which shall include—

(i) the cost of any labour or things (whether or not for incorporation) provided to secure completion of the Works, including the making good of any defects and/or faulty work, together with the addition of such percentage to cover superintendence and establishment charges as may be decided by the Authority (whose decision on that matter shall be final and conclusive);

(ii) the cost of work executed by other contractors to secure completion of the Works, including the making good of any defects and/or faulty work; and

(iii) the amount of liquidated damages which may under Condition 29 have become due from the Contractor at the date of determination in respect of any delay in the completion of the Works.

(2) If the cost of completion, after taking into account all credits from any sales of any things (whether or not for incorporation) brought on the Site by the Contractor prior to the date of determination, added to the actual sums paid to the Contractor up to the said date, is less than the sum which would have been payable to the Contractor for due completion, the Contractor shall be paid the difference, but the amount so payable shall not exceed the aggregate of—

(i) the value of the work executed up to the date of determination;

(ii) the value of any of such things (being things which were for incorporation) as are subsequently incorporated in the Works or otherwise disposed of; and

(iii) the value of any such things (being things which were not for incorporation) which are disposed of;

less the amount already paid under the Contract. Any such things as are unsold or unused when the Works are completed shall be returned to the Contractor.

(3) If the cost of completion, added to the sum actually paid to the Contractor up to the date of completion, exceeds the sum which would have been payable to the Contractor for due completion, the Authority may apply the proceeds of the sale of any things (whether or not for incorporation) which are on the Site in reduction of such excess and any deficit shall be recoverable from the Contractor. If after such excess has been met there remains any residue of the proceeds of the sale of any such things, and/or any such things remain unsold, such residue or (as the case may be) such things unsold shall be paid or returned to the Contractor.

**Injury to persons: Loss of property**

47 (1) This Condition applies to any personal injury or loss of property (not being a loss of property to which Condition 26 applies) which arises out of or in any way in connection with the execution or purported execution of the Contract.

(2) Subject to the following provisions of this Condition, the Contractor shall—

(a) be responsible for and reinstate and make good to the satisfaction of the Authority, or make compensation for, any loss of property suffered by the Crown to which this Condition applies;

(b) indemnify the Crown and servants of the Crown against all claims and proceedings made or brought against the Crown or servants of the Crown in respect of any personal injury or loss of property to which this Condition applies and against all costs and expenses reasonably incurred in connection therewith;
(c) indemnify the Crown against any payment by the Crown in order to indemnify in whole or in part a servant of the Crown against any such claim, proceedings, costs or expenses; and

(d) indemnify the Crown against any payment by the Crown to a Crown servant in respect of loss of property to which this Condition applies suffered by that servant of the Crown and against any payment made under any Government provision in connection with any personal injury to which this Condition applies suffered by any servant of the Crown.

(3) If the Contractor shows that any personal injury or loss of property to which this Condition applies was not caused nor contributed to by his neglect or default or by that of his servants, agents or sub-contractors, or by any circumstances within his or their control, he shall be under no liability under this Condition, and if he shows that the neglect or default of any other person (not being his servant, agent or sub-contractor) was in part responsible for any personal injury or loss of property to which this Condition applies, the Contractor's liability under this Condition shall not extend to the share in the responsibility attributable to the neglect or default of that person.

(4) (a) The Authority shall notify the Contractor of any claim or proceeding made or brought in respect of any personal injury or loss of property to which this Condition applies.

(b) If the Contractor admits that he is liable wholly to indemnify the Crown in respect of any such claim or proceeding, and the claim or proceeding is not an excepted claim, he, or, if he so desires, his insurers, shall be responsible (subject to the condition imposed by the following sub-paragraph) for dealing with or settling that claim or proceeding.

(c) If in connection with any such claim or proceeding with which the Contractor or his insurers are dealing, any matter or issue shall arise which involves or may involve any privilege or special right of the Crown (including any privilege or right in relation to the discovery or production of documents) the Contractor or his insurers shall before taking any action thereon, consult the legal adviser to the Authority and act in relation thereto as may be required by the Authority, and if either the Contractor or his insurers fail to comply with this sub-paragraph, sub-paragraph (b) above shall cease to apply.

(d) For the purposes of this paragraph 'an excepted claim' means a claim or proceeding in respect of a matter falling to be dealt with under a Government provision, or a claim or proceeding made or brought by or against a servant of the Crown.

(5) Where any such claim or proceeding as is mentioned in paragraph (2)(b) or (c) of this Condition is settled otherwise than by the Contractor or his insurers, he shall not be required to pay by way of indemnity any sum greater than that which would be reasonably payable in settlement having regard to the circumstances of the case and in particular to the damages which might be recoverable at law.

(6) In this Condition—

(a) the expression 'loss of property' includes damage to property, loss of profits and loss of use;

(b) the expression 'personal injury' includes sickness and death;

(c) the expressions 'servant of the Crown' and 'servants of the Crown' include persons who are servants of the Crown at the time when a personal injury or loss of property to which this Condition applies occurs, notwithstanding that they cease to be such before any payment in respect of the personal injury or loss of property is made, and, where they have ceased to be such by reason of their deaths, include their personal representatives; and
(d) the expression 'Government provision' means any statute, warrant, order, scheme, regulations or conditions of service applicable to a servant of the Crown making provision for continuance of pay or for payment of sick pay, or any allowance to or for the benefit of servants of the Crown, or their families, or dependants during or in respect of sickness, injury or disablement suffered by such servants.

Damage to public roads

48 (1) Notwithstanding the provisions of Condition 47, the Authority shall, subject to the following provisions of this Condition, indemnify the Contractor against all claims and proceedings made or brought against the Contractor in respect of any damage to highways, roads or bridges communicating with or on the routes to the Site, including any mains, pipes or cables under such highways, roads or bridges, caused by any extraordinary traffic of the Contractor or a sub-contractor or supplier in connection with the Works.

(2) The Contractor shall take all reasonable steps to prevent such highways, roads and bridges from being subjected to damage by extraordinary traffic as aforesaid and in particular but without prejudice to the generality of the foregoing shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic shall be limited so far as is reasonably practicable.

(3) The Contractor shall, without prejudice to his obligations under paragraph (2) of this Condition, comply with such instructions regarding any of the matters mentioned in the said paragraph as may be given to him from time to time in writing by the SO.

(4) The Contractor shall notify the Authority of any claim or proceeding made or brought in respect of any damage to highways, roads or bridges by extraordinary traffic to which this Condition applies and thereafter the Authority shall be responsible for dealing with or settling that claim or proceeding:

Provided always that if it is decided by the Authority that any such claim or proceeding is due, wholly or in part, to any failure by the Contractor to comply with the provisions of paragraph (2) of this Condition or with the SO's instructions under paragraph (3) thereof, then the Authority may recover the Contractor so much of the costs and expenses incurred by the Authority in connection with such claim or proceeding, as is due to the failure of the Contractor in that respect.

(5) 'Extraordinary traffic' for the purpose of this Condition means extraordinary traffic to which Section 62 of the Highways Act 1959, (or in relation to Scotland, Section 54 of the Road Traffic Act 1930) or any statutory modification or re-enactment thereof as for the time being in force, applies.

Emergency powers

49 If in the opinion of the SO any urgent measures shall become necessary during the progress of the execution of the Works to obviate any risk of accident or failure, or if, by reason of the happening of any accident or failure, or other event in connection with the execution of the Works, any remedial or other work or repair shall become urgently necessary for security and the Contractor be unable or unwilling at once to carry out such measures or work or repair, the Authority may by his own or other workpeople carry out such measures or execute such work or repair as the SO may consider necessary. If the measures carried out or the work or repair so executed by the Authority shall be such as the Contractor is liable under the Contract to carry out or execute at his own expense all costs and expenses so incurred by the Authority shall be recoverable from the Contractor.

Facilities for other works

50 The Authority shall have power at any time to execute other works (whether or not in connection with the Works) on the Site contemporaneously with the execution of the Works and the Contractor shall give reasonable facilities for such purpose:
Provided that the Contractor shall not be responsible for damage done to such other works except in so far as such damage has been caused by the negligence, omission or default of his workpeople or agents; and any damage done to the Works in the execution of such other works shall, for the purposes of Condition 26(2), be deemed to be damage which is wholly caused by the neglect or default of a servant of the Crown acting in the course of his employment as such.

51 The Contractor shall, in the execution of the Contract, observe and fulfil the obligations upon contractors specified in the Fair Wages Resolution passed by the House of Commons on 14 October, 1946, namely:

'(a) The contractor shall pay rates of wages and observe hours and conditions of labour not less favourable than those established for the trade or industry in the district where the work is carried out by the machinery of negotiation or arbitration to which the parties are respectively of substantial proportions of the employers and workers engaged in the trade or industry in the district.

'(b) In the absence of any rates of wages, hours or conditions of labour so established the contractor shall pay rates of wages and observe hours and conditions of labour which are not less favourable than the general level of wages, hours and conditions observed by other employers whose general circumstances in the trade or industry in which the contractor is engaged are similar.

2 The contractor shall in respect of all persons employed by him (whether in execution of the contract or otherwise) in every factory, workshop or place occupied or used by him for the execution of the contract comply with the general conditions required by this Resolution. Before a contractor is placed upon a Department's list of firms to be invited to tender, the Department shall obtain from him an assurance that to the best of his knowledge and belief he has complied with the general conditions required by this Resolution for at least the previous three months.

3 In the event of any question arising as to whether the requirements of this Resolution are being observed, the question shall, if not otherwise disposed of, be referred by the Minister of Labour and National Service to an independent Tribunal for decision.

4 The contractor shall recognise the freedom of his workpeople to be members of trade unions.

5 The contractor shall at all times during the continuance of a contract display, for the information of his workpeople, in every factory, workshop or place occupied or used by him for the execution of the contract a copy of this Resolution.

6 The contractor shall be responsible for the observance of this Resolution by sub-contractors employed in the execution of the contract, and shall if required notify the Department of the names and addresses of all such sub-contractors.

Note: Copies of the Resolution may be purchased from HM Stationery Office.

52 (1) The Contractor shall not unlawfully discriminate within the meaning and scope of the provisions of the Race Relations Act 1968 or any statutory modification or re-enactment thereof relating to discrimination in employment.

(2) The Contractor shall take all reasonable steps to ensure the observance of the provisions of paragraph (1) of this Condition by all servants, employees or agents of the Contractor and all sub-contractors.

GC: Government Works, England D-26
53 (1) If—

(a) complying with any of the SO’s instructions;

(b) the making good of loss or damage falling within Condition 26(2);

(c) the execution of works pursuant to Condition 50; or

(d) delay in the provision of any of the items specified in paragraph (2) of this Condition

unavoidably results in the regular progress of the Works or of any part thereof being materially disrupted or prolonged and in consequence of such disruption or prolongation the Contractor properly and directly incurs any expense in performing the Contract which he would not otherwise have incurred and which is beyond that otherwise provided for in or reasonably contemplated by the Contract, the Contract Sum shall, subject to paragraph (3) of this Condition and to Condition 23, be increased by the amount of that expense as ascertained by the Quantity Surveyor:

Provided that there shall be no such increase in respect of expense incurred in consequence of the making good of loss or damage falling within Condition 26(2) except where the Contractor is entitled to payment under that provision, and where his entitlement to payment under that provision is limited to a proportionate sum any such increase in respect of expense so incurred shall be limited in like manner.

(2) The items referred to in sub-paragraph (1)(d) of this Condition are—

(a) any drawings, schedules, levels or other design information to be provided by the SO and to be prepared otherwise than by the Contractor or any of his sub-contractors;

(b) any work the execution of which, or thing the supplying of which, is to be undertaken by the Authority or is to be ordered direct by him otherwise than from the Contractor and is to be so undertaken or ordered otherwise than in consequence of any default on the part of the Contractor;

(c) any direction from the Authority or the SO regarding the nomination or appointment of any person, or any instruction of the SO or consent of the Authority, to be given under Condition 38(4).

(3) It shall be a condition precedent to the Contract Sum being increased under paragraph (1) of this Condition—

(a) in the case of expense incurred in consequence of an SO’s instruction, that the instruction shall have been given or confirmed in writing and shall not have been rendered necessary as a result of any default on the part of the Contractor;

(b) in the case of expense incurred in consequence of delay in the provision of any of the items specified in paragraph (2) of this Condition, that, except where a date for the provision of the relevant item was agreed with the SO, the Contractor shall, neither unreasonably early nor unreasonably late, have given notice to the SO specifying that item and the date by which it was reasonably required; and

(c) in any case that—

(i) the Contractor, immediately upon becoming aware that the regular progress of the Works or of any part thereof has been or is likely to be disrupted or prolonged as aforesaid, shall have given notice to the SO specifying the circumstances causing or expected to cause that disruption or prolongation and stating that he is or expects
to be entitled to an increase in the Contract Sum under that paragraph;

(ii) as soon as reasonably practicable after incurring the expense the Contractor shall have provided such documents and information in respect of the expense as he is required to provide under Condition 37(2).

55 (1) The Contractor shall not—

(a) offer or give or agree to give to any person in Her Majesty's service any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Her Majesty's service or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract for Her Majesty's service; or

(b) enter into this or any other contract with Her Majesty or any Government Department in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the Authority.

(2) Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) or the commission of any offence by the Contractor or by anyone employed by him or acting on his behalf under the Prevention of Corruption Acts, 1889 to 1916, in relation to this or any other contract for Her Majesty's service shall entitle the Authority to determine the Contract and/or to recover from the Contractor the amount or value of any such gift, consideration or commission.

(3) Any dispute or difference of opinion arising in respect of either the interpretation or effect of this Condition or of the amount recoverable hereunder by the Authority from the Contractor shall be decided by the Authority, whose decision on that matter shall be final and conclusive.

56 (1) If the Authority gives the Contractor notice that any person is not to be admitted to the Site, the Contractor shall take all reasonable steps to prevent his being admitted.

(2) The Contractor shall take such steps as the SO may reasonably require of him to prevent persons who are aliens, other than citizens of a Member State of the European Economic Community, or who are British subjects by virtue only of certificates of naturalisation in which their names were included, being admitted to the Site without the permission in writing of the Authority first having been obtained.

(3) If and when directed by the SO, the Contractor shall furnish a list of the names and addresses of all persons who are or may be at any time concerned with the Works or any part thereof, specifying the capacities in which they are so concerned, and giving such other particulars as the SO may reasonably require.

(4) The decision of the Authority as to whether any person is to be admitted to the Site, and as to whether the Contractor has furnished the information or taken the steps required of him by this Condition shall be final and conclusive.

57 Where, in order to meet the requirements of public policy, public safety or security or public health, passes are required for the admission of workpeople

to the Site, the SO shall arrange for their issue to the Contractor, and to the extent required by the SO the Contractor shall submit to the SO a list of the names of the workpeople and produce satisfactory evidence as to their identity and bona fides so that the name on each individual pass can be filled in before the passes are issued. The passes shall be returned at any time on the demand of the SO and in any case on the completion of the Works.

Photographs

58 The Contractor shall not at any time take any photograph of the Site or of the Works or of any part thereof, and shall take all reasonable steps to ensure that no such photograph shall at any time be taken or published or otherwise circulated by any person employed by him, unless the Contractor or such person shall first have obtained the permission in writing of the Authority.

Secrecy

59 (1) The Contractor’s attention is drawn to the provisions of the Official Secrets Acts 1911 to 1939 and where appropriate, to the provisions of Section 11 of the Atomic Energy Act 1946.

(2) The Contractor shall take all reasonable steps to ensure that all persons employed by him in connection with the Contract are aware that these statutory provisions apply to them during the continuance and after the completion or earlier determination of the Contract.

(3) Information concerning the Contract and any information obtained either by the Contractor in the course of the execution of the Contract or by any person employed by him in connection with the Contract in the course of such employment is confidential and shall be used by the Contractor and by any such person solely for the purpose of the Contract and shall not at any time be disclosed by the Contractor or by any such person without the consent of the Authority except to such persons and to such extent as may be necessary for the execution of the Contract.

Arbitration

61 (1) All disputes, differences or questions between the parties to the Contract with respect to any matter or thing arising out of or relating to the Contract other than a matter or thing arising out of or relating to Condition 51 or as to which the decision or report of the Authority or of any other person is by the Contract expressed to be final and conclusive shall after notice by either party to the Contract to the other of them be referred to a single Arbitrator agreed for that purpose, or in default of such agreement to be appointed at the request of the Authority by the President of such one of the undermentioned as the Authority may decide, viz, the Law Society (or, when appropriate, the Law Society of Scotland), the Royal Institute of British Architects, the Royal Institution of Chartered Surveyors, the Royal Incorporation of Architects in Scotland, the Institutions of Civil Engineers, Mechanical Engineers, Heating and Ventilating Engineers, Electrical Engineers or Structural Engineers.

(2) Unless the parties otherwise agree, such reference shall not take place until after the completion, alleged completion or abandonment of the Works or the determination of the Contract.

(3) In the case of the Contract being subject to English Law such reference shall be deemed to be a submission to arbitration under the Arbitration Act 1950, or any statutory modification or re-enactment thereof.

(4) In the case of the Contract being subject to Scots Law, the Law of Scotland shall apply to the arbitration and the award of the Arbiter, including any award as to the amount of any compensation, damages and expenses to or against any of the parties to the arbitration, shall be final and binding on the parties, provided that at any stage of the arbitration the Arbiter may, and if so requested by either of the parties shall, prepare a statement of facts in a special case for the opinion and judgment of the Court of Session on
any question or questions of Law arising in the arbitration, and both parties to the arbitration shall be bound to concur in presenting to the Court a special case in the terms prepared by the Arbiter and in which the statement of facts prepared by him is agreed to by the parties, with such contentions as the parties or either of them may desire to add thereto for the opinion and judgment of the Court: and the Arbiter and the parties to the arbitration shall be bound by the answer or answers returned by the Court of Session, or if the case is appealed to the House of Lords, by the House, to the question or questions of Law stated in the case.
### Index to Conditions

<table>
<thead>
<tr>
<th>Section</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepted risks</td>
<td>1 (2), 25, 26, 28 (2)</td>
</tr>
<tr>
<td>Acts of Parliament</td>
<td>14</td>
</tr>
<tr>
<td>Arbitration Act</td>
<td>61 (3)</td>
</tr>
<tr>
<td>Atomic Energy Act</td>
<td>59</td>
</tr>
<tr>
<td>Highway Act</td>
<td>52</td>
</tr>
<tr>
<td>Industrial Training Act</td>
<td>48 (5)</td>
</tr>
<tr>
<td>Official Secrets Act</td>
<td>59</td>
</tr>
<tr>
<td>Prevention of Corruption Act</td>
<td>55 (2)</td>
</tr>
<tr>
<td>Race Relations Act</td>
<td>52</td>
</tr>
<tr>
<td>Road Traffic Act</td>
<td>48 (5)</td>
</tr>
<tr>
<td>Admission to Site</td>
<td>56</td>
</tr>
<tr>
<td>Advances on account</td>
<td>40</td>
</tr>
<tr>
<td>Agent—Contractor's</td>
<td>53</td>
</tr>
<tr>
<td>Alterations, additions and omissions: valuation of</td>
<td>9</td>
</tr>
<tr>
<td>Anomalies, fossils etc.</td>
<td>20 (2)</td>
</tr>
<tr>
<td>Arbitration</td>
<td>61</td>
</tr>
<tr>
<td>Archaeological finds</td>
<td>20 (2)</td>
</tr>
<tr>
<td>Assignment or transfer of Contract</td>
<td>27</td>
</tr>
<tr>
<td>Assignment of sub-contracts</td>
<td>46 (1) (6)</td>
</tr>
<tr>
<td>Attending for measurement and provision of information</td>
<td>37</td>
</tr>
<tr>
<td>Authority</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Bankruptcy</td>
<td>45 (b) (1)</td>
</tr>
<tr>
<td>Bills of Quantities, Specifications, Drawings, etc.</td>
<td>4</td>
</tr>
<tr>
<td>Bills of Quantities</td>
<td>1 (2), 5</td>
</tr>
<tr>
<td>Bora sides of Workpeople</td>
<td>57</td>
</tr>
<tr>
<td>Certificates</td>
<td>42</td>
</tr>
<tr>
<td>Claims</td>
<td>40 (3), 47, 48</td>
</tr>
<tr>
<td>Clerk of Works</td>
<td>16</td>
</tr>
<tr>
<td>Commission, payment of</td>
<td>55</td>
</tr>
<tr>
<td>Completion: date for</td>
<td>1 (2)</td>
</tr>
<tr>
<td>defects after</td>
<td>32</td>
</tr>
<tr>
<td>delay in</td>
<td>29</td>
</tr>
<tr>
<td>of Works</td>
<td>6, 7, 28</td>
</tr>
<tr>
<td>on determination</td>
<td>46 (1) (6)</td>
</tr>
<tr>
<td>partial possession before</td>
<td>28A</td>
</tr>
<tr>
<td>payment on and after</td>
<td>41</td>
</tr>
<tr>
<td>Conditions affecting execution of the Works, Contractor deemed to have satisfied himself as to</td>
<td>2</td>
</tr>
<tr>
<td>Contract</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Contract:</td>
<td>1 (2), 5</td>
</tr>
<tr>
<td>Contractor:</td>
<td>33</td>
</tr>
<tr>
<td>definition</td>
<td>1 (2)</td>
</tr>
<tr>
<td>employees—replacement of</td>
<td>36</td>
</tr>
<tr>
<td>regulations—need to conform to</td>
<td>35</td>
</tr>
<tr>
<td>Corrupt gifts and payment of commission</td>
<td>55</td>
</tr>
<tr>
<td>Costing up work—Contractor to give notice</td>
<td>22</td>
</tr>
<tr>
<td>Credits for old materials</td>
<td>40 (4)</td>
</tr>
<tr>
<td>Day work</td>
<td>9 (1) (6), 24</td>
</tr>
<tr>
<td>Default</td>
<td>28 (2) (6)</td>
</tr>
<tr>
<td>Authority's</td>
<td>32 (3), 45</td>
</tr>
<tr>
<td>Contractor's</td>
<td>45</td>
</tr>
<tr>
<td>Defects liability</td>
<td>32</td>
</tr>
<tr>
<td>Determination of Contract; due to default or failure of the Contractor</td>
<td>45</td>
</tr>
<tr>
<td>Drawings, Specification, Bills of Quantities, etc.</td>
<td>4, 7 (4)</td>
</tr>
<tr>
<td>Emergency powers</td>
<td>49</td>
</tr>
<tr>
<td>Excavations and materials arising therefrom</td>
<td>20</td>
</tr>
<tr>
<td>Execution of Works—conditions affecting</td>
<td>2</td>
</tr>
<tr>
<td>Extensions of time, date for completion and</td>
<td>28</td>
</tr>
<tr>
<td>Facilities for other works</td>
<td>50</td>
</tr>
<tr>
<td>Failure of Contractor to comply with SO's Instructions</td>
<td>8</td>
</tr>
<tr>
<td>Fair wages, etc.</td>
<td>51</td>
</tr>
<tr>
<td>Fees and notices—local and other authorities</td>
<td>14</td>
</tr>
<tr>
<td>Final Account</td>
<td>1 (2), 41</td>
</tr>
<tr>
<td>Final Sum</td>
<td>1 (2), 41</td>
</tr>
<tr>
<td>Fire risks, etc.—precautions against</td>
<td>25</td>
</tr>
<tr>
<td>Fire and accepted risks, damage by</td>
<td>26</td>
</tr>
<tr>
<td>Fossils, antiquities etc.</td>
<td>20 (2)</td>
</tr>
<tr>
<td>Foundations—not to be laid until directed</td>
<td>21</td>
</tr>
<tr>
<td>Frost, etc.—suspension for</td>
<td>23</td>
</tr>
<tr>
<td>Gifts, Corrupt</td>
<td>55</td>
</tr>
<tr>
<td>Indemnity against damage</td>
<td>47</td>
</tr>
<tr>
<td>Information, provision of</td>
<td>37</td>
</tr>
<tr>
<td>Injury to persons: loss of property</td>
<td>47</td>
</tr>
<tr>
<td>Inspection of foundations</td>
<td>21</td>
</tr>
<tr>
<td>things</td>
<td>13 (2)</td>
</tr>
<tr>
<td>Instructions: failure of Contractor to comply with SO's</td>
<td>8</td>
</tr>
<tr>
<td>Interim payments</td>
<td>40 (3)</td>
</tr>
<tr>
<td>Interim certificates</td>
<td>42</td>
</tr>
<tr>
<td>Labour-tax matters</td>
<td>11G</td>
</tr>
<tr>
<td>Lighting, watching and protection of Works</td>
<td>17</td>
</tr>
<tr>
<td>Liquidated damages</td>
<td>29</td>
</tr>
<tr>
<td>Local and other authorities' notices and fees</td>
<td>14</td>
</tr>
<tr>
<td>Loss of property: injury to persons</td>
<td>47</td>
</tr>
<tr>
<td>Loss of profits</td>
<td>47 (6) (a)</td>
</tr>
<tr>
<td>Maintenance period</td>
<td>32, 41</td>
</tr>
<tr>
<td>Materials arising from excavations</td>
<td>20</td>
</tr>
<tr>
<td>Measurement: attending for</td>
<td>37</td>
</tr>
<tr>
<td>method of</td>
<td>2, 5</td>
</tr>
</tbody>
</table>

D-31  GC: Government Works, England
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>28A</td>
<td>Partial possession of the Works before completion.</td>
</tr>
<tr>
<td>57</td>
<td>Passes.</td>
</tr>
<tr>
<td>15</td>
<td>Patent rights.</td>
</tr>
<tr>
<td>55</td>
<td>Payment: of commission.</td>
</tr>
<tr>
<td>40</td>
<td>on account.</td>
</tr>
<tr>
<td>41</td>
<td>on and after completion.</td>
</tr>
<tr>
<td>58</td>
<td>Photographs.</td>
</tr>
<tr>
<td>18</td>
<td>Pollution, precautions against.</td>
</tr>
<tr>
<td>6</td>
<td>Possession of the Site.</td>
</tr>
<tr>
<td>48</td>
<td>Precautions against: damage to public roads.</td>
</tr>
<tr>
<td>48</td>
<td>fire and other risks.</td>
</tr>
<tr>
<td>18</td>
<td>nuisance.</td>
</tr>
<tr>
<td>8</td>
<td>pollution.</td>
</tr>
<tr>
<td>38</td>
<td>Prime cost items.</td>
</tr>
<tr>
<td>47</td>
<td>Profits, loss of.</td>
</tr>
<tr>
<td>47</td>
<td>Property, loss of.</td>
</tr>
<tr>
<td>6</td>
<td>Progress of the Works.</td>
</tr>
<tr>
<td>53</td>
<td>Prolongation and disruption expenses.</td>
</tr>
<tr>
<td>17</td>
<td>Protection of the Works.</td>
</tr>
<tr>
<td>39</td>
<td>Provisional sums and provisional quantities.</td>
</tr>
<tr>
<td>46</td>
<td>Provisions in case of determination of Contract.</td>
</tr>
<tr>
<td>48</td>
<td>Public roads—damage to.</td>
</tr>
<tr>
<td>1</td>
<td>Quantities—Bills of.</td>
</tr>
<tr>
<td>1</td>
<td>Quantity Surveyor.</td>
</tr>
<tr>
<td>52</td>
<td>Racial discrimination.</td>
</tr>
<tr>
<td>1</td>
<td>Rates—Schedule of.</td>
</tr>
<tr>
<td>43</td>
<td>Recovery of sums due from Contractor.</td>
</tr>
<tr>
<td>35</td>
<td>Regulations—Contractor to conform to.</td>
</tr>
<tr>
<td>3</td>
<td>Removal of things from Site.</td>
</tr>
<tr>
<td>38</td>
<td>Renomination.</td>
</tr>
<tr>
<td>36</td>
<td>Replacement of Contractor’s employees.</td>
</tr>
<tr>
<td>16</td>
<td>Resident Engineer.</td>
</tr>
<tr>
<td>34</td>
<td>Returns—daily.</td>
</tr>
<tr>
<td>48</td>
<td>Risks, accepted.</td>
</tr>
<tr>
<td>19</td>
<td>Rubbish—removal of.</td>
</tr>
<tr>
<td>12</td>
<td>Setting out Works.</td>
</tr>
<tr>
<td>4</td>
<td>Site: admission to.</td>
</tr>
<tr>
<td>6</td>
<td>definition of.</td>
</tr>
<tr>
<td>8</td>
<td>failure to comply with valuation of.</td>
</tr>
<tr>
<td>9</td>
<td>Instructions of.</td>
</tr>
<tr>
<td>4</td>
<td>Specification, Bills of Quantities, Drawings, etc.</td>
</tr>
<tr>
<td>13</td>
<td>Testing.</td>
</tr>
<tr>
<td>1</td>
<td>Things: for/not for incorporation.</td>
</tr>
<tr>
<td>3</td>
<td>not to be removed.</td>
</tr>
<tr>
<td>3</td>
<td>vesting in Authority.</td>
</tr>
<tr>
<td>28</td>
<td>Time, extensions of.</td>
</tr>
<tr>
<td>48</td>
<td>Traffic, extraordinary.</td>
</tr>
<tr>
<td>27</td>
<td>Transfer/assignment of contract.</td>
</tr>
<tr>
<td>9</td>
<td>Valuation: of SO's instructions.</td>
</tr>
<tr>
<td>10</td>
<td>by measurement.</td>
</tr>
<tr>
<td>1</td>
<td>Variation of price (labour-tax matters).</td>
</tr>
<tr>
<td>7</td>
<td>Variations.</td>
</tr>
<tr>
<td>3</td>
<td>Vesting of Works, etc. in Authority.</td>
</tr>
<tr>
<td>17</td>
<td>Watching, lighting and protection of Works.</td>
</tr>
<tr>
<td>13</td>
<td>Workmanship and things to conform to description.</td>
</tr>
<tr>
<td>11G</td>
<td>Workpeople.</td>
</tr>
<tr>
<td>17</td>
<td>Works: definition of.</td>
</tr>
<tr>
<td>12</td>
<td>setting out.</td>
</tr>
<tr>
<td>26</td>
<td>Works and other things, damage by fire, accepted risks, etc.</td>
</tr>
</tbody>
</table>
NOTES

The following notes indicate the changes from the previous Edition but do not form part of the Contract.

Definitions:  Contract Sum  Reference to new Condition 53 added.

Condition No. 9  Amended Condition.

