

## **TELECOMMUNICATIONS NUMBERING ADVISORY COMMITTEE**

### **Emergency Codes for Iridium Mobile Satellite Service in Hong Kong**

#### **Purpose**

This paper reports the arrangement of emergency codes for Iridium mobile satellite service in Hong Kong.

#### **Background**

2. The Iridium system is a global wireless communications system which offers world-wide coverage by a constellation of 66 low-earth-orbit satellites. China Space Satellite Mobile Communications Company Limited (SpaceCom) which is based in Beijing is the gateway operator for the Iridium mobile satellite service covering mainland China, Mongolia, Macau and Hong Kong.

3. In the Iridium system, geographical locations on the earth are identified by Location Area Codes (LACs). A location area in Iridium is similar to a cell in the cellular radio system but has a much larger coverage area. Hong Kong is assigned with one of these LACs. A map showing the area covered by Hong Kong LAC is attached in Annex for reference.

#### **Emergency Codes for Hong Kong**

4. The basic emergency code for the Iridium system is the global emergency code "112". When an Iridium subscriber dials this emergency code, an emergency call indicator together with the LAC identity will be sent to the serving gateway Mobile Switching Centre (MSC). Upon detecting the emergency call indicator, the gateway MSC will map the LAC to another routing number for delivery to the local emergency centre via international gateway exchanges.

5. If a user sends out an emergency "112" call in Hong Kong's territory, the gateway MSC in Beijing will, after receiving the call, generate a mapped routing number "852 999" which is the Hong Kong's country code followed by the Hong Kong's emergency code. This routing number will be passed to the gateway of Hong Kong Telecom International Limited (HKTI) via the Beijing International Switching Centre (ISC). HKTI will subsequently deliver the call to the Hong Kong Police 999 Reporting Centre situated on the Hong Kong Island.

6. Apart from "112" code, "999" is also the essential emergency number in Hong Kong. In order to ensure that users of Iridium mobile satellite system in Hong

Kong dialling "999" or "852 999" would also be connected to the Hong Kong Police 999 Reporting Centre, the Office of the Telecommunications Authority has advised SpaceCom to program these two numbers in the same way as "112". In other words, any dialled emergency calls onto "112", "999" and "852 999" in Hong Kong will be routed to our Police 999 Reporting Centre.

7. Since emergency calls generated from local fixed and mobile networks are all free-of-charge, Iridium LLC, the operator of Iridium has agreed not to charge users of Iridium mobile satellite service for any dialled emergency calls in Hong Kong. Iridium LLC and the concerned gateway exchange operators are discussing the detailed arrangement on how to settle the charge for routing these emergency calls to Hong Kong among themselves.

### **Conclusion**

8. The three emergency codes "112", "999" and "852 999" have been programmed into the gateway MSC in Beijing. HKTl has completed the technical arrangement to ensure that any emergency calls received from Beijing ISC will be routed to the Hong Kong Police 999 Reporting Centre situated on the Hong Kong Island. Once the commercial agreement on settlement of connection charge of emergency calls is reached, emergency call service will be offered by Iridium mobile satellite system free-of-charge.

Office of the Telecommunications Authority  
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Coverage of the Hong Kong LAC

