



Telecommunications Users and Consumers Advisory Committee (TUCAC)

Fibre Access Networks and Related Issues

14 March 2013

Building Access

- **Operators need to access the common parts of private buildings to install facilities for the provision of telecommunications and broadcasting services to the occupants of the buildings.**
- **Common parts include Telecommunications and Broadcasting Equipment Room, ducts, pipes, etc.**

Related Legislation and Our Work

- **In accordance with the Telecommunications Ordinance, CA may authorize operators to access to the common parts of private buildings to install telecommunications facilities.**
- **OFCA**
 - **Encourage operators to extend their networks and upgrade their systems in order to enhance the quality of services.**
 - **Issue Codes of Practice and Guidelines for operators.**
 - **Encourage building owners to allow more operators to install telecommunications facilities in their buildings for provision of services.**
 - **Assist building owners and operators to handle issues related with building access.**

Development of Telecommunications Services

- **Evolve from voice service to broadband data service**
- **As at Nov 2012**
 - **Over 226M fixed network broadband service subscribers**
 - **Broadband household penetration : 86%**
 - **Number of broadband networks available**
 - **74% of households under coverage of at least two networks**
 - **64% of households under coverage of at least three networks**
- **According to the report issued in Dec 2011 by the Fibre-to-the-Home Council, Hong Kong ranked third in the world in the household penetration of Fibre-to-the-Home / Fibre-to-the-Building**
- **Network operators begin to adopt Next Generation Network (NGN) for the provision of more variety of telecommunications services**

The Challenge of Next Generation Network (NGN)

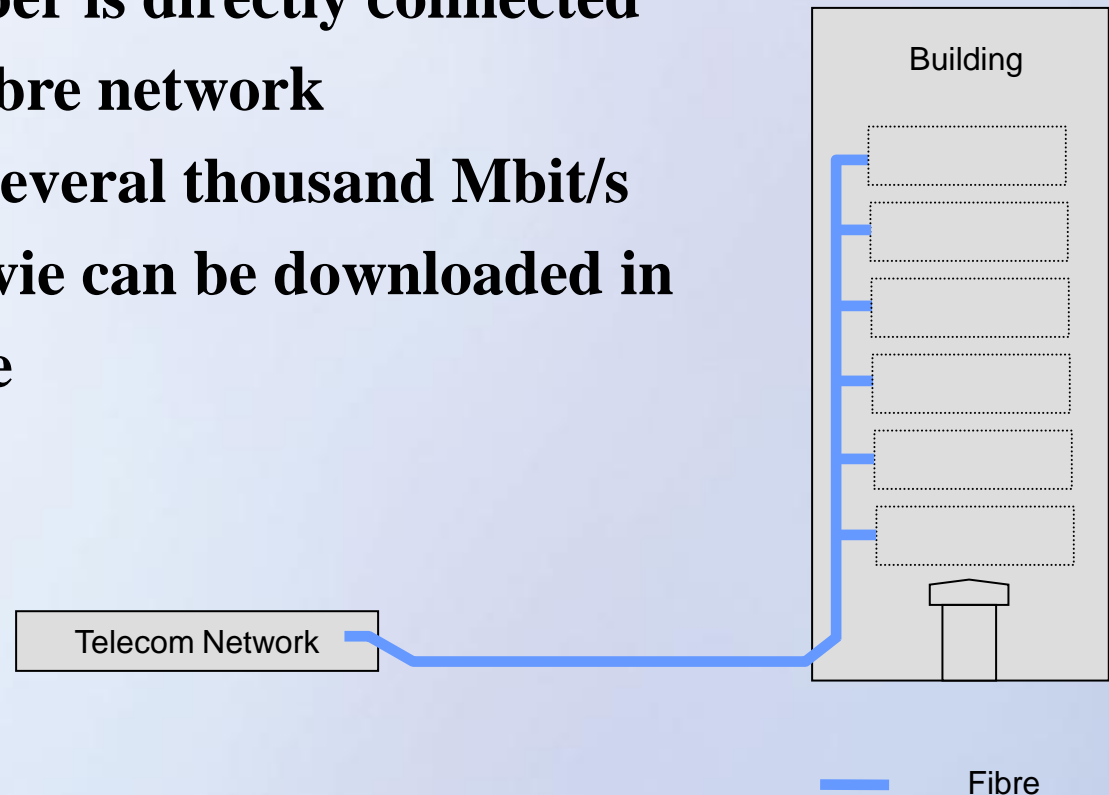
- **Contrary to the traditional telephone network, NGN is able to transmit voice, data and image information over an integrated platform for the provision of different services such as IP Telephony, IPTV and Internet access.**
- **In order to increase the transmission speed, NGN will usually use optical fibre in the access networks to buildings.**
- **With the expansion of their NGNs, the operators will have to install new facilities in buildings. The valuable resources within buildings e.g. common parts should be used effectively in order to meet the needs of different parties.**
- **OFCA introduced the Voluntary Registration Scheme for Buildings with Optical Fibre Access Networks to promote the development of optical fibre networks.**

