

RISK MANAGEMENT

SYSTEM FEATURES

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

- Identify, assess, and effectively manage operational, functional, and enterprise risks across the Company
- 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 Audit & 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.

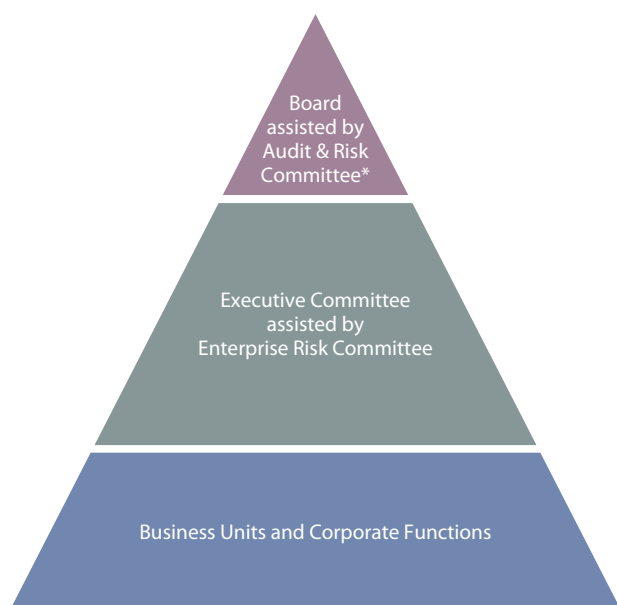
The Executives provide top-down views on the key risks of the Company through discussions on quarterly enterprise risk reports, receive technical input and analysis, make informed decisions and take decisive tactical and strategic action on the key risks that the Company faces. Two "Blue Sky" workshops were held in July and November 2022 respectively. At the July workshop, the Executives discussed the impact of increasing interest rates and

worsening inflation on the Company's businesses. At the November workshop the Executives had a more in-depth discussion and review on the risks associated with inflation and rising interest rates, as well as contemporary issues such as currency risk, supply chain challenges and the risk of economic slowdown in Mainland China and Hong Kong.

The Company's risks are rigorously identified, assessed and managed. Each risk is evaluated on the likelihood of occurrence as well as potential consequence while taking existing controls into consideration. A risk matrix is used to determine a risk rating (E1 – E4), with E1 being a relatively high risk and E4 being a relatively low risk. The risk rating determines the required level of management attention and risk treatment effort, while considering the Company's risk appetite. The highest category of risk, "E1", is subject to Board, Board Committee and Executive Committee oversight.

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

The Company's ERM system provides an important internal control in identifying, assessing and managing risks affecting the Company. As a learning organisation, the Company constantly looks for improvement opportunities through internal and external reviews and studies, as well as learning from incidents encountered during its operations. On 13 November 2022, our



* See the Audit & Risk Committee Report (pages 135 to 137 of this Annual Report) for duties and work performed by the Committee in 2022.

- 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

- Implement and continuously improve ERM framework
- Enterprise Risk Committee
 - Chaired by Legal and Governance Director
 - Comprises representatives from all business units and corporate functions
 - Steers framework implementation and improvement
 - Reviews Company's top risks and key emerging risks
 - Reports to Executive Committee and Audit & Risk Committee quarterly, and to Board every six months

- Establish arrangements and implement risk management process consistent with the Company's ERM framework and policy
- Manage risks, and identify and implement risk controls
- Capture identified risks in risk registers for regular review and monitoring

Tsuen Wan Line (“TWL”) service in Hong Kong was interrupted after a TWL train struck a dislodged permanent fixed metallic protection barrier along the trackside, leading to a train front wheel axle moving off the rail. Following the incident, the rear end detrainment ramp of the incident train was operated by passengers without the knowledge of the train captain, as the communication system had been damaged by the incident.

A comprehensive incident investigation was immediately initiated which found that the mounting bolts and nuts of the metallic protection barrier were seriously corroded at its base frames. The barrier involved in the incident and similar other barriers were not registered in the asset management system, and hence had not been subject to specific maintenance inspections. A series of follow-up actions, including enhancement of the associated maintenance regime, upgrading or replacement of all barriers of a similar nature, and the commencement of a comprehensive trackside infrastructure and equipment survey, were undertaken. The Company has also taken action to improve public communications in the event of an incident through the use of more standard messages (where possible) and is adding a function on all trains to send a direct alert to the Operations Control Centre whenever a detrainment ramp is operated.

On 5 December 2022, our Tseung Kwan O Line service was interrupted after a device inside the coupler connecting two train cars was dislodged, leading to lengthening of the train gangway. An in-depth investigation has been undertaken together with the equipment supplier, while immediate inspections were conducted based on the advice of the supplier.

Following these two incidents, the Company has commissioned a comprehensive review of its asset management and activities, with the aim of further enhancing the company’s asset management.

