# **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), ESG, 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 and compliance policies and, in conjunction with the Audit Committee, assessing the adequacy and 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 2021. Members' attendance records are disclosed in the Corporate Governance Report contained in this Annual Report.



#### Summary of Work in 2021/2022

- · Approved the update of the independent risk review and reviewed the independent risk review remediation plan update;
- Approved the HKSCC, HKCC, and SEOCH minimum capital requirements;
- Approved the VaR Platform (previously known as NextGen Risk Management (NGRM)) project implementation proposals
  and HKSCC Guarantee Fund Cap for NGRM; and reviewed the NGRM assurance update;
- Approved updates to the Personal Account Dealing Policy;
- Endorsed revisions of Risk Committee's terms of reference and Committee's terms of reference compliance assessment; and approved revisions to terms of reference of the Executive Risk Committee and the Clearing Risk Committee;
- Endorsed the establishment of the Listing Operation Governance Committee;
- Endorsed the approach to reviewing investment portfolio limit;
- Endorsed the proposed revision of the Information Security Risk Appetite Statement;
- · Reviewed the Group Chief Risk Officer Report and introduced divisional risk roundtable updates as a standing agenda point;
- · Reviewed the system capacity update;
- · Reviewed the business continuity drill update;
- Reviewed the report on market impacts regarding the US Executive Order;
- · Reviewed the proposed share purchase mechanics for the HKEX Employees' Share Award Scheme;
- Reviewed IMF Financial Sector Assessment Program Report HKCC;
- · Reviewed the subsidiary governance framework;
- · Reviewed the Mainland business activities;
- Reviewed the new Group Business Continuity Management Policy and Group Anti-Fraud Policy;
- · Reviewed the information security improvement update;
- Reviewed the Clearing Risk Committee report;
- Reviewed the HKEX Compliance Monitoring Programme (CMP), the CMP reports on Secretarial Services Department and on Cash Market Regulatory Reports and Commitments; and the assessment of state of regulatory compliance of Hong Kong entities:
- Reviewed the results of the Group's quarterly Group 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; and
- Reviewed the management confirmation on the adequacy and effectiveness of the Group's risk management and internal control systems.

Operating an adequate 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 2021, and the Group has satisfactorily maintained appropriate levels and control measures in response to the Covid-19

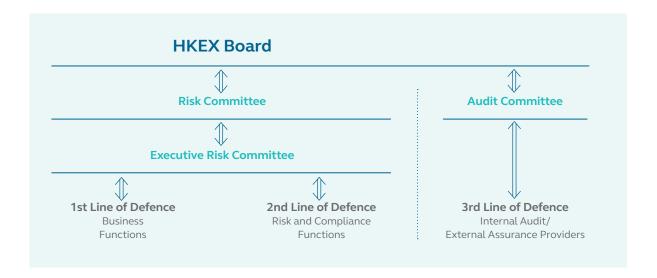
pandemic. The risk management and internal control systems adopted by the Group remain adequate and effective in evaluating, determining and managing significant risks that the Group may take in achieving its strategic objectives.

An independent strategic risk review concluded in Q1 2021 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 Board and the Risk Committee have kept abreast of the progress made in the remediation plan to address the recommendations stipulated in the independent risk review report.

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#### **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 Organisation for Standardisation (ISO) 31000 Risk Management – Principles and Guidelines. The following diagram illustrates the key processes adopted under the Group Risk Management Framework.



# **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, climate change and innovations;</li> </ul>
		<ul> <li>Proactive monitoring of and preparation for global and local changes in regulations affecting the Group;</li> </ul>
		<ul> <li>Responsive project controls to allow strategic flexibility and timely resource allocation; and</li> </ul>
		• Proactive monitoring of geopolitical developments, including sanctions impacts.
Credit Risk	The risk that a counterparty will not settle an obligation in full value, either when due or at any time thereafter.	Default management and recovery procedures in place;
		Operate a credit risk management function;
		<ul> <li>Stress tested collateral and margin deposits; and</li> </ul>
		Default contingent market risk managed through collateral management and margin collection.
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;</li> </ul>
		Investment portfolio stress limits; and
		<ul> <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> </ul>
		• Clearing liquidity risk management requirements met through established stress testing practices.
Operational	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.	ESG programmes;
Risk		<ul> <li>Service delivery controls covering people, process, third parties and technology;</li> </ul>
		Organisational leadership structure and operating model changes; and
		<ul> <li>Site and data centre security and continuity arrangements, including Covid-19 pandemic response plans and split team operations.</li> </ul>
Information Security and Technology Risk	The risk of financial or reputational loss or inability to deliver services and products due to computer hardware or software unauthorised access, use, disclosure, disruption, modification, or destruction of organisational data and/or systems.	Defence-in-depth cyber controls including segregation of critical systems;
		<ul> <li>Enhanced information security risk appetite statement;</li> </ul>
		Completed a review on cyber defence readiness;
		<ul> <li>Improvement plan to uplift cyber maturity;</li> </ul>
		• Low latency, highly resilient IT service design; and
		<ul> <li>Regular system performance monitoring, active capacity planning, maintenance and drills (including disaster recovery).</li> </ul>

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Principal Risks	Description	Key Mitigations
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> </ul>
		Legal review of contracts;
		<ul> <li>Appointment of new Group Chief Compliance Officer and Group Data Protection Officer;</li> </ul>
		<ul> <li>Compliance Monitoring Programme;</li> </ul>
		<ul> <li>Working constructively with regulators; and</li> </ul>
		<ul> <li>Internal compliance policies and training on their application 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.	Existing checks and balances under three-tiered regulatory structure (including the Listing Committee) and establishment of a new Listing Operation Governance Committee;
		• Listing Division Market Contingency Plan to deal with potential business disruption events;
		<ul> <li>Monitoring of unusual movements in price or trading volume of issuers' listed securities; and</li> </ul>
		<ul> <li>Segregation from other parts of HKEX using Chinese Wall arrangements to avoid leakage of inside information.</li> </ul>
Model Risk	The risk of adverse consequences arising from actions and decisions taken on the basis of incorrect or miscalculated model outputs and reports.	Model risk governance framework; and
		Internal model validation capacity.

### CHOW WOO Mo Fong, Susan

Chairman of the Risk Committee

Hong Kong, 15 February 2022