



Managing the Numbering Plan in Hong Kong

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Numbering Issues in Hong Kong

- ◆ Good Practice
- ◆ Lessons



Good Practice on Numbering Issues

Good Practice



- ◆ Regulatory Framework
- ◆ Number Portability
- ◆ Special Number Arrangement

Regulatory Framework

- ◆ Statutory Provisions- Telecommunications Ordinance (Cap.106)
- ◆ The Hong Kong Numbering Plan
- ◆ Code of Practice relating to use of numbers
- ◆ Telecommunications Numbering Advisory Committee

Regulatory Framework - Statutory Provisions (1)

- ◆ The Telecommunications Authority (TA) is empowered under Section 32F of the Telecommunications Ordinance (Cap.106) to control numbers
- ◆ The TA may prepare, specify, approve, publish, administer, enforce and amend the numbering plan

Regulatory Framework - Statutory Provisions (2)

- ◆ The TA may issue Code of Practice relating to the use of numbers in the numbering plan
- ◆ The TA may recover the cost of administration of the numbering plan
- ◆ The TA may delegate the administration of numbering plan to any person

Regulatory Framework - Statutory Provisions (3)

- ◆ The TA may designate numbers for lease or sale under regulations. Any proceeds raised by the lease or sale of numbers could be deployed to
 - charitable institution, educational/R&D institutions connected with telecommunications, the promotion of education and R&D for telecommunications;
 - a fund established by the TA for the above mentioned purposes

Regulatory Framework - Numbering Plan

- ◆ A unified 8-digit numbering plan. Leading digits in the 8-digit numbers convey service information to the users. e.g. leading digit ‘2’ numbers are fixed telephone numbers
- ◆ Operators providing same types of service share common number level. For example, all operators share number level ‘2’ (i.e. numbers with leading digit ‘2’) to provide fixed service
- ◆ New number level will be opened when the existing one is exhausted

Regulatory Framework - Code of Practice (1)

- ◆ The COP contains guidance principle for operators to follow when assigning telecommunications numbers to end customers
- ◆ Two-tiers approach
 - allocation - distribution of numbers by the TA to operators on a block-by-block basis
 - assignment - distribution of numbers by the operators to users of telecommunications services

Regulatory Framework - Code of Practice (2)

◆ Allocation Principles

- To ensure number allocations are consistent with the numbering plan and other relevant regulatory instruments
- To be fair and consistent in application of the allocation procedures
- To deal with allocation requests in a timely manner

Regulatory Framework - Code of Practice (3)

◆ Assignment Principles

- Operators must treat customers equitably and fairly
- Assignment of numbers by operators to end customers and their service offerings must comply with the Code of Practice and any requirements specified by the TA
- Operators should recover any numbers which have been given up by customers leaving the service (except for number portability requirements) for recycling.

Regulatory Framework - Consultative Committee

- ◆ The Telecommunications Numbering Advisory Committee (NAC) is established to
 - advise the TA on the development, implementation and administration of the numbering issues
 - advise the TA on the allocation of numbers in a fair and equitable manner
- ◆ Members include network operators, service providers, telecommunications associations, professional institutions, Consumer Council and individuals

Number Portability (1)

- ◆ Number portability for mobile service
 - implemented in March 1999
 - setup charge: about US \$1.3 per number
 - usage charge: about US 0.064¢ per dipping
 - since service launch, there are about 4.6 million porting cases

Number Portability (2)

- ◆ Number portability for fixed service
 - implemented in July 1995
 - setup charge: about US \$12 per line
 - since service launch, there are about 0.63 million porting cases

Special Number Arrangement (1)

- ◆ An open and fair procedure to allocate special (or lucky) numbers is desirable
- ◆ Special Number Arrangement (SNA) is a proposed scheme to assign special numbers to customers

Special Number Arrangement (2)

- ◆ Depending on the popularity of the special numbers, they will be assigned to end users through auction or for sale at a fixed price
- ◆ SNA is in the progress of public consultation. It is expected that SNA will be implemented by end of 2002



Lessons on Numbering Issues

Control of numbers (1)

- ◆ Before 1993, the numbering plan was administered by the then franchised telephone company
- ◆ In a competitive environment, managing the numbering plan by a network operator is not reasonable
- ◆ The TA was the natural candidate to administer the numbering plan

Control of numbers (2)

- ◆ Major policy considerations in taking over the control of numbers:
 - Number is a public resource
 - A sound numbering plan is essential to the effective and efficient provision of services
 - The numbering plan should be administered by an impartial party

Digit expansion (1)

- ◆ Hong Kong had adopted 7-digit numbering since 1967
- ◆ To cope with the increased demand, a new numbering plan was devised in consultation with the industry and the public in 1993/4
- ◆ The new 8-digit numbering plan increases the supply of numbers by one geometrical order

Digit expansion (2)



- ◆ A one-step transition to minimise customer confusion
- ◆ 12 months advance notice was given for the community to prepare for an orderly change
- ◆ A series of publicity campaigns was launched
- ◆ The transition to 8-digit numbering plan was implemented on 1 January 1995



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