5(2), 10, 39 and 40(3)  Reference to Condition 9 amended to 9(1).
15  Proviso amended.
23  Amended.
28(2)(b)  Amended.
37  Heading amended.
37(2)  Amended.
40(2)  Reference to '90 per cent' amended to '97 per cent'.
40  New sub-paragraph (5).
40(5) and (6)  Sub-paragraph numbers amended to (6) and (7).
44(3)(a)(iv)  Amended.
44(3)(a)(v)  New sub-paragraph.
50  Amended.
53  New Condition.

Amendment Sheet No. 2, which amended '90 per cent' to '97 per cent', has been incorporated in this Edition.
APPENDIX E

STANDARD FORM 23A
INDEX OF GENERAL PROVISIONS
(Construction Contract)
Edition of 29 July 1980

1.1 Definitions
1.2 Definitions
2. Specifications and Drawings
3. Changes
4. Differing Site Conditions
5. Termination for Default-Damages for Delay-Time Extensions
6. Disputes
7. Payments to Contractor
8. Assignment of Claims
9. Material and Workmanship
10. Inspection and Acceptance
11. Superintendence by Contractor
12. Permits and Responsibilities
13. Conditions Affecting the Work
14. Other Contracts
15. Shop Drawings
16. Use and Possession Prior to Completion
17. Suspension of Work
18. Termination for Convenience of the Government-Construction
19. Pricing of Adjustments
20. Patent Indemnity
21. Additional Bond Security
22. Examination of Records by Comptroller General
23. Buy American Act
24. Equal Opportunity

(29 Jul. 80) (Const. Gen. Prov.) (Alt.)

E-1 SF 23A
25. Covenant Against Contingent Fees
26. Officials Not to Benefit
27. Convict Labor
28. Utilization of Small Business and Small Disadvantaged Business Concerns
29. Federal, State and Local Taxes
30. Davis-Bacon Act
31. Contract Work Hours and Safety Standards Act-Overtime Compensation
32. Apprentices and Trainees
33. Payrolls and Basic Records
34. Compliance with Copeland Regulations
35. Withholding of Funds
36. Subcontracts
37. Contract Termination-Debarment
38. Disputes Concerning Labor Standards
39. Contractor Inspection System
40. Gratuities
41. Subcontracting Plan for Small Business and Small Disadvantaged Business Concerns (Formally Advertised)
42. Notice and Assistance Regarding Patent and Copyright Infringement
43. Authorization and Consent
44. Composition of Contractor
45. Site Investigation
46. Protection of Existing Vegetation, Structures, Utilities, and Improvements
47. Operations and Storage Areas
48. Modification Proposals-Price Breakdown
49. Subcontractors
50. Cleaning Up
51. Additional Definitions

(29 Jul 80)
52. Accident Prevention
53. Government Inspectors
54. Rights in Shop Drawings
55. Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era
56. Value Engineering Incentive—Construction
57. Affirmative Action for Handicapped Workers
58. Clean Air and Water
59. Notice to the Government of Labor Disputes
60. Contract Prices—Bidding Schedule
61. Priorities, Allocations, and Allotments
62. Price Reduction for Defective Cost or Pricing Data—Price Adjustments
63. Interest
64. Audit by Department of Defense
65. Subcontractor Cost or Pricing Data—Price Adjustments
66.1 Government—Furnished Property (Short Form)
66.2 Government Property (Fixed Price)
67. Variations in Estimated Quantities
68. Progress Charts and Requirements for Overtime Work
69. Certification of Requests for Adjustment or Relief Exceeding $100,000
70. Affirmative Action Compliance Requirements for Construction
71. Utilization of Women-Owned Business Concerns (Over $10,000)
72. Environmental Litigation

(24 Aug 81)  (Const. Gen. Prov.) (Alt.)

E-3  SF 23A
GENERAL PROVISIONS
(Construction Contract)
(Edition of 29 July 1980)
Issued By: Department of the Army, Corps of Engineers

(General Provisions 1 through 29 and 30 through 38 are those prescribed by the General Services Administration in Standard Form 23-A, April 1975 edition and Standard Form 19-A, January 1979 edition, respectively, as amended pursuant to the latest revisions of the Defense Acquisition Regulation and Engineer Contract Instructions, ER 1180-1-1.)

1.1 DEFINITIONS
(The following clause is applicable if the procurement instrument identification number is prefixed by the letters "DACW")

(a) The term "head of the agency" or "Secretary" as used herein means the Secretary of the Army; and the term "his duly authorized representative" means the Chief of Engineers, Department of the Army, or an individual or board designated by him.

(b) The term "Contracting Officer" as used herein means the person executing this contract on behalf of the Government and includes a duly appointed successor or authorized representative. (DAR 7-602.1 & ECI 7-070)

1.2 DEFINITIONS (1964 JUN)
(The following clause is applicable if the procurement instrument identification number is prefixed by the letters "DACA")

(a) The term "head of the agency" or "Secretary" as used herein means the Secretary, the Under Secretary, any Assistant Secretary, or any other head or assistant head of the executive or military department or other Federal agency; and the term "his duly authorized representative" means any person or persons or board (other than the Contracting Officer) authorized to act for the head of the agency or the Secretary.

(b) The term "Contracting Officer" as used herein means the person executing this contract on behalf of the Government and includes a duly appointed successor or authorized representative. (DAR 7-602.1)

2. SPECIFICATIONS AND DRAWINGS (1964 JUN)
The Contractor shall keep on the work a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy either in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at his own risk and expense. The Contracting Officer shall furnish from time to time such detail drawings and other information as he may consider necessary, unless otherwise provided. (DAR 7-602.2)

3. CHANGES (1968 FEB)
(a) The Contracting Officer may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make any change in the work within the general scope of the contract, including but not limited to changes:

(29 Jul 80)
(i) in the specifications (including drawings and designs);
(ii) in the method or manner of performance of the work;
(iii) in the Government-furnished facilities, equipment, materials, services, or site; or
(iv) directing acceleration in the performance of the work.

(b) Any other written order or an oral order (which terms as used in this paragraph (b) shall include direction, instruction, interpretation or determination) from the Contracting Officer, which causes any such change, shall be treated as a change order under this clause, provided, that the Contractor gives the Contracting Officer written notice stating the date, circumstances, and source of the order and that the Contractor regards the order as a change order.

(c) Except as herein provided, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the contract modified in writing accordingly. Provided however, That except for claims based on defective specifications, no claim for any change under (b) above shall be allowed for any costs incurred more than 20 days before the Contractor gives written notice as therein required. And provided further, That in the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with such defective specifications.

(e) If the Contractor intends to assert a claim for an equitable adjustment under this clause, he must, within 30 days after receipt of a written change order under (a) above or the furnishing of a written notice under (b) above, submit to the Contracting Officer a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Government. The statement of claim hereunder may be included in the notice under (b) above.

(f) No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract. (DAK 7-602.3)

4. DIFFERING SITE CONDITIONS (1968 FEB)

(a) The Contractor shall promptly, and before such conditions are disturbed, notify the Contracting Officer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in this contract. The Contracting Officer shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.

(b) No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above; provided, however, the time prescribed therefor may be extended by the Government.

(c) No claim by the Contractor for an equitable adjustment hereunder

(29 Jul 80)

(Const. Gen. Prov.)

E-5 SF 23A
shall be allowed if asserted after final payment under this contract. (DAR 7-602.4)

5. TERMINATION FOR DEFAULT - DAMAGES FOR DELAY - TIME EXTENSIONS (1969 AUG)

(a) If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within such time, the Government may, by written notice to the Contractor, terminate his right to proceed with the work or such part of the work as to which there has been delay. In such event the Government may take over the work and prosecute the same to completion, by contract or otherwise, and may take possession of and utilize in completing the work such materials, appliances, and plant as may be on the site of the work and necessary therefor. Whether or not the Contractor's right to proceed with the work is terminated, he and his sureties shall be liable for any damage to the Government resulting from his refusal or failure to complete the work within the specified time.

(b) If fixed and agreed liquidated damages are provided in the contract and if the Government so terminates the Contractor's right to proceed, the resulting damage will consist of such liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned the Government in completing the work.

(c) If fixed and agreed liquidated damages are provided in the contract and if the Government does not so terminate the Contractor's right to proceed, the resulting damage will consist of such liquidated damages until the work is completed or accepted.

(d) The Contractor's right to proceed shall not be so terminated nor the Contractor charged with resulting damage if:

1. The delay in the completion of the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the public enemy, acts of the Government in either its sovereign or contractual capacity, acts of another contractor in the performance of a contract with the Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and such subcontractors or suppliers; and

2. The Contractor, within 10 days from the beginning of any such delay (unless the Contracting Officer grants a further period of time before the date of final payment under the contract), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of the delay and extend the time for completing the work when, in his judgment, the findings of fact justify such an extension, and his findings of fact shall be final and conclusive on the parties, subject only to appeal as provided in the "Disputes" clause of this contract.

(e) If, after notice of termination of the Contractor's right to proceed under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the Government, be the same as if the notice of termination had been issued pursuant to such clause. If, in the foregoing circumstances, this contract does not contain a clause providing for

(29 Jul 80) (Const. Gen. Prov.)

SF 23A E-6
termination for convenience of the Government, the contract shall be equitably adjusted to compensate for such termination and the contract modified accordingly; failure to agree to any such adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes."

(f) The rights and remedies of the Government provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

(g) As used in paragraph (d)(1) of this clause, the term "subcontractors or suppliers" means subcontractors or suppliers at any tier. (DAR 7-602.5)

6. DISPUTES (1980 JUN)

(a) This contract is subject to the Contract Disputes Act of 1978 (P.L. 95-563).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved in accordance with this clause.

(c) (i) As used herein, "claim" means a written demand or assertion by one of the parties seeking, as a matter of right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. However, a written demand by the contractor seeking the payment of money in excess of $50,000 is not a claim until certified in accordance with (d) below.

(ii) A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim for the purposes of the Act. However, where such submission is subsequently disputed either as to liability or amount or not acted upon in a reasonable time, it may be converted to a claim pursuant to the Act by complying with the submission and certification requirements of this clause.

(iii) A claim by the contractor shall be made in writing and submitted to the contracting officer for decision. A claim by the Government against the contractor shall be subject to a decision by the Contracting Officer.

(d) For contractor claims of more than $50,000, the contractor shall submit with the claim a certification that the claim is made in good faith; the supporting data are accurate and complete to the best of the contractor's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which the contractor believes the Government is liable. The certification shall be executed by the contractor if an individual. When the contractor is not an individual, the certification shall be executed by a senior company official in charge at the contractor's plant or location involved, or by an officer or general partner of the contractor having over-all responsibility for the conduct of the contractor's affairs.

(e) For contractor claims of $50,000 or less, the Contracting Officer must, if requested in writing by the contractor, render a decision within 60 days of the request. For contractor certified claims in excess of $50,000 the Contracting Officer must decide the claim within 60 days or notify the contractor of the date when the decision will be made.

(f) The Contracting Officer's decision shall be final unless the contractor appeals or files a suit as provided in the Act.

(g) Interest on the amount found due on a contractor claim shall be paid from the date the contracting officer receives the claim, or from the date payment otherwise would be due, if such date is later, until the date of payment.

(29 Jul 80) (Const. Gen. Prov.)

E-7 SF 23A
(h) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal or action arising under the contract, and comply with any decision of the Contracting Officer. (DAR 7-103.12(a))

7. PAYMENTS TO CONTRACTOR (1979 MAR)

(a) The Government will pay the contract price as hereinafter provided.

(b) The Government will make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates approved by the Contracting Officer. If requested by the Contracting Officer, the Contractor shall furnish a breakdown of the total contract price showing the amount included therein for each principal category of the work, in such detail as requested, to provide a basis for determining progress payments. In the preparation of estimates the Contracting Officer, at his discretion, may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site may also be taken into consideration (1) if such consideration is specifically authorized by the contract and (2) if the Contractor furnishes satisfactory evidence that he has acquired title to such material and that it will be utilized on the work covered by this contract.

(c) In making such progress payments, there shall be retained 10 percent of the estimated amount until final completion and acceptance of the contract work. However, if the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, he may authorize such payment to be made in full without retention of a percentage. Also, whenever the work is substantially complete, the Contracting Officer shall retain an amount he considers adequate for the protection of the Government, and, at his discretion, may release to the Contractor all or a portion of any excess amount. Furthermore, on completion and acceptance of each separate building, public work, or other division of the contract, on which the price is stated separately in the contract, payment may be made therefor without retention of a percentage.

(d) All material and work covered by progress payments made shall thereupon become the sole property of the Government, but this provision shall not be construed as relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work, or as waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(e) The Contractor shall, upon request, be reimbursed for the entire amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after furnishing evidence of full payment to the surety.

(f) Upon completion and acceptance of all work, the amount due the Contractor under this contract shall be paid upon the presentation of a properly executed voucher and after the Contractor shall have furnished the Government with a release of all claims against the Government arising by virtue of this contract, other than claims in stated amounts as may be specifically excepted by the Contractor from the operation of the release. If the Contractor's claim to amounts payable under the contract has been assigned under the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), a release may also be required of the assignee. (DAR 7-602.7)

8. ASSIGNMENT OF CLAIMS (1976 OCT)

(a) Pursuant to the provisions of the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), if this contract provides for (29 Jul 80)

(Constr. Gen. Prov.)

SF 23A   E-8
payments aggregating $1,000 or more, claims for moneys due or to become due to the Contractor from the Government under this contract may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency, and may thereafter be further assigned and reassigned to any such institution. Any such assignment or reassignment shall cover all amounts payable under this contract and not already paid, and shall not be made to more than one party, except that any such assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in such financing. Unless otherwise provided in this contract, payments to assignee of any moneys due or to become due under this contract shall not, to the extent provided in said Act, as amended, be subject to reduction or setoff. (The preceding sentence applies only if this contract is made in time of war or national emergency as defined in said Act and is with the Department of Defense, the General Services Administration, the Energy Research and Development Administration, the National Aeronautics and Space Administration, the Federal Aviation Administration, or any other department or agency of the United States designated by the President pursuant to Clause 4 of the proviso of section 1 of the Assignment of Claims Act of 1940, as amended by the Act of May 15, 1951, 65 Stat. 41.)

(b) In no event shall copies of this contract or of any plans, specifications, or other similar documents relating to work under this contract, if marked "Top Secret," "Secret," or "Confidential," be furnished to any assignee of any claim arising under this contract or to any other person not entitled to receive the same. However, a copy of any part or all of this contract so marked may be furnished, or any information contained therein may be disclosed, to such assignee upon the prior written authorization of the Contracting Officer. (DAR 7-602.8)

9. MATERIAL AND WORKMANSHIP (1964 JUN)

(a) Unless otherwise specifically provided in this contract, all equipment, material, and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in this contract, reference to any equipment, material, article, or patented process, by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition, and the Contractor may, at his option, use any equipment, material, article, or process which, in the judgment of the Contracting Officer, is equal to that named. The Contractor shall furnish to the Contracting Officer for his approval the name of the manufacturer, the model number, and other identifying data and information respecting the performance, capacity, nature, and rating of the machine and mechanical and other equipment which the Contractor contemplates incorporating in the work. When required by this contract or when called for by the Contracting Officer, the Contractor shall furnish the Contracting Officer for approval full information concerning the material or articles which he contemplates incorporating in the work. When so directed, samples shall be submitted for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles installed or used without required approval shall be at the risk of subsequent rejection.

(b) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may, in writing, require the Contractor to remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable. (DAR 7-602.9)
10. INSPECTION AND ACCEPTANCE (1976 OCT)

(a) All work (which term includes but is not restricted to materials, workmanship, and manufacture and fabrication of components) shall be subject to inspection and test by the Government at all reasonable times and at all places prior to acceptance. Any such inspection and test is for the sole benefit of the Government and shall not relieve the Contractor of the responsibility of providing quality control measures to assure that the work strictly complies with the contract requirements. No inspection or test by the Government shall be construed as constituting or implying acceptance. Inspection or test shall not relieve the Contractor of responsibility for damage to or loss of the material prior to acceptance, nor in any way affect the continuing rights of the Government after acceptance of the completed work under the terms of paragraph (f) of this clause, except as hereinabove provided.

(b) The Contractor shall, without charge, replace any material or correct any workmanship found by the Government not to conform to the contract requirements, unless in the public interest the Government consents to accept such material or workmanship with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(c) If the Contractor does not promptly replace rejected material or correct rejected workmanship, the Government (1) may, by contract or otherwise, replace such material or correct such workmanship and charge the cost thereof to the Contractor, or (2) may terminate the Contractor's right to proceed in accordance with the clause of this contract entitled "Termination for Default - Damages for Delay - Time Extensions."

(d) The Contractor shall furnish promptly, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspection and test as may be required by the Contracting Officer. All inspection and test by the Government shall be performed in such manner as not unnecessarily to delay the work. Special, full size, and performance tests shall be performed as described in this contract. The Government reserves the right to charge to the Contractor any additional cost of inspection or test when material or workmanship is not ready at the time specified by the Contractor for inspection or test or when reinspection or retest is necessitated by prior rejection.

(e) Should it be considered necessary or advisable by the Government at any time before acceptance of the entire work to make an examination of work already completed, by removing or tearing out same, the Contractor shall, on request, promptly furnish all necessary facilities, labor and material. If such work is found to be defective or nonconforming in any material respect, due to the fault of the Contractor or his subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the contract, an equitable adjustment shall be made in the contract price to compensate the Contractor for the additional services involved in such examination and reconstruction and, if completion of the work has been delayed thereby, he shall, in addition, be granted a suitable extension of time.

(f) Unless otherwise provided in this contract, acceptance by the Government shall be made as promptly as practicable after completion and inspection of all work required by this contract, or that portion of the work that the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except as regards latent defects, fraud, or such gross mistakes as may amount to fraud or as regards the Government's rights under any warranty or guarantee. (DAR 7-602.11)
11. SUPERINTENDENCE BY CONTRACTOR (1976 OCT)

The Contractor, at all times during performance and until the work is completed and accepted, shall give his personal superintendance to the work or have on the work a competent superintendent, satisfactory to the Contracting Officer and with authority to act for the Contractor. (DAR 7-602.12)

12. PERMITS AND RESPONSIBILITIES (1964 JUN)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any applicable Federal, State, and municipal laws, codes, and regulations, in connection with the prosecution of the work. He shall be similarly responsible for all damages to persons or property that occur as a result of his fault or negligence. He shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. He shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire construction work, except for any completed unit of construction thereof which theretofore may have been accepted. (DAR 7-602.13)

13. CONDITIONS AFFECTING THE WORK (1964 JUN)

The Contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work, and the general and local conditions which can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve him from responsibility for successfully performing the work without additional expense to the Government. The Government assumes no responsibility for any understanding or representations concerning conditions made by any of its officers or agents prior to the execution of this contract, unless such understanding or representations by the Government are expressly stated in the contract. (DAR 7-602.14)

14. OTHER CONTRACTS (1964 JUN)

The Government may undertake or award other contracts for additional work, and the Contractor shall fully cooperate with such other contractors and Government employees and carefully fit his own work to such additional work as may be directed by the Contracting Officer. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by Government employees. (DAR 7-602.15)

15. SHOP DRAWINGS (1976 OCT)

(a) The term, "shop drawings", includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data; and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract.

(b) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate his approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate his approval or disapproval of the shop drawings and if not approved as submitted shall indicate his reasons therefor. Any work done prior to such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this

(29 Jul 80)  
(Const. Gen. Prov.)

E-11  SF 23A
contract, except with respect to variations described and approved in accordance with (c) below.

(c) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation(s), he shall issue an appropriate contract modification, except that, if the variation is minor and does not involve a change in price or in time of performance, a modification need not be issued.

(d) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated herein) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated herein) of all shop drawings will be retained by the Contracting Officer and one set will be returned to the Contractor. (DAR 7-602.54(a))

16. USE AND POSSESSION PRIOR TO COMPLETION (1976 OCT)

The Government shall have the right to take possession of or use any completed or partially completed part of the work. Prior to such possession or use, the Contracting Officer shall furnish the Contractor an itemized list of work remaining to be performed or corrected on such portions of the project as are to be possessed or used by the Government, provided that failure to list any item of work shall not relieve the Contractor of responsibility for compliance with the terms of the contract. Such possession or use shall not be deemed an acceptance of any work under the contract. While the Government has such possession or use, the Contractor, notwithstanding the provisions of the clause of this contract entitled "Permits and Responsibilities," shall be relieved of the responsibility for the loss or damage to the work resulting from the Government's possession or use. If such prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment in the contract price or the time of completion will be made and the contract shall be modified in writing accordingly. (DAR 7-602.39)

17. SUSPENSION OF WORK (1968 FEB)

(a) The Contracting Officer may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as he may determine to be appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of the Contracting Officer in the administration of this contract, or by his failure to act within the time specified in this contract (or if no time is specified, within a reasonable time), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent (1) that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor or (2) for which an equitable adjustment is provided for or excluded under any other provision of this contract.

(c) No claim under this clause shall be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order),

(29 Jul 80)

(Cont. Gen. Prov.)

SF 23A E-12
and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the contract. (DAR 7-602.46)

18. TERMINATION FOR CONVENIENCE OF THE GOVERNMENT-CONSTRUCTION (1974 APR)

(a) The performance of work under this contract may be terminated by the Government in accordance with this clause in whole, or from time to time in part, whenever the Contracting Officer shall determine that such termination is in the best interest of the Government. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective.

(b) After receipt of a Notice of Termination, and except as otherwise directed by the Contracting Officer, the Contractor shall:

(i) stop work under the contract on the date and to the extent specified in the Notice of Termination;

(ii) place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the work under the contract as is not terminated;

(iii) terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

(iv) assign to the Government, in the manner, at the times, and to the extent directed by the Contracting Officer, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the Government shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

(v) settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Contracting Officer, to the extent he may require, which approval or ratification shall be final for all the purposes of this clause;

(vi) transfer title and deliver to the Government, in the manner, at the times, and to the extent, if any, directed by the Contracting Officer, (A) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and (B) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would have been required to be furnished to the Government;

(vii) use his best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Contracting Officer, any property of the types referred to in (vi) above; provided however, that the Contractor (A) shall not be required to extend credit to any purchaser, and (B) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Contracting Officer; and provided further, that the proceeds of any such transfer or disposition shall be applied in

(29 Jul 80)  
(St. Gen. Prov.)

E-13  SF 23A
reduction of any payments to be made by the Government to the Contractor under this contract or shall otherwise be credited to the price or cost of the work covered by this contract or paid in such other manner as the Contracting Officer may direct;

(viii) complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and

(ix) take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which the Government has or may acquire an interest.

At any time after expiration of the plant clearance period, as defined in Section VIII, Defense Acquisition Regulation, as it may be amended from time to time, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Contracting Officer, and may request the Government to remove such items or enter into a storage agreement covering them. Not later than fifteen (15) days thereafter, the Government will accept title to such items and remove them or enter into a storage agreement covering the same; provided, that the list submitted shall be subject to verification by the Contracting Officer upon removal of the items, or if the items are stored, within forty-five (45) days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

(c) After receipt of a Notice of Termination, the Contractor shall submit to the Contracting Officer his termination claim, in the form and with certification prescribed by the Contracting Officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the Contracting Officer, upon request of the Contractor made in writing within such one year period or authorized extension thereof. However, if the Contracting Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after such one year period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Contracting Officer may determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

(d) Subject to the provisions of paragraph (c), the Contractor and the Contracting Officer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of work pursuant to this clause, which amount or amounts may include a reasonable allowance for profit on work done; provided, that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. The contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. Nothing in paragraph (e) of this clause, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Contracting Officer to agree upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the Contractor pursuant to this paragraph (d).

(29 Jul 80)

(Constr. Gen. Prov.)

SF 23A  E-14
(e) In the event of the failure of the Contractor and the Contracting Officer to agree, as provided in paragraph (d), upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, the Contracting Officer shall pay to the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed upon in accordance with paragraph (d):

(i) with respect to all contract work performed prior to the effective date of the Notice of Termination, the total (without duplication of any items) of:

(A) the cost of such work;
(B) the cost of settling and paying claims arising out of the termination of work under subcontracts or orders as provided in paragraph (b)(v) above, exclusive of the amounts paid or payable on account of supplies or materials delivered or services furnished by the subcontractor prior to the effective date of the Notice of Termination of Work under this contract, which amounts shall be included in the cost on account of which payment is made under (A) above; and

(C) a sum, as profit on (A) above, determined by the Contracting Officer pursuant to 8-303 of the Defense Acquisition Regulation, in effect as of the date of execution of this contract, to be fair and reasonable; provided, however, that if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, no profit shall be included in the amount allowed under this subdivision (C) and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss; and

(ii) the reasonable cost of the preservation and protection of property incurred pursuant to paragraph (b)(ix); and any other reasonable cost incidental to termination of work under this contract, including expense incidental to the determination of the amount due to the Contractor as the result of the termination of work under this contract. The total sum to be paid to the Contractor under (i) above shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. Except for normal spoilage, and except to the extent that the Government shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor under (i) above, the fair value, as determined by the Contracting Officer, of property which is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government, or to a buyer pursuant to paragraph (b)(vii).

(f) Costs claimed, agreed to, or determined pursuant to (c), (d), (e), and (i) hereof shall be in accordance with Section XV of the Defense Acquisition Regulation as in effect on the date of this contract.

(g) The Contractor shall have the right of appeal, under the clause of this contract entitled "Disputes", from any determination made by the Contracting Officer under paragraph (c), (e), or (i) hereof, except that if the Contractor has failed to submit his claim within the time provided in paragraph (c) or (i) hereof, and has failed to request extension of such time,
he shall have no such right of appeal. In any case where the Contracting Officer has made a determination of the amount due under paragraph (c), (e) or (i) hereof, the Government shall pay to the Contractor the following: (i) if there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Contracting Officer, or (ii) if an appeal has been taken, the amount finally determined on such appeal.

(h) In arriving at the amount due the Contractor under this clause there shall be deducted (i) all unliquidated advance or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this contract, (ii) any claim which the Government may have against the Contractor in connection with this contract, and (iii) the agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the Government.

(i) If the termination hereunder be partial, the Contractor may file with the Contracting Officer a claim for an equitable adjustment of the price or prices specified in the contract relating to the continued portion of the contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices. Any claim by the Contractor for an equitable adjustment under this clause must be asserted within ninety (90) days from the effective date of the termination notice, unless an extension is granted in writing by the Contracting Officer.

(j) The Government may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of this contract whenever in the opinion of the Contracting Officer the aggregate of such payments shall be within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this clause, such excess shall be payable by the Contractor to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury pursuant to Public Law 92-44, 85 STAT 97 for the Renegotiation Board, for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to the Government; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten days after the date of such retention or disposition, or such later date as determined by the Contracting Officer by reason of the circumstances.

(k) Unless otherwise provided for in this contract, or by applicable statute, the Contractor shall - from the effective date of termination until the expiration of three years after final settlement under this contract - preserve and make available to the Government at all reasonable times at the office of the Contractor but without direct charge to the Government, all his books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this contract and relating to the work terminated hereunder, or, to the extent approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions thereof. (DAR 7-602.29(a))

19. PRICING OF ADJUSTMENTS (1970 JUL)

When costs are a factor in any determination of a contract price adjustment pursuant to the "Changes" clause or any other provision of this contract, such costs shall be in accordance with Section XV of the Defense Acquisition Regulation as in effect on the date of this contract. (DAR 7-103.26)

(29 Jul 80) 13 (Const. Gen. Prov.)

SF 23A E-16
20. PATENT INDEMNITY (1964 JUN)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any Letters Patent of the United States (except Letters Patent issued upon an application which is now or may hereafter be, for reasons of national security, ordered by the Government to be kept secret or otherwise withheld from issue) arising out of the performance of this contract or out of the use or disposal by or for the account of the Government of supplies furnished or construction work performed hereunder. (DAR 7-602.16(a))

21. ADDITIONAL BOND SECURITY (1976 OCT)

If any surety upon any bond furnished in connection with this contract becomes unacceptable to the Government, or if any such surety fails to furnish reports as to his financial condition from time to time as requested by the Government, or if the contract price is increased to such an extent that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the Government and of persons supplying labor or materials in the prosecution of the work contemplated by this contract. (DAR 7-602.17)

22. EXAMINATION OF RECORDS BY COMPTROLLER GENERAL (1975 JUN)

(a) This clause is applicable if the amount of this contract exceeds $10,000 and was entered into by means of negotiation, including small business restricted advertising but is not applicable if this contract was entered into by means of formal advertising.

(b) The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under this contract or such lesser time specified in either Appendix M of the Defense Acquisition Regulation or the Federal Procurement Regulations Part 1-20, as appropriate, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this contract.

(c) The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under the subcontract or such lesser time specified in either Appendix M of the Defense Acquisition Regulation or the Federal Procurement Regulations Part 1-20, as appropriate, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term "subcontract" as used in this clause excludes (i) purchase orders not exceeding $10,000 and (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

(d) The periods of access and examination described in (b) and (c) above for records which relate to (i) appeals under the "Disputes" clause of this contract, (ii) litigation or the settlement of claims arising out of the performance of this contract, or (iii) costs and expenses of this contract as to which exception has been taken by the Comptroller General or any of his duly authorized representatives, shall continue until such appeals, litigation, claims or exceptions have been disposed of. (DAR 7-104.15)

(29 Jul 80)

E-17 SF 23A

(Const. Gen. Prov.)
23. BUY AMERICAN ACT (1966 OCT)

(a) Agreement. In accordance with the Buy American Act (41 U.S.C. 10a-10d), the Contractor agrees that only domestic construction material will be used (by the Contractor, subcontractors, materialmen, and suppliers) in the performance of this contract, except for nondomestic construction material listed in the "Nondomestic Construction Materials" clause, if any, of this contract.

(b) Domestic construction material. "Construction material" means any article, material, or supply brought to the construction site for incorporation in the building or work. An unmanufactured construction material is a "domestic construction material" if it has been mined or produced in the United States. A manufactured construction material is a "domestic construction material" if it has been manufactured in the United States and if the cost of its components which have been mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. "Component" means any article, material, or supply directly incorporated in a construction material.

(c) Domestic component. A component shall be considered to have been "mined, produced, or manufactured in the United States" (regardless of its source in fact) if the article, material, or supply in which it is incorporated was manufactured in the United States and the component is of a class or kind determined by the Government to be not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality. (DAR 7-602.20)

24. EQUAL OPPORTUNITY (1978 SEP)

If, during any twelve (12) month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded Federal contracts and/or subcontracts which have an aggregate value in excess of $10,000, the Contractor shall comply with (1) through (7) below. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.)

