



Facilitating Interconnection in Hong Kong

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Interconnection in Hong Kong

- ◆ Good Practice
- ◆ Lessons

Background

- ◆ Hong Kong a competitive market
- ◆ Interconnection is fundamental
 - ➔ to promote effective competition
 - ➔ to protect consumers' interest



Good Practice of Interconnection

Good Practice



- ◆ Need to formulate

- ➔ Legal framework

- ➔ Approach towards interconnection

- ◆ In order to ensure

- ➔ certainty, consistency, effective and efficient implementation of interconnection

Legal Framework (1)

◆ Telecommunications Ordinance

- ➔ appoints a public officer to be the Telecommunications Authority (TA) to regulate the telecommunications industry
- ➔ defines the powers and duties of the TA

Legal Framework (2)

- ◆ On interconnection (Section 36A of the Telecommunications Ordinance)
 - ➔ power granted to the TA to make determination
 - ➔ on the terms and conditions of interconnection
 - ➔ upon the request of a party or
 - ➔ in the absence of a request, in the interest of the public

Legal Framework (3)

- ◆ On interconnection (Section 36A)
 - ➔ power granted to the TA to publish all or any part of an interconnection agreement
 - ➔ if in the interest of the public
 - ➔ after consideration of the representations made by the parties to the agreement

Approach towards Interconnection

- ◆ Light-handed policy
- ◆ Guidelines on interconnection
- ◆ Intervention by determination
- ◆ Transparency

