

# THE SINGAPORE ENGINEER

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# Managing risk

by Andrew Merrilees, Director, **Hill International Inc**

*To execute and deliver major public works, it is incumbent that supply chains are properly set-up at the outset and projects are managed appropriately to control risk.*



Mr Andrew Merrilees

The tools of risk registers, heat maps, risk dashboards and so-called 'war rooms' are only part of an integrated risk management approach that needs to be not only owned by senior management but must percolate and be part of an entire organisation's risk culture.

An integrated risk management system comprises five key parts:

- Risk Transparency
- Risk Ownership and Strategy
- Risk Decisions and Processes
- Risk Governance
- Risk Culture

By adopting these steps, project managers, together with senior design, engineering, commercial and planning personnel, are allowed to focus on the pro-active control and mitigation of risk.

Risk is allocated to the best risk owners across the project, allowing risks to be monitored, controlled and mitigated. Risk governance led by top management is the driver of the constituent parts, making risk management a priority in day-to-day work activities.

Every organisation strives to control and reduce costs associated with

risk which is unsurprisingly prevalent on major public sector projects.

The type of procurement and form of contract should be carefully selected by the client and other stakeholders, to ensure risks are managed by the most appropriate party. There is an ever-increasing demand by clients to transfer the risk of design using Design and Build (D&B) contracts and guarantee cost certainty through the use of Guaranteed Maximum Price (GMP).

Thus, contractors must ensure subcontracts and supply agreements reflect the correct level of obligations, liabilities and risks, as contained in the head contract.

It is essential for contractors to engage with technically competent and experienced supply chain entities, from subcontractors to suppliers and vendors that have a proven track-record of executing projects, on time, to the necessary standards and workmanship.

Management should also give due regard to the importance of programme management. The recording of actual progress against plans has to be more systematic, with regular updates showing the effects of delays and the impact on overall project completion. The control of time is paramount to effective risk management.

In general, most time and cost overruns are avoidable and can be solved by a robust risk management regime that manages risk in all stages of the value chain and throughout the life cycle of a project.

An integrated risk management system identifies possible risks and assesses the likelihood of occurrence and impact on a project's time and cost parameters that are

ultimately controlled by the appropriate risk owners.

Organisations in the construction industry should remain bold and embrace best practices to ensure nothing is left to chance. By managing risk and providing solutions for the delivery of projects, competitive advantage will become the norm.

## **Hill International**

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