# Risk Committee Report

### **Risk Statement**

Effective risk management is important to the Group's achievement of its strategic goals. The Group manages risk across multiple risk domains, including but not limited to financial, business and strategic, operational (including IT and cyber security), and legal and regulatory risks. Business operations are managed in line with risk appetite tolerances set by the Board.

The Group seeks to ensure it achieves its strategic goal of being the global markets leader in the Asian time-zone; building upon our role as the leading venue for investing into and out of Mainland China, while increasing our international relevance to China, and our Asia relevance to the global markets. This includes acting in the interest of the public with particular regard to the interest of the investing public, maintaining stakeholder trust, and supporting the integrity of the financial system. The Group recognises its role as a market infrastructure provider and manager of systemic risk, and that its long-term sustainability is dependent on its pursuit of strategic goals while simultaneously managing risks, having sufficient capital and liquidity, ensuring continuity of operations, and protecting its reputation.

The Group aims to maintain sufficient capital and liquidity to meet its regulatory obligations, which require it to have financial resources to cover potential losses and liquidity needs for a range of stress scenarios taking into account extreme but plausible market conditions. As a business, the Group also aims to maintain sufficient capital over and above that required to meet its regulatory obligations in order to fund its strategic development objectives while ensuring the appropriate balance between risk and shareholder returns. The Group applies risk management measures to strategic initiatives that are designed to limit the Group's exposure to potential losses. It also seeks to maintain liquid financial resources to meet unforeseen cash outflows. The Group strives to maintain stakeholder trust by avoiding business practices that could lead to reputational damage or harm to the Group. The Group, therefore, seeks to operate within all relevant rules and regulations and to avoid disruptions to its business operations that would have a negative impact on stakeholders.

# The Risk Committee

The Risk Committee is delegated by the Board to oversee the Group's overall Risk Management Framework and to advise the Board on the Group's risk-related matters. The Committee is also responsible for reviewing the Group's risk policies and, in conjunction with the Audit Committee, assessing the effectiveness of the Group's risk management and internal control systems. The Committee's terms of reference are available on the HKEX Group website OS. The Committee comprises six INEDs whose names and biographies are set out in the Board and Committees section of this Annual Report. The Committee held five meetings in 2020. Members' attendance records are disclosed in the Corporate Governance Report contained in this Annual Report.



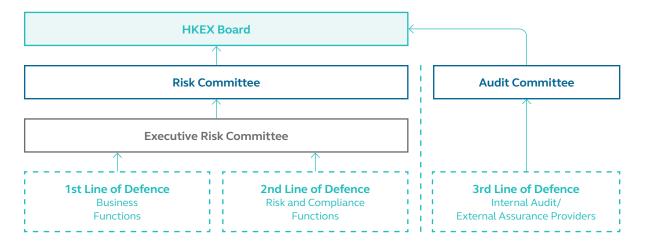
- Reviewed the Risk Committee's terms of reference and approved revisions to terms of reference of the Executive Risk Committee and the Clearing Risk Committee
- Approved the Group Risk Management plan
- Approved the HKSCC, HKCC, and SEOCH default fund enhancements
- Approved the initial margin and stress testing models for Next Generation Post Trade Platform and related risk policy changes for HKSCC
- · Approved the engagement of an external consultant to conduct an independent risk review
- Reviewed updates of the risk appetite statements and risk tolerances
- Reviewed the implementation of business continuity arrangements in response to the Covid-19 pandemic
- Reviewed the remediation actions taken in response to the independent review of the HKATS (Hong Kong Futures Automated Trading System) derivatives market suspension on 5 September 2019
- Reviewed updates of the Group Incident Escalation and Reporting Policy and the HKEX Market Contingency Plan, and the new Operational Incident Management Plan
- Reviewed updates of the IT risk governance and information security enhancements
- Reviewed the LME's pre-trade regulatory arrangements and post-Brexit contingency plans
- Reviewed the sanctions risk management plans
- Reviewed the implementation of risk and compliance culture initiatives
- Reviewed the HKEX Compliance Monitoring Programme, and approved updates to the Group Compliance Policy, the Group Personal Account Dealing Policy, the Group Record Retention Policy, and the Group Prevention of Financial Crime Policy
- Reviewed the results of the Group's quarterly Enterprise Risk Management processes that cover HKEX, the LME Group, and QME, including risk heatmaps and dashboards, summaries of assurance activities, emerging risks and clearing house liquidity, capital adequacy, and solvency levels
- Reviewed the management confirmation on the effectiveness of the Group's risk management and internal control systems

Operating an appropriate and effective risk management and internal control system is essential to achieving the Group's strategic objectives and maintaining service delivery targets. The Risk Committee is responsible for overseeing the Group's risk management approach, policy and framework. The Group operates a consistent methodology using the Group Risk Management Framework for the identification, assessment, reporting and management of risks. Risk identification and management is the responsibility of Group Management. There were no material internal control defects or significant areas of concerns identified during 2020, and the Group has satisfactorily managed the impact of the Covid-19 pandemic. The risk management and internal control systems adopted by the Group remain appropriate and effective in evaluating, determining and managing significant risks that the Group may take in achieving its strategic objectives.