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this Equal Opportunity clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the contractor's commitments under this Equal Opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(29 Jul 80)

(Constr. Gen. Prov.)

SF 23A E-18
(4) The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

(6) In the event of the Contractor's noncompliance with the Equal Opportunity clause of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States. (DAR 7-103.18(a))

25. COVENANT AGAINST CONTINGENT FEES (1958 JAN)

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commissions, percentage, brokerage or contingent fee. (DAR 7-103.20)

26. OFFICIALS NOT TO BENEFIT (1949 JUL)

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit. (DAR 7-103.19)

27. CONVICT LABOR (1975 OCT)

In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment (29 Jul 80) (Const. Gen. Prov.)

28. UTILIZATION OF SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (1980 AUG)

(a) It is the policy of the United States that small business and small business concerns owned and controlled by socially and economically disadvantaged individuals shall have the maximum practicable opportunity to participate in the performance of contracts let by any Federal agency.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with the efficient performance of this contract. The term "subcontract" means any agreement (other than one involving an employer-employee relationship) to be entered into by a Federal Government prime contractor or subcontractor calling for supplies or services required for the performance of the original contract or subcontract. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) As used in this contract, the term "small business concern" shall mean a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. The term "small business concern owned and controlled by socially and economically disadvantaged individuals," hereafter referred to as disadvantaged business, shall mean a small business concern -

(1) which is at least 51 per centum owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 per centum of the stock of which is owned by one or more socially and economically disadvantaged individuals; and

(2) whose management and daily business operations are controlled by one or more of such individuals. The Contractor shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans (i.e., American Indians, Eskimos, Aleuts and Native Hawaiians), Asian-Pacific Americans (i.e., U.S. citizens whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust Territories of the Pacific, Northern Mariana, Laos, Cambodia, and Taiwan, and other minorities, or any individuals found to be disadvantaged by the Administration pursuant to Section 6(a) of the Small Business Act.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as either a small business concern or a small business concern owned and controlled by socially and economically disadvantaged individuals. (DAR 7-104.14(a))

29. FEDERAL, STATE, AND LOCAL TAXES (1971 NOV)

(a) Except as may be otherwise provided in this contract, the contract price includes all applicable Federal, State, and local taxes and duties.

(b) Nevertheless, with respect to any Federal excise tax or duty on the transactions or property covered by this contract, if a statute, court decision, written ruling, or regulation takes effect after the contract date, and -

(1) results in the Contractor being required to pay or bear the burden of any such Federal excise tax or duty or increase in the rate thereof which would not otherwise have been payable on such transactions or property, the contract price shall be increased by the amount of such tax or duty or rate increase, provided the Contractor warrants in writing that no amount for

(14 Oct 80) (Const. Gen. Prov.)

SF 23A E-20
such newly imposed Federal excise tax or duty or rate increase was included in the contract price as a contingency reserve or otherwise; or

(2) results in the Contractor not being required to pay or bear the burden of, or in his obtaining a refund or drawback of, any such Federal excise tax or duty which would otherwise have been payable on such transactions or property or which was the basis of an increase in the contract price, the contract price shall be decreased by the amount of the relief, refund, or drawback, or that amount shall be paid to the Government, as directed by the Contracting Officer. The contract price shall be similarly decreased if the Contractor, through his fault or negligence or his failure to follow instructions of the Contracting Officer, is required to pay or bear the burden of, or does not obtain a refund or drawback of, any such Federal excise tax or duty.

(c) Paragraph (b) above shall not be applicable to social security taxes or to any other employment tax.

(d) No adjustment of less than $100 shall be made in the contract price pursuant to paragraph (b) above.

(e) As used in paragraph (b) above, the term "contract date" means the date set for bid opening, or if this is a negotiated contract, the contract date. As to additional supplies or services procured by modification to this contract, the term "contract date" means the date of such modification.

(f) Unless there does not exist any reasonable basis to sustain an exemption, the Government upon the request of the Contractor shall, without further liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax; provided that, evidence appropriate to establish exemption from any Federal excise tax or duty which may give rise to either an increase or decrease in the contract price will be furnished only at the discretion of the Government.

(g) The Contractor shall promptly notify the Contracting Officer of matters which will result in either an increase or decrease in the contract price and shall take action with respect thereto as directed by the Contracting Officer. (DAR 7-103.10(a))

30. DAVIS-BACON ACT (40 U.S.C. 276a to a-7) (1977 DEC)

If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms.

(a) All mechanics and laborers, including apprentices and trainees, employed or working directly upon the site of the work shall be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Copeland Regulations (29 CFR, Part 3)), the full amounts due at time of payment computed at wage rates not less than the aggregate of the basic hourly rates and the rates of payments, contributions, or costs for any fringe benefits contained in the wage determination decision of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor or subcontractor and such laborers and mechanics. A copy of such wage determination decision shall be kept posted by the Contractor at the site of the work in a prominent place where it can be easily seen by the workers. The term mechanics and laborers shall be deemed to include apprentices and trainees not covered by an approved program as provided by the apprentice and trainee clause of the contract.
(b) The Contractor may discharge his obligation under this clause to workers in any classification for which the wage determination decision contains:

(1) Only a basic hourly rate of pay, by making payment at not less than such basic hourly rate, except as otherwise provided in the Copeland Regulations (29 CFR, Part 3); or

(2) Both a basic hourly rate of pay and fringe benefits payments, by making payment in cash, by irrevocably making contributions pursuant to a fund, plan, or program for, and or by assuming an enforceable commitment to bear the cost of, bona fide fringe benefits contemplated by the Davis-Bacon Act, or by any combination thereof. Contributions made, or costs assumed, on other than a weekly basis shall be considered as having been constructively made or assumed during a weekly period to the extent that they apply to such period. Where a fringe benefit is expressed in a wage determination in any manner other than as an hourly rate and the Contractor pays a cash equivalent or provides an alternative fringe benefit, he shall furnish information with his payrolls showing how he determined that the cost incurred to make the cash payment or to provide the alternative fringe benefit is equal to the cost of the wage determination fringe benefit. In any case where the Contractor provides a fringe benefit different from any contained in the wage determination, he shall similarly show how he arrived at the hourly rate shown therefor. In the event of disagreement between or among the interested parties as to an equivalent of any fringe benefit, the Contracting Officer shall submit the question, together with his recommendation, to the Secretary of Labor for final determination.

(c) The assumption of an enforceable commitment to bear the cost of fringe benefits, or the provision of any fringe benefits not expressly listed in section 1(b)(2) of the Davis-Bacon Act or in the wage determination decision forming a part of the contract, may be considered as payment of wages only with the approval of the Secretary of Labor pursuant to a written request by the Contractor. The Secretary of Labor may require the Contractor to set aside assets, in a separate account, to meet his obligations under any unfunded plan or program.

(d) The Contracting Officer shall require that any class of laborers or mechanics, including apprentices and trainees, which is not listed in the wage determination decision and which is to be employed under the contract shall be classified or reclassified conformably to the wage determination decision, and shall report the action taken to the Secretary of Labor. If the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers or mechanics, including apprentices and trainees, to be used, the Contracting Officer shall submit the question, together with his recommendation, to the Secretary of Labor for final determination.

(e) In the event it is found by the Contracting Officer that any laborer or mechanic, including all apprentices and trainees, employed by the Contractor or any subcontractor directly on the site of the work covered by this contract has been or is being paid at a rate of wages less than the rate of wages required by paragraph (a) of this clause, or by the "Apprentices and Trainees" clause of this contract, the Contracting Officer may (i) by written notice to the Government Prime Contractor terminate his right to proceed with the work, or such part of the work as to which there has been a failure to pay said required wages, and (ii) prosecute the work to completion by or otherwise, whereupon the Contractor and his sureties shall be liable to the Government for any excess costs occasioned the Government thereby.

(f) Paragraphs (a) through (e) of the clause shall apply to this contract to the extent that it is (i) a prime contract with the Government subject to

(IF this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

This contract is subject to the Contract Work Hours and Safety Standards Act and to the applicable rules, regulations, and interpretations of the Secretary of Labor.

(a) The Contractor shall not require or permit any laborer or mechanic, including apprentices, trainees, watchmen, and guards in any workweek in which he is employed on any work under this contract to work in excess of eight (8) hours in any calendar day or in excess of forty (40) hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer or mechanic, including apprentices, trainees, watchmen, and guards, receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight (8) hours in any calendar day or in excess of forty (40) hours in such workweek, whichever is the greater number of overtime hours. The "basic rate of pay," as used in this clause, shall be the amount paid per hour, exclusive of the Contractor's contribution or cost for fringe benefits and any cash payment made in lieu of providing fringe benefits, or the basic hourly rate contained in the wage determination, whichever is greater.

(b) In the event of any violation of the provisions of paragraph (a), the Contractor shall be liable to any affected employee for any amounts due, and to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including an apprentice, trainee, watchman, or guard, employed in violation of the provisions of paragraph (a) in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight (8) hours or in excess of the standard workweek of forty (40) hours without payment of the overtime wages required by paragraph (a). (DAR 7-602.23(a)(ii))

32. APPRENTICES AND TRAINEES (1977 DEC)

(IF this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

(a) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a state apprenticeship agency recognized by the Bureau, or if a person is employed in his first ninety (90) days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a state apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen in any craft classification employed on this contract shall not be greater than the ratio permitted to the Contractor as to his entire work force under the register

(14 Oct 80)

(Const. Gen. Prov.)

E-23 SF 23A
program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in paragraph (b) of this clause or is not registered or otherwise employed as stated above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or subcontractor shall furnish to the Contracting Officer written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates (expressed in percentages of the journeyman hourly rates), for the area of construction prior to using apprentices on the contract work. The wage rate paid apprentices shall be not less than the appropriate percentage of the journeyman's rate contained in the applicable wage determination.

(b) Trainees will be permitted to work at less than the predetermined rate for the work performed when they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification, by the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training. The ratio of trainees to journeymen on this contract shall not be greater than permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainee must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and not participating in a training plan approved by the Bureau of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or subcontractor shall furnish the Contracting Officer written evidence of the certification of his program, the registration of the trainee, and the ratios and wage rates prescribed in that program. In the event the Bureau of Apprenticeship and Training withdraws the approval of a training program, the Contractor shall no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of this contract. (DAR 7-602.23(a)(iiii))

33. PAYROLLS AND BASIC RECORDS (1977 DEC)

(If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

(a) The Contractor shall maintain payrolls and basic records relating thereto during the course of the work and shall preserve them for a period of three (3) years thereafter for all laborers and mechanics, including apprentices, trainees, watchmen, and guards, working at the site of the work. Such records shall contain the name and address of each such employee, his correct classification, rate of pay (including rates of contributions for, or costs assumed to provide, fringe benefits), daily and weekly number of hours worked, deductions made and actual wages paid. (NOTE: Watchmen and guards are reflected on payroll records for Contract Work Hours and Safety Standards Act purposes only.) Whenever the Contractor has obtained approval from the Secretary of Labor as provided in paragraph (c) of the clause entitled "Davis-Bacon Act," he shall maintain records which show the commitment, its approval, written communication of the plan or program to the laborers or mechanics affected, and the costs anticipated or incurred under the plan or program.

(14 Oct 80) (Const. Gen. Prov.)

SF 23A   E-24
(b) The Contractor shall submit weekly a copy of all payrolls to the Contracting Officer. The Government Prime Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The copy shall be accompanied by a statement signed by the Contractor indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor, and that the classifications set forth for each laborer or mechanic, including apprentices and trainees, conform with the work he performed. Weekly submission of the "Statement of Compliance" required under this contract and the Copeland Regulations of the Secretary of Labor (29 CFR, Part 3) shall satisfy the requirement for submission of the above statement. The Contractor shall submit also a copy of any approval by the Secretary of Labor with respect to fringe benefits which is required by paragraph (c) of the clause entitled "Davis-Bacon Act."

(c) The Contractor shall make the records required under this clause available for inspection by authorized representatives of the Contracting Officer and the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. (DAR 7-602.23(a)(iv))

34. COMPLIANCE WITH COPELAND REGULATIONS (1964 JUN)
(If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

The Contractor shall comply with the Copeland Regulations of the Secretary of Labor (29 CFR, Part 3) which are incorporated herein by reference. (DAR 7-602.23(a)(v))

35. WITHHOLDING OF FUNDS (1977 DEC)
(If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

(a) The Contracting Officer may withhold or cause to be withheld from the Government Prime Contractor so much of the accrued payments or advances as may be considered necessary (i) to pay laborers and mechanics, including apprentices, trainees, watchmen, and guards, employed by the Contractor or any subcontractor on the work the full amount of wages required by the contract, and (ii) to satisfy any liability of the Contractor and any subcontractor for liquidated damages under paragraph (b) of the clause entitled "Contract Work Hours and Safety Standards Act—Overtime Compensation."

(b) If the Contractor or any subcontractor fails to pay any laborer, mechanic, apprentice, trainee, watchman, or guard employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Government Prime Contractor, take such action as may be necessary to cause suspension of any further payments or advances until such violations have ceased. (DAR 7-602.23(a)(vi))

36. SUBCONTRACTS (1972 FEB)
(If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

(14 Oct 80) (Const. Gen. Prov.)

E-25 SF 23A
The Contractor agrees to insert the clauses hereof entitled "Davis-Bacon Act," "Contract Work Hours and Safety Standards Act-Overtime Compensation," "Apprentices and Trainees," "Payrolls and Basic Records," "Compliance with Copeland Regulations," "Withholding of Funds," "Subcontracts," and "Contract Termination-Debarment" in all subcontracts. The term "Contractor" as used in such clauses in any subcontract shall be deemed to refer to the subcontractor except in the phrase "Government Prime Contractor." (DAR 7-602.23(a)(vii))

37. CONTRACT TERMINATION - DEBARMENT (1972 APR)
(If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)


38. DISPUTES CONCERNING LABOR STANDARDS (1977 DEC)
(If this contract is with a State or political subdivision thereof, the Contractor agrees to comply with the requirements of the Contract Work Hours Standards Act and to insert this clause in all subcontracts hereunder with private persons or firms)

Disputes arising out of the labor standards provisions of this contract shall be subject to the Disputes clause except to the extent such disputes involve the meaning of classifications or wage rates contained in the wage determination decision of the Secretary of Labor or the applicability of the labor provisions of this contract which questions shall be referred to the Secretary of Labor in accordance with the procedures of the Department of Labor. (DAR 7-602.23(a)(ix))

39. CONTRACTOR INSPECTION SYSTEM (1964 NOV)

The Contractor shall (i) maintain an adequate inspection system and perform such inspections as will assure that the work performed under the contract conforms to contract requirements, and (ii) maintain and make available to the Government adequate records of such inspections. (DAR 7-602.10(a))

40. GRATUITIES (1952 MAR)

(a) The Government may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract if it is found, after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract; provided, that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event this contract is terminated as provided in paragraph (a) hereof, the Government shall be entitled (i) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the

(14 Oct 80)

(Const. Gen. Prov.)

SF 23A E-26
contract by the Contractor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.

(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract. (DAR 7-104.16)

41. SUBCONTRACTING PLAN FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (FORMALLY ADVERTISED) (1982 APR)

(The following clause is applicable if this contract (1) offers subcontracting possibilities, (2) is expected to exceed $500,000, or $1,000,000 in the case of construction of any public facility, and (3) is required to include the clause in DAR 7-104.14(a))

(a) This provision does not apply to small business concerns.

(b) The apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan which addresses separately subcontracting with small business concerns and small disadvantaged business concerns, and which shall be included in and made a material part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for award of a contract. As a minimum, the subcontracting plan shall include -

(1) Separate percentage goals (expressed in terms of percentage of total planned subcontracting dollars) for the utilization as subcontractors of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals. For the purposes of the subcontracting plan, the Contractor shall include all subcontracts to be awarded for the specific purpose of performing this contract and may include a proportionate share of supplies and services whose costs are normally allocated as indirect or overhead costs when reasonably determined to be attributable to this contract.

a. A statement of: (i) total dollars planned to be subcontracted; (ii) total dollars planned to be subcontracted to small business; and (iii) total dollars planned to be subcontracted to small disadvantaged business.

b. A description of the principal supply and service areas to be subcontracted and an identification of those areas where it is planned to use (i) small business subcontractors, and (ii) small disadvantaged business subcontractors.

c. A statement of the method used in developing proposed subcontracting goals for small business and small disadvantaged business concerns.

d. If the offeror includes indirect and overhead costs as an element in establishing the goals in the subcontracting plan, the method used in determining the proportionate share of indirect and overhead costs incurred with (i) small business, and (ii) small disadvantaged business subcontractors shall be explained.

e. A statement of the method used for solicitation purposes (e.g., did the offeror use company source lists, the small business and disadvantaged small business source identification system provided by the Small Business Administration's Procurement Automated Source System, the National Minority Purchasing Council Vendor Information Service, or the services provided by the U.S. Department of Commerce Minority Business (16 Jul 82)

(Const. Gen. Prov.)

E-27 SF 23A
Development Agency's Research and Information Division, and the facilities of small business and disadvantaged business trade associations?).

(2) The name of an individual within the employ of the bidder who will administer the subcontracting plan of the bidder and a description of the duties of such individual;

(3) A description of the efforts the bidder will make to assure that small business and small disadvantaged business concerns will have an equitable opportunity to compete for subcontracts;

(4) Assurances that the bidder will include the clause entitled "Utilization of Small Business and Small Disadvantaged Business Concerns" in all subcontracts which offer further subcontracting possibilities in the United States and that the bidder will require all subcontractors (except small business concerns) who receive subcontracts in excess of $1,000,000 in the case of a contract for the construction of any public facility, or in excess of $500,000 in the case of all other contracts, to adopt a plan in consonance with this clause;

(5) Assurances that the bidder will submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the bidder with the subcontracting plan; and

(6) A recitation of the types of records the successful bidder will maintain to demonstrate procedures which have been adopted to comply with the requirements and goals set forth in the plan, including the establishment of source lists of small business concerns and small disadvantaged business concerns; and efforts to identify and award subcontracts to such small business concerns. The records shall include at least the following (these records may be maintained on a plant-wide or company-wide basis unless otherwise indicated):

a. Small and small disadvantaged business source lists, guides, and other data identifying small and small disadvantaged business vendors.

b. Organizations contacted for small and small disadvantaged business sources.

c. On a contract-by-contract basis, records on all subcontract solicitations over $100,000, indicating on each solicitation (i) whether small business was solicited and if not, why not; (ii) whether small disadvantaged business was solicited and if not, why not; and (iii) reasons for the failure of responding small businesses or small disadvantaged businesses to receive the subcontract award.

d. Records to support such efforts as:

(i) contacts with disadvantaged and small business trade associations;

(ii) contacts with business development organizations; and

(iii) attendance at small and small disadvantaged business procurement conferences and trade fairs.

e. Records to support internal activities to guide and encourage buyers such as:

(i) workshops, seminars, training programs, etc.; and

(ii) monitoring activities to evaluate compliance.

f. On a contract-by-contract basis, records to support award data submitted to the Government to include name, address, and size status of subcontractor.

(c) In order to effectively implement this plan, the Contractor shall:

(16 Jul 82)
(1) Issue and promulgate company-wide policy statements in support of this effort, develop written procedures and work instructions, and assign specific responsibilities regarding the requirements of this clause.

(2) Demonstrate continuing management interest and involvement in support of these programs through such actions as regular reviews of progress and establishment of overall corporate and divisional goals and objectives.

(3) Train and motivate Contractor personnel in support of these programs.

(4) Assist small business and small disadvantaged business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business and small disadvantaged subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(5) Provide adequate and timely consideration of the potentialities of small business and small disadvantaged business concerns in all "make-or-buy" decisions.

(6) Counsel and discuss subcontracting opportunities with representatives of small and disadvantaged business firms as are referred by the Small and Disadvantaged Business Utilization Specialist responsible for monitoring performance under this program and representatives of the SBA.

(d) The Contractor shall submit SF 295 in accordance with instructions provided on the form.

(e) The bidder understands that:

(1) Prior compliance of the bidder with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the bidder for award of the contract.

(2) The failure of any Contractor or subcontractor to comply in good faith with (i) the clause entitled "Utilization of Small Business and Small Disadvantaged Business Concerns", or (ii) the terms of any subcontracting plan required by this "Small Business and Small Disadvantaged Business Subcontracting Plan (Advertised)" provision, will be a material breach of the contract or subcontract.

(f) In the acquisition of commercial products, the bidder further understands that:

(1) If a commercial product (defined below) is offered, the required subcontracting plan may cover the company's production generally, both for Government contracts and for regular commercial sales, rather than just this acquisition. In such cases, the Contractor may request approval from the Contracting Officer to submit one company-wide, or division-wide, annual plan. If such request is deemed appropriate, the offeror shall submit a proposed company-wide, or division-wide, annual plan for acceptance.

(2) Upon approval by the Contracting Officer, the plan will remain in effect for the company's entire fiscal year. During this period, Government contracts for commercial products of the affected company or division will not be required to contain individual subcontracting plans relating only to the supply or services being acquired, unless the Contracting Officer determines for a particular contract that there are unforeseen possibilities for small business and small disadvantaged business subcontracting.

(3) At least 60 days before the scheduled termination of the company or division-wide plan, the Contractor may submit to the Contracting Officer a proposed company or division-wide subcontracting plan for its commercial products for the succeeding fiscal year. If the plan would

(16 Jul 82)  (Const. Gen. Prov.)

E-29  SF 23A
otherwise terminate prior to approval of the succeeding fiscal year's plan, it will remain in effect until the succeeding plan is accepted or rejected, but no longer than 60 days after the end of the company's fiscal year.

(4) For the purpose of this program, the term "commercial product" means a product in regular production sold in substantial quantities to the general public and/or industry at established catalog or market prices. A product which, in the opinion of the Contracting Officer, differs only insignificantly from the Contractor's commercial product may be regarded for the purpose of this clause as a commercial product. (DAR 7-104.14(c))

42. NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (1965 JAN)

(The provisions of this clause shall be applicable only if the amount of this contract exceeds $10,000.)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) This clause shall be included in all subcontracts. (DAR 7-103.23)

43. AUTHORIZATION AND CONSENT (1964 MAR)

The Government hereby gives its authorization and consent (without prejudice to any rights of indemnification) for all use and manufacture, in the performance of this contract or any part hereof or any amendment hereto or any subcontract hereunder (including any lower-tier subcontract), of any invention described in and covered by a patent of the United States (i) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract, or (ii) utilized in the machinery, tools, or methods the use of which necessarily results from compliance by the Contractor or the using subcontractor with (a) specifications or written provisions now or hereafter forming a part of this contract, or (b) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clauses, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted. (DAR 7-103.22)

44. COMPOSITION OF CONTRACTOR (1965 JAN)

If the Contractor hereunder is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder. (DAR 7-602.32)

45. SITE INVESTIGATION (1965 JAN)

The Contractor acknowledges that he has investigated and satisfied himself as to the conditions affecting the work, including but not restricted to those (14 Oct 80)

(Const. Gen. Prov.)

SF 23A   E-30
bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work. The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from information presented by the drawings and specifications made a part of this contract. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The Government assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Government. (DAE 7-602.33)

46. PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS (1965 JAN)

(a) The Contractor will preserve and protect all existing vegetation such as trees, shrubs, and grass on or adjacent to the site of work which is not to be removed and which does not unreasonably interfere with the construction work. Care will be taken in removing trees authorized for removal to avoid damage to vegetation to remain in place. Any limbs or branches of trees broken during such operations or by the careless operation of equipment, or by workmen, shall be trimmed with a clean cut and painted with an approved tree pruning compound as directed by the Contracting Officer.

(b) The Contractor will protect from damage all existing improvements or utilities at or near the site of the work, the location of which is made known to him, and will repair or restore any damage to such facilities resulting from failure to comply with the requirements of this contract or the failure to exercise reasonable care in the performance of the work. If the Contractor fails or refuses to repair any such damage promptly, the Contracting Officer may have the necessary work performed and charge the cost thereof to the Contractor. (DAE 7-602.34)

47. OPERATIONS AND STORAGE AREAS (1965 JAN)

(a) All operations of the Contractor (including storage of materials) upon Government premises shall be confined to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by his operations.

(b) Temporary buildings (storage sheds, shops, offices, etc.) may be erected by the Contractor only with the approval of the Contracting Officer, and shall be built with labor and materials furnished by the Contractor without expense to the Government. Such temporary buildings and utilities shall remain the property of the Contractor and shall be removed by him at his expense upon the completion of the work. With the written consent of the Contracting Officer, such buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways or construct and use such temporary roadways as may be authorized by the Contracting Officer. Where materials are transported in the prosecution of the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or

(14 Oct 80) (Const. Gen. Prov.)

E-31 SF 23A
prescribed by any Federal, State or local law or regulation. When it is necessary to cross curbs or sidewalks, protection against damage shall be provided by the Contractor and any damaged roads, curbs, or sidewalks shall be repaired by, or at the expense of the Contractor. (DAR 7-602.35)

48. MODIFICATION PROPOSALS - PRICE BREAKDOWN (1968 APR)

The Contractor, in connection with any proposal he makes for a contract modification, shall furnish a price breakdown, itemized as required by the Contracting Officer. Unless otherwise directed, the breakdown shall be in sufficient detail to permit an analysis of all material, labor, equipment, subcontract, and overhead costs, as well as profit, and shall cover all work involved in the modification, whether such work was deleted, added or changed. Any amount claimed for subcontracts shall be supported by a similar price breakdown. In addition, if the proposal includes a time extension, a justification therefor shall also be furnished. The proposal, together with the price breakdown and time extension justification, shall be furnished by the date specified by the Contracting Officer. (DAR 7-602.36)

49. SUBCONTRACTORS (1979 MAR)

(In construction contracts to be performed in United States possessions (as defined in DAR 18-703.2) and in Puerto Rico, the second sentence is modified to refer only to the clauses required by DAR 18-703.2)

Within seven days after the award of any subcontract either by himself or a subcontractor, the Contractor shall deliver to the Contracting Officer a completed DD Form 1566. The form shall include the subcontractor's acknowledgment of the inclusion in his subcontract of the clauses of this contract entitled "Davis-Bacon Act," "Contract Work Hours and Safety Standards Act-Overtime Compensation," "Apprentices and Trainees," "Compliance with Copeland Regulations," "Withholding of Funds," "Subcontracts," "Contract Termination-Determent," and "Payrolls and Basic Records." Nothing contained in this contract shall create any contractual relation between the subcontractor and the Government. (DAR 7-602.37)

50. CLEANING UP (1965 JAN)

The Contractor shall at all times keep the construction area, including storage areas used by him, free from accumulations of waste material or rubbish and prior to completion of the work remove any rubbish from the premises and all tools, scaffolding, equipment, and materials not the property of the Government. Upon completion of the construction the Contractor shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to the Contracting Officer. (DAR 7-602.40)

51. ADDITIONAL DEFINITIONS (1965 JAN)

(a) Wherever in the specifications or upon the drawings the words "directed," "required," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the "direction," "requirement," "ordered," "designation," or "prescription," of the Contracting Officer is intended and similarly the words "approved," "acceptable," "satisfactory" or words of like import shall mean "approved by" or "acceptable to," or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(b) Where "as shown," "as indicated," "as detailed," or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word

(14 Oct 80)

(Const. Gen. Prov.)

SF 23A   E-32
"provided" as used herein shall be understood to mean "provided complete in
place," that is "furnished and installed." (DAR 7-602.41)

52. ACCIDENT PREVENTION (1981 AUG)
(a) In order to provide safety controls for protection to the life and
health of employees and other persons; for prevention of damage to property,
materials, supplies, and equipment; and for avoidance of work interruptions in
the performance of this contract, the Contractor shall comply with all
pertinent provisions of Corps of Engineers Manual, EM 385-1-1, dated 1 April
1981, entitled "Safety and Health Requirements Manual", and will also take or
cause to be taken such additional measures as the Contracting Officer may
determine to be reasonably necessary for the purpose.
(b) The Contractor will maintain an accurate record of, and will report
to the Contracting Officer in the manner and on the forms prescribed by the
Contracting Officer, exposure data and all accidents resulting in death,
traumatic injury, occupational disease, and damage to property, materials,
supplies and equipment incident to work performed under this contract.
(c) The Contracting Officer will notify the Contractor of any
noncompliance with the foregoing provisions and the action to be taken. The
Contractor shall, after receipt of such notice, immediately take corrective
action. Such notice, when delivered to the Contractor or his representative
at the site of the work, shall be deemed sufficient for the purpose. If the
Contractor fails or refuses to comply promptly, the Contracting Officer may
issue an order stopping all or part of the work until satisfactory corrective
action has been taken. No part of the time lost due to any such stop orders
shall be made the subject of claim for extension of time or for excess costs
or damages by the Contractor.
(d) Compliance with the provisions of this clause by subcontractors will
be the responsibility of the Contractor.
(e) Prior to commencement of the work the Contractor will:
(1) submit in writing his proposals for effectuating this
 provision for accident prevention;
(2) meet in conference with representatives of the Contracting
 Officer to discuss and develop mutual understandings relative
to administration of the over-all safety program. (DAR
7-602.42(a) & (b))

53. GOVERNMENT INSPECTORS (1965 JAN)
The work will be conducted under the general direction of the Contracting
Officer and is subject to inspection by his appointed inspectors to insure
strict compliance with the terms of the contract. No inspector is authorized
to change any provision of the specifications without written authorization of
the Contracting Officer, nor shall the presence or absence of an inspector
relieve the Contractor from any requirements of the contract. (DAR 7-602.43)

54. RIGHTS IN SHOP DRAWINGS (1966 APR)
(Applicable to all contracts calling for the delivery of shop drawings)
(a) Shop drawings for construction means drawings, submitted to the
Government by the Construction Contractor, subcontractor or any lower tier
subcontractor pursuant to a construction contract, showing in detail (i) the
proposed fabrication and assembly of structural elements and (ii) the
installation (i.e., form, fit, and attachment details) of materials or
equipment. The Government may duplicate, use, and disclose in any manner and
for any purpose shop drawings delivered under this contract.

(15 Mar 82) (Const. Gen. Prov.)

E-33 SF 23A
(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier. (DAR 7-602.47)

55. AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (1976 JUL)

(This clause is applicable pursuant to 41 C.F.R. 60-250, if this contract is for $10,000 or more.)

