SYSTEM FEATURES

Business units across the Company embrace the Company’s Enterprise Risk Management (“ERM”) framework that underpins their day-to-day business activities. The framework provides a simple and effective management process to:

• Identify and review risks across all business units of the organisation
• Prioritise resources to manage risks
• Give management a clear view of the significant risks facing the Company
• Support decision making and project execution for better business performance

The Board, with the assistance of the Risk Committee, oversees the Company’s ERM framework and top risks, whereas the Executive Committee, with the support of the Enterprise Risk Committee (“ERC”), is overall accountable for the ERM policy and system implementation and continuous improvement.

In 2017, the Company strengthened the top-down input to the Company’s risk management process through the introduction of a new Risk Oversight Group, a forum attended by 3-4 Executives each time on a rotational and quarterly basis for risk discussion, and a new half-yearly Blue Sky Workshop for all Executives.

The Company’s risks are rigorously identified, assessed and managed. Each risk is evaluated on the basis of the likelihood of the identified risk and the consequence of the risk event, taking into consideration the control measures in place. A risk matrix is used to determine risk ratings (E1 – E4), with E1 being a very high risk and E4 being a low risk. The risk ratings reflect the required management attention and risk treatment effort, and take into account the Company’s risk appetite. The highest category of risks, “E1”, is subject to Board, Risk Committee and Executive Committee oversight.

While risk taking is inevitable in the course of business, the Company’s appetite for risk varies, but is particularly low in certain areas, such as in relation to safety and the provision of a reliable transport service.

Board assisted by Risk Committee*

Executive Committee assisted by Enterprise Risk Committee

Business Units

• Exercise ongoing risk oversight
• Establish appropriate risk management strategies
• Oversee the ERM framework
• Review top risks and emerging risks
• Conduct annual review of ERM system effectiveness

Executive Committee

• Chaired by Legal and European Business Director
• Comprises representatives from key business functions
• Steers framework implementation and improvement
• Reviews Company’s top risks and key emerging risks
• Reports to Executive Committee and Risk Committee quarterly, and to Board every six months

Enterprise Risk Committee

• Establish arrangements and implement risk management process consistent with the Company’s ERM framework and policy
• Capture identified risks in risk registers for regular review and monitoring

Business Units

* See the Risk Committee Report (pages 142 – 143 of this Annual Report) for duties and work performed by the Committee in 2017
MANAGEMENT PROCESS FOR SIGNIFICANT RISKS

The Company takes proactive measures to identify, evaluate and manage significant risks arising from its recurrent and growth businesses and from the constantly changing business environment. Risk management strategies are developed for different areas including but not limited to construction, operations, finance, treasury, safety and insurance.

The ERM Team within the Legal and Secretarial Division maintains a list of running issues and risk drivers pertinent to the changing business and external environments, which is used to assist the ERC in identifying potential risks that may emerge. In addition, the ERC, the Executive Committee and the Risk Committee review the Company’s enterprise risk profile and brainstorm emerging risks quarterly to ensure that key risks and those cutting across different areas of the business are captured.

* Areas below are not exhaustive
Focus areas for risk management of the Company include:

### Effective and Balanced Relationship with Key Stakeholders

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Strive to seek a balance between the sometimes competing demands of the Company’s key stakeholders | • Implement engagement plan for key stakeholders to maintain effective communication channels  
• Observe the Company’s operating obligations and maintain good performance of the Company |

### Operations Safety and Service Incidents

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Major railway service incidents  
• Management of crowding | • Investigations/technical studies conducted on individual incidents to identify opportunities for continuous improvement  
• Enhanced crowd management plans in place  
• Signalling systems being upgraded to enable more frequent train services to be run in the longer term  
• Works Management Office established to oversee the integrated management of the combined risk of concurrent major capital projects that may have an impact on the operating railway |

