

Interconnection and Related Competition Issues
Statement No. 6 (Revised)
“Interconnection Configurations and Basic Underlying Principles”

Statement of the Telecommunications Authority

18 March 2002

Issue

This Statement provides guidance on the types of interconnection configurations and the general underlying principles that will be considered by the Telecommunications Authority (TA) under section 36A of the Telecommunications Ordinance (Cap. 106) for a determination to be made under that section for interconnection between fixed telecommunications networks in Hong Kong.

Government Policy Objectives

2. In setting carrier-to-carrier charging principles, the TA is conscious of the Government’s telecommunications policy objectives set out in the Policy Objective booklet issued by the Information Technology and Broadcasting Bureau to accompany the Policy Address by the Chief Executive in October 2000. These are as follows -

- *“to enable Hong Kong to be recognized as a world-class telecommunications centre for doing business”;*
- *“to ensure that Hong Kong has high quality services available at competitive prices”; and*
- *“to ensure that Hong Kong has high performance in telecommunications as measured against the Organisation for Economic Co-operation and Development (OECD) economies”.*

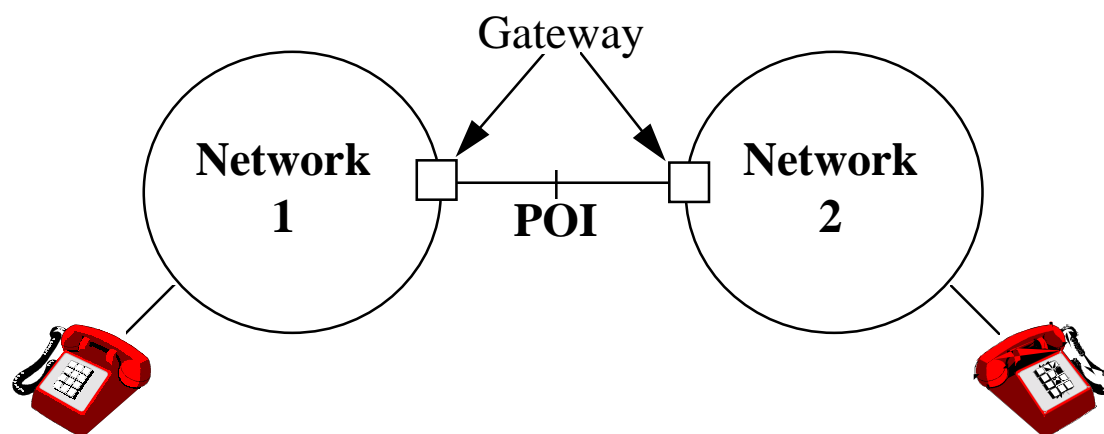
The thrust of these policy imperatives is to promote effective competition, which would in turn maximise consumer benefits and sustain a high

performance in the telecommunications sector. Further, a more competitive telecommunications market will encourage private sector investment and innovation necessary for Hong Kong to maintain its position as a world-class telecommunications centre.

Types of Interconnection Configurations

3. Section 36A of the Telecommunications Ordinance covers a broad range of interconnections. Section 36A is applicable to interconnections between any systems or services licensed or exempted from licensing under that Ordinance. In the context of fixed telecommunications network interconnection in the Hong Kong environment, this Statement broadly divides interconnection configurations into two main types according to the different physical modes of interconnection. The TA considers that both types of configurations are within the scope of interconnections under section 36A of the Telecommunications Ordinance. This Statement does not preclude the TA from determining other types of interconnection pursuant to section 36A.

