

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 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 [ORG](#). The Committee comprises five INEDs whose names and biographies are set out in the Board and Committees section of this Annual Report. The Committee held four meetings in 2019. Members' attendance records are disclosed in the Corporate Governance Report contained in this Annual Report.

Summary of Work in 2019/2020

During the period, the Risk Committee oversaw key risk management activities including:

- Enhancements to the risk governance model including an update of terms of reference of both the Risk Committee and the Clearing Risk Committee (CRC) and also establishment of the key controls oversight framework;
 - Updates of the risk appetite statements and risk tolerances;
 - Implementation of risk and compliance culture initiatives;
 - Enhancements to clearing house default management, settlement risk and margining practices;
 - Implementation and enhancement of physical security, cyber security and business continuity arrangements in response to social unrest in Hong Kong;
 - Conduct of a cyber security and crisis management simulation exercise and multiple member default drills;
 - Reviews of the HKATS (Hong Kong Futures Automated Trading System) derivative markets suspension and HKEX website cyber attack incidents;
 - Review of the LME governance arrangements to ensure regulatory compliance;
 - Review of the HKEX Compliance Monitoring Programme and approval of the new Group Compliance Policy and updates to the Group Personal Account Dealing Policy and the Group Prevention of Crime Policy;
 - Review of the results of the Group's quarterly Enterprise Risk Management processes including risk heatmaps and dashboards, summaries of assurance activities, emerging risks and clearing house liquidity, capital adequacy and solvency levels; and
 - Review of the management confirmation on the effectiveness of the Group's risk management and internal control systems.
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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. The Group operates a risk

governance model to effectively identify and manage risks. Notwithstanding the HKATS derivatives market suspension and HKEX website cyber attack incidents noted above, there were no material internal control defects or significant areas of concerns identified during 2019. 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.

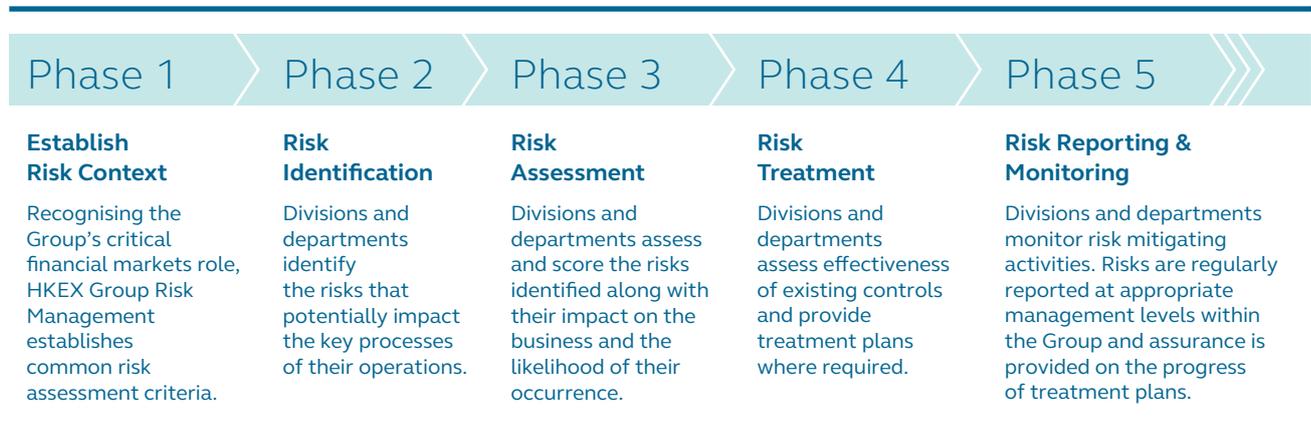
Risk Governance

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.



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 style="list-style-type: none"> Proactive monitoring of global exchange industry trends, competitors and innovations; Proactive monitoring of and preparation for global and local changes in regulations affecting the Group; and Responsive project controls to allow strategic flexibility and timely resource allocation.
Credit Risk	The risk that a counterparty will not settle an obligation in full value, either when due or at any time thereafter.	<ul style="list-style-type: none"> Default management and recovery procedures in place; Established credit risk management function; Stress tested collateral and margin deposits; and 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 style="list-style-type: none"> Investment capital at risk limited by investment policies, restrictions and guidelines; and Exposure to foreign exchange risk through subsidiaries limited due to HKD/USD peg.
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 style="list-style-type: none"> Investment policy, restrictions and guidelines in place covering Corporate Funds, Margin Funds and Clearing House Funds; and Clearing liquidity risk management requirements met through established stress testing practices.
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 style="list-style-type: none"> ESG programmes; Service delivery controls covering people, process and technology; Low latency, highly resilient IT service design; and Site and data centre security and continuity arrangements.
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 style="list-style-type: none"> IT network perimeter controls and cyber attack drills; Enhanced cyber threat prevention and detection; Enhanced real time data loss monitoring; and Cyber incident forensics and breach response controls.
Legal and Compliance Risk	The risk of loss resulting from breach of or non-compliance with applicable laws, regulations or contractual obligations.	<ul style="list-style-type: none"> Internal and where appropriate external legal advice sought and compliance reviews conducted on business activities and new initiatives; Legal review of contracts; Compliance review monitoring programme; and Internal policies to ensure staff compliance with laws and regulations.
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 style="list-style-type: none"> Existing checks and balances under three-tiered regulatory structure (including the Listing Committee); Listing Division Market Contingency Plan to deal with potential business disruption events; Monitoring of unusual movements in price or trading volume of issuers' listed securities; and Segregation from other parts of HKEX using Chinese Wall arrangements to avoid leakage of inside information.

John Mackay McCulloch Williamson
Chairman of the Risk Committee

Hong Kong, 24 February 2020