(a) The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans status in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(b) The Contractor agrees that all suitable employment openings of the Contractor which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment of the Contractor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The Contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of $10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not required to provide those reports set forth in paragraphs (d) and (e).

(c) Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and nonveterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the Contractor from any requirements in Executive Orders or regulations regarding nondiscrimination in employment.

(d) The reports required by paragraph (b) of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the Contractor has more than one hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of nondisabled veterans of the Vietnam era hired, (3) the number of disabled veterans of the Vietnam era hired, and (4) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 U.S.C. 1787. The Contractor shall submit a report within 30 days after the end of each reporting period wherein any performance is made on this contract identifying data for each hiring location. The Contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after final payment under the contract, during which time these reports and related documentation shall

(14 Oct 80)

(Const. Gen. Prov.)

SF 23A  E-34
be made available, upon request, for examination by any authorized representatives of the Contracting Officer or of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment and placement.

(e) Whenever the Contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these provisions and has so advised the State system, there is no need to advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(f) This clause does not apply to the listing of employment openings which occur and are filled outside of the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

(g) The provisions of paragraphs (b), (c), (d) and (e) of this clause do not apply to openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of his own organization or employer-union arrangement for that opening.

(h) As used in this clause:
   (1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: production and nonproduction; plant and office; laborers and mechanics; supervisory and nonsupervisory; technical; and executive, administrative, and professional openings as are compensated on a salary basis of less than $25,000 per year. This term includes full-time employment, temporary employment of more than three (3) days duration, and part-time employment. It does not include openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.
   (2) "Appropriate office of the State employment service system" means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.
   (3) "Openings which the Contractor proposes to fill from within his own organization" means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) and includes any openings which the Contractor proposes to fill from regularly established "recall" lists.
   (4) "Openings which the Contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement" means employment openings which the Contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the Contractor and representatives of his employees.

(14 Oct 80)  (Const. Gen. Prov.)

E-35 SF 23A
(i) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Vietnam Era Veterans' Readjustment Assistance Act, hereinafter referred to as the "Act" (38 U.S.C. 2012).

(j) In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(k) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, Office of Federal Contract Compliance Programs, provided by or through the Contracting Officer. Such notice shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.

(l) The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era.

(m) The Contractor will include the provisions of this clause in every subcontract or purchase order of $10,000 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

(DAR 7-103.2)

56. VALUE ENGINEERING INCENTIVE—CONSTRUCTION (1980 DEC)

(The following clause is applicable if this contract is in excess of $100,000)

(a) Applicability. This clause applies to any Contractor developed, prepared, and submitted Value Engineering Change Proposal (VECP).

(b) Definitions.

(1) "Contractor's development and implementation costs" means those costs incurred on a VECP before Government acceptance and those costs the Contractor incurs specifically to make the changes required by Government acceptance of a VECP.

(2) "Government costs" means those agency costs that result directly from developing and implementing the VECP and any net increases in the cost of testing, operations, maintenance, and logistic support. They do not include the normal administrative costs of processing the VECP.

(3) "Instant contract savings" means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs (including subcontractor's development and implementation costs). (See paragraph (g).)

(4) "Value Engineering Change Proposal (VECP)" means a proposal that:

(i) requires a change to this, the instant contract, to implement; and

(ii) results in reducing the contract price or estimated cost without impairing essential functions or characteristics, provided that it does not involve a change in deliverable end-item quantities only.

(29 Jan 81)

(Const. Gen. Prov.)

SF 23A E-36
(c) VECP Preparation. As a minimum, the Contractor shall include the information described in (1) through (6) in each VECP. If the proposed change affects contractually required configuration management procedures, the instructions in the procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

1. A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the item's performance.

2. A list of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

3. A separate, detailed cost estimate for both the affected portions of the existing contract requirement and the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (g). The Contractor shall also include a description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

4. A projection of any effects the proposed change would have on collateral costs to the agency.

5. A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

6. Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submissions.

1. The Contractor shall submit VECPs to the Resident Engineer at the worksite, with a copy to the Contracting Officer. The Contracting Officer shall notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required because of extenuating circumstances, the Contractor shall be notified within the 45-day period and provided the reason for the delay and the expected date of the Contracting Officer's decision. VECPs shall be processed expeditiously; however, the Government shall not be liable for any delay in acting upon a VECP.

2. If the VECP is not accepted, the Contracting Officer shall provide the Contractor written notification fully explaining the reasons for rejection. The Contractor may withdraw, in whole or in part, any VECP not accepted by the Government within the period specified in the VECP. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(e) Acceptance. Any VECP may be accepted in whole or in part by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not be reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The Contracting Officer's decision to accept all or part of any VECP shall be final and not subject to the Disputes clause.

(f) Sharing.

(29 Jan 81)
(1) **Rates.** The Contractor's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by 55 percent for fixed-price contracts and 25 percent for cost-reimbursement contracts.

(2) **Payment.** Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to:

(i) accept the VECP;
(ii) reduce the contract price or estimated cost by the amount of instant contract savings; and
(iii) provide the Contractor's share of savings by adding the amount calculated in (f)(1) to the contract price or fee.

(g) **Subcontract.** The Contractor shall include appropriate VE clauses in an subcontract of $50,000 or more and may include them in subcontracts of lesser value. To compute any adjustment in the contract price under paragraph (f), the Contractor's VECP development and implementation costs shall include any subcontractor's development and implementation costs that clearly result from the VECP, but shall exclude any VE incentive payments to subcontractors. The Contractor may choose any arrangement for subcontractor VE incentive payments, provided that these payments are not made from the Government's share of the savings resulting from the VECP.

(h) **Data.** The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering Incentive--Construction clause of Contract, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a VECP submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations."

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (DAR 7-602.50)

57. AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS (1976 MAY)

(Contracts and subcontracts are exempt from the requirements of the following clause with regard to work performed outside the United States by employees who were not recruited within the United States.)

(a) The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(29 Jan 81)
(b) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(c) In the event of the Contractor's noncompliance with the requirements of this clause, action for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.

(d) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the Contracting Officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

(e) The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

(f) The Contractor will include the provisions of this clause in every subcontract or purchase order of $2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance. (DAR 7-103.28)

58. CLEAN AIR AND WATER (1975 OCT)
(Applicable only if the contract exceeds $100,000, or the contracting officer has determined that orders under an indefinite quantity contract in any one year will exceed $100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 1857c-8(c)(1) or the Federal Water Pollution Control Act (33 U.S.C. 1319(c)) and is listed by EPA, or the contract is not otherwise exempt.)

(a) The Contractor agrees as follows:

(i) To comply with all the requirements of section 114 of the Clean Air Act, as amended (42 U.S.C. 1857, et seq., as amended by Public Law 91-604) and section 308 of the Federal Water Pollution Control Act (33 U.S.C. 1251, as amended by Public Law 92-500), respectively, relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Act and the Water Act, respectively, and all regulations and guidelines issued thereunder before the award of this contract;

(ii) That no portion of the work required by this prime contract will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date this contract was awarded unless and until the EPA eliminates the name of such facility or facilities from such listing;

(iii) To use his best efforts to comply with clean air standards and clean water standards at the facilities in which the contract is being performed; and

(iv) To insert the substance of the provisions of this clause in any nonexempt subcontract, including this paragraph (iv).

(b) The terms used in this clause have the following meanings.

(i) The term "Air Act" means the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Public Law 91-604).

(29 Jan 81) (Const. Gen. Prov.)

E-39 SF 23A

(iii) The term "clean air standards" means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in section 110(d) of the Clean Air Act (42 U.S.C. 1857c-5(d), an approved implementation procedure or plan under section 111(c) or section 111(d), respectively, of the Air Act (42 U.S.C. 1857c-6(c) or (d)), or an approved implementation procedure under section 112(d) of the Air Act (42 U.S.C. 1857c-7(d)).

(iv) The term "clean water standards" means any enforceable limitation, control, condition, prohibition, standard or other requirement which is promulgated pursuant to the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. 1342), or by a local government to ensure compliance with pretreatment regulations as required by section 307 of the Water Act (33 U.S.C. 1317).

(v) The term "compliance" means compliance with clean air or water standards. Compliance shall also mean compliance with a schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency or an air or water pollution control agency in accordance with the requirement of the Air Act or Water Act and regulations issued pursuant thereto.

(vi) The term "facility" means any building, plant, installation, structure, mine, vessel or other floating craft, location, or site of operations, owned, leased, or supervised by a contractor, subcontractor, to be utilized in the performance of a contract or subcontract. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location or site shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are colocated in one geographical area.

(vii) The term "nonexempt contract or subcontract" means a contract or subcontract of more than $100,000 which is not otherwise exempted pursuant to the EPA regulations implementing the Air Act and Water Act (40 CFR 15.5), as further implemented in DAR 1-2302.4 or in FPR 1-1.2302-6 (whichever is applicable) and the procedures of the Department awarding the contract. (DAR 7-103.29)

59. NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (1958 SEP)

(a) Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.

(b) The Contractor agrees to insert the substance of this clause, including this paragraph (b), in any subcontract hereunder as to which a labor dispute may delay the timely performance of this contract; except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify his next higher tier subcontractor, or the prime contractor, as the case may be, of all relevant information with respect to such dispute. (DAR 7-104.4)

(29 Jan 81) (Const. Gen. Prov.)

SF 29A E-40
60. CONTRACT PRICES - BIDDING SCHEDULE (1968 APR)

(The following clause is applicable to contracts containing unit prices)

Payment for the various items listed in the Bidding Schedule shall constitute full compensation for furnishing all plant, labor, equipment, appliances, and materials, and for performing all operations required to complete the work in conformity with the drawings and specifications. All costs for work not specifically mentioned in the Bidding Schedule shall be included in the contract prices for the items listed. (DAR 7-603.5)

61. PRIORITIES, ALLOCATIONS, AND ALLOTMENTS (1975 OCT)

(The following clause is applicable to ratable contracts)

The Contractor shall follow the provisions of DMS Reg. 1 or DPS Reg. 1 and all other applicable regulations and orders of the Bureau of Domestic Commerce in obtaining controlled materials and other products and materials needed to fill this order. (DAR 7-104.18)

62. PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - PRICE ADJUSTMENTS (1970 JAN)

(The following clause is applicable if this contract is in excess of $500,000)

(a) This clause shall become operative only with respect to any modification of this contract which involves aggregate increases and/or decreases in costs plus applicable profits in excess of $500,000 unless the modification is priced on the basis of adequate competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. The right to price reduction under this clause is limited to defects in data relating to such modification.

(b) If any price, including profit, or fee, negotiated in connection with any price adjustment under this contract was increased by any significant sums because:

(i) the Contractor furnished cost or pricing data which was not complete, accurate and current as certified in the Contractor's Certificate of Current Cost or Pricing Data;

(ii) a subcontractor, pursuant to the clause of this contract entitled "Subcontractor Cost or Pricing Data - Price Adjustments" or any subcontract clause therein required, furnished cost or pricing data which was not complete, accurate and current as certified in the subcontractor's Certificate of Current Cost or Pricing Data;

(iii) a subcontractor or prospective subcontractor furnished cost or pricing data which was required to be complete, accurate and current and to be submitted to support a subcontract cost estimate furnished by the Contractor but which was not complete, accurate and current as of the date certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(iv) the Contractor or a subcontractor or prospective subcontractor furnished any data, not within (i), (ii) or (iii) above, which was not accurate, as submitted,

the price shall be reduced accordingly and the contract shall be modified in writing as may be necessary to reflect such reduction. However, any reduction in the contract price due to defective subcontract data of a prospective subcontractor, when the subcontract was not subsequently awarded to such subcontractor, will be limited to the amount (plus applicable overhead and profit markup) by which the actual subcontract, or actual cost to the

(15 Mar 82) (Const. Gen. Prov.)

E-41 SF 23A
Contractor if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor, provided the actual subcontract price was not affected by defective cost or pricing data.

Note: Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontracts, it is expected that the contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the contractor. However, the inclusion of such a clause and the terms thereof are matters for negotiation and agreement between the contractor and the subcontractor, provided that they are consistent with DAR 23-203 relating to Disputes provisions in subcontracts. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by his lower tier subcontractors. (DAR 7-104.29(b))

63. INTEREST (1972 MAY)

Notwithstanding any other provision of this contract, unless paid within thirty (30) days, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code) shall bear interest from the date due until paid and shall be subject to adjustments as provided by Part 6 of Appendix E of the Defense Acquisition Regulation, as in effect on the date of this contract. The interest rate per annum shall be the interest rate in effect which has been established by the Secretary of the Treasury pursuant to Public Law 92-61, 85 STAT 97 for the Renegotiation Board, as of the date the amount becomes due as herein provided. Amounts shall be due upon the earliest one of (i) the date fixed pursuant to this contract; (ii) the date of the first written demand for payment, consistent with this contract, including demand consequent upon default termination; (iii) the date of transmittal by the Government to the Contractor of a proposed supplemental agreement to confirm completed negotiations fixing the amount; or (iv) if this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or in connection with a negotiated pricing agreement not confirmed by contract supplement. (DAR 7-104.39)

64. AUDIT BY DEPARTMENT OF DEFENSE (1978 AUG)

(The following clause is applicable unless this contract was entered into by formal advertising and is not in excess of $100,000)

(a) General. The Contracting Officer or his representatives shall have the audit and inspection rights described in the applicable paragraphs (b), (c) and (d) below.

(b) Examination of Costs. If this is a cost reimbursement type, incentive, time and materials, labor hour, or price determinable contract, or any combination thereof, the Contractor shall maintain, and the Contracting Officer or his representatives shall have the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this contract. Such right of examination shall include inspection at all reasonable times of the Contractor's plants, or such parts thereof, as may be engaged in the performance of this contract.

(c) Cost or Pricing Data. If the Contractor submitted cost or pricing data in connection with the pricing of this contract or any change or modification thereto, unless such pricing was based on adequate price

(29 Jan 81) (Const. Gen. Prov.)

SF 23A E-42
competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation, the Contracting Officer or his representatives who are employees of the United States Government shall have the right to examine all books, records, documents and other data of the Contractor related to the negotiation, pricing or performance of such contract, change or modification, for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data submitted. Additionally, in the case of pricing any change or modification exceeding $100,000 to formally advertised contracts, the Comptroller General of the United States or his representatives who are employees of the United States Government shall have such rights. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.

(d) Reports. If the Contractor is required to furnish Contractor Cost Data Reports (CCDR), Contract Fund Status Reports (CFSR), or Cost Performance Reports (CPR) the Contracting Officer or his representatives shall have the right to examine books, records, other documents, and supporting materials, for the purpose of evaluating (i) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports, and (ii) the data reported.

(e) Availability. The materials described in (b), (c) and (d) above shall be made available at the office of the Contractor, at all reasonable times, for inspection, audit, or reproduction, until the expiration of three years from the date of final payment under this contract or such lesser time specified in Appendix M of the Defense Acquisition Regulation, and for such longer period, if any, as is required by applicable statute, or by other clauses of this contract, or by (1) and (2) below:

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for a period of three years from the date of any resulting final settlement.

(2) Records which relate to appeals under the "Disputes" clause of this contract, or litigation or the settlement of claims arising out of the performance of this contract, shall be made available until such appeals, litigation, or claims have been disposed of.

(f) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (f), in all subcontracts exceeding $10,000 hereunder, except altered as necessary for proper identification of the contracting parties and the Contracting Officer under the Government prime contract. (DAR 7-104.41(a))

65. SUBCONTRACTOR COST OR PRICING DATA - PRICE ADJUSTMENTS (1970 JAN)

(The following clause is applicable if this contract is in excess of $500,000)

(a) Paragraphs (b) and (c) of this clause shall become operative only with respect to any modification made pursuant to one or more provisions of this contract which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed $500,000. The requirements of this clause shall be limited to such modifications.

(b) The Contractor shall require subcontractors hereunder to submit cost or pricing data under the following circumstances: (i) prior to the award of any subcontract the amount of which is expected to exceed $500,000 when entered into; (ii) prior to the pricing of any subcontract modification which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed $500,000; except where the price is based on adequate price

(21 Apr 82) (Const. Gen. Prov.)

E-43 SF 23A
competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(c) The Contractor shall require subcontractors to certify that to the best of their knowledge and belief the cost and pricing data submitted under (b) above is accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract change or modification.

(d) The Contractor shall insert the substance of this clause including this paragraph (d) in each subcontract which exceeds $500,000. (DAR 7-104.42(b))

66.1 GOVERNMENT-FURNISHED PROPERTY (SHORT FORM) (1964 NOV)

(The following clause is applicable when Government Property having an acquisition cost of $50,000 or less is furnished to or acquired by the Contractor)

(a) The Government shall deliver to the Contractor, for use only in connection with this contract, the property described in the schedule or specifications (hereinafter referred to as "Government-furnished property"), at the times and locations stated therein. If the Government-furnished property, suitable for its intended use, is not so delivered to the Contractor, the Contracting Officer shall, upon timely written request made by the Contractor, and if the facts warrant such action, equitably adjust any affected provision of this contract pursuant to the procedures of the "Changes" clause hereof.

(b) Title to Government-furnished property shall remain in the Government. The Contractor shall maintain adequate property control records of Government-furnished property in accordance with sound industrial practice.

(c) Unless otherwise provided in this contract, the Contractor, upon delivery to him of any Government-furnished property, assumes the risk of, and shall be responsible for, any loss thereof or damage thereto except for reasonable wear and tear, and except to the extent that such property is consumed in the performance of this contract.

(d) The Contractor shall, upon completion of this contract, prepare for shipment, deliver f.o.b. origin, or dispose of all Government-furnished property not consumed in the performance of this contract or not theretofore delivered to the Government, as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or paid in such other manner as the Contracting Officer may direct. (DAR 7-104.24(f))

66.2 GOVERNMENT PROPERTY (FIXED PRICE) (1968 SEP)

(The following clause is applicable when Government Property having an acquisition cost in excess of $50,000 is furnished to or acquired by the Contractor)

(a) Government-Furnished Property. The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the property described as Government-furnished property in the Schedule or specifications, together with such related data and information as the Contractor may request and as may reasonably be required for the intended use of such property (hereinafter referred to as "Government-furnished property"). The delivery or performance dates for the supplies or services to be furnished by the Contractor under this contract are based upon the expectation that Government-furnished property suitable for use (except for such property furnished "as is") will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient time to

(21 Apr 82) (Const. Gen. Prov.)

SF 23A E-44
enable the Contractor to meet such delivery or performance dates. In the event that Government-furnished property is not delivered to the Contractor by such time or times, the Contracting Officer shall, upon timely written request made by the Contractor, make a determination of the delay, if any, occasioned by the Contractor thereby, and shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provision affected by any such delay, in accordance with the procedures provided for in the clause of this contract entitled "Changes." Except for Government-furnished property furnished "as is," in the event the Government-furnished property is received by the Contractor in a condition not suitable for the intended use the Contractor shall, upon receipt thereof, notify the Contracting Officer of such fact and, as directed by the Contracting Officer, either (i) return such property at the Government's expense or otherwise dispose of the property, or (ii) effect repairs or modifications. Upon the completion of (i) or (ii) above, the Contracting Officer upon written request of the Contractor shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provision affected by the rejection or disposition, or the repair or modification, in accordance with the procedures provided for in the clause of this contract entitled "Changes." The foregoing provisions for adjustment are exclusive and the Government shall not be liable to suit for breach of contract by reason of any delay in delivery of Government-furnished property or delivery of such property in a condition not suitable for its intended use.

(b) Changes in Government-furnished Property.

(1) by notice in writing, the Contracting Officer may (i) decrease the property provided or to be provided by the Government under this contract, or (ii) substitute other Government-owned property for property to be provided by the Government, or to be acquired by the Contractor for the Government, under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct with respect to the removal and shipping of property covered by such notice.

(2) In the event of any decrease in or substitution of property pursuant to subparagraph (1) above, or any withdrawal of authority to use property provided under any other contract or lease, which property the Government had agreed in the Schedule to make available for the performance of this contract, the Contracting Officer, upon the written request of the Contractor (or, if the substitution of property causes a decrease in the cost of performance, on his own initiative), shall equitably adjust such contractual provisions as may be affected by the decrease, substitution, or withdrawal, in accordance with the procedures provided for in the "Changes" clause of this contract.

(c) Title. Title to all property furnished by the Government shall remain in the Government. In order to define the obligations of the parties under this clause, title to each item of facilities, special test equipment, and special tooling (other than that subject to a "Special Tooling" clause) acquired by the Contractor for the Government pursuant to this contract shall pass to and vest in the Government when its use in the performance of this contract commences, or upon payment therefor by the Government, whichever is earlier, whether or not title previously vested. All Government-furnished property, together with all property acquired by the Contractor title to which vests in the Government under this paragraph, is subject to the provisions of this clause and is hereinafter collectively referred to as "Government

(29 Jan 81)
E-45 SF 23A
(Const. Gen. Prov.)
property." Title to Government property shall not be affected by the incorporation or attachment thereof to any property not owned by the Government, nor shall such Government property, or any part thereof, be or become a fixture or lose its identity as personalty by reason of affixation to any realty.

(d) Property Administration. The Contractor shall comply with the provisions of Appendix B, Defense Acquisition Regulation, as in effect on the date of the contract, which is hereby incorporated by reference and made a part of this contract. Material to be furnished by the Government shall be ordered or returned by the Contractor, when required, in accordance with the "Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors" (Appendix H, Defense Acquisition Regulation) as in effect on the date of this contract, which Manual is hereby incorporated by reference and made a part of this contract.

(e) Use of Government Property. The Government property shall, unless otherwise provided herein or approved by the Contracting Officer, be used only for the performance of this contract.

(f) Utilization, Maintenance and Repair of Government Property. The Contractor shall maintain and administer, in accordance with sound industrial practice, and in accordance with applicable provisions of Appendix B, a program for the utilization, maintenance, repair, protection, and preservation of Government property until disposed of by the Contractor in accordance with this clause. In the event that any damage occurs to Government property the risk of which has been assumed by the Government under this contract, the Government shall replace such items or the Contractor shall make such repair of the property as the Government directs; provided however, that if the Contractor cannot effect such repair within the time required, the Contractor shall dispose of such property in the manner directed by the Contracting Officer. The contract price includes no compensation to the Contractor for the performance of any repair or replacement for which the Government is responsible, and an equitable adjustment will be made in any contractual provisions affected by such repair or replacement of Government property made at the direction of the Government, in accordance with the procedures provided for in the "Changes" clause of this contract. Any repair or replacement for which the Contractor is responsible under the provisions of this contract shall be accomplished by the Contractor at his own expense.

(g) Risk of Loss. Unless otherwise provided in this contract, the Contractor assumes the risk of, and shall be responsible for, any loss of or damage to Government property provided under this contract upon its delivery to him or upon passage of title thereto to the Government as provided in paragraph (c) hereof, except for reasonable wear and tear and except to the extent that such property is consumed in the performance of this contract.

(h) Access. The Government, and any persons designated by it, shall at all reasonable times have access to the premises wherein any Government property is located, for the purpose of inspecting the Government property.

(i) Final Accounting and Disposition of Government Property. Upon the completion of this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property not consumed in the performance of this contract (including any resulting scrap) or not theretofore delivered to the Government, and shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property, as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid in such other manner as the Contracting Officer may direct.

(29 Jan 81)
(j) Restoration of Contractor's Premises and Abandonment. Unless otherwise provided herein, the Government:

(i) may abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and

(ii) has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j)(i) above), disposition on completion of need or of the contract (paragraph (i) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph (b) above.

(k) Communications. All communications issued pursuant to this clause shall be in writing or in accordance with the "Manual for Military Standard Requisitioning and Issue Procedure (MILSTRIP) for Defense Contractors" (Appendix H, Defense Acquisition Regulation). (DAR 7-104.24(a))

67. VARIATIONS IN ESTIMATED QUANTITIES (1968 APR)

(The following clause is not applicable to bid items listed in the "Variations in Estimated Quantities - Subdivided Items" clause, and also is not applicable to contracts for dredging work which contain the "Variations in Estimated Quantities - Dredging" clause.)

Where the quantity of a pay item in this contract is an estimated quantity and where the actual quantity of such pay item varies more than fifteen percent (15%) above or below the estimated quantity stated in this contract, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above one hundred fifteen percent (115%) or below eighty-five percent (85%) of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contracting Officer shall, upon receipt of a written request for an extension of time within ten (10) days from the beginning of such delay, or within such further period of time which may be granted by the Contracting Officer prior to the date of final settlement of the contract, ascertain the facts and make such adjustment for extending the completion date as in his judgment the findings justify. (DAR 7-603.27)

68. PROGRESS CHARTS AND REQUIREMENTS FOR OVERTIME WORK (1965 JAN)

(a) The Contractor shall within 5 days or within such time as determined by the Contracting Officer, after date of commencement of work, prepare and submit to the Contracting Officer for approval a practicable schedule, showing the order in which the Contractor proposes to carry on the work, the date on which he will start the several salient features (including procurement of materials, plant and equipment) and the contemplated dates for completing the same. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion at any time. The Contractor shall enter on the chart the actual progress at such intervals as directed by the Contracting Officer, and shall immediately deliver to the Contracting Officer three copies thereof. If the Contractor fails to submit a progress schedule within the time herein prescribed, the Contracting Officer may withhold approval of progress payment estimates until such time as the Contractor submits the required progress schedule.

(b) If, in the opinion of the Contracting Officer, the Contractor falls behind the progress schedule, the Contractor shall take such steps as may be necessary to improve his progress and the Contracting Officer may require him

(29 Jan 81) (Const. Gen. Prov.)

E-47 SF 23A
to increase the number of shifts, or overtime operations, days of work, or the amount of construction plant, or all of them, and to submit for approval such supplementary schedule or schedules in chart form as may be deemed necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the Government.

(c) "Failure of the Contractor to comply with the requirements of the Contracting Officer under this provision shall be grounds for determination by the Contracting Officer that the Contractor is not prosecuting the work with such diligence as will insure completion within the time specified. Upon such determination the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part thereof, in accordance with the clause of the contract entitled "Termination for Default - Damages for Delay - Time Extensions." (DAR 7-603.48)

69. CERTIFICATION OF REQUESTS FOR ADJUSTMENT OR RELIEF EXCEEDING $100,000 (1980 FEB)

(The following clause is applicable if this contract is expected to exceed $100,000 and the procurement instrument identification number is prefixed by the letters "DACA")

(a) Any contract claim, request for equitable adjustment to contract terms, request for relief under Public Law 85-804, or other similar request exceeding $100,000 shall bear, at the time of submission, the following certificate given by a senior company official in charge at the plant or location involved:

I certify that the claim is made in good faith, that the supporting data are accurate and complete to the best of my knowledge and belief; and that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable.

(Official's Name)

(Title)

(b) The certification in paragraph (a) requires full disclosure of all relevant facts, including cost and pricing data.

(c) The certification requirement in paragraph (a) does not apply to:

(i) requests for routine contract payments—for example, those for payment for accepted supplies and services, routine vouchers under cost reimbursement-type contracts and progress payment invoices;

(ii) final adjustments under incentive provisions of contracts;

(d) In those situations where no claim certification for the purposes of Section 813 has been submitted prior to the inception of a contract dispute, a single certification, using the language prescribed by the Contract Disputes Act but signed by a senior company official in charge at the plant or location involved, will be deemed to comply with both statutes. (DAR 7-104.102)

70. AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (1982 FEB)

(a) As used in this clause:

(1) "Covered area" means the geographical area described in the solicitation from which this contract resulted;

(2) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

(21 Apr 82) (Const. Gen. Prov.)

SF 23A  E-48
(3) "Employer identification number" means the Federal social security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

(4) "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(b) Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of this clause and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitation from which this contract resulted.

(c) If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered areas either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan, in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals.

(d) The Contractor shall implement the specific affirmative action standards provided in subparagraphs (g)(1) through (16) of this clause. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work (whether or not it is Federal or Federally assisted) in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where such work is actually performed. The Contractor is expected to make substantially uniform progress toward its goal in each craft.

(e) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, or the regulations promulgated pursuant thereto.

(18 Jun 81) (Const. Gen. Prov.)
(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

1. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

3. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referred from a union, a recruitment source or community organization and of what action was taken with respect to each individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

4. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

5. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under (g)(2) above.

6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority

(20 May 81)  

(Const. Gen. Prov.)

SF 23A   E-50
and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

(7) Review, at least annually, the company's EEO policy and affirmative action obligations under this clause with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and subcontractors with whom the Contractor does or anticipates doing business.

(9) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.

(11) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(13) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under this clause are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

(h) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations ((g)(1) through (16)). The efforts of a contractor association, joint contractor-union, contractor-community, or other

(20 May. 81) (Const. Gen. Prov.)

E-51 SF 23A
similar group of which the contractor is a member and participant, may be
asserted as fulfilling any one or more of its obligations under (g)(1)
through (16) of this clause provided that the contractor actively
participates in the group, makes every effort to assure that the group has
a positive impact on the employment of minorities and women in the
industry, ensures that the concrete benefits of the program are reflected
in the Contractor's minority and female workforce participation, makes a
good faith effort to meet its individual goals, and can provide access to
documentation which demonstrates the effectiveness of actions taken on
behalf of the Contractor. The obligation to comply, however, is the
Contractor's and failure of such a group to fulfill an obligation shall
not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women
have been established. The Contractor, however, is required to provide
equal employment opportunity and to take affirmative action for all
minority groups, both male and female, and all women, both minority and
non-minority. Consequently, the Contractor may be in violation of the
Executive Order if a particular group is employed in a substantially
disparate manner (for example, even though the Contractor has achieved its
goals for women generally, the Contractor may be in violation of the
Executive Order if a specific minority group of women is underutilized).

(j) The Contractor shall not use the goals or affirmative action
standards to discriminate against any person because of race, color,
religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any
person or firm debarred from Government contracts pursuant to Executive
Order 11246.

(l) The Contractor shall carry out such sanctions and penalties for
violation of this clause and of the Equal Opportunity clause, including
suspension, termination and cancellation of existing subcontracts as may
be imposed or ordered pursuant to Executive Order 11246, as amended, and
its implementing regulations, by the Office of Federal Contract Compliance
Programs. Any Contractor who fails to carry out such sanctions and
penalties shall be in violation of this clause and Executive Order 11246,
as amended.

