For Information

Legislative Council Panel on Information Technology and Broadcasting

A Note on Previous Cases of Telephone Traffic Congestion due to Typhoon or Heavy Rain

Purpose

During the discussion at the meeting of the Panel on 17 September 2002 on the telephone traffic congestion experienced on 11 September 2002 preceding and coinciding with the issue of the No. 8 typhoon signal, Members asked the Administration to provide information on, amongst other things, previous cases of telephone traffic congestion due to typhoon and heavy rain. This note provides information on the previous incidents based on traffic records of telephone operators in so far as those records are still in existence.

Previous Incidents

- 2. There were two incidents of Typhoon Signal No. 8 hoisted in the year 2001. The first one was between 1930 hours on 5 July 2001 to 1340 hours on 6 July 2001 and the other one was between 0030 hours to 1940 hours on 25 July 2001. There was also a Black Rain Storm Warning Signal issued at 2245 hours on 1 September 2001. However, records of telephone traffic for the year 2000 or earlier were not kept by operators.
 - (a) 5-6 July 2001 Typhoon Signal No. 8

Typhoon Signal No. 8 was hoisted between 1930 hours on 5 July 2002 and 1340 hours on 6 July 2001. According to the traffic figure submitted by fixed network operators, one

operator recorded a maximum of 2.2 times of the normal peak hour traffic in this period. Another operator recorded a maximum of about 1.2 times. The remaining fixed network operators either experienced normal traffic or had not kept such historical traffic data. One mobile operator recorded a maximum of 1.4 times of the normal peak hour traffic and another operator experienced about 1.44 times during the same period. Figures from the other mobile network operators are not available. In this incident the additional telephone traffic generated was manageable and no network congestion or network failure was reported to the OFTA. We note in this incident that the peak hour traffic was recorded either one hour before the Typhoon Signal No. 8 was hoisted at 1930 hours on 5 July, or right after Signal No. 8 was lowered at 1340 hours on 6 July. The pattern suggested that most people would make calls before or after the Typhoon Signal.

(b) 25 July 2001 Typhoon Signal No. 8

Typhoon Signal No. 8 was hoisted between 0030 hours and According to the information submitted by fixed network operators, one operator experienced only 72% of the normal peak hour traffic and the other one recorded slightly less than 2 times of the normal peak hour traffic during this period. The other fixed network operators either experienced normal traffic or had not kept their traffic figures. One mobile operator recorded a maximum of 2.4 times the normal peak hour traffic and two operators experienced about 1.7 times. Other mobile network operators reported that they did not experience any increase of traffic. In this incident the additional telephone traffic generated was also manageable and no network congestion or network failure was reported to the OFTA. We note that in this case most students were on their summer holidays.

(c) 1 September 2001 Black Rain Storm Warning Signal

Black Rain Warning was issued by Hong Kong Observatory at 2245 hours on 1 September 2001. According to the information from one of the fixed network operators, the traffic was 60% of the normal peak hour traffic. Whereas another fixed network operator recorded a maximum traffic of 1.4 times of the normal level. The other fixed network operators either experienced normal traffic or had not kept their traffic records. Most mobile operators had not kept the traffic data and therefore comparison could not be made. Only one mobile operator reported that it had experienced a maximum of 1.8 times of the normal peak hour traffic. Overall the extra telephone traffic generated could be handled by the local telecommunications network without any problem. There was no network congestion or network failure reported to the OFTA.

Observation

3. In all of the three incidents, the increase of telephone traffic was manageable and no serious congestion was reported. Under those circumstances, the increase of the traffic level compared with the normal peak hour traffic level was at most 2.4 times, which was substantially less than the increase of six times recorded on 11 September 2002. OFTA will separately provide an investigation report of the incident on 11 September 2002. This report is scheduled to be available in December 2002.

Office of the Telecommunications Authority 5 November 2002