

# RISK COMMITTEE REPORT

## The Risk Committee

The Risk Committee is delegated by the Board with responsibilities to oversee the Group's overall Risk Management Framework and to advise the Board on the Group's risk-related matters. The Risk Committee is also responsible for approving the Group's risk policies and assessing the effectiveness of the Group's risk controls/mitigation tools. The Risk Committee's terms of reference are available on the HKEX website [ORG](#).

The Risk Committee comprises 5 INEDs whose names and biographies are set out in the Board and Committees section of the 2015 Annual Report.

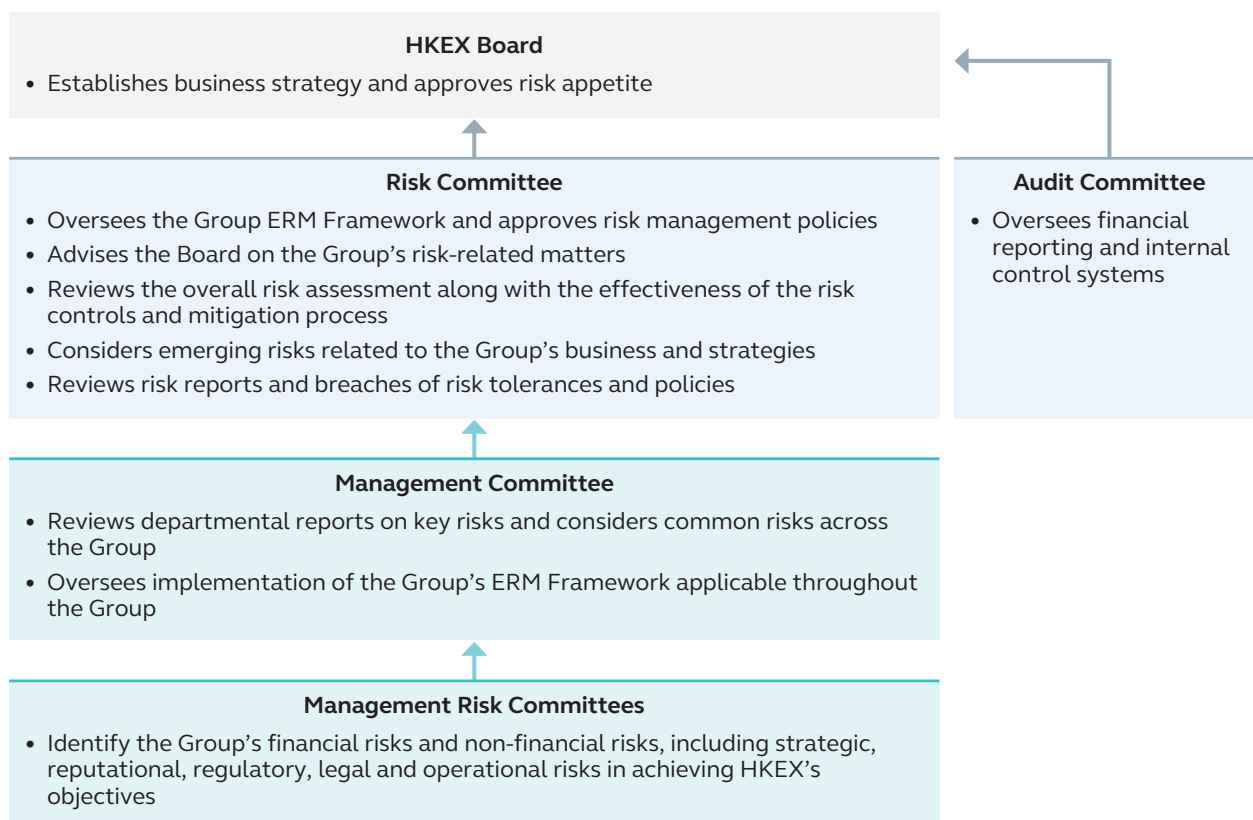
Between its establishment in March 2015 and the end of December 2015, the Risk Committee held 3 meetings. Members' attendance records are disclosed in the Corporate Governance Report of the 2015 Annual Report.