(m) The Contractor, in fulfilling its obligations under this clause
shall implement specific affirmative action steps, at least as extensive
as those standards prescribed in paragraph (g) of this clause, so as to
achieve maximum results from its efforts to ensure equal employment
opportunity. If the Contractor fails to comply with the requirements of
the Executive Order, the implementing regulations, or this clause, the
Director shall proceed in accordance with 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to monitor
all employment related activity to ensure that the company EEO policy is
being carried out, to submit reports relating to the provisions hereof as
may be required by the Government and to keep records. Records shall at
least include for each employee the name, address, telephone numbers,
construction trade, union affiliation if any, employee identification
number when assigned, social security number, race, sex, status (e.g.,
mechanic, apprentice, trainee, helper, or laborer), dates of changes in
status, hours worked per week in the indicated trade, rate of pay, and
locations at which the work was performed. Records shall be maintained in
an easily understandable and retrievable form; however, to the degree that
existing records satisfy this requirement, contractors shall not be
required to maintain separate records.

(20 May 81)

(Const. Gen. Prov.)

SF 23A    E-52
(o) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program). (DAR 7-603.60)

71. UTILIZATION OF WOMEN-OWNED BUSINESS CONCERNS (OVER $10,000) (1980 AUG)

(a) It is the policy of the United States Government that women-owned businesses shall have the maximum practicable opportunity to participate in the performance of contracts awarded by any Federal agency.

(b) The Contractor agrees to use its best efforts to carry out this policy in the award of subcontracts to the fullest extent consistent with the efficient performance of this contract. As used in this contract, a "women-owned business" concern means a business that is at least 51 percent owned by a woman or women who are U.S. citizens and who also control and operate the business and that is a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management.

(c) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as women-owned business concerns. (DAR 7-104.52)

72. ENVIRONMENTAL LITIGATION (1974 NOV)(OCE)

(a) If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the "Suspension of Work" clause of this contract. The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

(b) The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment. (ECI 7-671.10)

(24 Aug 81) (Const. Gen. Prov.)(Alt.)
E-53 SF 23A
Selected Clauses, Conditions of Contract, Jubail Industrial City, Royal Commission for Jubail/Yanbu, Kingdom of Saudi Arabia (1979)

GENERAL CONDITIONS

GC-10 Contract Documents................................................................. F-2
GC-12 Authorized Representatives...................................................... F-2
GC-13 Royal Commission-Furnished
   Drawings and Specifications....................................................... F-2
GC-14 Contractor Prepared Plans,
   Specifications and Drawings................................................... F-3
GC-47 Changes and Extra Work ..................................................... F-3
GC-48 Delays and Extensions of Time.............................................. F-6
GC-49 Suspension............................................................................ F-6
GC-50 Termination for Default........................................................ F-7
GC-10 CONTRACT DOCUMENTS
Except as otherwise provided herein, the provisions of Attachment “A”, Attachment “B” and Attachment “C” hereof shall prevail over those of any other document forming part of this Contract. Subject to the foregoing, the several documents forming the Contract are intended to be correlative and mutually explanatory, and any Work required in one document and not mentioned in another shall be performed to the same extent and purpose as though required by all. The misplacement, addition or omission of a word or character shall not change the intent of any part of the Contract from that set forth by the Contract as a whole. Contractor shall be solely responsible for requesting any interpretation or clarification of the Contract and shall bear at its own expense any costs and expenses arising from its failure to do so.

If Contractor discovers any conflicts, ambiguities, errors, omissions or discrepancies among the various Contract documents, the matter shall be submitted immediately by Contractor in writing to the Royal Commission for clarification. Any work affected by such conflicts, ambiguities, errors, omissions or discrepancies which is performed by Contractor subsequent to discovery but prior to clarification by the Royal Commission shall be at Contractor’s risk.

GC-12 AUTHORIZED REPRESENTATIVES
The Royal Commission may designate by written notice to Contractor or by provision elsewhere in this Contract one or more persons, firms or corporations to act as its authorized representative in connection with the administration of this Contract. Except as otherwise provided in such written notice or elsewhere herein, such authorized representative shall have the authority to act for the Royal Commission with respect to the performance of this Contract by Contractor with the objective of achieving full compliance by Contractor with the terms and provisions of the Contract. Contractor shall accept and comply with instructions from such authorized representative as though such instructions had been given by the Royal Commission, and Contractor shall deal directly with such authorized representative in all matters arising under this Contract, including but not limited to matters involving Contract interpretation, disputes and submissions for the Royal Commission’s approval. However, such authorized representative is authorized to act in connection with this Contract solely as the representative of the Royal Commission and not as principal hereunder.

GC-13 ROYAL COMMISSION-FURNISHED DRAWINGS AND SPECIFICATIONS
The Royal Commission has furnished Contractor, in Attachment “D” and Attachment “E” of this Contract, prints of engineering design drawings and specifications for each part of the Permanent Works. Such drawings and specifications are intended to describe the Permanent Works and provide information required for the preparation of plans, specifications and drawings by Contractor. During the performance of the Work, the Royal Commission may furnish additional drawings and specifications, marked “Issued for Construction”, which will supersede or supplement those listed in Attachments “D” and “E”. Such additional drawings and specifications will, upon issuance, become a part of this Contract. Unless otherwise provided, Contractor shall perform the Work only in accordance with the drawings and specifications issued by the Royal Commission and in accordance with the plans, specifications, and drawings submitted by Contractor and approved by the Royal Commission pursuant to the provisions of the General Condition hereof entitled “Contractor Prepared Plans, Specifications and Drawings”.

One (1) full size reproducible copy and three (3) full size prints of drawings and three (3) copies of the specifications issued by the Royal Commission will be furnished to Contractor without charge. Additional copies of such drawings and specifications will, upon Contractor’s request, be furnished at the actual cost therefor.

Contractor shall, immediately upon receipt thereof, verify and check all drawings and specifications furnished by the Royal Commission and shall promptly notify the Royal Commission of any errors, omissions or discrepancies. Apparent errors or omissions in such drawings and specifications or the misdescription of Work which is manifestly necessary to carry out the intent thereof, or which is customarily performed, shall not relieve Contractor from performing such omitted or misdescribed Work, but such
Work shall be performed by Contractor as if fully and correctly set forth and described therein.

All drawings and specifications issued by the Royal Commission shall remain the property of the Royal Commission and shall not be copied or used by Contractor for any purpose other than the performance of the Work.

**GC-14 CONTRACTOR PREPARED PLANS, SPECIFICATIONS AND DRAWINGS**

All plans, specifications and drawings prepared by Contractor hereunder shall be available for review by the Royal Commission at all reasonable times during development and promptly upon completion. All such plans, specifications and drawings required to be submitted by Contractor for the approval of the Royal Commission shall be prepared and processed in accordance with the requirements and specifications set forth in Attachment "D" hereof. The Royal Commission's approval of plans, specifications and drawings submitted by Contractor shall not relieve Contractor of its responsibility for the correctness thereof or of its obligation to meet all the specifications and requirements of this Contract. Contractor shall not modify or deviate from plans, specifications and drawings approved by the Royal Commission without the Royal Commission's prior approval of such modification or deviation.

Contractor shall maintain at the Work Site, at all times when construction is in progress, a complete and current copy of both plans, specifications and drawings prepared by Contractor hereunder and the drawings and specifications issued by the Royal Commission. Contractor shall grant the Royal Commission free access-thereto at all reasonable times for purposes of inspection and review.

**GC-46 ACCOUNTING AND AUDITS**

Contractor shall, at its expense, keep and maintain in one place full and complete records and books of account of its costs and expenses relating to the performance of the Work in accordance with generally accepted accounting practices. Such records and accounts shall permit Contractor to furnish the Royal Commission, upon written notice, an accurate written allocation of the total Contract Price to the various elements of the Work, as may be required by the Royal Commission.

The Royal Commission and its representatives shall have the right to examine, upon reasonable advance notice in writing, any books, records, accounts and other documents of Contractor directly pertaining to costs when such costs are the basis of a claim or of reimbursement to Contractor hereunder. Contractor shall keep and preserve all such books, records, accounts and other documents for a period of at least three (3) years from and after completion of the Work.

**GC-47 CHANGES AND EXTRA WORK**

The term "Change", as used in this Contract, means substitutions, additions or deletions in the Work within the scope of the Contract. The term "Extra Work", as used in this Contract, means Work outside the scope of the Contract.

The Royal Commission may, at any time, without invalidating this Contract and without notice to Contractor's guarantor or sureties, if any, make Changes and may require Contractor to perform Extra Work. All the provisions of this Contract shall apply to Changes and Extra Work.

All Changes and Extra Work shall be administered in accordance with the procedure hereinafter set forth, consisting of the issuance of instructions by the Royal Commission, the submittal of an estimate by Contractor and the issuance of a Change Order by the Royal Commission. The Royal Commission, however, reserves the right to perform any Change or Extra Work with its own forces or to hire other contractors to perform such work.

**A. Instructions Directing a Change or Extra Work**

When, in the opinion of the Royal Commission, a Change or Extra Work is required, the Royal Commission will issue written instructions regarding performance of the Change or Extra Work and requesting Contractor to submit in writing its estimate of the cost and time required for such Change or Extra Work and its proposed method of adjusting the Contract Schedule and the Contract Price; provided that in the event of an emergency which, as determined by the Royal Commission, threatens to disrupt
the orderly performance of the Work or endangers persons or property, the Royal Commission may issue oral instructions to Contractor to perform a Change or Extra Work and, as soon as practicable thereafter, confirm such oral instructions in writing. Such instructions, whether written or oral, may be accompanied by any drawings and data which are necessary to show the extent and details of such Change or Extra Work.

If, however, Contractor receives an order from the Royal Commission which in its opinion constitutes a Change or Extra Work and which the Royal Commission has not so identified, Contractor shall immediately inform the Royal Commission in writing prior to commencing performance of such order. The Royal Commission will review Contractor's written notice and will advise Contractor if a Change or Extra Work has or has not been ordered. In the event that a Change or Extra Work has been ordered, the Royal Commission's reply to Contractor shall constitute the Royal Commission's written instructions directing a Change or Extra Work. Except as provided in the event of an emergency, Contractor shall not commence Work on such a Change or Extra Work prior to receiving such written instructions from the Royal Commission.

**B. Contractor's Estimate**

In the case of any Change or Extra Work, Contractor shall commence and perform such Work in strict accordance with the instructions, written or oral, received pursuant to the foregoing. Unless otherwise directed in such instructions, Contractor shall also, within ten (10) days of the receipt thereof, submit in writing to the Royal Commission a detailed estimate which shall set forth the increase or decrease, if any, in the time required for performance of the Work and in the cost to Contractor of such performance resulting from the Change or Extra Work. The estimate shall state the basis of compensation proposed for the Change or Extra Work involved; or if a Change causes a decrease in the cost of performing the Work, the amount of such decrease shall be stated. Sufficient detail shall be provided to permit thorough analysis of the estimate.

The basis of compensation for a Change or Extra Work shall be either the unit or lump sum prices set forth in this Contract, if applicable; or new unit or lump sum prices. If Contractor does not propose in its estimate the method of compensation for such Change or Extra Work, or any part thereof, or if any proposed method is not acceptable to the Royal Commission or if a method of compensation for such Change or Extra Work, or any part thereof, cannot be agreed upon, Contractor shall proceed with such Change or Extra Work in accordance with the Royal Commission's instructions, shall record its costs for performing such Work in accordance with the cost-plus provisions hereof, shall keep such records separate and apart from its other costs and shall be paid for such Work on a cost-plus basis as set forth in paragraphs (i) through (vi) below. In the event that Contractor shall be required to commence such Change or Extra Work before its estimate has been prepared and approved, Contractor shall record its costs as provided above. If, at any time after Contractor commences such Change or Extra Work a method of compensation other than cost-plus is agreed upon, such compensation will be made in accordance with such agreement.

(i) **Direct Labor Cost**—Payment shall be made for all manual classifications up to and including foremen, but shall not include superintendents, assistant superintendents, general foremen, surveyors, office personnel, time-keepers and maintenance mechanics. The time charged to Changes or Extra Work shall be subject to the daily approval of the Royal Commission and no charges shall be accepted unless evidence of such approval is submitted by Contractor with its billing. Labor rates used to calculate the direct labor costs shall be those rates in effect for the Work during the accomplishment of the Change or Extra Work. In addition to the direct payroll costs, the direct labor costs shall include payroll taxes and insurance, vacation allowance, subsistence, travel time and overtime premium and any other payroll additives required to be paid by Contractor by law. Copies of certified pertinent payrolls shall be submitted to the Royal Commission.

(ii) **Equipment Costs**—Payment for the rental and operation of the equipment furnished and used by Contractor shall be made for all construction and
automotive equipment except equipment or tools with a new cost at point of origin of 2,000 Saudi Riyals (or equivalent) or less for each.

Equipment time charged to Changes and Extra Work will be subject to daily approval of the Royal Commission and no charges will be accepted unless evidence of such approval is submitted with Contractor's billing.

The equipment rental and operation rates shall include costs for rental, fuel, oil, grease, repair parts, service and maintenance of any kind and necessary attachments. Such rates shall not include costs for operating labor and transportation to and from the location of the Change or Extra Work. If this Contract contains equipment rental and operation rates, such rates shall apply to Contractor’s equipment used on Changes or Extra Work. If this Contract does not contain equipment rental and operation rates or if equipment is used for Changes and Extra Work which does not reasonably resemble any of the equipment having rental and operation rates set forth herein, the rental and operation rate shall be negotiated and agreed upon in writing before Contractor uses such equipment in connection with any Change or Extra Work.

If Contractor-owned equipment is not available and equipment is rented from outside sources, payment will be computed on the basis of actual invoice cost. Rental rates for non-owned equipment must be approved in advance in writing by the Royal Commission.

When equipment is used infrequently and, as determined by the Royal Commission, need not remain at the Work Site continuously, payment shall be limited to actual hours of use. Equipment not operating but retained at the location of Changes or Extra Work at the Royal Commission’s direction shall be paid for at a standby rate.

Transportation costs for bringing equipment to the Work Site and for returning equipment to the point of origin, exclusively for use on a Change or Extra Work, will be reimbursed to Contractor based on invoices, provided that such transportation of equipment to the Work Site has been approved in advance in writing by the Royal Commission.

(iii) Material Costs—Payment for the cost of materials furnished by Contractor for use in performing the Change or Extra Work shall be made, provided such furnishing and use of materials is as specifically authorized in the instructions ordering such Change or Extra Work and the actual use is verified by the Royal Commission. Charges must be the net cost to Contractor delivered at the Work site and a copy of the vendor’s invoice must accompany the billing along with the verification by the Royal Commission of such use of the materials.

(iv) Contract and outside Service Costs—Charges for work and services subcontracted by Contractor in the performance or completion of the Change or Extra Work will be allowed only when both the subcontractor and the terms of payment to such subcontractor have been approved in writing by the Royal Commission before the subcontractor starts to work on the Change or Extra Work. Such charges will be allowed at net cost to Contractor, computed and verified on the same basis as set forth in paragraphs (l) through (iii) above.

(v) Tools, Supplies, Overhead, Supervision and Profit—A charge shall be allowed to cover tools and equipment with a new cost of 2,000 Saudi Riyals or less each, and to cover supplies, overhead, supervision, profit and all other costs not otherwise provided for herein, in the amount of the following percentage of the total direct labor cost, as defined in paragraph (l) above:

(a) Forty percent (40%) when the total direct labor cost is less than 100,000 Saudi Riyals (or equivalent); or
(b) Thirty-five percent (35%) or 40,000 Saudi Riyals whichever is greater, when the total design and engineering costs and direct labor costs are 100,000 Saudi Riyals or over.

C. Issuance of a Change Order

When the basis of compensation and the required adjustments, if any, to the
Contract Price and Contract Schedule have been determined by the Royal Commission pursuant to the foregoing provisions, the Royal Commission shall issue a Change Order setting forth the total Contract adjustments to be made. Such Change Order, when signed by the Royal Commission and Contractor, shall constitute an amendment to this Contract.

Notwithstanding the provisions of this General Condition, if the aggregate price of the Changes and Extra Work hereunder exceed twenty percent (20%) of the original Contract Price set forth in Attachment "C" hereof, the Royal Commission, in its sole discretion, may review the Contract Price with Contractor for the purpose of negotiating a revised total Contract Price for all the Work performed under this Contract.

**GC-48 DELAYS AND EXTENSION OF TIME**

Either party shall be entitled to an appropriate extension of time for performance of its obligations under this Contract if such performance is prevented or delayed by any condition, existing or future, which is beyond the reasonable control and without the fault or negligence of such party and which condition was not foreseeable by such party at the time this Contract was entered into and by such party taking reasonable steps could not have been prevented. Such conditions shall include, without limitation, acts of God, war, fire, floods, and interferences by civil or military authorities. Such party shall, within seven (7) days of the commencement of any such delay, give to the other party written notice thereof and of the anticipated results thereof. Within seven (7) days after termination of any such delay, such party shall file an additional written notice with the other party specifying the actual duration of the delay. Failure to give either of the above notices shall be sufficient ground for denial of an extension of time hereunder.

In the event of any such condition, the party whose performance is prevented or delayed thereby shall take all necessary measures to mitigate and minimize the effect of the delay and to continue with the prompt and diligent performance of its obligations under this Contract.

**GC-49 SUSPENSION**

The Royal Commission may from any reason whatsoever, at its sole option, suspend at any time and from time to time, by notice in writing to Contractor, the performance of all or any portion of the Work. Such notice of suspension will designate the amount and type of Construction Plant and labor which shall remain committed to the Work Site. During the period of suspension, Contractor shall utilize its Construction Plant and labor in such a manner as to minimize costs associated with suspension and shall continue to prosecute and perform the unsuspended part of the Work.

Upon receipt of any such notice, Contractor shall, unless the notice requires otherwise:

(a) immediately discontinue Work on the date and to the extent specified in the notice;

(b) place no further purchase orders or subcontracts for material, services, or facilities with respect to suspended Work other than to the extent required in the notice;

(c) promptly make every reasonable effort to obtain suspension upon terms satisfactory to the Royal Commission of all purchase orders, subcontracts and rental agreements to the extent that they relate to performance of Work suspended; and,

(d) continue to protect and maintain the Construction Plant and Permanent Works including those portions on which Work has been suspended.

As full compensation for such suspension, Contractor shall be reimbursed for the following costs, reasonably incurred, without duplication of any items, to the extent that such costs directly result from such suspension of Work:

(a) a standby charge to be paid to Contractor during the period of suspension, which standby charge shall be sufficient to compensate Contractor for keeping, to the extent required in the notice, its organization and equipment committed to the Work Site on a standby status;
(b) all reasonable costs associated with mobilization and demobilization of Contractor's Construction Plant and forces;
(c) an equitable amount to reimburse Contractor for the direct cost of maintaining and protecting that portion of the Construction Plant and Permanent Works upon which Work has been suspended; and
(d) an equitable adjustment with respect to the performance of the remaining portion of the Work, if as a direct result of any such suspension of Work the cost to Contractor of subsequently performing the Work is increased or decreased.

Upon receipt of notice to resume suspended Work, Contractor shall immediately resume performance of the suspended Work to the extent required in the notice. Any claim on the part of Contractor for time or compensation shall be made within ten (10) days after receipt of notice to resume Work, and Contractor shall submit for review and approval by the Royal Commission a revised Contract Schedule.

No additional compensation or extension of time shall be granted if suspension results from Contractor's non-compliance with the requirements of this Contract.

**GC-50 TERMINATION FOR DEFAULT**

If any or all of the Work to be performed under this Contract is abandoned by Contractor; or if the Contract or any part thereof is assigned in violation of the provisions hereof, or if any Work is sublet by Contractor without the required approval of the Royal Commission; or if Contractor becomes Insolvent or unable to meet its payroll or other current obligations, or is adjudicated a bankrupt, or has an involuntary petition in bankruptcy filed against it, or makes an assignment for the benefit of creditors, files a petition for an arrangement, composition or compromise with its creditors under any applicable laws, or has a trustee or other officer appointed to take charge of its assets; or if the Royal Commission determines that the Contract Schedule is not being maintained or that Contractor is violating any of the conditions or provisions of this Contract; or if the Royal Commission determines that Contractor is refusing or failing to perform properly any portion of the Work or that Contractor is performing any portion of the Work in bad faith or not in accordance with the terms of this Contract, and if, within seven (7) days after receipt of a written notice of default from the Royal Commission, Contractor fails to remedy such default or to provide satisfactory evidence that such default will be corrected, the Royal Commission may, without notice to the Contractor's guarantor or sureties, if any, withhold any amounts otherwise due under the Contract and/or terminate by written notice Contractor's right to proceed with all or any portion of the Work.

Upon such termination or withholding, the Royal Commission shall have the right to complete any Work by whatever method the Royal Commission may deem expedient, including employing another contractor under such form of contract as the Royal Commission may deem advisable or having the Royal Commission provide any labor or materials and perform any part of such Work that has been terminated; and the Royal Commission shall have the right to take possession of and to use any or all of the materials and Construction Plant of any and every kind furnished by Contractor for such Work. The expense of so completing such Work, together with a reasonable charge for administering any contract for such completion, will be charged to Contractor, and such expense will be deducted by the Royal Commission out of such monies as may be due or may at any time thereafter become due to Contractor. In case such expense exceeds the sum which would have otherwise been payable under this Contract, Contractor and its guarantors and sureties, if any, shall be liable for and shall upon notice from the Royal Commission promptly pay to the Royal Commission the amount of such excess. The Royal Commission shall not be required to obtain proposals for completing such Work, but may make such expenditures as in the Royal Commission's sole judgment will best accomplish such reasonable completion. The Royal Commission shall not be liable for any damages or loss of anticipated profits on account of such termination.

Upon receipt of any such written notice of termination of right to proceed, Contractor shall continue to prosecute and perform any uncompleted part of the Work and shall, at its expense, for that part of the Work affected by any such termination:
(a) immediately discontinue Work on the date and to the extent specified in the notice;
(b) assist the Royal Commission in making an inventory of all Construction Plant at the Work Site and all Permanent Works in storage at the Work Site, en route to the Work Site, and on order from vendors and subcontractors;
(c) remove from the Work Site all Construction Plant listed in said inventory other than the Construction Plant which is designated in writing by the Royal Commission to be used by the Royal Commission in completing such Work;
(d) assign the Royal Commission subcontracts, purchase orders, supply contracts and equipment rental agreements, all as designated by the Royal Commission;
(e) deliver to the Royal Commission, in the manner and to the extent determined by the Royal Commission, any data, plans, drawings, specifications, reports, estimates, summaries, completed Work, Work in progress, and such other information and materials as may have been acquired or prepared by Contractor in connection with this Contract; and
(f) make available to the Royal Commission the names and category of employment of all persons employed on the Work Site, other than Contractor's permanent staff, to enable the Royal Commission to employ such personnel as the Royal Commission may require to complete the Work.

For the part of the Work with respect to which Contractor's right to proceed has been terminated, all applicable provisions of this Contract shall continue in full force and effect as to all Work performed prior to the effective date of termination, provided that, subject to the provisions of the General Condition hereof entitled "Liability, Indemnity and Release" and the General Condition hereof entitled "Warranty," after such effective date the Royal Commission shall bear the risk of loss of or damage to any portion of the Permanent Works upon which Contractor's right to proceed has been terminated. For the remainder of the Work, this Contract shall remain in full force and effect.

The rights and remedies of the Royal Commission provided by this General Condition are in addition to any and all other rights and remedies provided by law or under this Contract, and nothing contained herein shall prejudice the rights of the Royal Commission to take whatever action it may deem necessary or appropriate to obtain the satisfactory performance of this Contract.
APPENDIX G

Rules of conciliation and arbitration of the ICC

This revised version of the Rules of Conciliation and Arbitration was adopted by the ICC Executive Committee in March 1975. It replaces the 1955 revision published as ICC Brochure "ch".

First published as ICC Publication No. 291 in April 1975. Also issued by ICC Headquarters in Arabic, French, German and Spanish editions. Translations in other languages may be available from ICC National Committees.

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Contents

<table>
<thead>
<tr>
<th>Article(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td></td>
</tr>
<tr>
<td>Standard ICC Arbitration Clause</td>
<td></td>
</tr>
<tr>
<td>Optional conciliation</td>
<td></td>
</tr>
<tr>
<td>Conciliation Commission and Committees</td>
<td></td>
</tr>
<tr>
<td>Request for conciliation</td>
<td>2</td>
</tr>
<tr>
<td>Action taken by Conciliation Committee</td>
<td></td>
</tr>
<tr>
<td>Terms of settlement</td>
<td>4</td>
</tr>
<tr>
<td>Rights of parties failing settlement</td>
<td></td>
</tr>
<tr>
<td>Arbitration</td>
<td></td>
</tr>
<tr>
<td>Court of Arbitration</td>
<td>1</td>
</tr>
<tr>
<td>Choice of arbitrators</td>
<td>2</td>
</tr>
<tr>
<td>Request for arbitration</td>
<td>3</td>
</tr>
<tr>
<td>Answer to the request</td>
<td>4</td>
</tr>
<tr>
<td>Counter-claim</td>
<td>5</td>
</tr>
<tr>
<td>Pleadings and written statements, notifications or communications</td>
<td>6</td>
</tr>
<tr>
<td>Absence of agreement to arbitrate</td>
<td>7</td>
</tr>
<tr>
<td>Effect of the agreement to arbitrate</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Article(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit to cover costs of arbitration</td>
<td>9</td>
</tr>
<tr>
<td>Transmission of the file to the arbitrator</td>
<td>10</td>
</tr>
<tr>
<td>Rules governing the proceedings</td>
<td>11</td>
</tr>
<tr>
<td>Place of arbitration</td>
<td>12</td>
</tr>
<tr>
<td>Terms of reference</td>
<td>13</td>
</tr>
<tr>
<td>The arbitral proceedings</td>
<td>14, 15, 16</td>
</tr>
<tr>
<td>Award by consent</td>
<td>17</td>
</tr>
<tr>
<td>Time-limit for awards</td>
<td>18</td>
</tr>
<tr>
<td>Awards by three arbitrators</td>
<td>19</td>
</tr>
<tr>
<td>Decision as to the costs of the arbitration</td>
<td>20</td>
</tr>
<tr>
<td>Scrutiny of award by the Court</td>
<td>21</td>
</tr>
<tr>
<td>Making of the award</td>
<td>22</td>
</tr>
<tr>
<td>Notification of the award to the parties</td>
<td>23</td>
</tr>
<tr>
<td>Finality and enforceability of the award</td>
<td>24</td>
</tr>
<tr>
<td>Deposit of the award</td>
<td>25</td>
</tr>
<tr>
<td>General rule</td>
<td>26</td>
</tr>
</tbody>
</table>

Appendix I — Statutes of the Court
Appendix II — Schedule of costs
**Standard ICC arbitration clause**

The ICC recommends all parties wishing to make reference to ICC arbitration in their foreign contracts to use the following standard clause:

"All disputes arising in connection with the present contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules."

**French**

"Tous différends découlant du présent contrat seront tranchés définitivement suivant le Règlement de Conciliation et d'Arbitrage de la Chambre de Commerce Internationale par un ou plusieurs arbitres nommés conformément à ce règlement."

**German**

"Alle aus dem gegenwärtigen Vertrag sich ergebenden Streitigkeiten werden nach der Vergleichs- und Schiedsgerichtsordnung der Internationalen Handelskammer von einem oder mehreren gemäss dieser Ordnung ernannten Schiedsrichtern endgültig entschieden."

**Spanish**

"Todas las desavenencias que deriven de este contrato serán resueltas definitivamente de acuerdo con el Reglamento de Conciliación y Arbitraje de la Cámara de Comercio Internacional por uno o más árbitros nombrados conforme a este Reglamento."

**Arabic**

"جميع الخلافات التي نشأت عن هذا العقد يتم حلها نهائيًا وفقًا لنساطك المحايدة والمحاكمة في قطاع التجارة الدولية بواسطة حكم أو عدة حكام يتم تعيينهم طبقًا لذلك النظام."

Attention is called to the fact that the laws of certain countries require that parties to contracts expressly accept arbitration clauses, sometimes in a precise and particular manner.

The parties may—if they so desire—stipulate, in the arbitration clause itself, the national law applicable to the contract. The parties’ free choice of the place of arbitration is not limited by the ICC.

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**Optional Conciliation**

**Article 1**

**Administrative Commission for Conciliation. Conciliation Committees.**

1 Any business dispute of an international character may be the subject of a request for settlement by amicable arrangement through the medium of the Administrative Commission for Conciliation established at the International Chamber of Commerce.

Each National Committee may nominate from one to three members to the Commission, from among its nationals resident in Paris; they shall be appointed for a term of two years by the President of the International Chamber of Commerce.

2 For each dispute, a Conciliation Committee of three members shall be set up by the President of the International Chamber of Commerce.

The Committee shall be composed of two conciliators, who shall be as far as possible of the nationalities of the applicant and of the other party, and of a Chairman of a nationality other than that of the parties involved, chosen in principle from the Administrative Commission for Conciliation.

**Article 2**

**Request for conciliation.**

The party making a request for conciliation shall apply to International Headquarters of the International Chamber of Commerce through his National Committee or direct; in the latter case, the Secretary General shall inform the National Committee concerned of the application.

The request shall consist of a statement of the case from the point of view of the said party and shall be accompanied by copies of relevant papers and documents as well
as by the deposit laid down in the appended schedule for the expenses incurred by International Headquarters in the conciliation proceedings.

Article 3

Action taken by Conciliation Committee.

1 Upon receipt of any such request and of the relevant papers and documents and of the deposit, the Secretary General of the International Chamber of Commerce shall inform the other party or parties to the dispute direct or through his or their National Committee or Committees and shall invite him or them to accept an attempt at conciliation and in that event to submit to the Conciliation Committee a statement of the case in writing with copies of relevant papers and documents as well as the deposit laid down in the appended schedule for expenses incurred by International Headquarters in the conciliation proceedings.

2 The Committee shall acquaint itself with the details of the case and procure any information required for this purpose by communicating with the parties to the dispute direct or through their National Committees, and shall hear the parties if possible.

The parties may appear in person before the Committee or be represented by duly accredited agents. They may also be assisted by counsel or solicitors.

Article 4

Terms of settlement.

1 After having examined the case and having heard the parties if possible, the Conciliation Committee shall submit terms of settlement to the parties.

2 Should a settlement result, the Conciliation Committee shall draw up and sign a record of the settlement.

3 When the parties do not appear in person or are not represented by duly accredited agents, the Committee shall communicate the terms of settlement to the Chairmen of the National Committees concerned and shall request them to endeavour to persuade the parties to accept the settlement proposed by the Committee.