Light-handed policy

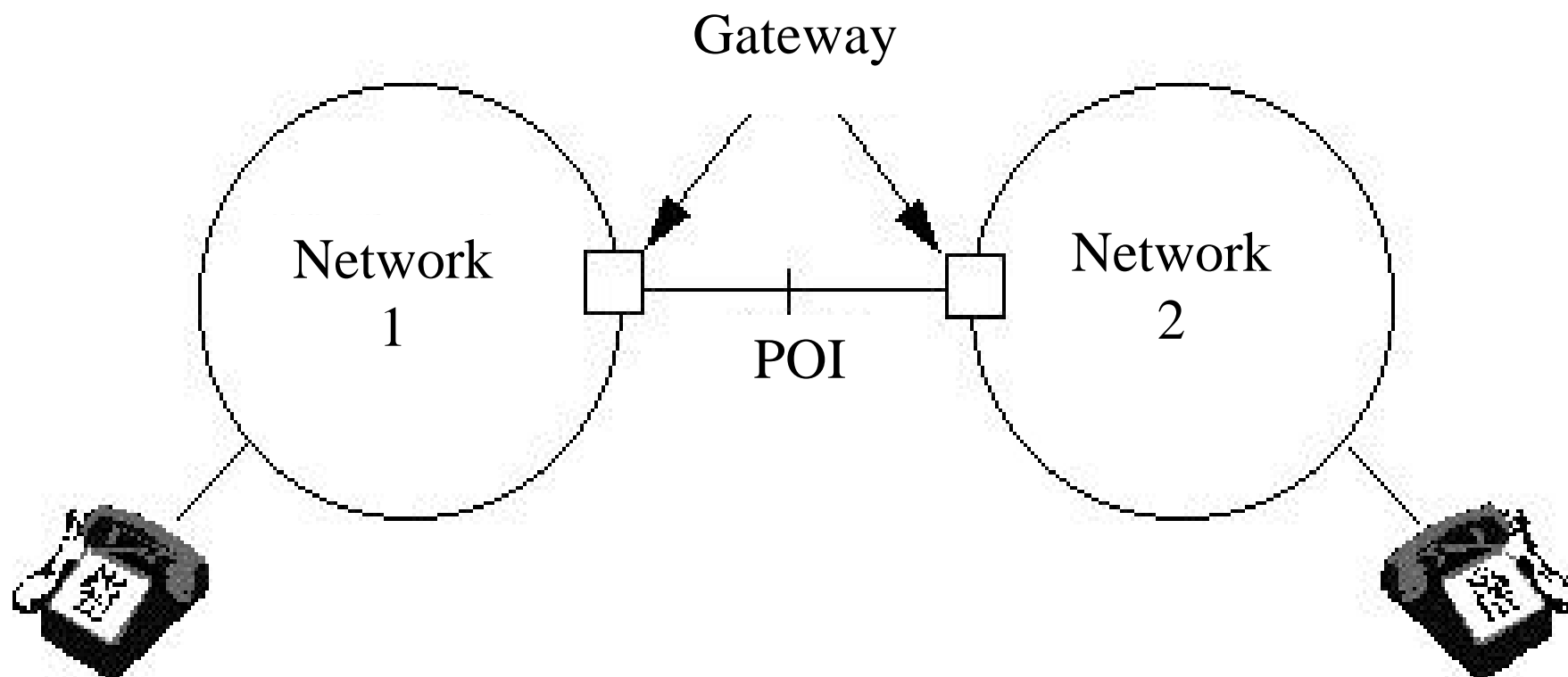


- ➔ operators encouraged to reach commercial agreements through negotiation
- ➔ guidelines issued by the TA to set out the basic principles on interconnection
- ➔ intervention by the TA if no commercial agreements reached despite negotiation

Guidelines on interconnection

- ➔ in the form of a series of TA statements
- ➔ providing guidance on matters like
 - ⇒ interconnection configurations (Type I and Type II interconnection)
 - ⇒ broadband interconnection
 - ⇒ carrier-to-carrier relationship
 - ⇒ charging principles
- ➔ TA statements issued and updated after industry consultations

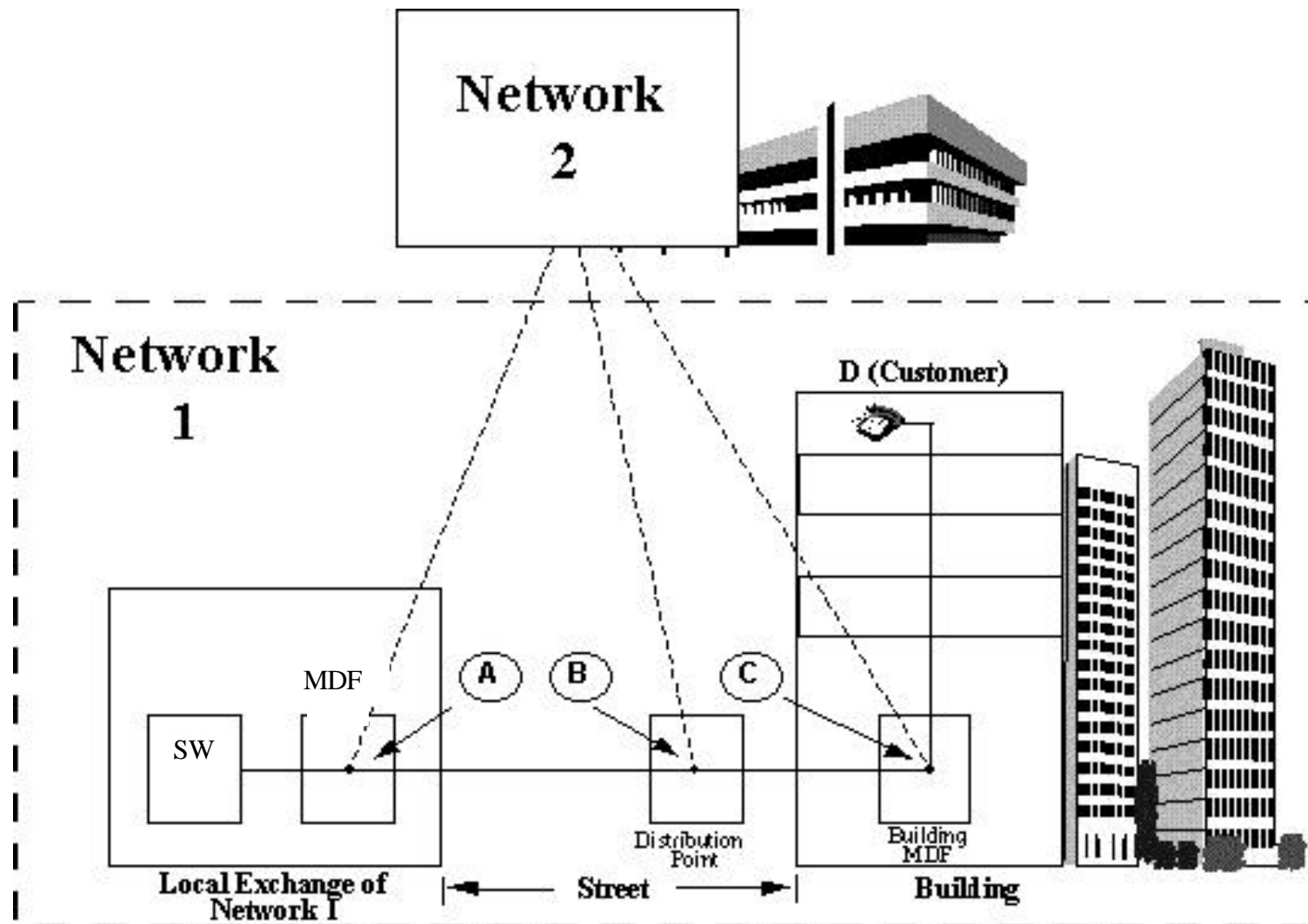
*Type I Interconnection -
Interconnection between network gateways*



