

# Enterprise risk management

## Our ERM framework provides a holistic and systematic process for managing significant risks.



### Enterprise risk management

Introduced in 2002, the Keppel Offshore & Marine (Keppel O&M) Group's Enterprise Risk Management (ERM) framework provides a holistic and systematic process for identifying, evaluating and managing significant risks.

In this ongoing process, significant risks and appropriate mitigating actions associated with various value drivers to achieve our corporate strategies are identified and cascaded down from top management to the individual business units and departments.

During the annual strategy meeting in Singapore, top management reviews risk profiles in relation to corporate strategies.

At the operational level, the risk management process is incorporated in day-to-day operating procedures, as well as all significant projects handled by the Group.

A large proportion of the Group's operations is project-based and extends over a period of time. Keppel O&M management monitors major risks for each significant project at tender and execution stages using a standard risk template.

At the tender stage, the risk template consists of various risk factors grouped under pre-tendering, competition, project, contract, execution, people and safety.

At the execution stage, the risk template consists of risk factors involving on-time, on-budget delivery, quality control and meeting customer's specifications.

**Emergency plans have been drawn up to handle possible epidemic outbreaks. During the year, simulation exercises were conducted.**



With a record order book, the Group's main challenge is the execution of projects to ensure on-time and on-budget delivery while meeting quality standards. The major risks associated with this would largely be related to execution risks with stretched resources. A template has been developed for monitoring schedule risk, cost risk and quality risk of all major work-in-progress.

In order to manage the execution risks with stretched resources, Keppel FELS has expanded its facilities, including setting up a new yard in Singapore at Shipyard Crescent and a joint-venture yard in Bintan, Indonesia. Keppel FELS is also subcontracting portions of its work to sister yards around the world. The yard in Nantong, China, which was acquired by Keppel Singmarine, started its specialised newbuilding activities in 2006 with a team of senior staff from Singapore.

In order to monitor the execution risks with stretched resources on the numerous projects on hand, a sub-risk template for execution risks has been developed to report on their progress of work on a periodical basis.

An equally important challenge to the Group during the execution of projects is safety awareness and enforcement. To add further emphasis in this area, Keppel Corporation has formed a Board Safety Committee to complement the Group Safety Committee in reviewing the effectiveness of the Group's safety management systems.

The system for internal control, established by the Group, is designed to manage the risk of failure to achieve the Group's strategic goals.

#### **Business continuity management**

To manage potential threats or disruptions to our operations arising from unforeseen factors such as SARS, bird flu and terrorism, a Business Continuity Management (BCM) framework has been incorporated as part of ERM.

A BCM Committee was set up in 2003 to look into critical threats that could severely disrupt the yards' operations, and to develop action plans to mitigate these threats. Some of the critical threats identified are epidemics which affect staff in general, terrorism, damage to critical physical assets such as buildings, IT infrastructure, drydocks and cranes, and loss of critical supply chains.

Championed by department heads, mitigating action plans addressing these critical threats have been developed to ensure business continuity.

The yards in the Group have implemented security procedures which comply with the International Ship and Port Security (ISPS) Code adopted by the Maritime and Port Authority of Singapore (MPA). The response plan covers various scenarios such as fire or sea intrusion by terrorists which may affect the yards' security. Bomb hoax and intrusion response exercises were conducted during the year to assess the effectiveness of the yards' security arrangements.