Article 5

Rights of the parties failing settlement.

1 Should a settlement not result, the parties shall be at liberty to refer their dispute to arbitration or to bring an action at law should they so desire, unless they are bound by an arbitration clause.

2 Nothing that has transpired in connection with the proceedings before the Conciliation Commission shall in any way affect the legal rights of any of the parties to the dispute whether in an arbitration or in a Court of law.

No person having sat on a Conciliation Committee for the settlement of a dispute may be appointed arbitrator for the same dispute.

Arbitration

Article 1

Court of Arbitration.

1 The Court of Arbitration of the International Chamber of Commerce is the international arbitration body attached to the International Chamber of Commerce. Members of the Court are appointed by the Council of the International Chamber of Commerce. The function of the Court is to provide for the settlement by arbitration of business disputes of an international character in accordance with these Rules.

2 In principle, the Court meets once a month. It draws up its own internal regulations.

3 The Chairman of the Court of Arbitration or his deputy shall have power to take urgent decisions on behalf of the Court, provided

ICC  G-3
that any such decision shall be reported to
the Court at its next session.

4 The Court may, in the manner provided for
in its internal regulations, delegate to one
or more groups of its members the power
to take certain decisions provided that any
such decision shall be reported to the Court
at its next session.

5 The Secretariat of the Court of Arbitration
shall be at the Headquarters of the Inter-
national Chamber of Commerce.

Article 2

Choice of arbitrators.

1 The Court of Arbitration does not itself settle
disputes. Insofar as the parties shall not
have provided otherwise, it appoints, or con-
firms the appointments of, arbitrators in ac-
cordance with the provisions of this Article.
In making or confirming such appointment,
the Court shall have regard to the proposed
arbitrator’s nationality, residence and other
relationships with the countries of which the
parties or the other arbitrators are nationals.

2 The disputes may be settled by a sole arbi-
trator or by three arbitrators. In the fol-
lowing Articles the word “arbitrator” denotes
a single arbitrator or three arbitrators as the
case may be.

3 Where the parties have agreed that the
disputes shall be settled by a sole arbitrator,
they may, by agreement, nominate him for
confirmation by the Court. If the parties
fail so to nominate a sole arbitrator within
30 days from the date when the Claimant’s
Request for Arbitration has been com-
municated to the other party, the sole arbitrator
shall be appointed by the Court.

4 Where the dispute is to be referred to three
arbitrators, each party shall nominate in the
Request for Arbitration and the Answer
thereto respectively one arbitrator for con-
firmation by the Court. Such person shall
be independent of the party nominating him.
If a party fails to nominate an arbitrator, the
appointment shall be made by the Court.

The third arbitrator, who will act as chair-
man of the arbitral tribunal, shall be appoint-
ed by the Court, unless the parties have pro-
vided that the arbitrators nominated by them
shall agree on the third arbitrator within
a fixed time limit. In such a case the Court
shall confirm the appointment of such third
arbitrator. Should the two arbitrators fail,
within the time limit fixed by the parties or
the Court, to reach agreement on the third
arbitrator, he shall be appointed by the
Court.

5 Where the parties have not agreed upon the
number of arbitrators, the Court shall appoint
a sole arbitrator, save where it appears to
the Court that the dispute is such as to
warrant the appointment of three arbitrators.
In such a case the parties shall each have
a period of 15 days within which to nominate
an arbitrator.

6 Where the Court is to appoint a sole arbi-
trator or the chairman of an arbitral tribunal,
it shall choose a National Committee of the
International Chamber of Commerce from
which it shall request a proposal. The sole
arbitrator or the chairman of an arbitral tri-
bunal shall be chosen from a country other
than those of which the parties are nationals.
However, in suitable circumstances and pro-
vided that neither of the parties objects,
the sole arbitrator or the chairman of the
arbitral tribunal may be chosen from a
country of which any one of the parties is a
national.

Where the Court appoints an arbitrator on
behalf of a party which has failed so to do,
it shall request a proposal from the National
Committee of the country of which that party
is a national. If the country of which such
party is a national has no National Com-
mittee, the Court is at liberty to choose any
person whom it regards as suitable.

7 Should an arbitrator be challenged by one
of the parties, the Court, as sole judge of
the grounds of challenge, shall make a deci-
sion which shall be final.
8 If an arbitrator dies or is prevented from carrying out his functions or has to resign consequent upon a challenge or for any other reason, or if the Court, after having considered the arbitrator's observations, decides that the arbitrator is not fulfilling his functions in accordance with the Rules or within the prescribed time limits, he shall be replaced. In all such cases the procedure indicated in the preceding paragraphs 3, 4 and 6 shall be followed.

Article 3

1 Request for arbitration.
A party wishing to have recourse to arbitration by the International Chamber of Commerce shall submit its Request for arbitration to the Secretariat of the Court, through its National Committee or directly. In this latter case the Secretariat shall bring the Request to the notice of the National Committee concerned.

The date when the Request is received by the Secretariat of the Court shall, for all purposes, be deemed to be the date of commencement of the arbitral proceedings.

2 The Request for arbitration shall inter alia contain the following information:
   a) names in full, description, and addresses of the parties,
   b) a statement of the Claimant's case,
   c) the relevant agreements, and in particular the agreement to arbitrate, and such documentation or information as will serve clearly to establish the circumstances of the case,
   d) all relevant particulars concerning the number of arbitrators and their choice in accordance with the provisions of Article 2 above.

3 The Secretariat shall send a copy of the Request and the documents annexed thereto to the Defendant for his Answer.

Article 4

Answer to the request.

1 The Defendant shall within 30 days from the receipt of the documents referred to in paragraph 3 of Article 3 comment on the proposals made concerning the number of arbitrators and their choice and, where appropriate, nominate an arbitrator. He shall at the same time set out his defence and supply relevant documents. In exceptional circumstances the Defendant may apply to the Secretariat for an extension of time for the filling of his defence and his documents. The application must, however, include the Defendant's comments on the proposals made with regard to the number of arbitrators and their choice and also, where appropriate, the nomination of an arbitrator. If the Defendant fails so to do, the Secretariat shall report to the Court, which shall proceed with the arbitration in accordance with these Rules.

2 A copy of the Answer and of the documents annexed thereto, if any, shall be communicated to the Claimant for his information.

Article 5

Counter-claim.

1 If the Defendant wishes to make a counter-claim, he shall file the same with the Secretariat, at the same time as his Answer as provided for in Article 4.

2 It shall be open to the Claimant to file a Reply with the Secretariat within 30 days from the date when the Counter-claim was communicated to him.

Article 6

Pleadings and written statements, notifications or communications.

All pleadings and written statements submitted by the parties, as well as all documents annexed thereto, shall be supplied in a number of copies sufficient to provide one copy for each party, plus one for each arbitrator, and one for the Secretariat.

All notifications or communications from the Secretariat and the arbitrators shall be validly made if they are delivered against receipt or forwarded by registered post to
the address or last known address of the party for whom the same are intended as notified by the party in question or by the other party as appropriate.

Notification or communication shall be deemed to have been effected on the day when it was received, or should, if made in accordance with the preceding paragraph, have been received by the party itself or by its representative.

Article 7

Absence of agreement to arbitrate.

Where there is no prima facie agreement between the parties to arbitrate or where there is an agreement but it does not specify the International Chamber of Commerce, and if the Defendant does not file an Answer within the period of 30 days provided by paragraph 1 of Article 4 or refuses arbitration by the International Chamber of Commerce, the Claimant shall be informed that the arbitration cannot proceed.

Article 8

Effect of the agreement to arbitrate.

1 Where the parties have agreed to submit to arbitration by the International Chamber of Commerce, they shall be deemed thereby to have submitted ipso facto to the present Rules.

2 If one of the parties refuses or fails to take part in the arbitration, the arbitration shall proceed notwithstanding such refusal or failure.

3 Should one of the parties raise one or more pleas concerning the existence or validity of the agreement to arbitrate, and should the Court be satisfied of the prima facie existence of such an agreement, the Court may, without prejudice to the admissibility or merits of the plea or pleas, decide that the arbitration shall proceed. In such a case any decision as to the arbitrator's jurisdiction shall be taken by the arbitrator himself.

4 Unless otherwise provided, the arbitrator shall not cease to have jurisdiction by reason of any claim that the contract is null and void or allegation that it is inexistent provided that he upholds the validity of the agreement to arbitrate. He shall continue to have jurisdiction, even though the contract itself may be inexistent or null and void, to determine the respective rights of the parties and to adjudicate upon their claims and pleas.

5 Before the file is transmitted to the arbitrator, and in exceptional circumstances even thereafter, the parties shall be at liberty to apply to any competent judicial authority for interim or conservatory measures, and they shall not by so doing be held to infringe the agreement to arbitrate or to affect the relevant powers reserved to the arbitrator.

Any such application and any measures taken by the judicial authority must be notified without delay to the Secretariat of the Court of Arbitration. The Secretariat shall inform the arbitrator thereof.

Article 9

Deposit to cover costs of arbitration.

1 The Court shall fix the amount of the deposit in a sum likely to cover the costs of arbitration of the claims which have been referred to it.

Where, apart from the principal claim, one or more counter-claims are submitted, the Court may fix separate deposits for the principal claim and the counter-claim or counter-claims.

2 As a general rule, the deposits shall be paid in equal shares by the Claimant or Claimants and the Defendant or Defendants. However, any one party shall be free to pay the whole deposit in respect of the claim or the counter-claim should the other party fail to pay a share.

3 The Secretariat may make the transmission of the file to the arbitrator conditional upon the payment by the parties or one of them
of the whole or part of the deposit to the
International Chamber of Commerce.

4 When the Terms of Reference are com-
municated to the Court in accordance with
the provisions of Article 13, the Court shall
verify whether the requests for deposit have
been complied with.

The Terms of Reference shall only become
operative and the arbitrator shall only pro-
cceed in respect of those claims for which
the deposit has been duly paid to the Inter-
national Chamber of Commerce.

Article 10

Transmission of the file to the arbitrator.
Subject to the provisions of Article 9, the
Secretary shall transmit the file to the arbi-
trator as soon as it has received the Defen-
dant’s Answer to the Request for Arbitra-
tion, at the latest upon the expiry of the time
limits fixed in Articles 4 and 5 above for the
filing of these documents.

Article 11

Rules governing the proceedings.
The rules governing the proceedings before
the arbitrator shall be those resulting from
these Rules and, where these Rules are
silent, any rules which the parties (or, failing
them, the arbitrator) may settle, and whether
or not reference is thereby made to a muni-
cipal procedural law to be applied to the
arbitration.

Article 12

Place of arbitration.
The place of arbitration shall be fixed by
the Court, unless agreed upon by the parties.

Article 13

Terms of reference.
1 Before proceeding with the preparation of
the case, the arbitrator shall draw up, on the
basis of the documents or in the presence
of the parties and in the light of their most
recent submissions, a document defining
his Terms of Reference. This document
shall include the following particulars:
   a) the full names and description of the
      parties,
   b) the addresses of the parties to which
      notifications or communications arising in
      the course of the arbitration may validly be
      made,
   c) a summary of the parties’ respective
      claims,
   d) definition of the issues to be determined,
   e) the arbitrator’s full name, description and
      address,
   f) the place of arbitration,
   g) particulars of the applicable procedural
      rules and, if such is the case, reference to
      the power conferred upon the arbitrator to
      act as amiable compositeur,
   h) such other particulars as may be required
      to make the arbitral award enforceable in
      law, or may be regarded as helpful by the
      Court of Arbitration or the arbitrator.

2 The document mentioned in paragraph 1 of
this Article shall be signed by the parties
and the arbitrator. Within two months of the
date when the file has been transmitted to
him, the arbitrator shall transmit to the Court
the said document signed by himself and by
the parties. Upon the arbitrator’s request,
the Court may, in exceptional circumstances,
extend this time limit.

Should one of the parties refuse to take part
in the drawing up of the said document or
to sign the same, the Court, if it is satisfied
that the case is one of those mentioned in
paragraphs 2 and 3 of Article 8, shall take
such action as is necessary for its approval.
Thereafter the Court shall set a time limit
for the signature of the statement by the
defaulting party and on expiry of that time
limit the arbitration shall proceed and the
award shall be made.

3 The parties shall be free to determine the
law to be applied by the arbitrator to the
merits of the dispute. In the absence of
any indication by the parties as to the applic-
able law, the arbitrator shall apply the law
designated as the proper law by the rule of
conflict which he deems appropriate.
The arbitrator shall assume the powers of an amicable compositeur if the parties are agreed to give him such powers.

In all cases the arbitrator shall take account of the provisions of the contract and the relevant trade usages.

Article 13

**The arbitral proceedings.**

1. The arbitrator shall proceed within as short a time as possible to establish the facts of the case by all appropriate means. After study of the written submissions of the parties and of all documents relied upon, the arbitrator shall hear the parties together in person if one of them so requests; and failing such a request he may of his own motion decide to hear them. In addition, the arbitrator may decide to hear any other person in the presence of the parties or in their absence provided they have been duly summoned.

2. The arbitrator may appoint one or more experts, define their terms of reference, receive their reports and/or hear them in person.

3. The arbitrator may decide the case on the relevant documents alone if the parties so request or agree.

Article 15

1. At the request of one of the parties or if necessary on his own initiative, the arbitrator, giving reasonable notice, shall summon the parties to appear before him on the day and at the place appointed by him and shall so inform the Secretariat of the Court.

2. If one of the parties, although duly summoned, fails to appear, the arbitrator, if he is satisfied that the summons was duly received and the party is absent without valid excuse, shall have power to proceed with the arbitration, and such proceedings shall be deemed to have been conducted in the presence of all parties.

3. The arbitrator shall determine the language or languages of the arbitration, due regard being paid to all the relevant circumstances and in particular to the language of the contract.

4. The arbitrator shall be in full charge of the hearings, at which all the parties shall be entitled to be present. Save with the approval of the arbitrator and of the parties, persons not involved in the proceedings shall not be admitted.

5. The parties may appear in person or through duly accredited agents. In addition, they may be assisted by advisers.

Article 16

The parties may make new claims or counter-claims before the arbitrator on condition that these remain within the limits fixed by the Terms of Reference provided for in Article 13 or that they are specified in a rider to that document, signed by the parties and communicated to the Court.

Article 17

**Award by consent.**

If the parties reach a settlement after the file has been transmitted to the arbitrator in accordance with Article 10, the same shall be recorded in the form of an arbitral award made by consent of the parties.

Article 18

**Time-limit for awards.**

1. The arbitrator shall make his award within six months of the date of signing the document mentioned in Article 13.

2. The Court may, in exceptional circumstances and pursuant to a reasoned request from the arbitrator, or if need be on its own initiative extend this time limit if it decides that it is necessary so to do.

3. Where no such extension is granted and, if appropriate, after application of the provisions of Article 2 (8), the Court shall deter-
mine the manner in which the dispute is to be resolved.

Article 19

Awards by three arbitrators.
When three arbitrators have been appointed, the award is given by a majority decision. If there be no majority, the award shall be made by the Chairman of the arbitral tribunal alone.

Article 20

Decision as to costs of arbitration.
The arbitrator’s award shall, in addition to dealing with the merits of the case, fix the costs of the arbitration and decide which of the parties shall bear the costs or in what proportions the costs shall be borne by the parties.

The costs of the arbitration shall include the arbitrator's fees and the administrative costs fixed by the Court in accordance with the scale annexed to the present Rules, the expenses, if any, of the arbitrator, the fees and expenses of any experts, and the normal legal costs incurred by the parties.

The Court may fix the arbitrator’s fees at a figure higher or lower than that which would result from the application of the annexed scale if in the exceptional circumstances of the case this appears to be necessary.

Article 21

Scrutiny of award by the Court.
Before signing an award, whether partial or definitive, the arbitrator shall submit it in draft form to the Court. The Court may lay down modifications as to the form of the award and, without affecting the arbitrator’s liberty of decision, may also draw his attention to points of substance. No award shall be signed until it has been approved by the Court as to its form.

Article 22

Making of award.
The arbitral award shall be deemed to be made at the place of the arbitration proceedings and on the date when it is signed by the arbitrator.

Article 23

Notification of award to parties.
1 Once an award has been made, the Secretariat shall notify to the parties the text signed by the arbitrator; provided always that the costs of the arbitration have been paid to the International Chamber of Commerce by the parties or by one of them.

2 Additional copies certified true by the Secretary-General of the Court shall be made available, on request and at any time, to the parties but to no one else.

3 By virtue of the notification made in accordance with paragraph 1 of this article, the parties waive any other form of notification or deposit on the part of the arbitrator.

Article 24

Finality and enforceability of award.
The arbitral award shall be final.

2 By submitting the dispute to arbitration by the International Chamber of Commerce, the parties shall be deemed to have undertaken to carry out the resulting award without delay and to have waived their right to any form of appeal in so far as such waiver can validly be made.

Article 25

Deposit of award.
An original of each award made in accordance with the present Rules shall be deposited with the Secretariat of the Court.

The arbitrator and the Secretariat of the Court shall assist the parties in complying with whatever further formalities may be necessary.

Article 26

General rule.
In all matters not expressly provided for in these Rules, the Court of Arbitration and the arbitrator shall act in the spirit of these Rules and shall make every effort to make sure that the award is enforceable at law.
Appendix I
Statutes of the Court

Article 1

Appointment of members.
The members of the Court of Arbitration of the International Chamber of Commerce are appointed for a term of two years by the Council of that Chamber pursuant to Article III, §1 of the Constitution, on the proposal of each national Committee.

Article 2

Composition.
The Court of Arbitration shall be composed of a Chairman, of five Vice-Chairmen, of a Secretary General and of one or several Technical Advisers chosen by the Council of the International Chamber of Commerce either from among the members of the Court or from outside their membership, and appointed by, each National Committee.
The chairmanship may be exercised by two co-Chairmen; in this case, they shall have equal rights, and the expression "the Chairman", used in the Rules of Conciliation and Arbitration, shall apply to either of them equally.

When a member of the Court does not reside in the city where International Headquarters of the International Chamber of Commerce is situated, the Council may appoint an alternate member.
If the Chairman is unable to attend a session of the Court, he shall be replaced by one of the Vice-Chairmen.

Article 3

Function and power.
The function of the Court of Arbitration is to ensure the application of the Rules of Conciliation and Arbitration of the International Chamber of Commerce and the Court has all the necessary powers for that purpose. It is further entrusted, if need be, with laying before the Commission on International Commercial Arbitration any proposals for amending the Rules of Conciliation and Arbitration of the International Chamber of Commerce which it considers necessary.

Article 4

Deliberations and Quorum.
The decisions of the Court shall be taken by a majority vote, the Chairman having a casting vote in the event of a tie.

The deliberations of the Court shall be valid when at least six members are present.
The Secretary General of the International Chamber of Commerce, the Secretary General of the Court and the Technical Adviser or Advisers shall attend in an advisory capacity only.

Appendix II
Schedule of Conciliation and Arbitration Costs
(In force as from 1st January 1972)

Registration Fee.
Each party to a dispute submitted to the ICC for conciliation and arbitration shall be liable for a registration fee of US $ 50 and no application will be entertained unless accompanied by this deposit.
The registration fee shall also be payable by each party if the ICC is called upon to appoint an arbitrator or arbitrators outside the procedure of its Court of Arbitration.
The registration fee is not recoverable and becomes the property of the ICC.

Costs of Conciliation.
2 Before a case is considered by the Conciliation Committee, each party shall contribute to the cost of the conciliation procedure by paying half the costs to be calculated in accordance with the table of administrative charges hereinafter set out.
Where the sum in dispute in any such case is not stated, the Secretariat shall fix the costs.

Costs of Arbitration.
3 a) The costs of arbitration comprise the fee of the arbitrator(s) and the administrative charge, and may furthermore include personal expenses of the arbitrator(s) and the cost of any expertise as well as similar expenses.
b) Before a case (or counterclaim) can be submitted to the arbitrator(s), the parties, or, failing this, the claimant (or counterclaimant, as the case may be), shall pay a deposit covering the fee of the arbitrator(s) and the administrative charge (fixed in accordance with the table hereinafter set out).
c) The Court shall fix the fee of the arbitrator(s) in accordance with the table hereinafter set out or, where the sum in dispute is not stated, at its discretion.
d) When a case is submitted to more than one arbitrator, the Court, at its discretion, shall have the right to increase the fee up to a maximum of three times the fee payable to one arbitrator.
e) When arbitration is preceded by attempted con-
conciliation, half of the administrative charge paid in respect of the said attempt shall be credited to the administrative charge of the arbitration.

b) Before any expertise can be commenced, the parties, or one of them, shall pay a deposit sufficient to cover the expected fee and expenses as determined by the arbitrator(s).

g) If a case, not preceded by attempted conciliation, is withdrawn before it reaches the arbitrator(s), any deposit made shall be returned to the parties, after deduction of a sum equal to half the administrative charge.

<table>
<thead>
<tr>
<th>Scale of Administrative Charge and Fees.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To calculate the administrative charge and the fee the percentages applied to each successive slice of the sum in dispute are to be added together.</td>
</tr>
</tbody>
</table>

a) Administrative charge

<table>
<thead>
<tr>
<th>Sum in dispute (in US dollars)</th>
<th>Administrative charge (*) in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 0 to 25,000</td>
<td>3 (min. $ 200)</td>
</tr>
<tr>
<td>From 25,000 to 100,000</td>
<td>2</td>
</tr>
<tr>
<td>From 100,000 to 500,000</td>
<td>1.5</td>
</tr>
<tr>
<td>From 500,000 to 1,000,000</td>
<td>1</td>
</tr>
<tr>
<td>From 1,000,000 to 2,000,000</td>
<td>0.5</td>
</tr>
<tr>
<td>From 2,000,000 to 5,000,000</td>
<td>0.2</td>
</tr>
<tr>
<td>From 5,000,000 to 10,000,000</td>
<td>0.1</td>
</tr>
<tr>
<td>From 10,000,000 to 100,000,000</td>
<td>0.05</td>
</tr>
<tr>
<td>Over 100,000,000</td>
<td>0.02</td>
</tr>
</tbody>
</table>

b) Arbitrator’s fees

<table>
<thead>
<tr>
<th>Sum in dispute (in US dollars)</th>
<th>Fees (**) (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>From 0 to 25,000</td>
<td>(min. $ 800)</td>
</tr>
<tr>
<td>From 25,000 to 100,000</td>
<td>1.5</td>
</tr>
<tr>
<td>From 100,000 to 500,000</td>
<td>0.8</td>
</tr>
<tr>
<td>From 500,000 to 1,000,000</td>
<td>0.5</td>
</tr>
<tr>
<td>From 1,000,000 to 2,000,000</td>
<td>0.3</td>
</tr>
<tr>
<td>From 2,000,000 to 5,000,000</td>
<td>0.2</td>
</tr>
<tr>
<td>From 5,000,000 to 10,000,000</td>
<td>0.1</td>
</tr>
<tr>
<td>From 10,000,000 to 100,000,000</td>
<td>0.1</td>
</tr>
<tr>
<td>Over 100,000,000</td>
<td>0.05</td>
</tr>
</tbody>
</table>

(*) See paras. n° 2, 3 (b), 3 (e), 3 (g)
(**) See paras. n° 3 (c), 3 (d)
APPENDIX H

Construction Industry
Arbitration Rules

AMERICAN CONSULTING
ENGINEERS COUNCIL

AMERICAN INSTITUTE OF ARCHITECTS

AMERICAN SOCIETY OF
CIVIL ENGINEERS

AMERICAN SOCIETY OF
LANDSCAPE ARCHITECTS

AMERICAN SUBCONTRACTORS
ASSOCIATION

ASSOCIATED GENERAL CONTRACTORS

ASSOCIATED SPECIALTY
CONTRACTORS, INC.

CONSTRUCTION SPECIFICATIONS
INSTITUTE

NATIONAL ASSOCIATION OF
HOME BUILDERS

NATIONAL SOCIETY OF
PROFESSIONAL ENGINEERS

NATIONAL UTILITY CONTRACTORS
ASSOCIATION, INC.

American
Arbitration
Association

Effective April 1, 1982

NEW YORK (10020) • 140 West 51st Street
(212) 484-4000

AAA Arbitration H-1
For the Submission of existing disputes:

We, the undersigned parties, hereby agree to submit to arbitration under the Construction Industry Arbitration Rules of the American Arbitration Association the following controversy: [cite briefly]. We further agree that the above controversy be submitted to [one] [three] Arbitrator(s) selected from the panels of Arbitrators of the American Arbitration Association. We further agree that we will faithfully observe this agreement and the Rules and that we will abide by and perform any award rendered by the Arbitrator(s) and that a judgment of the Court having jurisdiction may be entered upon the award.

Standard Arbitration Clause

Parties may refer to these Rules in their contracts. For this purpose, the following clause may be used:

Any controversy or claim arising out of or relating to this contract or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the Arbitrator(s) may be entered in any Court having jurisdiction thereof.

American Arbitration Association

Arbitration is the voluntary submission of a dispute to a disinterested person or persons for final determination. And to achieve orderly, economical and expeditious arbitration, in accordance with federal and state laws, the American Arbitration Association is available to administer arbitration cases under various specialized rules.

The American Arbitration Association maintains throughout the United States a National Panel of Arbitrators consisting of experts in all trades and professions. By arranging for arbitration under the Construction Industry Arbitration Rules, parties may obtain the services of arbitrators who are familiar with the construction industry.

The American Arbitration Association shall establish and maintain as members of its National Panel of Arbitrators individuals competent to hear and determine disputes administered under the Construction Industry Arbitration Rules. The Association shall consider for appointment to the Construction Industry Panel persons recommended by the National Construction Industry Arbitration Committee as qualified to serve by virtue of their experience in the construction field.

The Association does not act as arbitrator. Its function is to administer arbitrations in accordance with the agreement of the parties and to maintain Panels from which arbitrators may be chosen by parties. Once designated, the arbitrator decides the issues and an award is final and binding.

When an agreement to arbitrate is written into a construction contract, it may expedite peaceful settlement without the necessity of going to arbitration at all. Thus, the arbitration clause is a form of insurance against loss of good will.
Construction Industry Arbitration Rules

1. Agreement of Parties
The parties shall be deemed to have made these Rules a part of their arbitration agreement whenever they have provided for arbitration under the Construction Industry Arbitration Rules. These Rules and any amendment thereof shall apply in the form obtaining at the time the arbitration is initiated.

2. Name of Tribunal
Any Tribunal constituted by the parties for the settlement of their dispute under these Rules shall be called the Construction Industry Arbitration Tribunal, hereinafter called the Tribunal.

3. Administrator
When parties agree to arbitrate under these Rules, or when they provide for arbitration by the American Arbitration Association, hereinafter called AAA, and an arbitration is initiated hereunder, they thereby constitute AAA the administrator of the arbitration. The authority and duties of the administrator are prescribed in the agreement of the parties and in these Rules.

4. Delegation of Duties
The duties of the AAA under these Rules may be carried out through Tribunal Administrators, or such other officers or committees as the AAA may direct.

5. National Panel of Arbitrators
In cooperation with the National Construction Industry Arbitration Committee, the AAA shall establish and maintain a National Panel of Construction Arbitrators, hereinafter called the Panel, and shall appoint an arbitrator or arbitrators therefrom as hereinafter provided. A neutral arbitrator selected by mutual choice of both parties or their appointees, or appointed by the AAA, is herein-
after called the arbitrator, whereas an arbitrator selected unilaterally by one party is hereinafter called the party-appointed arbitrator. The term arbitrator may hereinafter be used to refer to one arbitrator or to a Tribunal of multiple arbitrators.

6. Office of Tribunal
The general office of a Tribunal is the headquarters of the AAA, which may, however, assign the administration of an arbitration to any of its Regional Offices.

7. Initiation under an Arbitration Provision in a Contract
Arbitration under an arbitration provision in a contract shall be initiated in the following manner:

The initiating party shall, within the time specified by the contract, if any, file with the other party a notice of an intention to arbitrate (Demand), which notice shall contain a statement setting forth the nature of the dispute, the amount involved, and the remedy sought; and shall file three copies of said notice with any Regional Office of the AAA, together with three copies of the arbitration provisions of the contract and the appropriate filing fee as provided in Section 48 hereunder.

The AAA shall give notice of such filing to the other party. A party upon whom the demand for arbitration is made may file an answering statement in duplicate with the AAA within seven days after notice from the AAA, simultaneously sending a copy to the other party. If a monetary claim is made in the answer the appropriate administrative fee provided in the Fee Schedule shall be forwarded to the AAA with the answer. If no answer is filed within the stated time, it will be treated as a denial of the claim. Failure to file an answer shall not operate to delay the arbitration.

8. Change of Claim or Counterclaim
After filing of the claim or counterclaim, if either party desires to make any new or different claim or counterclaim, same shall be made in writing and filed with the AAA, and a copy thereof shall be mailed to the other party who shall have a period of seven days from the date of such mailing within which to file an answer with the AAA. However, after the arbitrator is appointed no new or different claim or counterclaim may be submitted without the arbitrator’s consent.

9. Initiation under a Submission
Parties to any existing dispute may commence an arbitration under these Rules by filing at any Regional Office two copies of a written agreement to arbitrate under these Rules (Submission), signed by the parties. It shall contain a statement of the matter in dispute, the amount of money involved, and the remedy sought, together with the appropriate filing fee as provided in the Fee Schedule.

10. Pre-Hearing Conference
At the request of the parties or at the discretion of the AAA a pre-hearing conference with the administrator and the parties or their counsel will be scheduled in appropriate cases to arrange for an exchange of information and the stipulation of uncontested facts so as to expedite the arbitration proceedings.

11. Fixing of Locale
The parties may mutually agree on the locale where the arbitration is to be held. If any party requests that the hearing be held in a specific locale and the other party files no objection thereto within seven days after notice of the request is mailed to such party, the locale shall be the one requested. If a party objects to the locale requested by the other party, the AAA shall have power to determine the locale and its decision shall be final and binding.

12. Qualifications of Arbitrator
Any arbitrator appointed pursuant to Section 13 or Section 15 shall be neutral, subject to disqualification for the reasons specified in Section 19. If the agreement of the parties names an arbitrator or specifies any other method of appointing an arbitrator, or if the parties specifically agree in writing, such arbitrator shall not be subject to disqualification for said reasons.