(1) Type I - Interconnection between Network Gateways

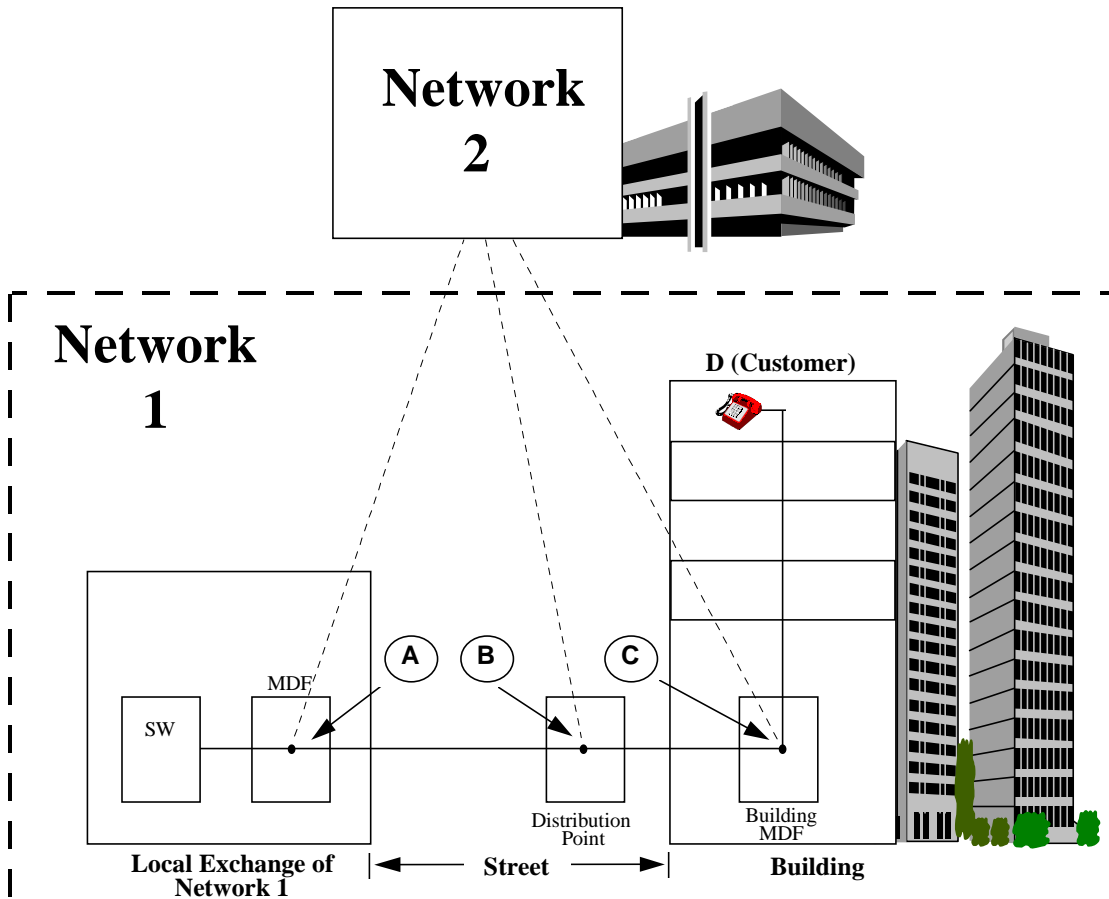


Main characteristics :

- Gateways can be toll exchanges, tandem exchanges, local exchanges or dedicated interconnection gateways.

- A point of interconnection (POI) is a notional point in the mid-point of the link interconnecting the gateways of two networks.
- Interconnection in this configuration should be made upon the request of any network operator.

(2) **Type II - Interconnection at Points in the Local Loop**



Main characteristics :

- Interconnection of Network 2 to Network 1 is possible at any of the points A, B or C.
- Interconnection in this configuration is only permissible upon the request of the customer at point D to become a direct customer of Network 2.

- After interconnection, the customer at point D becomes a direct access customer of Network 2.
- After interconnection, the operator of Network 1 continues to own, maintain and support the local loop.

General Principles

4. Having regard to the policy objectives of the Hong Kong Government in introducing competition, the nature of the fixed telecommunications market in Hong Kong and public interest concerns occasioned by environmental disruption and unnecessary duplication of facilities, the TA sets out below the general underlying principles for the two types of interconnection configuration as guidelines for adoption in an interconnection determination between fixed telecommunications networks.

General Principles on Type I Interconnection

5. In this type of interconnection, the following general principles apply:

- Principle of equal responsibility - In an interconnection of the Type I configuration between two fixed telecommunications networks, both networks are required by their licence conditions (GC 13 of the FTNS licence and the corresponding condition under the fixed carrier licence) to interconnect with each other. They therefore have equal responsibility in ensuring that the two networks are interconnected promptly and efficiently.
- Principle of “any to any” - Interconnection between fixed telecommunications networks shall be carried out in such a way that any customer in any one network can have access to any other customer or any service offered in any interconnecting network.
- Interconnection on request - Any one fixed telecommunications network has the right to request a Type I interconnection from any other fixed telecommunications network at locations and in

such manner as considered reasonably necessary by the requesting party. The party being requested shall facilitate the requested interconnection provided that the matter may be brought to the TA for determination if a dispute arises as to the reasonableness of the request.

General Principles on Type II Interconnection

6. The following general principles will apply for this type of interconnection:

- Interconnection on customer request only - The TA agrees with the view that the local loop established by a fixed telecommunications network operator is owned by that operator. However, the TA also takes the view that if a customer connected to the end of a local loop could exercise free choice not to continue with the local access service supplied by the operator owning the local loop, the piece of wire and the associated facilities constituting the local loop would immediately become idle. In the Hong Kong environment, it might be difficult for the new entrant network operators to establish an alternative local loop to serve this customer. Many buildings have bottlenecks and it may, in fact, be impractical to install a second local loop. Clearly it would compound the difficulties if existing wiring was pulled out and withdrawn from service simply to enable a new wire to be laid. In addition, the construction of additional parallel local loops to serve the same customer amounts to wasteful duplication and may cause disruption and inconvenience to a number of end customers. The TA therefore considers it desirable for interconnection to be permitted at local loop level but subject to the proviso that such interconnection will only be permitted at the request of the customer being connected to the local loop concerned. The customer request may be expressed directly to the network operator from which the customer chooses to take service and the form of the customer request will be approved by the TA. The owner of the local loop will be compensated by an interconnecting network operator for the

reasonable relevant cost incurred in interconnecting that network operator to its local loop.

- Co-location of facilities - In facilitating the Type II configuration of interconnection, it is often necessary to co-locate facilities of the new access provider in premises (such as a local exchange or a building MDF room) of the incumbent operator owning the local loop. The TA is of the view that such co-location of facilities for the purposes of interconnection is integral to the interconnection process and should be facilitated as far as technically possible by the operators concerned. Again, the reasonable relevant costs incurred by the incumbent operator in facilitating co-location will be fairly compensated by the operator requiring co-location.
- Prompt, efficient and “invisible” interconnection - Interconnection using the Type II configuration should be performed promptly and efficiently upon the request of a customer to change its local access supplier and the interconnection process should, as far as possible, be “invisible” to the end customer.

7. This Statement is being issued as a guideline, pursuant to section 6D of the Telecommunications Ordinance.

Office of the Telecommunications Authority
18 March 2002