Type I interconnection

- ➔ Gateways can be toll exchanges, tandem exchanges, local exchanges or dedicated interconnect gateways
- ➔ A point of interconnection (POI) is a notional point in the mid-point of the link interconnecting the gateways of two networks
- ➔ Interconnection should be made upon the request of any network operator

*Type II Interconnection -
Unbundling of local loop*



Type II interconnection

- ➔ Interconnection of Network 2 to Network 1 is possible at any of the points A, B or C
- ➔ Interconnection 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

Broadband interconnection

- ➔ TA statement in November 2000
- ➔ 144 kbps or above
- ➔ Type II interconnection mandated at any technically feasible points along the local loops of local wireline-based fixed networks
- ➔ Two options:
 - ⇒ full capacity available to interconnecting carrier
 - ⇒ “line sharing” between narrowband telephony service and broadband service

Carrier-to-carrier relationship

- ➔ equal rights and obligations
- ➔ principle of cost causality - carrier who causes the cost to be incurred pays
- ➔ principle of benefiting party - carrier who benefits from the interconnect service pays
- ➔ principle of any-to-any
- ➔ non-discrimination
- ➔ unbundling - carrier entitled to services on an unbundled basis
- ➔ exchange of information

Charging principles (1)

➔ Section 36A

- ➔ Charges based on the relevant reasonable costs attributable to interconnection
- ➔ TA may select from among alternative costing methods what he considers to be a fair and reasonable costing method

➔ Long Run Average Incremental Cost (LRAIC)

- ➔ carrier-to-carrier interconnection
- ➔ review completed in March 2002

Charging principles (2)

➔ LRAIC

- ➔ difference in the carrier's total costs with and without the services or facilities supplied, divided by the total output of the services or facilities
- ➔ based on the incremental cost of the “entire conveyance service”, ie including the shared costs common to all the service elements of the “entire conveyance service”, but excluding shared costs common to the conveyance service and other services (eg access services)
- ➔ correct pricing signals on “build or buy”

Intervention by Determination (1)

- ➔ where a party seeks TA's determination
- ➔ where it is in the interest of the public to intervene
 - ⇒ the TA recently initiates a determination on the level of charges and terms and conditions for International Call Forwarding Services
- ➔ terms and conditions determined by TA be of essence of agreement between parties
- ➔ overriding a different intention in agreement