### Summary of Work in 2015/2016

- Endorsed the Group Risk Management Policy Framework
- Reviewed risk reports on liquidity, capital adequacy and solvency levels of the Group's clearing houses
- Acknowledged the risk assessment updates for the equity clearing operations, the stress testing frameworks of OTC Clear and LME Clear, and the results of the independent review of clearing risk management by an external consultant
- Reviewed the adequacy and effectiveness of the Group's risk management system
- Endorsed management confirmation on the effectiveness of the Group's risk management system
- Endorsed the 2015 Group Risk Report which contains the results of the Group's 2015 annual Enterprise Risk Management (ERM) assessment and the top risk profile of the Group
- Considered the Group's Cyber Security Programme

## Risk Governance

The Group's risk governance structure is based on a "Three Lines of Defence" model, with oversight and directions from the Board and Group level risk committees at HKEX.



The following highlights the key risk management measures under HKEX's "Three Lines of Defence" model and enhancements made by the Group during 2015.

#### **1<sup>st</sup> line of defence — Risk management (Divisions/Departments – Business owners)**

- Management conducted an annual Internal Control Self-evaluation in 2015. Division Heads confirmed that appropriate internal control policies and procedures have been established and complied with.
- Various policies, procedures and guidelines have been adopted with defined authority for effective segregation of duties, controls and risk management, and they are subject to regular review.
- The Group Security Policy sets out the requirements for protection of the Group's information, IT systems and personnel, which aims to minimise the Group's risk exposure including unauthorised data disclosure, system outages, and personnel risks.
- The Group Anti-Bribery and Anti-Corruption Policy was adopted to set out minimum standards in recognising circumstances which may lead to or give the appearance of involving corruption or unethical business conduct, to help avoid conduct which is clearly prohibited, and to encourage everyone in the Group to seek appropriate guidance promptly when needed. A training programme was arranged for the Group's employees.
- The Group Whistleblowing Policy was adopted to facilitate internal reporting of any malpractice and unethical conduct within the Group without fear of reprisal and victimisation. A training programme was arranged for the Group's employees.
- A set of Cross Border Activities guidelines was developed to facilitate compliance with rules and regulations in the Mainland, Korea, Singapore, Taiwan, the UK and the US in respect of the marketing and promotion of financial products and services in these jurisdictions.

#### **2<sup>nd</sup> line of defence — Risk oversight (Group Risk Management/Regulatory Compliance/Information Security & Business Continuity/Group Project Management)**

- The Group Risk Management Policy Framework was developed and endorsed by the Risk Committee to outline the principles, governance, roles and responsibilities, and approach within a coherent risk management framework that addresses and prioritises risks that are material and relevant to the Group's corporate goals.
- The Group's ERM Framework was refined to help management assess and manage risks arising from and associated with new business activities and environments, including emerging risks. An integrated risk assessment approach was adopted to address risks across various subsidiaries of the Group, to assess those risks on an integrated Group-wide basis and to consider any cross-business impact within HKEX.
- The Group's information security systems were further enhanced in line with industry best practices. For example, various control improvements were introduced to reduce the risk of cyber security threats within HKEX. Information Security Quick Reference: Data Classification was published for all employees' reference, and annual security awareness training for the Group's employees was introduced.
- The Group Project Portfolio Management Department (now named Group Project Management Department) provided quarterly updates to the Board on the Group's key project initiatives. The updates included risks, issues and financial information relating to the projects.

