

## **TELECOMMUNICATIONS NUMBERING ADVISORY COMMITTEE**

### **Review of Mobile Number Utilization Rate for New Mobile Number Application**

#### **Purpose**

This paper sets out the Telecommunications Authority (TA)'s proposal and consideration to adopt a utilization rate of 75 % as the underlying criterion for new mobile number applications.

#### **Review of Mobile Number Utilization Rate**

2. At present, the Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan (Cap. 269) prescribes that for new mobile number applications, mobile network operators should have achieved a minimum utilization rate of 50 % with the number blocks already assigned. The TA considers that there is a need to conduct a review of this 50 % criterion since its inception in 1994. By the end of May 1999, there were 7.4 million numbers assigned to mobile network operators whereas the total number of subscribers was 3.45 million. Thus, the overall mobile number utilization rate in the industry taken as a whole is 46.53 %. The TA considers that this utilization level indicates that mobile numbers are currently not utilized efficiently in the industry. Considering that telecommunications numbers are a scarce and precious community resource and should be used efficiently, the TA has therefore proposed that the mobile number utilization rate should be increased from 50 % to 75 % before new mobile numbers are granted. The mobile network operators were requested to comment on the proposal.

3. The Office of the Telecommunications Authority (OFTA) has solicited views and comments from all mobile network operators about the above proposal of increasing the mobile number utilization rate to 75 %. Some operators considered that the present criterion of 50 % utilization rate should be retained. Three mobile network operators (HTHK, CWHKTCSL and SUNDAY) considered that 60 % utilization rate would be acceptable and would not cause pressure in their number resources management. A summary of their comments is in Annex.

#### **The TA's Consideration**

4. After considering the views and comments of mobile network operators, the TA agrees that operators normally need a lead-time of 3 months before they can

assign newly allocated mobile numbers to customers. However, if the 75 % utilization rate is adopted, mobile network operators will still have about 100K – 500K numbers in hand to serve new subscribers during the 3-month period. According to OFTA's mobile subscriber statistics, this buffer of mobile numbers should be adequate for operators to cater for the new take-up of subscribers and new services during the 3 months' period.

5. In order to promote the efficient use of mobile numbers in the industry, the TA considers that 75 % utilization rate should be adopted. However, if individual mobile network operators could not meet the proposed criterion but still have strong justifications for additional number blocks, they may submit their applications to the TA for consideration.

6. OFTA has indicated at the 32nd Telecommunications Numbering Advisory Committee (TNAC) on 7 July 1999 the TA's intention to review the mobile number utilization rate. It is therefore necessary to hold in abeyance all mobile number block applications from operators after this date, pending for the outcome of the review.

### **Advice Sought**

7. Members are invited to give their views and comments on the TA's proposal given in para. 4-6 to the Secretary of the TNAC on or before 16 August 1999.

Office of the Telecommunications Authority  
31 July 1999

**Summary of Comments from Mobile Network Operators  
on the Review of Mobile Number Utilization Rate**

<p><b>Hutchison Telecommunications (Hong Kong) Limited (HTHK):</b></p>	<ul style="list-style-type: none"> <li>• The 75 % utilization rate will fail to allow a comfortable buffer for unexpected sale upsurges.</li> <li>• Port-out numbers inevitably increase the actual utilization rate and reduce the buffer for future assignment.</li> <li>• HTHK proposes to increase the current number utilization rate from 50 % to 60 %.</li> </ul>
<p><b>Cable &amp; Wireless HKT CSL Limited (CWHKTCSL) :</b></p>	<ul style="list-style-type: none"> <li>• Over 10 % of the numbers out of a numbering block are regarded as bad or poor numbers by customers.</li> <li>• The distributed database nature of system architecture has an impact on the number utilization rate. Numbering blocks assigned to the database are in general required to be larger than the capacity of the database so as to maximize the database usage and the rate of return on the associated investment.</li> <li>• Non-voice services such as data and fax are becoming increasingly popular and their users will no doubt be further escalated in future. Service focus of the mobile industry is shifting from voice to non-voice services with the arrival of technologies such as General Packet Radio Services (GPRS) and Enhanced Data Rate for GSM evolution, and third generation technology which will be commercially available in 2002. The tremendous upsurge in the demand for such non-voice services will result in larger requirement on the existing number resources.</li> <li>• CWHKTCSL recommends the minimum mobile number utilization rate criterion should be increased</li> </ul>

	initially to 60 %, subject to periodical reviews at, say, six-month interval.
<b>New World PCS Limited (NWPCS) :</b>	<ul style="list-style-type: none"> <li>• NWPCS considers that the minimum utilization rate of 50 % should remain unchanged.</li> <li>• With comparatively small amount of unused numbers, NWPCS is facing difficulties in administering and distributing mobile numbers amongst its sales channels. Further increase in such utilization rate criterion will create even higher pressure to mobile number resources, taking into consideration its rapid customer growth and the normal lead time of 2 months for opening a new level.</li> </ul>
<b>PEOPLES Telephone Company Limited (PEOPLES) :</b>	<ul style="list-style-type: none"> <li>• The proposed utilization rate of 75 % is on the high side and will become definitely a threat to business. PEOPLES will be constrained by the scarcity of buffer numbers particularly when the new numbers are not made ready for use due to long lead time and setup time.</li> <li>• It asks OFTA to shelf the proposal for the time being and maintain the status quo of the industry.</li> </ul>
<b>Mandarin Communications Limited (SUNDAY) :</b>	<ul style="list-style-type: none"> <li>• SUNDAY agrees with OFTA that numbering, same as frequency, is a very precious resource. In reviewing OFTA's position to effectively improve the utilization of mobile number resources, SUNDAY would like to propose to increase the utilization rate criterion to 60 %.</li> </ul>
<b>SmarTone Mobile Communications Limited (SmarTone) :</b>	<ul style="list-style-type: none"> <li>• SmarTone adopts the "minimum 50 % numbering utilization rate" in planning its network implementation. Any increase in this important planning parameter will have significant impact to its overall network planning and service roll-out strategies.</li> <li>• Increase of mobile number utilization rate will have adverse effect on delivery time of new and advanced services to customers.</li> </ul>

	<ul style="list-style-type: none"><li>• 14 working days are required in applying new number blocks from OFTA. Also, there are 6 weeks lead time for CWHKT to open new number blocks. Adding with the lead time for internal provision, therefore a lead time of 3 months is expected. The increase to 75 % utilization rate will be a heavy burden to numbering planning and the lead time will then be totally unacceptable in providing satisfactory services to customers.</li><li>• Customers are increasingly demanding on choosing mobile numbers because the market is so competitive. The increase in utilization rate will result in poor flexibility for operators to create new subscription. SmarTone believes that the increase of the utilization rate will have adverse impact on cellular penetration.</li></ul>
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