### New Projects Cost and Delivery

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Shortage and ageing of contractor workers  
• Close proximity of construction activities to operating railway and urban developments  
• Management of interfaces with different parties  
• Adherence to the programme and cost of the projects | • Work with Government to facilitate recruitment of workers and applications for labour importation  
• Close coordination with parties involved in interfacing activities and enhancement of design and construction methodology  
• Training for contractor workers and staff on railway safety  
• Stringent control of contingency funds |

### Workforce Transition/Competence/Institutional Knowledge/Resourcing

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Stream of staff reaching retirement age in coming years after MTR train service has been in operation since 1979  
• Manpower shortages and retention challenge in several job types | • Proactive manpower sourcing and succession planning  
• Skills and competency enhancement  
• Provide flexible resource pools and improve staff mobility for growth businesses  
• Explore innovative solutions to mitigate manpower shortage |

### New Business Model/Technological Disruption/Competition

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Current business model disrupted by new technology  
• Manage competition from other transport modes | • Capitalise on e-commerce and technology to explore new business models  
• Monitor competition from other transport modes and implement initiatives to maintain market share |

### Delivery of Growth Strategy

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Challenging business model for future new lines in Hong Kong  
• Strong competition for business opportunities outside Hong Kong | • Formulate innovative business models for new lines in Hong Kong  
• Maximise branding effect of the Company  
• Conduct regular environmental scan for new business opportunities outside Hong Kong |

### Security Threat (cyber/physical)

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Key Controls</th>
</tr>
</thead>
</table>
| • Threat of cyber-attack on Operations and IT systems  
• Terrorist attack threat, in particular for railway operations of the Company outside Hong Kong | • Enhance IT network resilience to protect the Company against cyber attacks  
• Implement cyber security protection systems for railway operations systems  
• Enhance governance of corporate security framework |
Factors considered during the review

- Review areas suggested in the Corporate Governance Code for the Board’s annual review of the risk management system
- Annual internal certification of risk management effectiveness by Department Heads and Heads of subsidiaries/associates
- Enhancements resulting from the 2016 ERM system effectiveness review
- Risk management of subsidiaries and associates
- Benchmarking/roundtable/peer group ideas exchange
- Risk management trainings and promotions activities held in 2017

Conclusion
ERM system was effective and adequate for the year ended 31 December 2017

CONTINUOUS PROCESS IMPROVEMENT

Key improvements in the ERM system implemented within 2017 include:

- The risk register template has been enhanced, supplemented by guidelines, to enable better articulation of risks and risk controls, assessment of the effectiveness of controls and the reinforcement of forward risk trends
- Enterprise risks have been reviewed for further differentiation and those risks assessed to be more appropriately monitored and managed by business units as part of normal business have been archived from the enterprise risk map, to enable more focused risk discussion at the enterprise level
- In June 2017, a series of half-day risk management workshops were attended by over 100 department heads/senior managers/ERC members/divisional risk coordinators at which global risk trends and lessons learnt from external real life case studies were discussed; another series of half-day workshops focusing on risk management principles and risk awareness were also organised and attended by over 110 managers and supervisors
- In late October 2017, the Company launched its Risk Awareness Week (“RAW”) event for the fourth year to continue to promote risk awareness across all levels of the organisation. The event included a workshop on forward-thinking tools applicable for risk management, a lunchtime seminar on risk assessment tools, a series of interactive half-day workshops, and an online game. Over 400 staff participated in various activities during the RAW event. Key business units outside Hong Kong also promoted risk awareness in their respective local business units to echo Headquarters’ efforts
- We keep ourselves abreast of the latest developments in risk management through reviews with users, cross-industry benchmarking and experience sharing through various channels:
  - Sharing and learning of best practice through the tenth UK ERM Roundtable and the ninth HK ERM Roundtable meetings
  - Cross-learning among risk managers from different business units, including subsidiaries and associates in the Mainland of China and overseas, through the in-house “Audit & Risk Forum” held in Hong Kong in June 2017 and periodic teleconference meetings