#### **3<sup>rd</sup> line of defence — Independent assurance (Internal Audit/External assurance providers)**

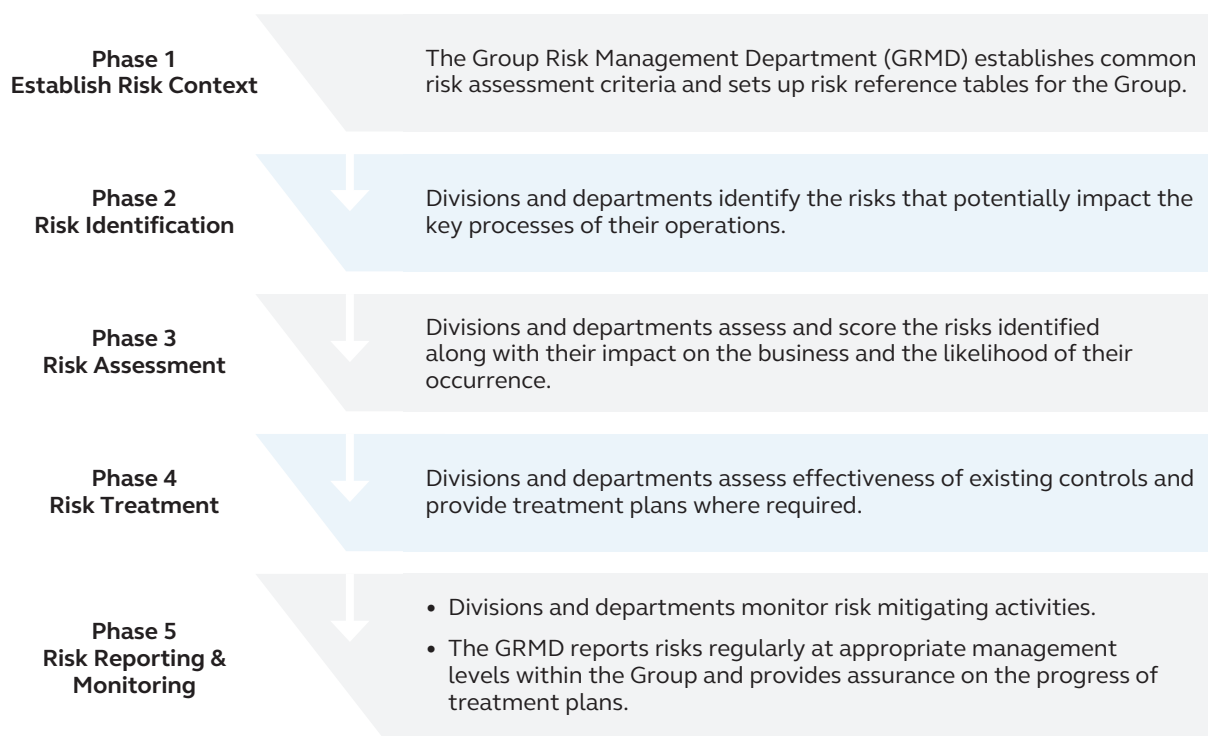
- The Internal Audit Department (IAD) is responsible for conducting independent reviews of the adequacy and effectiveness of the Group's internal control systems and reporting the review results regularly to the Board through the Audit Committee. Its work covers all material controls, including the financial, operational, IT, compliance and risk management controls. Further details of the IAD's role and its internal audit methodology and processes are available on the HKEX website [CG](#).

## Group Risk Management Policy Framework

During 2015, the Group Risk Management Policy Framework, which is based on the International Standard ISO (International Organization for Standardization) 31000:2009 Risk management – Principles and guidelines, was approved by the Risk Committee as an effective and adequate approach to be applied across the Group to manage the risks associated with its business and operations. This framework is designed to enhance risk management of the Group through a holistic and integrated framework so that all material risks faced by the Group are identified and appropriately managed to:

- (i) promote consistent risk identification, measurement, reporting and mitigation;
- (ii) set a common risk language to avoid any conflicting terminology or confusion in risk reporting;
- (iii) develop and communicate policies on risk management and controls aligned with the business strategy; and
- (iv) enhance reporting to provide transparency of risks across the Group.