13. Appointment from Panel
If the parties have not appointed an arbitrator and have not provided any other method of appointment, the arbitrator shall be appointed in the following manner: Immediately after the filing of the
Demand or Submission, the AAA shall submit simultaneously to each party to the dispute an identical list of names of persons chosen from the Panel. Each party to the dispute shall have seven days from the mailing date in which to cross off any names to which it objects, number the remaining names to indicate the order of preference, and return the list to the AAA. If a party does not return the list within the time specified, all persons named therein shall be deemed acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the AAA shall invite the acceptance of an arbitrator to serve. If the parties fail to agree upon any of the persons named, or if acceptable arbitrators are unable to act, or if for any other reason the appointment cannot be made from the submitted lists, the AAA shall have the power to make the appointment from other members of the Panel without the submission of any additional lists.

14. Direct Appointment by Parties
If the agreement of the parties names an arbitrator or specifies a method of appointing an arbitrator, that designation or method shall be followed. The notice of appointment, with name and address of such arbitrator, shall be filed with the AAA by the appointing party. Upon the request of any such appointing party, the AAA shall submit a list of members of the Panel from which the party may make the appointment.

If the agreement specifies a period of time within which an arbitrator shall be appointed, and any party fails to make such appointment within that period, the AAA shall make the appointment.

If no period of time is specified in the agreement, the AAA shall notify the parties to make the appointment, and if within seven days after mailing of such notice such arbitrator has not been so appointed, the AAA shall make the appointment.

15. Appointment of Arbitrator by Party-Appointed Arbitrators
If the parties have appointed their party-appointed arbitrators or if either or both of them have been appointed as provided in Section 14, and have authorized such arbitrator to appoint an arbitrator within a specified time and no appointment is made within such time or any agreed extension thereof, the AAA shall appoint an arbitrator who shall act as Chairperson.

If no period of time is specified for appointment of the third arbitrator and the party-appointed arbitrators do not make the appointment within seven days from the date of the appointment of the last party-appointed arbitrator, the AAA shall appoint the arbitrator who shall act as Chairperson.

If the parties have agreed that their party-appointed arbitrators shall appoint the arbitrator from the Panel, the AAA shall furnish to the party-appointed arbitrators, in the manner prescribed in Section 13, a list selected from the Panel, and the appointment of the arbitrator shall be made as prescribed in such Section.

16. Nationality of Arbitrator in International Arbitration
If one of the parties is a national or resident of a country other than the United States, the arbitrator shall, upon the request of either party, be appointed from among the nationals of a country other than that of any of the parties.

17. Number of Arbitrators
If the arbitration agreement does not specify the number of arbitrators, the dispute shall be heard and determined by one arbitrator, unless the AAA, in its discretion, directs that a greater number of arbitrators be appointed.

18. Notice to Arbitrator of Appointment
Notice of the appointment of the arbitrator, whether mutually appointed by the parties or appointed by the AAA, shall be mailed to the arbitrator by the AAA, together with a copy of these Rules, and the signed acceptance of the arbitrator shall be filed prior to the opening of the first hearing.

19. Disclosure and Challenge Procedure
A person appointed as neutral arbitrator shall disclose to the AAA any circumstances likely to affect his or her impartiality, including any bias or any financial or personal interest in the result of
the arbitration or any past or present relationship with the parties or their counsel. Upon receipt of such information from such arbitrator or other source, the AAA shall communicate such information to the parties and, if it deems it appropriate to do so, to the arbitrator and others. Thereafter, the AAA shall determine whether the arbitrator should be disqualified and shall inform the parties of its decision, which shall be conclusive.

20. Vacancies
If any arbitrator should resign, die, withdraw, refuse, be disqualified or be unable to perform the duties of office, the AAA shall, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provision of these Rules. In the event of a vacancy in a panel of neutral arbitrators, the remaining arbitrator or arbitrators may continue with the hearing and determination of the controversy, unless the parties agree otherwise.

21. Time and Place
The arbitrator shall fix the time and place for each hearing. The AAA shall mail to each party notice thereof at least five days in advance, unless the parties by mutual agreement waive such notice or modify the terms thereof.

22. Representation by Counsel
Any party may be represented by counsel. A party intending to be so represented shall notify the other party and the AAA of the name and address of counsel at least three days prior to the date set for the hearing at which counsel is first to appear. When an arbitration is initiated by counsel, or where an attorney replies for the other party, such notice is deemed to have been given.

23. Stenographic Record
The AAA shall make the necessary arrangements for the taking of a stenographic record whenever such record is requested by a party. The requesting party or parties shall pay the cost of such record as provided in Section 50.

24. Interpreter
The AAA shall make the necessary arrangements for the services of an interpreter upon the request of one or both parties, who shall assume the cost of such services.

25. Attendance at Hearings
Persons having a direct interest in the arbitration are entitled to attend hearings. The arbitrator shall otherwise have the power to require the retirement of any witness or witnesses during the testimony of other witnesses. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any other persons.

26. Adjournments
The arbitrator may adjourn the hearing, and must take such adjournment when all of the parties agree thereto.

27. Oaths
Before proceeding with the first hearing or with the examination of the file, each arbitrator may take an oath of office, and if required by law, shall do so. The arbitrator may require witnesses to testify under oath administered by any duly qualified person or, if required by law or demanded by either party, shall do so.

28. Majority Decision
Whenever there is more than one arbitrator, all decisions of the arbitrators must be by at least a majority. The award must also be made by at least a majority unless the concurrence of all is expressly required by the arbitration agreement or by law.

29. Order of Proceedings
A hearing shall be opened by the filing of the oath of the arbitrator, where required, and by the recording of the place, time, and date of the hearing, the presence of the arbitrator and parties, and counsel, if any, and by the receipt by the arbitrator of the statement of the claim and answer, if any.

The arbitrator may, at the beginning of the hearing, ask for statements clarifying the issues involved.

The complaining party shall then present its claims, proofs and witnesses, who shall submit to questions or other examination. The defending party shall then present its defenses, proofs and witnesses, who
shall submit to questions or other examination. The arbitrator may vary this procedure but shall afford full and equal opportunity to the parties for the presentation of any material or relevant proofs.

Exhibits, when offered by either party, may be received in evidence by the arbitrator.

The names and addresses of all witnesses and exhibits in order received shall be made a party of the record.

30. Arbitration in the Absence of a Party
Unless the law provides to the contrary, the arbitration may proceed in the absence of any party, who, after due notice, fails to present or fails to obtain an adjournment. An award shall not be made solely on the default of a party. The arbitrator shall require the party who is present to submit such evidence as deemed necessary for the making of an award.

31. Evidence
The parties may offer such evidence as they desire and shall produce such additional evidence as the arbitrator may deem necessary to an understanding and determination of the dispute. An arbitrator authorized by law to subpoena witnesses or documents may do so upon the request of any party, or independently. The arbitrator shall be the judge of the admissibility of the evidence offered and conformity to legal rules of evidence shall not be necessary. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where any of the parties is absent in default of or has waived his or her right to be present.

32. Evidence by Affidavit and Filing of Documents
The arbitrator may receive and consider the evidence of witnesses by affidavit, giving it such weight as seems appropriate after consideration of any objections made to its admission.

All documents not filed with the arbitrator at the hearing, but arranged for at the hearing or subsequently by agreement of the parties, shall be filed with the AAA for transmission to the arbitrator. All parties shall be afforded opportunity to examine such documents.

33. Inspection or Investigation
An arbitrator finding it necessary to make an inspection or investigation in connection with the arbitration shall direct the AAA to so advise the parties. The arbitrator shall set the time and the AAA shall notify the parties thereof. Any party who so desires may be present at such inspection or investigation. In the event that one or both parties are not present at the inspection or investigation, the arbitrator shall make a verbal or written report to the parties and afford them an opportunity to comment.

34. Conservation of Property
The arbitrator may issue such orders as may be deemed necessary to safeguard the property which is the subject matter of the arbitration without prejudice to the rights of the parties or to the final determination of the dispute.

35. Closing of Hearings
The arbitrator shall specifically inquire of the parties whether they have any further proofs to offer or witnesses to be heard. Upon receiving negative replies, the arbitrator shall declare the hearings closed and a minute thereof shall be recorded. If briefs are to be filed, the hearings shall be declared closed as of the final date set by the arbitrator for the receipt of briefs. If documents are to be filed as provided for in Section 32 and the date set for their receipt is later than that set for the receipt of briefs, the later date shall be the date of closing the hearing. The time limit within which the arbitrator is required to make an award shall commence to run, in the absence of other agreements by the parties, upon the closing of the hearings.

36. Reopening of Hearings
The hearings may be reopened by the arbitrator at will, or upon application of a party at any time before the award is made. If the reopening of the hearing would prevent the making of the award within the specific time agreed upon by the parties in the contract out of which the controversy has arisen, the matter may not be reopened, unless the parties agree upon the extension of such time limit. When no specific date is fixed in the contract, the arbitrator may reopen the hearings, and the arbitrator shall have thirty days from the closing of the reopened hearings within which to make an award.
37. Waiver of Oral Hearings
The parties may provide, by written agreement, for the waiver of oral hearings. If the parties are unable to agree as to the procedure, the AAA shall specify a fair and equitable procedure.

38. Waiver of Rules
Any party who proceeds with the arbitration after knowledge that any provision or requirement of these Rules has not been compiled with and who fails to state an objection thereto in writing, shall be deemed to have waived the right to object.

39. Extensions of Time
The parties may modify any period of time by mutual agreement. The AAA for good cause may extend any period of time established by these Rules, except the time for making the award. The AAA shall notify the parties of any such extension of time and its reason therefor.

40. Communication with Arbitrator and Serving of Notices
There shall be no communication between the parties and an arbitrator other than at oral hearings. Any other oral or written communications from the parties to the arbitrator shall be directed to the AAA for transmittal to the arbitrator.

Each party to an agreement which provides for arbitration under these Rules shall be deemed to have consented that any papers, notices or process necessary or proper for the initiation or continuation of an arbitration under these Rules and for any court action in connection therewith or for the entry of judgment on any award made thereunder may be served upon such party by mail addressed to such party or its attorney at the last known address or by personal service, within or without the state wherein the arbitration is to be held (whether such party be within or without the United States of America), provided that reasonable opportunity to be heard with regard thereto has been granted to and, unless otherwise agreed by the parties, or specified by law, not later than thirty days from the date of closing the hearings, or if oral hearings have been waived, from the date of transmitting the final statements and proofs to the arbitrator.

42. Form of Award
The award shall be in writing and shall be signed either by the sole arbitrator or by at least a majority if there be more than one. It shall be executed in the manner required by law.

43. Scope of Award
The arbitrator may grant any remedy or relief which is just and equitable and within the terms of the agreement of the parties. The arbitrator, in the award, shall assess arbitration fees and expenses as provided in Sections 48 and 50 equally or in favor of any party and, in the event any administrative fees or expenses are due the AAA, in favor of the AAA.

44. Award upon Settlement
If the parties settle their dispute during the course of the arbitration, the arbitrator, upon their request, may set forth the terms of the agreed settlement in an award.

45. Delivery of Award to Parties
Parties shall accept as legal delivery of the award the placing of the award or a true copy thereof in the mail by the AAA, addressed to such party at its last known address or to its attorney, or personal service of the award, or the filing of the award in any manner which may be prescribed by law.

46. Release of Documents for Judicial Proceedings
The AAA shall, upon the written request of a party, furnish to such party, at its expense, certified facsimiles of any papers in the AAA’s possession that may be required in judicial proceedings relating to the arbitration.

47. Applications to Court
No judicial proceedings by a party relating to the subject matter of the arbitration shall be deemed a waiver of the party’s right to arbitrate.
The AAA is not a necessary party in judicial proceedings relating to the arbitration.

Parties to these Rules shall be deemed to have consented that judgment upon the award rendered by the arbitrator(s) may be entered in any Federal or State Court having jurisdiction thereof.

48. Administrative Fees
As a not-for-profit organization, the AAA shall prescribe an administrative fee schedule and a refund schedule to compensate it for the cost of providing administrative services. The schedule in effect at the time of filing or the time of refund shall be applicable.

The administrative fees shall be advanced by the initiating party or parties in accordance with the administrative fee schedule, subject to final apportionment by the arbitrator in the award.

When a matter is withdrawn or settled, the refund shall be made in accordance with the refund schedule.

The AAA, in the event of extreme hardship on the part of any party, may defer or reduce the administrative fee.

49. Fee when Oral Hearings are Waived
Where all oral hearings are waived under Section 37 the Administrative Fee Schedule shall apply.

50. Expenses
The expenses of witnesses for either side shall be paid by the party producing such witnesses.

The cost of the stenographic record, if any is made, and all transcripts thereof, shall be prorated equally between the parties ordering copies, unless they shall otherwise agree, and shall be paid for by the responsible parties directly to the reporting agency.

All other expenses of the arbitration, including required traveling and other expenses of the arbitrator and of AAA representatives, and the expenses of any witness or the cost of any proofs produced at the direct request of the arbitrator, shall be borne equally by the parties, unless they agree otherwise, or unless the arbitrator in the award assesses such expenses or any part thereof against any specified party or parties.

51. Arbitrator’s Fee
Unless the parties agree to terms of compensation, members of the National Panel of Construction Arbitrators will serve without compensation for the first two days of service.

Thereafter, compensation shall be based upon the amount of service involved and the number of hearings. An appropriate daily rate and other arrangements will be discussed by the administrator with the parties and the arbitrator(s). If the parties fail to agree to the terms of compensation, an appropriate rate shall be established by the AAA, and communicated in writing to the parties.

Any arrangement for the compensation of an arbitrator shall be made through the AAA and not directly by the arbitrator with the parties. The terms of compensation of neutral arbitrators on a Tribunal shall be identical.

52. Deposits
The AAA may require the parties to deposit in advance such sums of money as it deems necessary to defray the expense of the arbitration, including the arbitrator’s fee if any, and shall render an accounting to the parties and return any unexpended balance.

53. Interpretation and Application of Rules
The arbitrator shall interpret and apply these Rules insofar as they relate to the arbitrator’s powers and duties. When there is more than one arbitrator and a difference arises among them concerning the meaning or application of any such Rules, it shall be decided by a majority vote. If that is unobtainable, either an arbitrator or a party may refer the question to the AAA for final decision. All other Rules shall be interpreted and applied by the AAA.
ADMINISTRATIVE FEE SCHEDULE

A filing fee of $200 will be paid at the time the case is initiated.

The balance of the administrative fee of the AAA is based upon the amount of each claim and counterclaim as disclosed when the claim and counterclaim are filed, and is due and payable prior to the notice of appointment of the neutral arbitrator.

In those claims and counterclaims which are not for a monetary amount, an appropriate administrative fee will be determined by the AAA, payable prior to such notice of appointment.

<table>
<thead>
<tr>
<th>Amount of Claim or Counterclaim</th>
<th>Fee for Claim or Counterclaim</th>
</tr>
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<tbody>
<tr>
<td>$1 to $20,000</td>
<td>3% (minimum $200)</td>
</tr>
<tr>
<td>$20,000 to $40,000</td>
<td>$600, plus 2% of excess over $20,000</td>
</tr>
<tr>
<td>$40,000 to $80,000</td>
<td>$1,000, plus 1% of excess over $40,000</td>
</tr>
<tr>
<td>$80,000 to $160,000</td>
<td>$1,400, plus ½% of excess over $80,000</td>
</tr>
<tr>
<td>$160,000 to $5,000,000</td>
<td>$1,800, plus ¼% of excess over $160,000</td>
</tr>
</tbody>
</table>

Where the claim or counterclaim exceeds $5 million, an appropriate fee will be determined by the AAA. If there are more than two parties represented in the arbitration, an additional 10% of the administrative fee will be due for each additional represented party.

When no amount can be stated at the time of filing, the administrative fee is $500, subject to adjustment in accordance with the schedule as soon as an amount can be disclosed.

OTHER SERVICE CHARGES

$50 payable by a party causing an adjournment of any scheduled hearing;

$100 payable by a party causing a second or additional adjournment of any scheduled hearing;

$50 payable by each party for each second and subsequent hearing which is either clerked by the AAA or held in a hearing room provided by the AAA.

REFUND SCHEDULE

If the AAA is notified that a case has been settled or withdrawn before it mails a notice of appointment of a neutral arbitrator, all of the fee in excess of $200 will be refunded.

If the AAA is notified that a case is settled or withdrawn thereafter but at least 48 hours before the date and time set for the first hearing, one-third of the fee in excess of $200 will be refunded.
APPENDIX I

Construction Industry Mediation Rules

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN INSTITUTE OF ARCHITECTS

AMERICAN SOCIETY OF CIVIL ENGINEERS

AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

AMERICAN SUBCONTRACTORS ASSOCIATION

ASSOCIATED GENERAL CONTRACTORS

ASSOCIATED SPECIALTY CONTRACTORS, INC.

CONSTRUCTION SPECIFICATIONS INSTITUTE

NATIONAL ASSOCIATION OF HOME BUILDERS

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

American Arbitration Association

Effective
April 1, 1982

NEW YORK (10020) • 140 West 51st Street
(212) 484-4000

AAA Mediation I-1
Introduction

Representatives of the ten organizations listed on the front cover constitute the National Construction Industry Arbitration Committee (NCIAC). This committee is the sponsor of the arbitration procedure specially designed for the construction industry by the American Arbitration Association (AAA).

Despite arbitration's acknowledged success in the resolution of a growing number of construction industry disputes, the NCIAC has concluded that it is desirable to provide a supplementary procedure that will serve the parties in resolving disputes in their early stages. Such alternative—mediation—makes unnecessary the kind of preparations required for an adversary arbitration or court proceeding, which tend to polarize the parties and harden them in their respective positions.

Mediation consists of the effort of an individual, or several individuals, to assist the parties in reaching the settlement of a controversy or claim by direct negotiations between or among themselves. The mediator participates impartially in the negotiations, advising and consulting the various parties involved. The result of the mediation should be an agreement that the parties find acceptable. The mediator cannot impose a settlement, but can only seek to guide the parties to the achievement of their own settlement.

The AAA will administer the mediation process to achieve orderly, economical, and expeditious mediation, utilizing to the greatest possible extent the competency and acceptability of the arbitrators on the AAA's Construction Industry Panel. Depending on the expertise needed for a given dispute, the parties can obtain the services of one or more individuals who are willing to serve as mediators and who are trained by the AAA in the necessary mediation skills. In identifying those persons most qualified to mediate, the AAA is assisted by the NCIAC.

The AAA itself does not act as mediator. Its function is to administer the mediation process in accordance with the agreement of the parties, to teach mediation skills to members of the construction industry, and to maintain panels from which top-flight mediators may be chosen.

Mediation Clause

Parties may refer to these rules in their contracts. For this purpose, the following clause may be used:

If a dispute arises out of or relating to this contract, or the breach thereof, and if said dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle the dispute in an amicable manner by mediation under the Voluntary Construction Mediation Rules of the American Arbitration Association, before having recourse to arbitration or a judicial forum.

Submission to Mediation

After a dispute has arisen, the parties may agree to these rules by means of the following Submission Agreement:

The parties hereby submit the following dispute to mediation under the Voluntary Construction Mediation Rules of the American Arbitration Association. The requirement of filing a notice of claim with respect to the dispute submitted to mediation shall be suspended until the conclusion of the mediation process. (The clause can also provide for the number of mediators, their compensation, method of payment, locale of meetings and any other item of concern to the parties.)
Construction Industry Mediation Rules

1. Agreement of Parties
The parties shall be deemed to have made these rules a part of their agreement whenever, by stipulation or in their contract, they have provided for mediation of existing or future disputes under AAA auspices or under these rules.

2. Initiation of Mediation
Any party or parties to a dispute may initiate mediation by filing a written request for mediation pursuant to these rules.

3. Request for Mediation
A request for mediation shall contain a brief statement of the nature of the dispute and the names and addresses of all parties to the dispute. The initiating party shall simultaneously file two (2) copies of the request with the AAA and one copy with every other party to the dispute and every other person reasonably expected to have a direct financial interest in the outcome of the dispute.

4. Response to Request for Mediation
Each person who receives a request for mediation shall advise the AAA of a willingness to mediate within twenty (20) days after the date of mailing of the mediation request and the AAA shall so advise all of the other parties.

5. Appointment of Mediator
Based upon the nature of the issues in dispute and the preferences of the parties, the AAA shall appoint one or more qualified mediator(s) to serve. In all instances, a single mediator will be appointed unless the parties agree otherwise, or the nature of the issues requires the appointment of a larger number. If the agreement of the parties names a mediator or specifies a method of appointing a mediator, that designation or method shall be followed.

6. Qualifications of a mediator
Any mediator appointed shall be a member of the AAA's Construction Mediation Panel, with expertise in the area of the dispute and knowledgeable in the mediation process.

No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation, except by consent of the parties. Prior to accepting an appointment, the prospective mediator shall disclose any circumstances likely to create a presumption of bias or prevent prompt meetings with the parties. Upon receipt of such information, the AAA shall either replace the mediator or immediately communicate the information to the parties for their comments. If the appointed mediator is unable to serve promptly, the AAA is authorized to appoint another mediator.

7. Time and Place of Mediation
The mediator, with the agreement of the parties or at the mediator's own initiative, shall fix the time of each mediation session. The mediation will be held at the construction site, or at the nearest regional office of the AAA, or at any other convenient location agreeable to the mediator and the parties.

8. Authority of Mediator
The mediator is authorized to conduct joint and separate meetings with the parties and to make oral recommendations for settlement. Whenever necessary, the mediator may also obtain expert advice concerning technical aspects of the dispute, provided the parties agree and assume the expense of obtaining such advice. Arrangements for such advice shall be made by the AAA.

The mediator is authorized to end the mediation whenever further efforts at mediation would not contribute to a solution of the dispute between the parties.

Normally, mediators do not write reports of the mediation process, unless the parties agree otherwise.
9. Privacy
The mediator shall maintain the privacy of the mediation effort. Nothing that transpires during the mediation proceeding is intended in any way to affect the rights or prejudice the position of any of the parties to the dispute in any later arbitration, litigation, or proceeding.

10. No Stenographic Record
There shall be no stenographic record of the mediation process.

11. Expenses
The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required travelling and other expenses of the mediator and representatives of the AAA, and the expenses of any witness, or the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties unless they agree otherwise.

FEE SCHEDULE

Administrative Fee
An initial administrative fee of the AAA of $200 for each party shall be paid at the time of filing of the mediation request. No refund of the initial fee is made when a matter is withdrawn or settled after the filing of the mediation request.

Additional Sessions
A fee of $50 is payable by each party for each second and subsequent mediation session that is either attended by an AAA staff representative or held in a hearing room provided by the AAA.

Postponement Fee
A fee of $50 is payable by a party causing a postponement of any scheduled mediation session.

Mediator’s Fee
Mediators on AAA’s Construction Mediation Panel will serve without compensation for the first day. Thereafter, the mediator shall be compensated at a reasonable rate, agreeable to the parties, to be arranged by the AAA. The mediator’s fee shall be borne equally by the parties unless they agree otherwise.

Deposits
Before the commencement of mediation, the parties shall each deposit half of the fee covering the cost of mediation and of any appropriate additional sums the AAA deems necessary to defray the expenses of the proceeding. When the mediation is concluded by settlement or terminates without a settlement, the AAA shall render an accounting and return any unexpended balance to the parties.
APPENDIX J

UNCITRAL
Arbitration Rules

RESOLUTION 31/98 ADOPTED BY THE GENERAL ASSEMBLY ON 15 DECEMBER 1976

The General Assembly,

Recognizing the value of arbitration as a method of settling disputes arising in the context of international commercial relations,

Being convinced that the establishment of rules for <i>ad hoc</i> arbitration that are acceptable in countries with different legal, social and economic systems would significantly contribute to the development of harmonious international economic relations,

Bearing in mind that the Arbitration Rules of the United Nations Commission on International Trade Law have been prepared after extensive consultation with arbitral institutions and centres of international commercial arbitration,

Noting that the Arbitration Rules were adopted by the United Nations Commission on International Trade Law at its ninth session<sup>1</sup> after due deliberation,

1. Recommends the use of the Arbitration Rules of the United Nations Commission on International Trade Law in the settlement of disputes arising in the context of international commercial relations, particularly by reference to the Arbitration Rules in commercial contracts;

2. Requests the Secretary-General to arrange for the widest possible distribution of the Arbitration Rules.


The UNCITRAL Arbitration Rules were adopted in 1977 by the United Nations Commission on International Trade Law, a worldwide organization that includes representatives from the various legal, economic, and social systems and geographic regions. The General Assembly of the United Nations has recommended use of the UNCITRAL Arbitration Rules for inclusion in international commercial contracts.

United Nations
New York, 1977

Contents

GENERAL ASSEMBLY RESOLUTION 31/98
UNCITRAL ARBITRATION RULES

Section I. Introductory rules
Scope of application (article 1) and model arbitration clause
Notice, calculation of periods of time (article 2)
Notice of arbitration (article 3)
Representation and assistance (article 4)

Section II. Composition of the arbitral tribunal
Number of arbitrators (article 5)
Appointment of arbitrators (articles 6 to 8)
Challenge of arbitrators (articles 9 to 12)
Replacement of an arbitrator (article 13)
Repetition of hearings in the event of the replacement of an arbitrator (article 14)

Section III. Arbitral proceedings
General provisions (article 15)
Place of arbitration (article 16)
Language (article 17)
Statement of claim (article 18)
Statement of defence (article 19)
Amendments to the claim or defence (article 20)
Pleas as to the jurisdiction of the arbitral tribunal (article 21)
Further written statements (article 22)
Periods of time (article 23)
Evidence and hearings (articles 24 and 29)
Interim measures of protection (article 26)
Experts (article 27)
Default (article 28)
Closure of hearings (article 29)
Waiver of rules (article 30)

Section IV. The award
Decisions (article 31)
Form and effect of the award (article 32)
Applicable law, amicable composition (article 33)
Settlement or other grounds for termination (article 34)
Interpretation of the award (article 35)
Correction of the award (article 36)
Additional award (article 37)
Costs (articles 38 to 40)
Deposit of costs (article 41)
UNCITRAL ARBITRATION RULES

Section I. Introductory rules

SCOPE OF APPLICATION

Article 1

1. Where the parties to a contract have agreed in writing* that disputes in relation to that contract shall be referred to arbitration under the UNCITRAL Arbitration Rules, then such disputes shall be settled in accordance with these Rules subject to such modification as the parties may agree in writing.

2. These Rules shall govern the arbitration except that where any of these Rules is in conflict with a provision of the law applicable to the arbitration from which the parties cannot derogate, that provision shall prevail.

NOTICE, CALCULATION OF PERIODS OF TIME

Article 2

1. For the purposes of these Rules, any notice, including a notification, communication or proposal, is deemed to have been received if it is physically delivered to the addressee or if it is delivered at his habitual residence, place of business or mailing address, or, if none of these can be found after making reasonable inquiry, at the addressee's last-known residence or place of business. Notice shall be deemed to have been received on the day it is so delivered.

2. For the purposes of calculating a period of time under these Rules, such period shall begin to run on the day following the day when a notice, notification, communication or proposal is received. If the last day of such period is an official holiday or a non-business day at the residence or place of business of the addressee, the period is extended until the first business day following. Official holidays or non-business days occurring during the running of the period of time are included in calculating the period.

*MODEL ARBITRATION CLAUSE

Any dispute, controversy or claim arising out of or relating to this contract, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.

Note - Parties may wish to consider adding:
(a) The appointing authority shall be . . . (name of institution or person);
(b) The number of arbitrators shall be . . . (one or three);
(c) The place of arbitration shall be . . . (town or country);
(d) The language(s) to be used in the arbitral proceedings shall be . . .

NOTICE OF ARBITRATION

Article 3

1. The party initiating recourse to arbitration (hereinafter called the "claimant") shall give to the other party (hereinafter called the "respondent") a notice of arbitration.

2. Arbitral proceedings shall be deemed to commence on the date on which the notice of arbitration is received by the respondent.

3. The notice of arbitration shall include the following:
   (a) A demand that the dispute be referred to arbitration;
   (b) The names and addresses of the parties;
   (c) A reference to the arbitration clause or the separate arbitration agreement that is invoked;
   (d) A reference to the contract out of or in relation to which the dispute arises;
   (e) The general nature of the claim and an indication of the amount involved, if any;
   (f) The relief or remedy sought;
   (g) A proposal as to the number of arbitrators (i.e. one or three), if the parties have not previously agreed thereon.

4. The notice of arbitration may also include:
   (a) The proposals for the appointments of a sole arbitrator and an appointing authority referred to in article 6, paragraph 1;
   (b) The notification of the appointment of an arbitrator referred to in article 7;
   (c) The statement of claim referred to in article 18.

REPRESENTATION AND ASSISTANCE

Article 4

The parties may be represented or assisted by persons of their choice. The names and addresses of such persons must be communicated in writing to the other party; such communication must specify whether the appointment is being made for purposes of representation or assistance.
Section II. Composition of the arbitral tribunal

NUMBER OF ARBITRATORS

Article 5
If the parties have not previously agreed on the number of arbitrators (i.e. one or three), and if within fifteen days after the receipt by the respondent of the notice of arbitration the parties have not agreed that there shall be only one arbitrator, three arbitrators shall be appointed.

APPOINTMENT OF ARBITRATORS (ARTICLES 6 TO 8)

Article 6
1. If a sole arbitrator is to be appointed, either party may propose to the other:
   (a) The names of one or more persons, one of whom would serve as the sole arbitrator; and
   (b) If no appointing authority has been agreed upon by the parties, the names of one or more persons, one of whom would serve as appointing authority.

2. If within thirty days after receipt by a party of a proposal made in accordance with paragraph 1 the parties have not reached agreement on the choice of a sole arbitrator, the sole arbitrator shall be appointed by the appointing authority agreed upon by the parties. If no appointing authority has been agreed upon by the parties, or if the appointing authority agreed upon refuses to act or fails to appoint the arbitrator within sixty days of the receipt of a party's request therefor, either party may request the Secretary-General of the Permanent Court of Arbitration at The Hague to designate an appointing authority.

3. The appointing authority shall, at the request of one of the parties, appoint the sole arbitrator as promptly as possible. In making the appointment the appointing authority shall use the following list procedure, unless both parties agree that the list procedure should not be used or unless the appointing authority determines in its discretion that the use of the list procedure is not appropriate for the case:
   (a) At the request of one of the parties the appointing authority shall communicate to both parties an identical list containing at least three names;
   (b) Within fifteen days after the receipt of this list, each party may return the list to the appointing authority after having deleted the name or names to which he objects and numbered the remaining names on the list in the order of his preference;
   (c) After the expiration of the above period of time the appointing authority shall appoint the sole arbitrator from among the names approved on the lists returned to it and in accordance with the order of preference indicated by the parties;
   (d) If for any reason the appointment cannot be made according to this procedure, the appointing authority may exercise its discretion in appointing the sole arbitrator.

