Telecommunications Regulatory Affairs Advisory Committee

Proposals of the
Telecommunications Numbering Working Group

Purpose

The Telecommunications Numbering Working Group[1] (TNWG) was established under the Telecommunications Regulatory Affairs Advisory Committee (TRAAC) in January 2013. The TNWG held three meetings during January to March in 2013 and discussed various numbering issues, including new number blocks for mobile services, revisions to the "Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan" (Numbering Code of Practice) in preparation for the new International Telecommunication Regulations (ITRs), and the machine-to-machine (M2M) communications numbering arrangement. This paper summarises the TNWG's views and recommendations on these three topics.

New Number Blocks for Mobile Services

Background

2. Over the past few years, the subscriber growth rate of mobile services remains at a relatively high level. The number of mobile users has increased from 14.9 million in December 2011 to 16.4 million in December 2012, representing an annual growth rate of about 9.9%. If this trend continues, the existing vacant mobile number blocks will be exhausted by end of 2013. This issue was discussed in the TNWG meetings, and the TNWG Members recommended that the number blocks in "57X" should be re-allocated from Class 2 services to mobile services so as to meet the demand for mobile numbers.

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[1] Membership list of the TNWG is given in the **Annex**.

Recommendation

3.   Under the existing numbering plan, "57X" and "58X" numbers are allocated for Class 2 services.   However, the number demand for Class 2 services has been low for the past seven years.   According to the statistics in March 2013, only 81k "58X" numbers (4.05% out of two million "57X/58X" numbers) have so far been allocated for Class 2 services.   The "57X" numbers have not been allocated to any operator yet.   The arrangement of the "57X/58X" numbers was reviewed by the former Telecommunications Numbering Advisory Committee ("NAC") and the former NAC recommended in NAC Paper No. 2/2011 that if the demand for Class 2 services remained low, the unallocated "57X/58X" numbers could be re-allocated for other uses.   As the number demand for Class 2 services remains low, the TNWG Members recommended re-allocating the "57X" number block from Class 2 services to mobile services in order to better utilise the numbering resources.   If the proposal is supported by Members, the Office of the Communications Authority (OFCA) will make the necessary recommendations to the Director-General of Communications (DG Com).   After DG Com has given her approval to the proposal, OFCA will update the "Numbering Plan for Telecommunications Services in Hong Kong" and the Numbering Code of Practice to reflect the new arrangement.

Revision to Numbering Code of Practice for the New ITRs

Background

4.   In the World Conference on International Telecommunication held in December 2012 (WCIT-12) convened by the International Telecommunication Union (ITU), the ITRs are updated.   Details of the new ITRs are discussed in TRAAC Paper No. 2/2013.   We have to make the necessary preparation to ensure compliance with the new ITRs when they are put into effect on 1 January 2015.

5.   In the WCIT-12, the Pacific Island countries raised concerns about the misuse of international telecommunication numbers for

fraudulent purpose.   There was general support to adopt appropriate measures to curb the misuse of numbering resources.   In this respect, the ITRs have introduced a new Article 3.5 to deal with the misuse of numbering resources –

> *"3.5   Member States shall endeavour to ensure that international telecommunication numbering resources specified in ITU-T Recommendations are used only by the assignees and only for the purposes for which they were assigned; and that unassigned resources are not used."*

Recommendation

6.   The current version of the Numbering Code of Practice[2] was adopted by the CA in April 2012.   It sets out the principles for the allocation and assignment of numbers and codes for telecommunications services providers to follow.   In order to reflect the new requirement discussed in paragraph 5 above, the TNWG recommended adding the following new paragraph 12 to the "Background" section of the Numbering Code of Practice –

> *"International Numbering Resources*
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> *12.   Operators shall only use international telecommunication numbering resources specified in ITU-T Recommendations which the Communications Authority have assigned to them for the purposes for which they were assigned. Operators shall ensure that they do not use unassigned resources."*

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[2]   See http://www.ofca.gov.hk/filemanager/ofca/common/Industry/telecom/cop20100929e.pdf.

Machine-to-Machine Communications Numbering Arrangement

Background

7.   When the former NAC met in November 2011, the NAC Paper No. 3/2011 "Numbering Arrangement for Machine-to-Machine Communications" was discussed.   It was proposed to reserve "450X" numbers with digit length of 12 for M2M service.   In that meeting, the NAC suggested that the arrangement to reserve and allocate numbers for M2M communications should be decided after the Technical Standards Advisory Committee (TSAC) deliberated the technical implementation issues.

8.   The M2M numbering issue was subsequently discussed in the former TSAC meeting in March 2012.   Considering that the comments raised by members focused on the implementation issues about the proposed use of 12-digit numbers for M2M service rather than any issue about the technical standards, the TSAC Chairman concluded that no change to the then HKTA specifications could be identified.

9.   The M2M numbering issue was further discussed in the TNWG meeting in January 2013.   In the meeting, most of the TNWG Members were of the view that the M2M number demand was low.   Moreover, their network did not support 12-digit M2M numbers, and network upgrade would be required to support such a digit length.

Recommendation

10.   Considering that the M2M demand remains low and there are other means to support M2M services (such as using Internet Protocol (IP) addresses, internal network numbers), the TNWG considered that there was no urgent need to deploy 12-digit M2M numbers at this moment. The TNWG will keep monitoring the development of M2M services in other countries and make timely recommendations to TRAAC on this subject matter if the need arises.

Advice Sought

11.   Members' views and comments are sought on the recommendations given in paragraphs 3, 6 and 10 above.

Office of the Communications Authority
April 2013

Annex

Membership List of the
Telecommunications Numbering Working Group

1.	Ad personam	Ms Eva Chan
2.	China Mobile Hong Kong Company Limited	Mr Almond Tso
3.	Communications Association of Hong Kong	Mr Gilbert Chan
4.	ComNet Telecom (HK) Limited	Mr Raymond Tang
5.	CSL Limited	Mr Ken Kong
6.	External telecommunications services (ETS) providers as a group	Mr Stephen Chan
7.	Hong Kong Broadband Network Limited	Mr Charles Yeung
8.	Hong Kong Police Force	Mr Shiu Wai Kay
9.	Hong Kong Telecommunications (HKT) Limited	Mr Cheung Wing Kin
10.	Hutchison Global Communications Limited	Mr Michael Shiu
11.	Hutchison Telephone Company Limited	Mr Ringo Chan
12.	The Institution of Engineering and Technology Hong Kong	Dr Y H Shum
13.	New World Telecommunications Limited	Mr C F Liu
14.	SmarTone Mobile Communications Limited	Mr S L Lee
15.	Paging operators as a group	Mr Raymond Wong
16.	TraxComm Limited	Mr Brian Ho
17.	Wharf T&T Limited	Mr Eric Ng
18.	OFCA	Mr Sidney Tsan (Chairman)
19.	OFCA	Mr Andy Leung (Secretary)

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