MANAGEMENT PROCESS FOR SIGNIFICANT RISKS

The Company adopts a proactive management process to identify, evaluate, treat, report and monitor 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, operations, construction, finance, and environment, social and governance (“ESG”). ESG risks identified through the ERM framework are further mapped against relevant issues under ISO 26000 for materiality assessment purposes.



* Areas below are not exhaustive

The ERM Team within the Legal and Governance Function 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 and the Executive Committee review the Company’s enterprise risk profile and brainstorm emerging risks quarterly to ensure key risks are captured, assessed and controlled. The Board also reviews these on a six-monthly basis.

Key risk management focus areas for the Company include:

Effective and Balanced Relationship with Key Stakeholders	
Key Challenges	<ul style="list-style-type: none"> Challenging political landscape and diverse stakeholder expectations Upholding public confidence in light of operational incidents Building relationships with communities and stakeholders affected by new projects
Key Controls	<ul style="list-style-type: none"> Implement proactive tailored engagement plans for different stakeholders to maintain effective communication and understanding Fulfill the Company's operating obligations and maintain good performance
Operations	
Key Challenges	<ul style="list-style-type: none"> Uphold asset performance while assets are ageing Manage interfaces from works along the operating railway to mitigate any major impact on train services Secure sufficient Non-traffic Hours ("NTH") possessions to meet asset replacement and maintenance needs Replace complex signalling systems in a live operating railway environment Unplanned disruption of services due to incidents
Key Controls	<ul style="list-style-type: none"> Strengthened governance of asset replacement strategy to manage asset replacement demand Comprehensive review on asset management and activities for continuous improvement opportunities Explore use of technology to monitor asset condition and performance Railway Protection and assurance teams to review potential railway interface hazards Secure required NTH possessions through the NTH Office established to coordinate supply and demand across business units and invest in necessary resources Engage independent safety assessor to assist delivery of safety critical projects to safety and quality standards Comprehensive investigation of incidents followed by implementation of corrective and preventative actions
People	
Key Challenges	<ul style="list-style-type: none"> Talent recruitment and retention especially for specific disciplines, new/growth business Challenging employee relations environment due to more diverse and polarised views Health threat to the workforce, loss of productivity and potential impact on normal operations arising from the COVID-19 pandemic
Key Controls	<ul style="list-style-type: none"> Succession planning, talent development, forward manpower planning and resourcing strategies Employee Engagement Survey to gauge more accurately staff sentiment, addressing issues raised via action plan executed by taskforces Proactive employee engagement through various communication channels, starting with the onboarding process Provision of personal protective equipment for staff such as face masks and test kits, special work arrangements and implementation of business continuity arrangements, as appropriate, with due consideration of prevailing situation and restrictions Enhanced cleaning and sterilisation of workplaces, including offices, depots, stations and trains
New Projects Quality, Programme and Cost	
Key Challenges	<ul style="list-style-type: none"> Delivering new projects on time, within budget, and to the expected standard of quality while meeting stakeholder expectations Obtaining adequate and timely NTH possessions to deliver new projects on time while need for operational maintenance/asset replacement NTH possessions is met Negotiation of Project Agreements for new projects with Government
Key Controls	<ul style="list-style-type: none"> Deploy Three Lines of Defence to provide project assurance, including audits and assurance to ensure compliance with processes and procedures Revamped Capital Works Project Integrated Management System Monitoring of project quality and progress against Key Performance Indicators Stringent control of change and management of contingency funds Introduction of competency and resource management framework in the Capital Works Business Unit to ensure sufficient staff with the right skills and competencies Increased use of technology to deliver and manage projects, including the use of Building Information Modelling ("BIM") and digital supervision and record keeping NTH Office established to coordinate supply and demand for track possessions across business units and to develop initiatives and procure resources to improve possession efficiency Proactive engagement with Government to establish the future way of delivering railway projects
New Business Model/Technological Disruption/Competition	
Key Challenges	<ul style="list-style-type: none"> Current business model disrupted by new technology Manage competition from other transport providers
Key Controls	<ul style="list-style-type: none"> Invest in technology and digital solutions to strengthen business model Monitor competition from other transport providers and implement initiatives to maintain market share