The Board initiated an independent strategic risk review in Q3 2020. Employing independent industry experts, the review has holistically examined the Group's risk organisation, processes and practices and identified areas of required investment to ensure Risk Management remains resilient with respect to the Group's evolving strategy. The review will conclude by the end of Q1 2021. Governance

#### **Risk Governance**

The Group's risk governance structure is based on a "Three Lines of Defence" model, with oversight and directions from the Board, the Risk Committee, and Group Management through the Executive Risk Committee.



#### **Group Risk Management**

The Group Risk Management Framework, approved by the Risk Committee, mandates a consistent and effective approach applied across the Group to manage the risks associated with its business and operations. The framework is based on the international standard ISO (International Organisation for Standardisation) 31000 Risk Management – Principles and Guidelines. The following diagram illustrates the key processes adopted under the Group Risk Management Framework.

#### Phase 1 Establish Risk Context

Recognising the Group's critical financial markets role, HKEX Group Risk Management establishes common risk assessment criteria.

#### Phase 2 Risk Identification

Divisions and departments identify the risks that potentially impact the key processes of their operations.

#### Phase 3 Risk Assessment

Divisions and departments ass

departments assess and score the risks identified along with their impact on the business and the likelihood of their occurrence.

#### Phase 4 Risk Treatment

Divisions and departments assess effectiveness of existing controls and provide treatment plans where required.

# Phase 5

#### Risk Reporting & Monitoring

Divisions and departments monitor risk mitigating activities. Risks are regularly reported at appropriate management levels within the Group and assurance is provided on the progress of treatment plans.

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# **Principal Risks**

The Group faces a number of principal risks and uncertainties that, if not properly managed, could create an exposure for the Group. Thorough risk assessment and mitigation help ensure these risks are well managed and governed effectively. The Group focuses on addressing the following principal risks.

Principal Risks	Description	Key Mitigations
Business and Strategic Risk	The risk of material adverse changes to the Group's business performance, development prospects and/or ability to deliver its strategy, caused by changes in the business, economic, competitive, regulatory, or political environment in which the Group operates.	<ul> <li>Proactive monitoring of global exchange industry trends, competitors, and innovations;</li> <li>Proactive monitoring of and preparation for global and local changes in regulations affecting the Group; and</li> <li>Responsive project controls to allow strategic flexibility and timely resource allocation.</li> </ul>
Credit Risk	The risk that a counterparty will not settle an obligation in full value, either when due or at any time thereafter.	<ul> <li>Default management and recovery procedures in place;</li> <li>Operate a credit risk management function;</li> <li>Stress tested collateral and margin deposits; and</li> <li>Default contingent market risk managed through collateral management and margin collection.</li> </ul>
Market Risk	The risk resulting from adverse movements in market rates or prices such as foreign exchange rates, interest rates, or equity prices impacting the Group's investment portfolio (Investment Market Risk), or from a defaulted member's portfolio.	<ul> <li>Investment capital at risk limited by investment policies, restrictions, and guidelines; and</li> <li>Exposure to foreign exchange risk through subsidiaries limited due to HKD/USD peg.</li> </ul>
Liquidity Risk	The risk of being unable to settle obligations as they fall due whether relating to HKEX's cash flow and/or regulatory requirements for clearing coverage confidence levels under extreme but plausible market conditions.	<ul> <li>Investment policy, restrictions, and guidelines in place covering Corporate Funds, Margin Funds, and Clearing House Funds; and</li> <li>Clearing liquidity risk management requirements met through established stress testing practices.</li> </ul>
Operational Risk	The risk of financial or reputational loss or inability to deliver services and products due to inadequate or failed internal processes, IT systems, or external events.	<ul> <li>ESG programmes;</li> <li>Service delivery controls covering people, process, and technology;</li> <li>Low latency, highly resilient IT service design; and</li> <li>Site and data centre security and continuity arrangements, including pandemic response plans and split team operations.</li> </ul>
Cyber Security Risk	The risk of financial or reputational loss or inability to deliver services and products due to unauthorised access, use, disclosure, disruption, modification, or destruction of organisational data and/or systems.	<ul> <li>Defence-in-depth cyber controls including segregation of critical systems;</li> <li>Strengthened DDoS mitigation controls;</li> <li>Revised IT and cyber security operational function; and</li> <li>Assessment of cyber maturity against a new framework, and associated improvement plans.</li> </ul>
Legal and Compliance Risk	The risk of loss resulting from breach of or non-compliance with applicable laws, regulations, or contractual obligations.	<ul> <li>Internal and where appropriate external legal advice sought and compliance reviews conducted on business activities and new initiatives;</li> <li>Legal review of contracts;</li> <li>Compliance Monitoring Programme; and</li> <li>Internal compliance policies to ensure staff compliance with laws and regulations.</li> </ul>
Listing Risk	The risk of reputational damage resulting from a failure on the part of SEHK to comply fully with its statutory obligations or the provisions of, or obligations under, the January 2003 MOU with the SFC.	<ul> <li>Existing checks and balances under three-tiered regulatory structure (including the Listing Committee);</li> <li>Listing Division Market Contingency Plan to deal with potential business disruption events;</li> <li>Monitoring of unusual movements in price or trading volume of issuers' listed securities; and</li> <li>Segregation from other parts of HKEX using Chinese Wall arrangements to avoid leakage of inside information.</li> </ul>

#### John Mackay McCulloch Williamson

Chairman of the Risk Committee

Hong Kong, 16 February 2021