Intervention by Determination (2)

- ➔ Criteria to meet before intervention (section 36A(10))
 - ⇒ Government's policy objectives for telecommunications industry
 - ⇒ consumer interests
 - ⇒ encouraging efficient investment in telecommunications infrastructure
 - ⇒ the nature and extent of competition among the parties
 - ⇒ other appropriate considerations such as the course of negotiation between the parties

Intervention by Determination (3)

- ➔ The terms and conditions determined by the TA may cover
 - ⇒ level and method of calculating charges
 - ⇒ points of interconnection
 - ⇒ technical standards
 - ⇒ supply of any element of a telecommunications network, system or installation
 - ⇒ supply of ancillary service
 - ⇒ supply of information necessary for efficient planning and handling of services through interconnection
 - ⇒ sharing of facilities

Intervention by Determination (4)

- ➔ reliance on the principles set out in the TA statements on interconnection to make determination
- ➔ certainty, consistency, transparency

Intervention by Determination (5)

- ➔ alternative to intervention by determination - mediation
- ➔ Success of mediation depending on the willingness of the concerned parties to negotiate in good faith through the TA acting as the mediator

Transparency (1)



- ➔ TA statements on interconnection principles
- ➔ Guidelines on procedures for conducting determination proceedings
- ➔ Publication of progress of proceedings
- ➔ Publication of determinations made
- ➔ Publication of interconnection agreements made with dominant operator

Transparency (2)



- ➔ Procedures for conducting determination proceedings
 - ⇒ to set target timeline for completion of determination
 - ⇒ to ensure that the parties are given reasonable opportunities to make representations before a determination is made

Transparency (3)

- ➔ Publication of the progress of proceedings
 - ⇒ [12] cases currently handled by the TA
 - ⇒ Publication of the names of parties, subject matter, and progress of the proceedings
 - ⇒ Covering Type I interconnection, narrowband Type II interconnection, broadband Type II interconnection, interconnection between TV systems

Transparency (4)



- ➔ Publication of determinations made by the TA
 - ⇒ publication of the terms and conditions determined by the TA
 - ⇒ publication of the analysis of the case
 - ⇒ useful benchmarks

Transparency (5)

- ➔ Interconnection agreements made with dominant operator
 - ⇒ publication of full terms of agreements without revealing the identity of the other parties to the agreements
 - ⇒ providing benchmark references on the terms and conditions of interconnection
 - ⇒ concerned parties given opportunities to make representations before publication



Lessons Learned

Lessons



- ◆ The need of resources
- ◆ The observance of due process

Resources (1)



- ◆ Need of expertise
 - ➔ complex technical, economic, financial and legal issues
 - ➔ great implications on the success (or failure) in promoting competition and ensuring consumers' uninhibited enjoyment of communications and choice of services
 - ➔ operators' interest at stake

Resources (2)



- ◆ Need of expertise
 - ➔ of fundamental importance that regulator is assisted by experts of different disciplines to help him make informed judgments on interconnection issues
 - ➔ telecom engineers, competition experts, lawyers, economists, accountants etc

Due Process (1)

- ◆ Justice must not only be done but must seem to be done
- ◆ Regulator faces reduced risk of challenges of procedural irregularity if due process is observed
- ◆ Regulator establishes credibility and authority

Due Process (2)

◆ How to implement?

- ➔ A party that may be affected by a decision to be made by the regulator should be given the opportunity to make representations
- ➔ The representations made by an affected party should be properly considered before a decision is made
- ➔ The regulator gives reasons for his decision

Concluding Remarks

- ◆ The art of balancing between
 - ➔ the exercise of regulator's power of intervention (if such power is granted by law)
 - ➔ letting the industry have a free hand in establishing its own rules which it considers are most suitable for the market



Thank You