Voluntary Registration Scheme for Buildings with Optical Fibre Access Networks

- **Launched in 2010**
- **Aims**
 - **To promote the development of optical fibre networks**
 - **To provide information to members of the public about the optical fibre networks installed in individual buildings**

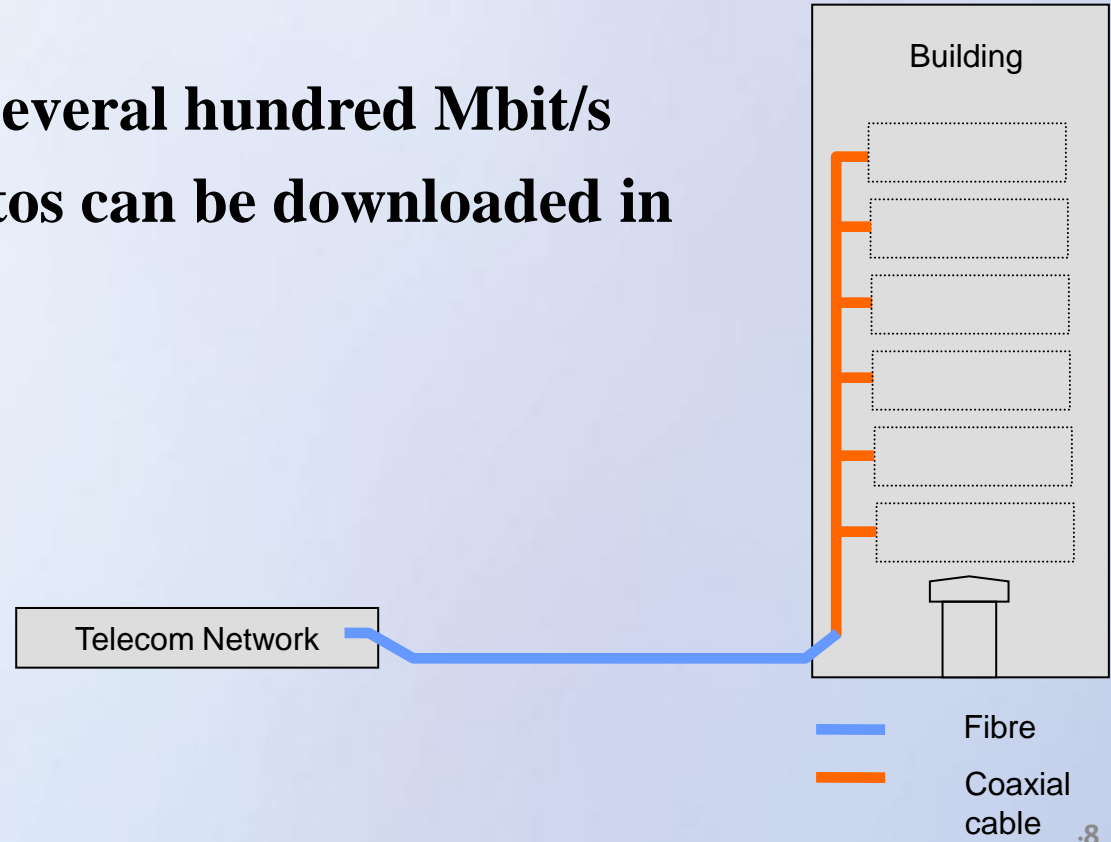
Classification of Buildings – Fibre-to-the-Home (FTTH)

- **Optical fibre networks are installed inside buildings**
- **Individual subscriber is directly connected with the optical fibre network**
- **Data speed: up to several thousand Mbit/s**
- **A DVD quality movie can be downloaded in less than a minute**



Classification of Buildings – Fibre-to-the-Building (FTTB)

- Optical fibre networks are installed inside buildings
- Using copper wires to connect with an individual subscriber
- Data speed: up to several hundred Mbit/s
- Tens of digital photos can be downloaded in a minute



The Labels

- **Introduced FTTB Label and FTTH Label**
- **To raise public awareness of FTTB buildings and FTTH buildings**
- **The IO/BMO may display the appropriate FTTB Label or FTTH Label in a prominent position in the building**
- **The FTTB Label or FTTH Label may also be used in the printing materials in relation to the building**

Label Design

FTTH



The FTTH label design features a circular emblem with a golden-yellow background. Inside the circle, the letters 'FTTH' are written in a bold, golden-yellow font. Below the letters, the Chinese characters '光纖到戶' (Fiber to the Home) are written in a stylized, blue-outlined font. The background of the emblem depicts a modern office interior with a desk, a laptop, and a chair.