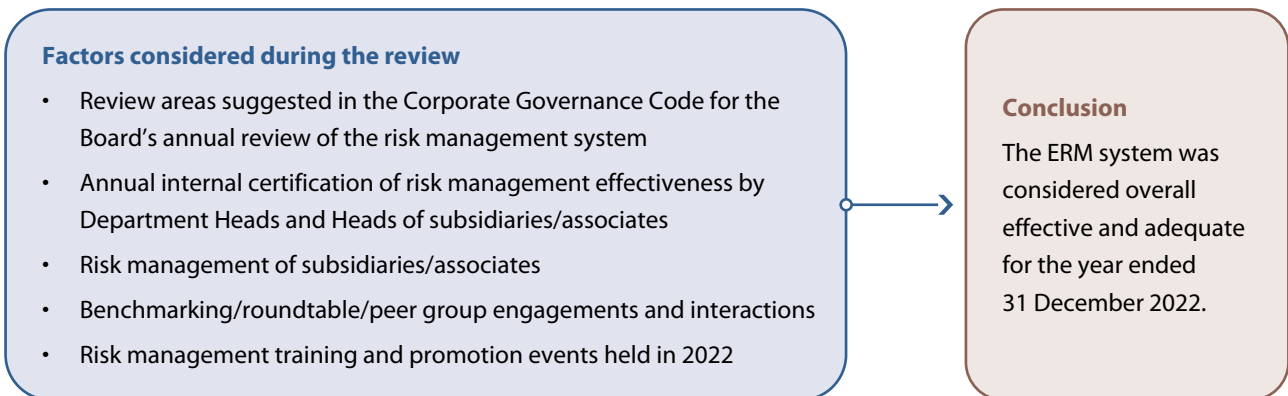
Delivery of Growth Strategy	
Key Challenges	<ul style="list-style-type: none"> • Uncertain business model for future new lines in Hong Kong • Keen competition for business opportunities outside Hong Kong • Business performance below bid models and assumptions • Heightened geopolitical/isolationist risk
Key Controls	<ul style="list-style-type: none"> • Ongoing engagement with Government to establish business models for new lines in Hong Kong • Maximise branding effect of the Company and stakeholder engagement • Diversify the Company's businesses in locations outside Hong Kong and conduct regular scans for new business opportunities • Formulate and implement business improvement plans for underperforming businesses
Security Threat (Cyber/Physical)	
Key Challenges	<ul style="list-style-type: none"> • Threat of cyber-attack on Operations and IT systems • Terrorist attack threat
Key Controls	<ul style="list-style-type: none"> • Enhanced IT network resilience to protect against cyber attacks • Implementation of cyber security protection systems for IT and railway operations systems • Enhanced security measures • Enhanced corporate security governance framework

The long-term financial sustainability of the Company is continuously monitored by the Board and the Executive Committee. The prolonged COVID-19 pandemic is a key enterprise risk which has and continues to significantly affect the Company's businesses over the course of 2022, and has required careful management to mitigate the financial, operational, staff and customer impacts. Our recurrent businesses will benefit from the revitalisation of the travel, tourism and retail industries when the world gradually transitions towards a more manageable endemic era of COVID-19. Overall, the financial position of the Group remains sound. The Group has also been implementing transformation initiatives with a view to further improving the Group's profitability in the longer-term, while the new railway and other projects in the pipeline will also contribute to the Group's long-term financial sustainability.

Process of System Effectiveness Review

On behalf of the Executive Committee, the ERC evaluates the effectiveness of the ERM system at least annually. The Legal and Governance Director, who chairs the ERC, presented the ERM system effectiveness review results for the year ending 31 December 2022 to the Executive Committee, who confirmed its agreement with the review results on 9 February 2023 and to the Audit & Risk Committee on 27 February 2023, who likewise confirmed their agreement with the review results.

The Audit & Risk Committee, with delegated authority from the Board, has evaluated the effectiveness and adequacy of the Company's ERM system and considers it to be overall "effective and adequate", based on a number of review areas.



CONTINUOUS PROCESS IMPROVEMENT

Key initiatives undertaken in relation to the ERM system in 2022 include the following:

- The ERM Team continued to produce ERM Newsletters for dissemination to all staff focusing on topical issues in risk management, aiming to raise risk awareness and share good risk management practices.
- The annual event of the Risk Awareness Week (or “RAW”) for promoting risk awareness and risk management discussions across the organisation was kicked off on 12 October 2022 by a keynote seminar on managing Diversity, Equity and Inclusion inaction risks for business sustainability. The seminar was well received and was attended by approximately 330 senior managers. As part of the RAW, four half-day interactive workshops on barrier-based risk management using the Bow-Tie risk analysis method were attended by approximately 70 senior supervisors/managerial staff from different Business Units/Functions. These workshops helped uplift risk management skills within the organisation.
- Over the course of 2022, the Company has continued to implement its strengthened Three Lines of Defence (“3LoD”) model through the independent Assurance Management Department, complemented by technical and engineering Centres of Excellence and a new Strategic Assurance Review Board which serves to coordinate and focus assurance activities, as well as to highlight any insights or concerns to relevant Executives. Although in the early implementation phase, the newly formed Second Line of Defence (“2LoD”) has introduced and piloted the refreshed 3LoD model and framework within the Capital Works Business Unit and has expanded its rollout to Hong Kong Transport Services and other Business Units. While a substantial journey remains, the foundation for an effective 2LoD has been established.
- We keep ourselves abreast of the latest developments in risk management through reviews with users, reviewing a variety of global risk reports, and cross-industry benchmarking and experience sharing, including through participation in UK and Hong Kong ERM Roundtable meetings.