

**Legislative Council Panel on  
Information Technology and  
Broadcasting**

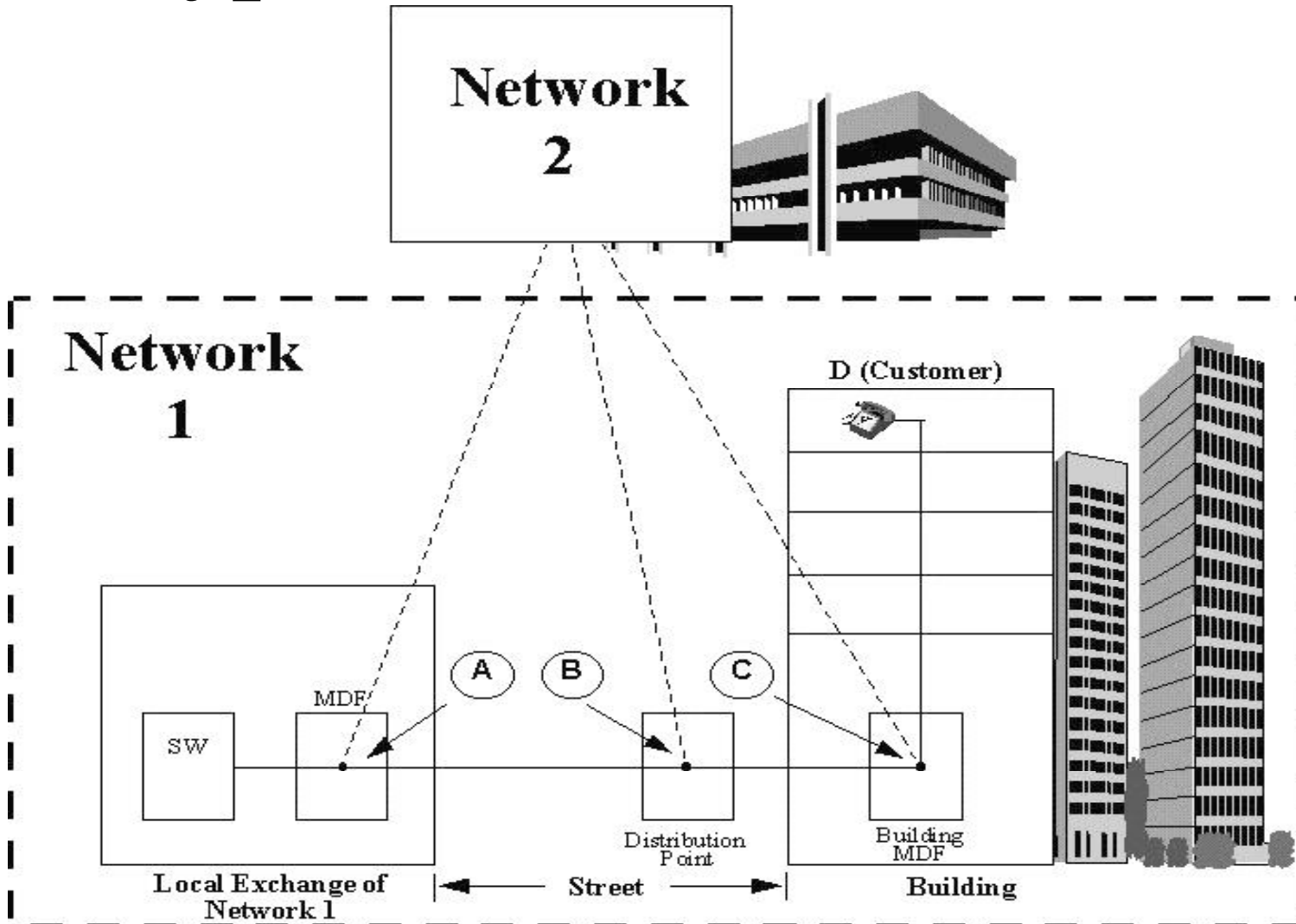
**Review of  
Type II Interconnection Policy  
Second Consultation Paper**

**25 February 2004**

# What is Type II Interconnection

- Interconnection between two fixed telecommunications networks at customer access network level
- Enable operators without customer access network to also provide services to customers through the networks of other operators

# Type II Interconnection



Point A : At Telephone Exchange level

Point B : At Street level

Point C : At Building level

# Policy Objectives

- Encouraging investment in network
  - Competitive, advanced and high bandwidth telecommunications networks that are capable of supporting innovative services
- Facilitating effective competition in the telecommunications market and enhancing consumer choice
  - Protecting consumer interest
- Promoting the telecommunications industry

# Policy Consideration

- Type II interconnection obligation is a regulatory measure
- To continue in justifiable circumstances only i.e. essential and significant for achieving Government's policy objectives
- Overall review to examine whether Type II interconnection should continue in the light of current market conditions

**Type II Interconnection at  
Telephone Exchange Level (Point A)**

# Current Market Status

- Competing operators have a market share of 24.8% in the voice market
  - > 10.7% via Type II interconnection at telephone exchange (i.e. Point A)
  - > 14.1% via direct access to the buildings (some may use interconnection at building level (i.e. Point C) to reach customers)
- Networks of competing operators have a coverage of 45% of residential units in HK
- Competing operators' market share in broadband market is higher than 45%

