YAMASAKI
Optical Technology

TECH TALK

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FTTH Global Ranking

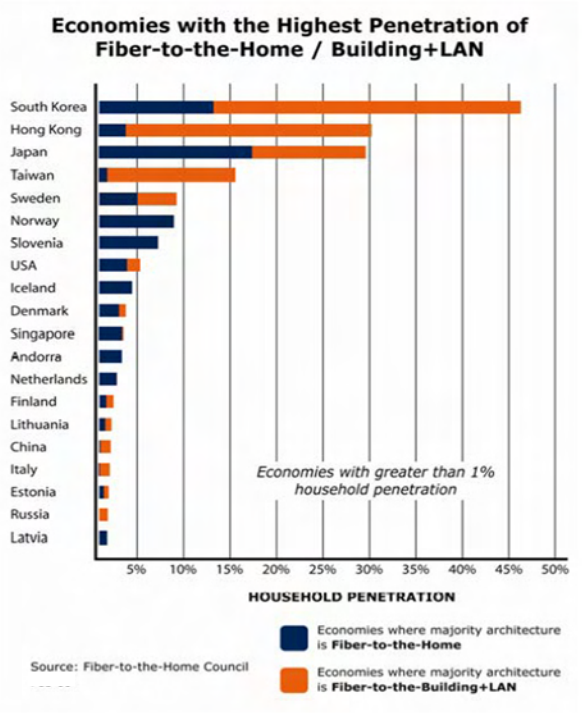
Since December 2008, the Fiber To The Building growth rate has climbed by a staggering 12%, according to an interim FTTH Council Asia-Pacific / Ovum joint study.

The interim ranking which updated the Asia-Pacific region tracks both the level of fibre to the home (FTTH) and fiber to the building (FTTB) market penetration in economies where more than one percent of households are connected directly into high speed fibre networks globally.

Asian economies maintained their leadership in the FTTH market penetration with South Korea, Hong Kong, Japan and Taiwan now occupying the top four positions in the ranking. The Asian region now accounts for more than 30.8 million of the world's estimated 38 million fiber to the home connections.
South Korea now has 45 percent of its households connected to fibre, with Hong Kong at 30 percent, Japan close to 30 percent and Taiwan at 16 percent.

Japan remains the overall leader in terms of the number of fibre to the home subscribers at 8.5 million followed by South Korea. The People's Republic of China, however, has the highest fibre to the building subscribers at 6.2 million, now surpassing Korea. Furthermore, Taiwan has emerged with the strongest FTTH growth rate since end of last year.

The breakdown between FTTH and FTTB for each economy is depicted in the following chart :



FTTH Access Protocols Defined

The Access Protocols in use today for FTTH & FTTB Networks are:

"EFM" - Ethernet in the First Mile in IEEE 802.3ah
"EP2P" - Ethernet over P2P in IEEE 802.3ah
"EPON" - Ethernet PON in IEEE802.3ah
(Gigabit EPON is synonymous with EPON.)
"BPON" defined as Broadband PON in ITU-T Recommendation G.983
"GPON" defined as Gigabit PON in ITU-T Recommendation G.984

A Passive Optical Network (PON) is defined as a point-to-multipoint, fiber to the premises network architecture in which unpowered optical splitters are used to enable a single optical fiber to serve multiple premises, typically 32-128.

A PON consists of an Optical Line Terminal (OLT) at the service provider's central office and a number of Optical Network Terminals (ONTs) also called Optical Network Units (ONUs) at the premises.

Product of the Month

Yamasaki SFPs

SFP transceivers are available with a variety of different transmitter and receiver types, allowing users to select the appropriate transceiver for each link to provide the required optical reach over the available optical fiber type.

Multimode Fiber : 550 meters
Singlemode Fiber: up to 120 km.

SFP transceivers are also available with a RJ45 interface, allowing a host device designed primarily for optical fiber communications to also communicate over standard networking cable. There are also CWDM and single-fiber "bi-directional" (Upstream/Downstream) SFPs to allow greater bandwidth over fiber optic networks.