「光纖到戶」
樓宇已鋪設可以接駁至用戶處所的光纖網絡
"Fibre-to-the-Home"
Fibre network is installed and ready to be connected to individual subscriber's premises.

光纖網絡接達樓宇登記計劃
Registration Scheme for Buildings
with Optical Fibre Access Networks



通訊事務管理局
COMMUNICATIONS
AUTHORITY

FTTB



The FTTB label design features a circular emblem with a blue background. Inside the circle, the letters 'FTTB' are written in a bold, blue font. Below the letters, the Chinese characters '光纖到樓' (Fiber to the Building) are written in a stylized, blue-outlined font. The background of the emblem depicts a modern office interior with a desk, a laptop, and a chair.

「光纖到樓」
光纖網絡已鋪設至樓宇範圍
"Fibre-to-the-Building"
Fibre network is installed and connected within the boundary of the building.

光纖網絡接達樓宇登記計劃
Registration Scheme for Buildings
with Optical Fibre Access Networks



通訊事務管理局
COMMUNICATIONS
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The Register

- **Register of Buildings with Fibre Access Networks**
 - OFCA established the register according to the information provided by network operators
 - Record the name and address of FTTH and FTTB buildings
 - Provide the number of optical fibre access networks in each registered building
- **On Line Enquiry**
 - Website <http://app1.ofca.gov.hk/apps/ubs/map.asp>
 - Searched by address or map

An Example of Using the Register

Databases for Broadcasting & Telecommunications Infrastructures

Building Search
Telecom / Broadcasting Infrastructure:
All Services

Building Details
Address HING ON MANSION, TAIKOO SHING, 5, TAI YUE AVENUE, EASTERN
地址 東區太裕路5號太古城興安閣

Service Details
+ DTT Service ✓
- FTTH/H Service FTTH

Building Class : FTTH
Number of FTTH Network(s) installed: 1
Number of FTTH Network(s) installed: 2

Remarks:
1. Building Class
FTTB denotes **Fibre-to-the-Building ("FTTB") Building** where fibre network is installed and connected within the boundary of the building.
FTTH denotes **Fibre-to-the-Home ("FTTH") Building** where fibre network is installed and ready to be connected to individual subscriber's premises inside the building
* denotes building not yet registered under the Scheme. Fixed network operators and the incorporated owners / building management offices / owners ("IO/BMO") of the buildings are welcome to provide information to OFCA on the FTTB/FTTH status of the

HING ON MANSION, TAIKOO SHING, 5, TAI YUE AVENUE, EASTERN
東區太裕路5號太古城興安閣

DTT Service
DTT Coverage Estimate: ✓

FTTB/H Service
Building Class : FTTH

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Publicity

- **May 2011 - FTTB Label and FTTH Label were distributed to IO/BMO. Labels could also be downloaded from OFCA website.**
- **July 2011 – an article about the Scheme was published in *Headline Daily*.**
- **December 2011 and January 2012 - two videos were broadcast on East Rail Line, West Rail Line and Ma On Shan Line as well as tvb.com. The two videos were also uploaded to OFCA website (www.ofca.gov.hk).**
- **As of February 2013, 19 briefing sessions attended by about 1,300 representatives of IO/BMO had been arranged.**

Achievements of First Stage of Registration Scheme & Implementation of Second Stage

- **First Stage**
 - About 2,400 FTTB buildings and 11,100 FTTH buildings registered under the scheme as of Nov 2012
 - Participating Operators : Hong Kong Broadband Network Ltd, Hong Kong Cable Television Ltd, Hutchison Global Communications Ltd, New World Telecommunications Ltd, PCCW-HKT Telephone Ltd and Hong Kong Telecommunications (HKT) Ltd and Wharf T&T Ltd
- **Second Stage**
 - After consulting the Telecommunications Regulatory Affairs Advisory Committee, OFCA decided to extend the Scheme to cover non-residential buildings including commercial, industrial and government buildings in the near future

THANK YOU