• (Data as at end of August 2003)

# Preliminary Views

- **Status quo** (i.e. maintaining Type II interconnection obligation in all telephone exchanges) discourages investment in the rollout of high bandwidth fibre-based networks to buildings and consumers will be deprived of a choice of innovative services
- Operators may need time and overcome practical difficulties to roll out customer access networks to buildings, **withdrawing Type II interconnections obligation in all areas** will :-
  - consumers not yet connected to alternative customer access networks may immediately lose the choice of service provider currently made available through Type II interconnection (vis-a-vis self-built network)
  - for buildings which are commercially not viable or technically not feasible to install alternative customer access network, consumers in those buildings may never have a choice of service providers

⇒ Both are not desirable to achieve policy objectives



# Preliminary Views (Cont'd)

- **Should withdraw Type II interconnection obligation in some areas**
  - The obligation should be maintained in areas that justify the continuation of this regulatory measure
  - In other areas, the obligation should be withdrawn to enable the market mechanism to achieve efficiency in deployment of resources

# Withdraw Type II Interconnection Obligation in Some Areas (Cont'd)

- Considered 3 possible options
  - *Option 1*
    - Withdraw Type II interconnection obligation in some areas served by selected exchanges
      - Different types of buildings within an area served by the same exchange
      - Operators may not roll out alternative customer access networks to some buildings (e.g. older or low density buildings) because of economic reasons or physical constraints
      - Customers in those buildings will be deprived of a choice of service providers
- ⇒ May not be desirable from consumer choice perspective

# Withdrawing Type II Interconnection Obligation in Some Areas (Cont'd)

- *Option 2*

- Withdraw Type II interconnection obligation in estates/buildings exceeding a prescribed number of units

- Based on the assumption of economic viability of operators to serve densely populated estates by their own customer access networks

- But business strategies of operators may be based on other factors. There may also be physical difficulties

- Some leading housing estates with a high number of units on a per building basis currently do not have alternative customer access networks

⇒ May not be desirable from consumer choice perspective 11

# Withdrawing Type II Interconnection Obligation in Some Areas (Cont'd)

- *Option 3*
  - Withdrawal of Type II interconnection obligation in buildings connected by at least two self-built customer access networks
  - For this purpose, the self-built customer access networks should be fully fledged networks capable of delivering both narrowband (voice) and broadband services

# Withdraw Type II Interconnection Obligation in Some Areas (Cont'd)

- Option 3 best meets policy objectives :-
    - All consumers that currently enjoy a choice of service providers will continue to have a choice
    - Operators will be encouraged to invest in rolling out customer access networks
    - The option will facilitate the faster rollout and wider geographic coverage of competitive, advanced and high bandwidth telecommunications networks
    - Consumers will benefit from higher capacity connections and accelerated development of innovative services
- ⇒ **A pro-consumer and pro-investment option**

# Transitional Arrangements

- Proposes a transitional arrangement to implement Option 3 in order to reduce disruption to consumers and allow sufficient time for operators to adjust business strategy and rollout new customer access network if required
  - A 3-year “**transitional period**” and a 3-year “**grandfathering period**”
  - OFTA will announce the commencement of the transition period (“cut-off date”) for a list of buildings connected to at least 2 customer access networks
  - *During the transitional period*
    - Type II interconnection obligation will be maintained for those buildings (i.e. no change to current arrangement)

# Transitional Arrangements (Cont'd)

- *At the end of the transitional period*
  - Type II interconnection obligation will be withdrawn from those buildings
  - Lines that are connected by Type II interconnection on the day the transitional period ends will be eligible for a further period of Type II interconnection obligation (“grandfathering period”), or until the customers switch network
- *At the expiry of the grandfathering period*
  - Type II interconnection obligation for those lines will end
  - Operators should have prepared to either switch those customers to their self-built network or maintain service to them on commercially negotiated Type II interconnection

**Type II Interconnection at  
Individual Building Level (Point C)**



# Preliminary Views

- Point C interconnection refers to interconnection to the in-building wiring part of a fixed network operator's customer access network
- Issues and Concerns
  - It is highly unlikely that the demand of all licensed fixed network operators to roll out networks within buildings can be accommodated given the limited space in the common parts available within buildings
  - It may not be economically sensible to install multiple in-building telecommunications systems to provide services to a limited number of users

# Preliminary Views (Cont'd)

- Benefits to maintain the policy
  - Enable operators who are faced with physical and economic constraints to install their own in-building systems to provide services to the end customers in those buildings
  - To prevent oligopolistic position of operators who own the in-building systems
- Appropriate to maintain Type II interconnection at individual building level

# Conclusion

- Our proposal best meets Government's policy objectives in the light of the current market conditions:-
  - Encourage investment in telecommunications network for the emergence of a competitive, advanced and high bandwidth telecommunications infrastructure which is capable of supporting innovative service
  - Ensure consumers having a choice at present will continue to have a choice
  - Allow sufficient time and room to adjust business strategy in right of the updated and future needs of the market
- ⇒ **Furthering the goal of developing Hong Kong into a leading digital city**

# Way Forward

- Second consultation period extended to  
**2 March 2004**
- Government will study submissions in detail and make a decision in the first half of 2004

**End**