

## **Press release**

### **LCQ19: Suspension of dissemination of Hang Seng Family of Indexes**

Wednesday, February 24, 2010

Following is a question by the Hon Mrs Regina Ip and a written reply by the Secretary for Financial Services and the Treasury, Professor K C Chan, in the Legislative Council today (February 24):

Question:

The index system of Hang Seng Indexes Company Limited (HSIL) failed to disseminate the various Hang Seng indexes (HSI) through the trading and information systems of The Hong Kong Exchanges and Clearing Limited between about 10am and 10.32am on January 22 this year. There have been comments that apart from affecting the operation of the Hong Kong stock market that day, the incident had tainted Hong Kong's esteemed reputation as an international financial centre. Moreover, HSIL publicly pointed out after the incident that it was caused by data sequence errors, which was rare, and HSIL also indicated that all necessary changes and comprehensive testing with regard to the problem had been carried out and considered that there would not be any problem. The comments have also pointed out that HSIL's remarks are unconvincing and have aroused concern about the reliability of the HSI system. In this connection, will the Government inform this Council:

(a) whether it has ascertained from HSIL:

(i) the reasons for overlooking the possibility of occurrence of the aforesaid incident during the analysis and designing stages of the index system; whether the software engineers had conducted a thorough testing on the index system at its development stage; if not, of the reasons for that; how HSIL ensures that the aforesaid comprehensive testing conducted on the index system had not missed out any part of the system; and

(ii) whether HSIL's analysts and designers have sufficient domain knowledge to perform their duties; and

(b) whether it knows if the aforesaid incident occurred because the continuous expansion of the trading market had given rise to information transmission situations, which were not expected when the index system was designed and, as a result, the system has become overloaded; if so, whether it has requested HSIL to conduct regular information technology audits so as to find out the weaknesses of the system and conduct system upgrade in a timely manner?

Reply:

President,

The Hang Seng Indexes Company Limited (HSIL) has investigated and reviewed the incident. HSIL and the Hong Kong Exchanges and Clearing Limited (HKEx) have each prepared an incident report. The Administration has forwarded the reports to the Legislative Council Panel on Financial Affairs for reference.

My replies to the sub-questions are as follows -

(a) HSIL performs comprehensive systems tests and User Acceptance Tests for each of its system developments. According to HSIL's incident report, the incident was caused by a rare incoming message sequence. Since the Real-Time Index System used a parallel data processing methodology, the "Out of Sequence" event following the pre-opening auction was rare, and had not been previously encountered or foreseen. HSIL have not seen any indication from the incident that the relevant personnel lacked the necessary knowledge to perform their duties.

(b) According to HSIL, the occurrence of the incident was not related to market expansion or system capacity issues, but the rare incoming message sequence mentioned above. According to HSIL's incident report, HSIL is undertaking a comprehensive review of its system with a view to identifying any other potential points of failure, and if so, making the necessary changes.

While this incident inevitably affected the normal operation of the market, the contingency measures activated by HSIL and HKEx on January 22, 2010 helped to avoid significant disruption to the market. We believe improvements and enhancements proposed by HKEx and HSIL can help to further improve the contingency arrangements. The Securities and Futures Commission will work closely with HSIL and HKEx to follow up on these proposed changes.

Ends