4. In making the appointment, the appointing authority shall have regard to such considerations as are likely to secure the appointment of an independent and impartial arbitrator and shall take into account as well the advisability of appointing an arbitrator of a nationality other than the nationalities of the parties.

Article 7
1. If three arbitrators are to be appointed, each party shall appoint one arbitrator. The two arbitrators thus appointed shall choose the third arbitrator who will act as the presiding arbitrator of the tribunal.

2. If within thirty days after the receipt of a party's notification of the appointment of an arbitrator the other party has not notified the first party of the arbitrator he has appointed:
   (a) The first party may request the appointing authority previously designated by the parties to appoint the second arbitrator; or
   (b) If no such authority has been previously designated by the parties, or if the appointing authority previously designated refuses to act or fails to appoint the arbitrator within thirty days after receipt of a party's request therefor, the first party may request the Secretary-General of the Permanent Court of Arbitration at The Hague to designate the appointing authority. The first party may then request the appointing authority so designated to appoint the second arbitrator. In either case, the appointing authority may exercise its discretion in appointing the arbitrator.
3. If within thirty days after the appointment of the second arbitrator the two arbitrators have not agreed on the choice of the presiding arbitrator, the presiding arbitrator shall be appointed by an appointing authority in the same way as a sole arbitrator would be appointed under article 6.

Article 8
1. When an appointing authority is requested to appoint an arbitrator pursuant to article 6 or article 7, the party which makes the request shall send to the appointing authority a copy of the notice of appointment, a copy of the contract out of or in relation to which the dispute has arisen and a copy of the arbitration agreement if it is not contained in the contract. The appointing authority may require from either party such information as it deems necessary to fulfill its function.
2. Where the names of one or more persons are proposed for appointment as arbitrators, their full names, addresses and nationalities shall be indicated, together with a description of their qualifications.

CHALLENGE OF ARBITRATORS (ARTICLES 9 TO 12)

Article 9
A prospective arbitrator shall disclose to those who approach him in connexion with his possible appointment any circumstances likely to give rise to justifiable doubts as to his impartiality or independence. An arbitrator, once appointed or chosen, shall disclose such circumstances to the parties unless they have already been informed by him of these circumstances.

Article 10
1. Any arbitrator may be challenged if circumstances exist that give rise to justifiable doubts as to the arbitrator’s impartiality or independence.
2. A party may challenge the arbitrator appointed by him only for reasons of which he becomes aware after the appointment has been made.

Article 11
1. A party who intends to challenge an arbitrator shall send notice of his challenge within fifteen days after the appointment of the challenged arbitrator has been notified to the challenging party or within fifteen days after the circumstances mentioned in articles 9 and 10 became known to that party.
2. The challenge shall be notified to the other party, to the arbitrator who is challenged and to the other members of the arbitral tribunal. The notification shall be in writing and shall state the reasons for the challenge.
3. When an arbitrator has been challenged by one party, the other party may agree to the challenge. The arbitrator may also, after the challenge, withdraw from his office. In neither case does this imply acceptance of the validity of the grounds for the challenge. In both cases the procedure provided in article 6 or 7 shall be used in full for the appointment of the substitute arbitrator, even if during the process of appointing the challenged arbitrator a party had failed to exercise his right to appoint or to participate in the appointment.

Article 12
1. If the other party does not agree to the challenge and the challenged arbitrator does not withdraw, the decision on the challenge will be made:
   (a) When the initial appointment was made by an appointing authority, by that authority;
   (b) When the initial appointment was not made by an appointing authority, but an appointing authority has been previously designated, by that authority;
   (c) In all other cases, by the appointing authority to be designated in accordance with the procedure for designating an appointing authority as provided for in article 6.
2. If the appointing authority sustains the challenge, a substitute arbitrator shall be appointed or chosen pursuant to the procedure applicable to the appointment or choice of an arbitrator as provided for in articles 6 to 9 except that, when this procedure would call for the designation of an appointing authority, the appointment of the arbitrator shall be made by the appointing authority which decided on the challenge.

REPLACEMENT OF AN ARBITRATOR

Article 13
1. In the event of the death or resignation of an arbitrator during the course of the arbitral proceedings, a substitute arbitrator shall be appointed or chosen pursuant to the procedure provided for in articles 6 to 9 that was applicable to the appointment or choice of the arbitrator being replaced.
2. In the event that an arbitrator fails to act or in the event of the de jure or de facto impossibility of his performing his functions, the procedure in respect of the
challenge and replacement of an arbitrator as provided in the preceding articles shall apply.

REPETITION OF HEARINGS IN THE EVENT OF THE REPLACEMENT OF AN ARBITRATOR

Article 14
If under articles 11 to 13 the sole or presiding arbitrator is replaced, any hearings held previously shall be repeated; if any other arbitrator is replaced, such prior hearings may be repeated at the discretion of the arbitral tribunal.

Section III. Arbitral proceedings

GENERAL PROVISIONS

Article 15
1. Subject to these Rules, the arbitral tribunal may conduct the arbitration in such manner as it considers appropriate, provided that the parties are treated with equality and that at any stage of the proceedings each party is given a full opportunity of presenting his case.
2. If either party so requests at any stage of the proceedings, the arbitral tribunal shall, hold hearings for the presentation of evidence by witnesses, including expert witnesses, or for oral argument. In the absence of such a request, the arbitral tribunal shall decide whether to hold such hearings or whether the proceedings shall be conducted on the basis of documents and other materials.
3. All documents or information supplied to the arbitral tribunal by one party shall at the same time be communicated by that party to the other party.

PLACE OF ARBITRATION

Article 16
1. Unless the parties have agreed upon the place where the arbitration is to be held, such place shall be determined by the arbitral tribunal, having regard to the circumstances of the arbitration.
2. The arbitral tribunal may determine the locale of the arbitration within the country agreed upon by the parties. It may hear witnesses and hold meetings for consultation among its members at any place it deems appropriate, having regard to the circumstances of the arbitration.
3. The arbitral tribunal may meet at any place it deems appropriate for the inspection of goods, other property or documents. The parties shall be given sufficient notice to enable them to be present at such inspection.
4. The award shall be made at the place of arbitration.

LANGUAGE

Article 17
1. Subject to an agreement by the parties, the arbitral tribunal shall, promptly after its appointment, determine the language or languages to be used in the proceedings. This determination shall apply to the statement of claim, the statement of defence, and any further written statements and, if oral hearings take place, to the language or languages to be used in such hearings.
2. The arbitral tribunal may order that any documents annexed to the statement of claim or statement of defence, and any supplementary documents or exhibits submitted in the course of the proceedings, delivered in their original language, shall be accompanied by a translation into the language or languages agreed upon by the parties or determined by the arbitral tribunal.

STATEMENT OF CLAIM

Article 18
1. Unless the statement of claim was contained in the notice of arbitration, within a period of time to be determined by the arbitral tribunal, the claimant shall communicate his statement of claim in writing to the respondent and to each of the arbitrators. A copy of the contract, and of the arbitration agreement if not contained in the contract, shall be annexed thereto.
2. The statement of claim shall include the following particulars:
   (a) The names and addresses of the parties;
   (b) A statement of the facts supporting the claim;
   (c) The points at issue;
   (d) The relief or remedy sought.
The claimant may annex to his statement of claim all documents he deems relevant or may add a reference to the documents or other evidence he will submit.
STATEMENT OF DEFENCE

Article 19
1. Within a period of time to be determined by the arbitral tribunal, the respondent shall communicate his statement of defence in writing to the claimant and to each of the arbitrators.
2. The statement of defence shall reply to the particulars (b), (c) and (d) of the statement of claim (Article 18, para. 2). The respondent may annex to his statement the documents on which he relies for his defence or may add a reference to the documents or other evidence he will submit.
3. In his statement of defence, or at a later stage in the arbitral proceedings if the arbitral tribunal decides that the delay was justified under the circumstances, the respondent may make a counter-claim arising out of the same contract or rely on a claim arising out of the same contract for the purpose of a set-off.
4. The provisions of Article 18, paragraph 2, shall apply to a counter-claim and a claim relied on for the purpose of a set-off.

AMENDMENTS TO THE CLAIM OR DEFENCE

Article 20
During the course of the arbitral proceedings either party may amend or supplement his claim or defence unless the arbitral tribunal considers it inappropriate to allow such amendment having regard to the delay in making it or prejudice to the other party or any other circumstances. However, a claim may not be amended in such a manner that the amended claim falls outside the scope of the arbitration clause or separate arbitration agreement.

PLEAS AS TO THE JURISDICTION OF THE ARBITRAL TRIBUNAL

Article 21
1. The arbitral tribunal shall have the power to rule on objections that it has no jurisdiction, including any objections with respect to the existence or validity of the arbitration clause or of the separate arbitration agreement.
2. The arbitral tribunal shall have the power to determine the existence or the validity of the contract of which an arbitration clause forms a part. For the purposes of Article 21, an arbitration clause which forms part of a contract and which provides for arbitration under these Rules shall be treated as an agreement independent of the other terms of the contract. A decision by the arbitral tribunal that the contract is null and void shall not entail ipso jure the invalidity of the arbitration clause.
3. A plea that the arbitral tribunal does not have jurisdiction shall be raised not later than in the statement of defence or, with respect to a counter-claim, in the reply to the counter-claim.
4. In general, the arbitral tribunal should rule on a plea concerning its jurisdiction as a preliminary question. However, the arbitral tribunal may proceed with the arbitration and rule on such a plea in their final award.

FURTHER WRITTEN STATEMENTS

Article 22
The arbitral tribunal shall decide which further written statements, in addition to the statement of claim and the statement of defence, shall be required from the parties or may be presented by them and shall fix the periods of time for communicating such statements.

PERIODS OF TIME

Article 23
The periods of time fixed by the arbitral tribunal for the communication of written statements (including the statement of claim and statement of defence) should not exceed forty-five days. However, the arbitral tribunal may extend the time-limits if it concludes that an extension is justified.

EVIDENCE AND HEARINGS (ARTICLES 24 AND 25)

Article 24
1. Each party shall have the burden of proving the facts relied on to support his claim or defence.
2. The arbitral tribunal may, if it considers it appropriate, require a party to deliver to the tribunal and to the other party, within such a period of time as the arbitral tribunal shall decide, a summary of the documents and other evidence which that party intends to present in support of the facts in issue set out in his statement of claim or statement of defence.
3. At any time during the arbitral proceedings the arbitral tribunal may require the parties to produce documents, exhibits or other evidence within such a period of time as the tribunal shall determine.
Article 25

1. In the event of an oral hearing, the arbitral tribunal shall give the parties adequate advance notice of the date, time and place thereof.
2. If witnesses are to be heard, at least fifteen days before the hearing each party shall communicate to the arbitral tribunal and to the other party the names and addresses of the witnesses he intends to present, the subject upon and the languages in which such witnesses will give their testimony.
3. The arbitral tribunal shall make arrangements for the translation of oral statements made at a hearing and for a record of the hearing if either is deemed necessary by the tribunal under the circumstances of the case, or if the parties have agreed thereto and have communicated such agreement to the tribunal at least fifteen days before the hearing.
4. Hearings shall be held in camera unless the parties agree otherwise. The arbitral tribunal may require the retirement of any witness or witnesses during the testimony of other witnesses. The arbitral tribunal is free to determine the manner in which witnesses are examined.
5. Evidence of witnesses may also be presented in the form of written statements signed by them.
6. The arbitral tribunal shall determine the admissibility, relevance, materiality and weight of the evidence offered.

INTERIM MEASURES OF PROTECTION

Article 26

1. At the request of either party, the arbitral tribunal may take any interim measures it deems necessary in respect of the subject-matter of the dispute, including measures for the conservation of the goods forming the subject-matter in dispute, such as ordering their deposit with a third person or the sale of perishable goods.
2. Such interim measures may be established in the form of an interim award. The arbitral tribunal shall be entitled to require security for the costs of such measures.
3. A request for interim measures addressed by any party to a judicial authority shall not be deemed incompatible with the agreement to arbitrate, or as a waiver of that agreement.

EXPERTS

Article 27

1. The arbitral tribunal may appoint one or more experts to report to it, in writing, on specific issues to be determined by the tribunal. A copy of the expert’s terms of reference, established by the arbitral tribunal, shall be communicated to the parties.
2. The parties shall give the expert any relevant information or produce for his inspection any relevant documents or goods that he may require of them. Any dispute between a party and such expert as to the relevance of the required information or production shall be referred to the arbitral tribunal for decision.
3. Upon receipt of the expert’s report, the arbitral tribunal shall communicate a copy of the report to the parties who shall be given the opportunity to express, in writing, their opinion on the report. A party shall be entitled to examine any document on which the expert has relied in his report.
4. At the request of either party the expert, after delivery of the report, may be heard at a hearing where the parties shall have the opportunity to be present and to interrogate the expert. At this hearing either party may present expert witnesses in order to testify on the points at issue. The provisions of article 25 shall be applicable to such proceedings.

DEFAULT

Article 28

1. If, within the period of time fixed by the arbitral tribunal, the claimant has failed to communicate his claim without showing sufficient cause for such failure, the arbitral tribunal shall issue an order for the termination of the arbitral proceedings. If, within the period of time fixed by the arbitral tribunal, the respondent has failed to communicate his statement of defence without showing sufficient cause for such failure, the arbitral tribunal shall order that the proceedings continue.
2. If one of the parties, duly notified under these Rules, fails to appear at a hearing, without showing sufficient cause for such failure, the arbitral tribunal may proceed with the arbitration.
3. If one of the parties, duly invited to produce documentary evidence, fails to do so within the established period of time, without showing sufficient cause for such failure, the arbitral tribunal may make the award on the evidence before it.
CLOSURE OF HEARINGS

Article 29
1. The arbitral tribunal may inquire of the parties if they have any further proof to offer or witnesses to be heard or submissions to make and, if there are none, it may declare the hearings closed.
2. The arbitral tribunal may, if it considers it necessary owing to exceptional circumstances, decide, on its own motion or upon application of a party, to reopen the hearings at any time before the award is made.

WAIVER OF RULES

Article 30
A party who knows that any provision of, or requirement under, these Rules has not been complied with and yet proceeds with the arbitration without promptly stating his objection to such non-compliance, shall be deemed to have waived his right to object.

Section IV. The award

DECISIONS

Article 31
1. When there are three arbitrators, any award or other decision of the arbitral tribunal shall be made by a majority of the arbitrators.
2. In the case of questions of procedure, when there is no majority or when the arbitral tribunal so authorizes, the presiding arbitrator may decide on his own, subject to revision, if any, by the arbitral tribunal.

FORM AND EFFECT OF THE AWARD

Article 32
1. In addition to making a final award, the arbitral tribunal shall be entitled to make interim, interlocutory, or partial awards.
2. The award shall be made in writing and shall be final and binding on the parties. The parties undertake to carry out the award without delay.

3. The arbitral tribunal shall state the reasons upon which the award is based, unless the parties have agreed that no reasons are to be given.
4. An award shall be signed by the arbitrators and it shall contain the date on which and the place where the award was made. Where there are three arbitrators and one of them fails to sign, the award shall state the reason for the absence of the signature.
5. The award may be made public only with the consent of both parties.
6. Copies of the award signed by the arbitrators shall be communicated to the parties by the arbitral tribunal.
7. If the arbitration law of the country where the award is made requires that the award be filed or registered by the arbitral tribunal, the tribunal shall comply with this requirement within the period of time required by law.

APPLICABLE LAW, AMIABLE COMPOSITEUR

Article 33
1. The arbitral tribunal shall apply the law designated by the parties as applicable to the substance of the dispute. Failing such designation by the parties, the arbitral tribunal shall apply the law determined by the conflict of laws rules which it considers applicable.
2. The arbitral tribunal shall decide as amiable compositeur or ex aequo et bono only if the parties have expressly authorized the arbitral tribunal to do so and if the law applicable to the arbitral procedure permits such arbitration.
3. In all cases, the arbitral tribunal shall decide in accordance with the terms of the contract and shall take into account the usages of the trade applicable to the transaction.

SETTLEMENT OR OTHER GROUNDS FOR TERMINATION

Article 34
1. If, before the award is made, the parties agree on a settlement of the dispute, the arbitral tribunal shall either issue an order for the termination of the arbitral proceedings or, if requested by both parties and accepted by the tribunal, record the settlement in the form of an arbitral award on agreed terms. The arbitral tribunal is not obliged to give reasons for such an award.
2. If, before the award is made, the continuation of the arbitral proceedings becomes unnecessary or impossible for any reason not mentioned in paragraph 1, the arbitral tribunal shall inform the parties of its inten-
tion to issue an order for the termination of the proceedings. The arbitral tribunal shall have the power to issue such an order unless a party raises justifiable grounds for objection.

3. Copies of the order for termination of the arbitral proceedings or of the arbitral award on agreed terms, signed by the arbitrators, shall be communicated by the arbitral tribunal to the parties. Where an arbitral award on agreed terms is made, the provisions of article 32, paragraphs 2 and 4 to 7, shall apply.

INTERPRETATION OF THE AWARD

Article 35

1. Within thirty days after the receipt of the award, either party, with notice to the other party, may request that the arbitral tribunal give an interpretation of the award.

2. The interpretation shall be given in writing within forty-five days after the receipt of the request. The interpretation shall form part of the award and the provisions of article 32, paragraphs 2 to 7, shall apply.

CORRECTION OF THE AWARD

Article 36

1. Within thirty days after the receipt of the award, either party, with notice to the other party, may request the arbitral tribunal to correct in the award any errors in computation, any clerical or typographical errors, or any errors of similar nature. The arbitral tribunal may within thirty days after the communication of the award make such corrections on its own initiative.

2. Such corrections shall be in writing, and the provisions of article 32, paragraphs 2 to 7, shall apply.

ADDITIONAL AWARD

Article 37

1. Within thirty days after the receipt of the award, either party, with notice to the other party, may request the arbitral tribunal to make an additional award as to claims presented in the arbitral proceedings but omitted from the award.

2. If the arbitral tribunal considers the request for an additional award to be justified and considers that the omission can be rectified without any further hearings or evidence, it shall complete its award within sixty days after the receipt of the request.

3. When an additional award is made, the provisions of article 32, paragraphs 2 to 7, shall apply.

COSTS (ARTICLES 38 TO 40)

Article 38

The arbitral tribunal shall fix the costs of arbitration in its award. The term "costs" includes only:

(a) The fees of the arbitral tribunal to be stated separately as to each arbitrator and to be fixed by the tribunal itself in accordance with article 39;

(b) The travel and other expenses incurred by the arbitrators;

(c) The costs of expert advice and of other assistance required by the arbitral tribunal;

(d) The travel and other expenses of witnesses to the extent such expenses are approved by the arbitral tribunal;

(e) The costs for legal representation and assistance of the successful party if such costs were claimed during the arbitral proceedings, and only to the extent that the arbitral tribunal determines that the amount of such costs is reasonable;

(f) Any fees and expenses of the appointing authority as well as the expenses of the Secretary-General of the Permanent Court of Arbitration at The Hague.

Article 39

1. The fees of the arbitral tribunal shall be reasonable in amount, taking into account the amount in dispute, the complexity of the subject-matter, the time spent by the arbitrators and any other relevant circumstances of the case.

2. If an appointing authority has been agreed upon by the parties or designated by the Secretary-General of the Permanent Court of Arbitration at The Hague, and if that authority has issued a schedule of fees for arbitrators in international cases which it administers, the arbitral tribunal fixing its fees shall take that schedule of fees into account to the extent that it considers appropriate in the circumstances of the case.

3. If such appointing authority has not issued a schedule of fees for arbitrators in international cases, any party may at any time request the appointing authority to furnish a statement setting forth the basis for establishing fees which is customarily followed in international cases in which the authority appoints arbitrators. If the appointing authority consents to provide
such a statement, the arbitral tribunal in fixing its fees shall take such information into account to the extent that it considers appropriate in the circumstances of the case.

4. In cases referred to in paragraphs 2 and 3, when a party so requests and the appointing authority consents to perform the function, the arbitral tribunal shall fix its fees only after consultation with the appointing authority which may make any comment it deems appropriate to the arbitral tribunal concerning the fees.

Article 40

1. Except as provided in paragraph 2, the costs of arbitration shall in principle be borne by the unsuccessful party. However, the arbitral tribunal may apportion each of such costs between the parties if it determines that apportionment is reasonable, taking into account the circumstances of the case.

2. With respect to the costs of legal representation and assistance referred to in article 38, paragraph (e), the arbitral tribunal, taking into account the circumstances of the case, shall be free to determine which party shall bear such costs or may apportion such costs between the parties if it determines that apportionment is reasonable.

3. When the arbitral tribunal issues an order for the termination of the arbitral proceedings or makes an award on agreed terms, it shall fix the costs of arbitration referred to in article 38 and article 39, paragraph 1, in the text of that order or award.

4. No additional fees may be charged by an arbitral tribunal for interpretation or correction or completion of its award under articles 35 to 37.

DEPOSIT OF COSTS

Article 41

1. The arbitral tribunal, on its establishment, may request each party to deposit an equal amount as an advance for the costs referred to in article 38, paragraphs (a), (b) and (c).

2. During the course of the arbitral proceedings the arbitral tribunal may request supplementary deposits from the parties.

3. If an appointing authority has been agreed upon by the parties or designated by the Secretary-General of the Permanent Court of Arbitration at The Hague, and when a party so requests and the appointing authority consents to perform the function, the arbitral tribunal shall fix the amounts of any deposits or supplementary deposits only after consultation with the appointing authority which may make any comments to the arbitral tribunal which it deems appropriate concerning the amount of such deposits and supplementary deposits.

4. If the required deposits are not paid in full within thirty days after the receipt of the request, the arbitral tribunal shall so inform the parties in order that one or another of them may make the required payment. If such payment is not made, the arbitral tribunal may order the suspension or termination of the arbitral proceedings.

5. After the award has been made, the arbitral tribunal shall render an accounting to the parties of the deposits received and return any unexpended balance to the parties.
APPENDIX K

Convention
on the recognition and enforcement
of Foreign Arbitral Awards

Article I
1. This Convention shall apply to the recognition and enforcement of arbitral awards made in the territory of a State other than the State where the recognition and enforcement of such awards are sought, and arising out of differences between persons, whether physical or legal. It shall also apply to arbitral awards not considered as domestic awards in the State where their recognition and enforcement are sought.

2. The term "arbitral awards" shall include not only awards made by arbitrators appointed for each case but also those made by permanent arbitral bodies to which the parties have submitted.

3. When signing, ratifying or acceding to this Convention, or notifying extension under article X hereof, any State may on the basis of reciprocity declare that it will apply the Convention to the recognition and enforcement of awards made only in the territory of another Contracting State. It may also declare that it will apply the Convention only to differences arising out of legal relationships whether contractual or not, which are considered as commercial under the national law of the State making such declaration.

Article II
1. Each Contracting State shall recognize an agreement in writing under which the parties undertake to submit to arbitration all or any differences which have arisen or which may arise between them in respect of a defined legal relationship, whether contractual or not, concerning a subject matter capable of settlement by arbitration.

2. The term "agreement in writing" shall include an arbitral clause in a contract or an arbitration agreement, signed by the parties or contained in an exchange of letters or telegrams.

3. The court of a Contracting State, when seized of an action in a matter in respect of which the parties have made an agreement within the meaning of this article, shall, at the request of one of the parties, refer the parties to arbitration, unless it finds that the said agreement is null and void, inoperative or incapable of being performed.

Article III
1. Each Contracting State shall recognize arbitral awards as binding and enforce them in accordance with the rules of procedure of the territory where the award is relied upon, under the conditions laid down in the following articles. There shall not be imposed substantially more onerous conditions or higher fees or charges on the recognition or enforcement of arbitral awards to which this Convention applies than are imposed on the recognition or enforcement of domestic arbitral awards.

Article IV
1. To obtain the recognition and enforcement mentioned in the preceding article, the party applying for recognition and enforcement shall, at the time of the application, supply:
a) the duly authenticated original award or a duly certified copy thereof;
b) the original agreement referred to in Article II or a duly certified copy thereof.

2. If the said award or agreement is not made in an official language of the country in which the award is relied upon, the party applying for recognition and enforcement of the award shall produce a translation of these documents into such language. The translation shall be certified by an official or sworn translator or by a diplomatic or consular agent.

**Article V**

1. Recognition and enforcement of the award may be refused, at the request of the party against whom it is involved, only if that party furnishes to the competent authority where the recognition and enforcement is sought, proof that:

   (a) the parties to the agreement referred to in Article II were, under the law applicable to them, under some incapacity, or the said agreement is not valid under the law to which the parties have subjected their agreement or, failing any indication, thereon, under the law of the country where the award was made; or

   (b) the party against whom the award is invoked was not given proper notice of the appointment of the arbitrator or of the arbitration proceedings or was otherwise unable to present his case; or

   (c) the award deals with a difference not contemplated by or not falling within the terms of the submission to arbitration, or it contains decisions on matters beyond the scope of the submission to arbitration, provided that, if the decisions on matters submitted to arbitration can be separated from those not so submitted, that part of the award which contains decisions on matters submitted to arbitration may be recognized and enforced; or

   (d) the composition of the arbitral authority or the arbitral procedure was not in accordance with agreement of the parties, or, failing such agreement, was not in accordance with the law of the country where the arbitration took place; or

   (e) the award has not yet become binding on the parties, or has been set aside or suspended by a competent authority of the country in which, or under the law of which, that award was made.

2. Recognition and enforcement of an arbitral award may also be refused if the competent authority in the country where recognition and enforcement is sought finds that:

   (a) the subject matter of the difference is not capable of settlement by arbitration under the law of that country; or

   (b) the recognition or enforcement of the award would be contrary to the public policy of that country.

**Article VI**

If an application for the setting aside or suspension of the award has been made to a competent authority as referred to in Article V paragraph 1(e) the authority before which the award is sought to be relied upon may, if it considers it proper, adjourn the decision on the enforcement of the award and may also, on the application of the party claiming enforcement of the award, order the other party to give suitable security.

**Article VII**

1. The provisions of the present Convention shall not affect the validity of

Enforcing Arbitral Awards
multilateral or bilateral agreements concerning the recognition and enforce-
ment of arbitral awards entered into by the Contracting States nor deprive
any interested party of any right to avail himself of an arbitral award in the
manner and to the extent allowed by the law or the treaties of the country
where such award is sought to be relied upon.

Execution of Foreign Arbitral Awards of 1927 shall cease to have effect
between Contracting States on their becoming bound and to the extent they
become bound by the Convention.

Article VIII
1. This Convention shall be open until 31 December 1958 for signature on
behalf of any Member of the United Nations and also on behalf of any other
State which is or hereafter becomes a member of any specialized agency of
the United Nations, or which is or hereafter becomes a party to the Statute of
the International Court of Justice, or any other State to which an invitation
has been addressed by the General Assembly of the United Nations.

2. This Convention shall be ratified and the instrument of ratification shall
be deposited with the Secretary-General of the United Nations.

Article IX
1. This Convention shall be open for accession to all States referred to in
Article VIII.

2. Accession shall be affected by the deposit of an instrument of accession
with the Secretary-General of the United Nations.

Article X
1. Any State may, at the time of signature, ratification or accession, declare
that this Convention shall extend to all or any of the territories for the
international relations of which it is responsible. Such a declaration shall take
effect when the Convention enters into force for the State concerned.

2. At any time thereafter any such extension shall be made by notification
addressed to the Secretary-General of the United Nations and shall take
effect as from the ninetieth day after the day of receipt by the Secretary-
General of the United Nations of this notification, or as from the date of entry
into force of the Convention for the State concerned, whichever is the
later.

3. With respect to those territories to which this Convention is not extended
at the time of signature, ratification or accession, each State concerned shall
consider the possibility of taking the necessary steps in order to extend the
application of this Convention to such territories, subject, where necessary
for constitutional reasons, to the consent of the Governments of such
territories.

Article XI
1. In the case of a federal or non-unitary State, the following provisions
shall apply:

(a) With respect to those articles of this Convention that come within the
legislative jurisdiction of the federal authority, the obligations of the
federal Government shall to this extent be the same as those of
Contracting States which are not federal States;

(b) With respect to those articles of this Convention that come within the
legislative jurisdiction of constituent states or provinces which are not,
under the constitutional system of the federation, bound to take legisla-
tive action, the federal Government shall bring such articles with a favourable recommendation to the notice of the appropriate authorities of constituent states or provinces at the earliest possible moment;

(c) A federal State party to this Convention shall, at the request of any other Contracting State transmitted through the Secretary-General of the United Nations, supply a statement of the law and practice of the federation and its constituent units in regard to any particular provision of this Convention, showing the extent to which effect has been given to that provision by legislative or other action.

Article XII
1. This Convention shall come into force on the ninetieth day following the date of deposit of the third instrument of ratification or accession.

2. For each State ratifying or acceding to this Convention after the deposit of the third instrument of ratification or accession, this Convention shall enter into force on the ninetieth day after deposit by such State of its instrument of ratification or accession.

Article XIII
1. Any Contracting State may denounce this Convention by a written notification to the Secretary-General of the United Nations. Denunciation shall take effect one year after the date of receipt of the notification by the Secretary-General.

2. Any State which has made a declaration or notification under article X may, at any time thereafter, by notification to the Secretary-General of the United Nations, declare that this Convention shall cease to extend to the territory concerned one year after the date of the receipt of the notification by the Secretary-General.

3. This Convention shall continue to be applicable to arbitral awards in respect of which recognition or enforcement proceedings have been instituted before the denunciation takes effect.

Article XIV
A Contracting State shall not be entitled to avail itself of the present Convention against other Contracting States except to the extent that it is itself bound by the Convention.

Article XV
The Secretary-General of the United Nations shall notify the States contemplated in Article VIII of the following:

(a) Signature and ratifications in accordance with Article VIII;
(b) Accessions in accordance with Article IX;
(c) Declarations and notifications under Articles I, X and XI;
(d) The date upon which this Convention enters into force in accordance with Article XII;
(e) Denunciations and notifications in accordance with Article XIII.

Article XVI
1. This Convention, of which the Chinese, English, French, Russian and Spanish texts shall be equally authentic, shall be deposited in the archives of the United Nations.

2. The Secretary-General of the United Nations shall transmit a certified copy of this Convention to the States contemplated in Article VIII.