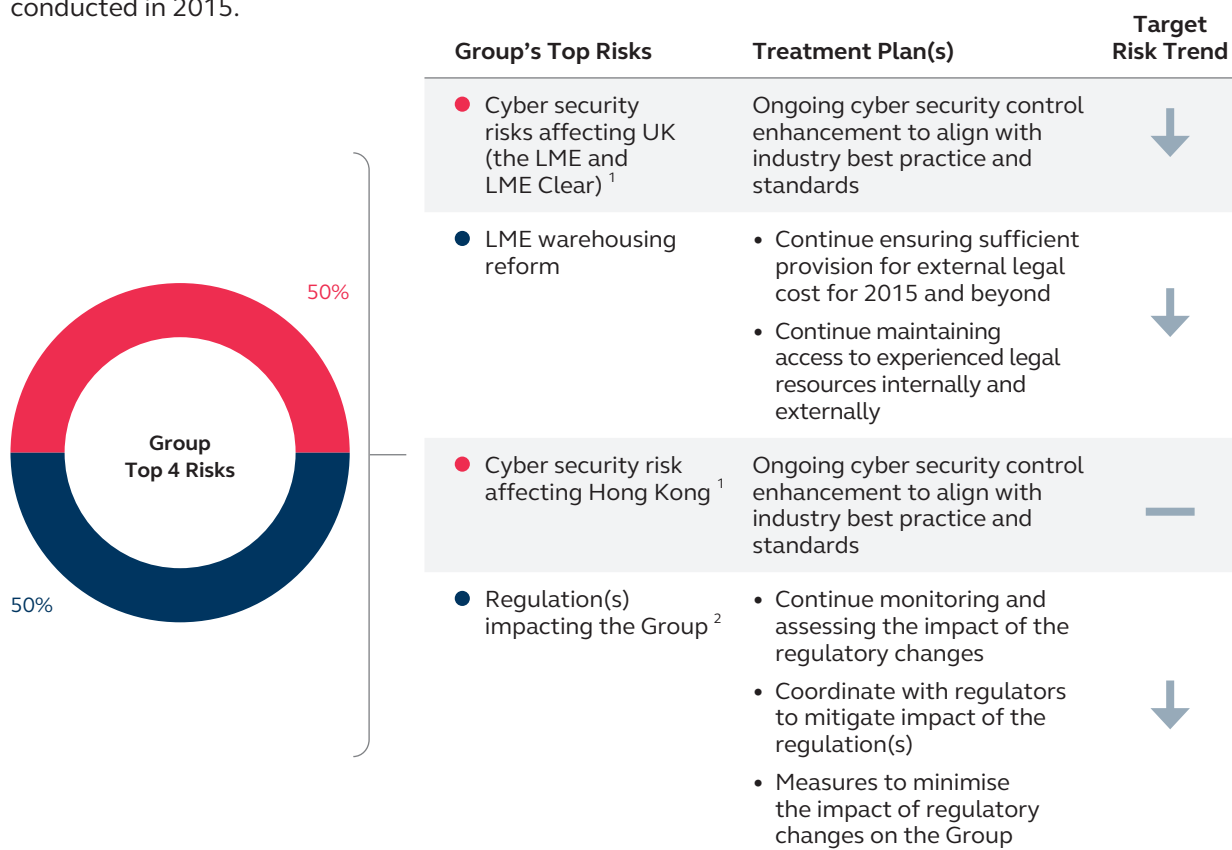
The following diagram illustrates the key processes adopted under the Group's ERM Framework.



## Group Risk Report

In 2015, HKEX conducted an annual Group-wide review based on the Group's ERM Framework to assess the risks relevant to both existing and new businesses of the Group. The Group Risk Report for 2015 was compiled to cover: (i) the top risks of HKEX, the LME and LME Clear; (ii) changes in the nature and extent of the significant risks since 2014; and (iii) associated action plans and controls designed to mitigate the top risks, where applicable, at appropriate levels. The Group Risk Report, as endorsed by the Management Committee and the Risk Committee in November 2015, was presented to the Board for review in December 2015.

The following diagram highlights the top risks to the Group based on the annual risk assessment conducted in 2015.



- <sup>1</sup> Cyber security remains a key risk trend globally in 2015. While HKEX will continue to enhance security controls towards its target maturity level addressing inherent risks of operating in today's business environment, it is expected that certain level of residual risks in the cyber security domain will continue to exist.
- <sup>2</sup> Given the ongoing diversification, increasing volumes and growing complexity of the Group's business and the cross-border nature of regulations, this risk remains high despite a decreasing trend from 2014.

#### Risk Categories

<ul style="list-style-type: none"> <li>● <b>Business, strategic and regulatory risks</b></li> <li>• Negative effect on HKEX's statutory role in the event of breaches of laws, rules or regulations</li> <li>• Failure to meet the expectations of regulators, market participants and investors regarding changes in legal and regulatory requirements for the financial markets and the metals industry</li> <li>• Loss of revenue</li> <li>• Loss of market share/business</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Operational (people, process, system, external events) risks</b></li> <li>• Failure to deliver continuous, effective and reliable listing, trading, clearing and settlement platforms, market data and other key services</li> <li>• Negative effect on HKEX's reputation as a key market operator in Hong Kong</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Financial (market, credit, liquidity) risks</b></li> <li>• Losses due to counterparties' failure to meet their settlement obligations</li> <li>• Insufficient cash flow to meet the Group's financial obligations</li> </ul>
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#### Members of the Risk Committee

CHOW Chung Kong (Chairman)  
 CHAN Tze Ching, Ignatius  
 Rafael GIL-TIENDA  
 John Barrie HARRISON  
 LEUNG KO May Yee, Margaret

Hong Kong, 24 February 2016