

Telecommunications Numbering Advisory Committee

Review of “300” Numbers for International Value-Added Network Services (IVANS)

Purpose

This paper reviews and explores the numbering resources under the “30” range in the Hong Kong Numbering Plan to meet the existing and future demand of the International Value-Added Network Services (IVANS) in Hong Kong. It also proposes an assignment principle for Fixed Telecommunication Network Services (FTNS) to assign “30” numbers to IVANS operators.

Scope of IVANS

2. The IVANS are local and/or international public non-exclusive telecommunication services accessed by their customers via the public switched telecommunication networks and/or leased circuits such as international private leased circuits. IVANS may include the following service elements :

- data communications (store and retrieve/forward);
- facsimile communications (store and retrieve/forward);
- electronic mailbox/messaging;
- electronic data interchange;
- Internet access;
- database access and retrieval; and
- value added voice services (e.g. voice mailbox).

Review of “300” Numbering Sources

3. In the Hong Kong Numbering Plan, the “300” number range is exclusively used for IVANS and these numbers are allocated to each FTNS operator on a per 10K block basis. All IVANS operators are required to apply the “300” numbers from FTNS operators. At present, 70K numbers have been allocated to four FTNS operators and only 20K numbers are available for future expansion. The current allocations of “300” numbers are shown in the Annex. The FTNS operators will assign “300” numbers to IVANS operators according to their needs. For each installed Direct Exchange Line (DEL), a unique “300” number will be assigned while for Direct-Dialling-In (DDI) lines, FTNS operators will normally assign blocks of 0.1K of “300” numbers to IVANS operators. Due to the lack of “300” numbers in hand, FTNS

operators usually assign “300” numbers to IVANS operators for the DDI operation in a prudent manner.

Demands of “300” Numbers

4. The number of IVANS operators in Hong Kong as of January and December 1997 was 190 and 250 respectively. There was an increase of 31% of IVANS operators in 1997. It is expected that the number of IVANS operators will continue to increase this year. The existing “300” number resources may not be sufficient to cater for their future demands. In addition, there is a trend that IVANS operators will use more DDI lines than DEL to operate the public messaging services and sub-assign every IVANS customer a unique “300” number.

Proposed New Number Levels for IVANS

5. Under these circumstances, the Telecommunications Authority (TA) considers it necessary to open more number levels to cater for the demands of IVANS. The best choice will be “30(1-9)” because the entire “30” level will then be solely assigned for use by IVANS. This will make an additional 900K numbers for IVANS. It is estimated that these additional numbers will be adequate to serve the growing need of IVANS in future. Although these levels are originally reserved for FTNS, the re-deployment should not affect the FTNS as there are still plenty of unassigned number resources under the rest of the “3X” levels to cater for the future FTNS requirements. If this proposal is acceptable, the TA will amend the Hong Kong Numbering Plan accordingly.

Proposed Assignment Principle of “30” Numbers

6. As discussed in para. 4 above, there is a tendency for IVANS operators to give each customer a unique IVANS number (in fact it is a DDI number) for use as electronic mailbox number. Callers can deposit their voice and fax messages by dialling directly to the customer's assigned “30” number (or electronic mailbox number). As a result, IVANS operators will request the FTNS operators to assign as many DDI numbers under the “30” range as possible so that they can sub-assign them to their customers. It is therefore necessary to derive an assignment principle in order to ensure that the assignment of “30” numbers to IVANS operator should be done in a fair and transparent manner.

7. The TA proposes that the IVANS operators can request for the assignment of up to a maximum of 300 numbers from FTNS operators for installed or additional T1 circuit or 24 DDI circuits. The ratio of circuit to numbers for DDI service is **1:12.5**. (The calculation is based on 0.051 Erlangs per IVANS customer in busy hour with GOS of 1%). For DEL, the ratio of circuit to number will remain **1:1**. For normal application, FTNS operators will follow the above rule to assign “30” numbers to IVANS operators. However, under special circumstances, if IVANS operators have to use more “30” numbers than the above ratio, they have to submit

their applications with justifications to the TA direct. Subject to the TA's approval, FTNS operators will then assign the requested amount of "30" numbers to the IVANS operators.

Advice Sought

8. Members and IVANS operators are invited to give their views and comments on the TA's proposals mentioned in para. 5-7 by writing to the Secretary on or before 27 February 1998.

Office of the Telecommunications Authority
15 January 1998

Hong Kong Numbering Plan

Leading Digit 3

Leading Digits	Digit Length	Type of Services	Status
3000	≤7	Access Code for number translation devices	IVANS Operators
300(1-4)	8	IVANS	HKTC
3005	8	IVANS	HCL
3006	8	IVANS	NT&T
3007	8	IVANS	NWT
300(8,9)	8	IVANS	Unallocated
30(1-9)	8	Reserved for the expansion of FTNS	Reserved
31	8	Reserved for the expansion of FTNS	Reserved
32	8	Reserved for the expansion of FTNS	Reserved
33	8	Reserved for the expansion of FTNS	Reserved
34	8	Reserved for the expansion of FTNS	Reserved
35	8	Reserved for the expansion of FTNS	Reserved
36	8	Reserved for the expansion of FTNS	Reserved
37	8	Reserved for the expansion of FTNS	Reserved
38	8	Reserved for the expansion of FTNS	Reserved
39	8	Reserved for the expansion of FTNS	Reserved