香港交易所資訊服務(中國)有限公司

(香港交易及結算所有限公司全資附屬公司)

HKEX INFORMATION SERVICES (CHINA) LIMITED

(A wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited)

Guiding Note for Audit Metering System

Securities and Derivatives Market Data (for licensed real-time data vendors and end-users)

PURPOSE

This Guiding Note sets out the scope and requirements for those HKEX Information Services (China) Limited ("HKEX-IS (China)") licensed real-time information vendors (IVs) and end-users (EUs) that provide or use real-time Per Quote Access and/or Charge Per Unit Time services (Usage Based Services) to submit a Quote Meter Audit (QMA) Report within 90 days upon the end of the financial year during which Usage Based Services are launched. The submitted QMA Report shall be signed by either an external audit firm or an internal auditor/accountant certified for HKICPA, ACCA, ICAEW or equivalent qualification with an authorized signatory.

A) QMA OBJECTIVES

To ensure the integrity, validity, accuracy and completeness of the metering system that logs feeliable access for the real-time Usage Based Services and the remittance reports as generated from the metering system. The QMA should cover the entire end-to-end process within the IV's or EU's system (that is, from the point when the IV or EU first receives the Exchange data up to the final reporting and payment of the relevant subscriber/individual user fees to HKEX-IS (China)).

The QMA Report should confirm whether there are adequate controls over:

- 1. The reliability of the access logging program;
- 2. The accuracy, security and integrity of the log;
- 3. The security of the network environment where the logging program and the log reside; and
- 4. The continual existence of reliable, adequate and effective audit trail in maintaining the user records in the systems.

B) QMA GUIDELINES TO LICENSEES AND AUDITORS

The QMA Report should verify whether the metering system is able to fulfill, including but not limited to the followings:

- Logging of fee-liable access ("Access") to data content as approved in the service application and Schedule 4 - Memorandum of Permitted Purpose ("MOPP") of the respective Licence Agreement:
 - For Per Quote Access Service a static quote pertaining to each and every single security/derivatives/issue/instrument of the Securities and/or Derivatives market being displayed;
 - For Charge Per Unit Time Service time access to streaming real-time Securities and/or Derivatives market data by a single user rounded up to the nearest minute for each Access;

香港交易所資訊服務(中國)有限公司

(香港交易及結算所有限公司全資附屬公司)

HKEX INFORMATION SERVICES (CHINA) LIMITED

(A wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited)

- 2. Any display of data content of Securities and/or Derivatives market instruments delayed by less than 15 minutes (effective 2 April 2007) is considered as real-time data. Upon the launch of Closing Auction Session ("CAS"), any information of non-CAS securities delayed by less than 15 minutes after the reference price and any information of CAS securities delayed by less than 15 minutes after the close of trading session is considered as real-time data.
 - The metering system shall cover all trading sessions, namely Pre-opening, Morning, Extended Morning, Afternoon and Closing Auction sessions. For details of the trading hours for Securities and Derivatives markets, please refer to HKEX website: www.hkex.com.hk
 - IVs or EUs are reminded to specify clearly the fee-liable periods adopted for its metering system in the QMA Report.
- 3. The QMA Report should certify that the IV's or EU's systems can properly perform the following functions:
 - a) Count all Access of Usage Based Services according to the types and levels of data content as approved by HKEX-IS (China).
 - b) In situations where static quote of more than one security/derivatives/issue/instrument is packaged and disseminated as a basket portfolio, within a page or as market reminder service, each real-time quote for each security/derivatives/issue/instrument should be logged as a separate quote and subject to the fee as specified in the MOPP of the respective Licence Agreement. For example, a portfolio containing display of five stocks simultaneously should translate into 5 individual fee-liable quotes in total.
 - c) Log and round up the Access time to the nearest minute for each Access for each subscriber/individual user for Charge Per Unit Time service.
 - d) Confirm the security of network environment where the logging program and the log reside.
 - e) Count all Access to the data content approved in the MOPP of the respective Licence Agreement and in accordance with the requirements of the relevant guiding notes.
 - f) Generate detailed reports on each individual Access, and that these report totals are consistent with the actual Access captured.
 - g) Generate valid, accurate and complete remittance reports for the calculation of subscriber and/or individual user fees to HKEX-IS (China) as specified in the MOPP of the respective Licence Agreement on a consistent and reliable basis.
 - h) Verify that there are pre-requisite technical mechanisms to a) disallow concurrent access and no bundling of entitlement for more than one subscriber or individual user unit to claim monthly capping charge at HK\$250; and b) bottom-up to the monthly minimum subscriber fee of \$6,000 per 3rd party client (as applicable).
 - i) Confirm that there is continual existence and maintenance of reliable, adequate and effective audit trail as defined in Clauses 5.5 and 5.6 of the Market Data Vendor Licence Agreement or Clauses 6.4 and 6.5 of the Market Data End-User Licence Agreement.
- 4. The IV's or EU's system should cover the end-to-end process (that is, from the point where the IV or EU first receives the Exchange data up to the final reporting and payment of the relevant subscriber / individual user fees to HKEX-IS (China)).

香港交易所資訊服務(中國)有限公司

(香港交易及結算所有限公司全資附屬公司)

HKEX INFORMATION SERVICES (CHINA) LIMITED

(A wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited)

5. The QMA Report should include information in detailing the QMA period covered, the types and levels of data content under review, the QMA works performed with testing details and the conclusion if the above objectives have been achieved. Below is an extract of the recommended conclusion:

(Sample format regarding Conclusion)

	======EXAMPLE======
	Conclusion
-	With the details of audit works performed with samples as incorporated in the report, we hereby certify that for the period from to, [company name] achieved all the audit objectives with no exceptions noted
-	for [the types and levels of data content] of Per Quote Access and/or Charge Per Unit Time services as stated in the MOPP.

Should IVs or EUs have any questions or comments on this Guiding Note, please contact the Data Client Audit team of Market Data Department via DataClientAudit@hkex.com.hk