

FTTx Deployments Worldwide

Session Chairman
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Good afternoon Ladies and Gentlemen.

Thank you very much for joining this FTTx session.

We are going to have 4 presentations this afternoon, one from the global perspective and three concerning the regional investigation and return.

Broadband Everywhere, Global Perspective FTTx Industries

Dr. Charilaos Christopoulos, Ericsson, Sweden

European FTTH: Progress Update

Mr. Tadgh Leonard, FTTH Council Europe, UK

FTTx in North America

Mr. David L. Foote, Hitachi Telecom, USA

Development & Return of Experience in Asia Pacific and Korea

Dr. Sang Hong Lee, KT, Korea

Before starting the presentations, in order to help your understanding, I like to explain in the following two slides some abbreviations and acronyms which will be used in the presentations.

Fiber to the X (FTTx)

FTTx = using optical fiber for the access network

- Fiber replaces copper lines some or all of the access loop
- Fiber to the Node (FTTN): all fiber except the last 3k – 5k feet (1 - 1.6 km)
- Fiber to the Curb (FTTC): all fiber except the last 500 – 1k feet (150 – 300m)

FTTP (Fiber to the Premises) covers other acronyms like:

- Fiber to the Home (FTTH)
- Fiber to the Building (FTTB)
- Fiber to the Multi-Dwelling Unit (FTTMDU) (apartments, townhomes, high rise)

FTTP covers multiple technology types

- Active Ethernet (point-to-point fiber)
- PON is Passive Optical Network
- ITU-standard PON :B-PON (Broadband), G-PON (Gigabit)
- IEEE-standard PON: E-PON (Ethernet) or GE-PON (Gigabit Ethernet)
- WDM-PON is Wavelength Division Multiplexing PON

Acronyms

AON (Active Optical Network)

CLEC (Competitive Local Exchange Carrier)

ILEC (Incumbent Local Exchange Carrier)

FSAN (Full-Services Access Network consortium (input to ITU-T standards))

HFC (Hybrid Fiber Coaxial)

MSO (Multi Service Operator)

MDU (Multi Dwelling Unit)

SFU (Single Family Unit)

OLT (Optical Line Terminal)

The network device that manages communication with multiple subscribers connected with ONTs.

ONT (Optical Network Terminal) (or ONUs)

A network device that terminates the optical link at the customer's premises.

Optical splitter

A passive device that divides a single optical signal from an OLT into multiple streams for individual ONTs.

POTS (Plain Old Telephone Service)

P2P (Point to Point)

TPS (Triple Play Service)

WDM (Wavelength-Division Multiplexers)

Device that combines/separates optical channels. Power is distributed based on frequency (color), permitting multi wavelength transmission over a single fiber.

