

Session 6 : Broadband Access Highlights & Conclusions

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Cable TV - Naoyoshi NAKAMURA (NHK, Japan)

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Highlights from Presentation 1 "VDSL2"

- o ITU Consent in May 2005 (Approved in February 2006)
- o Multiple profiles defined to address regional and application specific requirements
- o ADSL/2/2+ interoperability
- o Worldwide subscribers to Digital Video Recording (DVR) services will rise by a factor of seven between 2005 and 2010
- o Polymer Optical Fibre (POF) solution for Home Networking?

Highlights from Presentation 2 "PON"

- o Very high speed data up to 1 Gbit/s to home and businesses
- o Low cost due to fibre and CO interface shared by several customers
- o Maintenance cost reduction due to no electronics between CO and customers
- o Multiple applications including data (IP), video and voice (triple play)

Highlights from Presentation 3 “Cable TV”

- o Distribution of High Definition TV(HDTV) is a key application for broadband access networks
 - Cable TV system (traditional type, HFC is typical)
 - FTTH - high speed IP (Video distribution using TDM, Ethernet technology)
- o Critical issues in Home Networking and Transport
 - Domain control and Digital Rights Management (DRM)
 - Quality of Services (QoS) definition

Highlights from Presentation 4 “WiMAX”

- o Field trials have indicated its feasibility and identified further study items
- o Global harmonisation required to promote it as global standard (i.e., such as equipment/system interoperability, common frequency band allocation, etc.)



CONCLUSIONS

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- Distribution of High Definition TV(HDTV) is a key application for broadband access networks
- Increase PON bandwidth by using higher transmission rate or WDM technology
- Increase PON reach by using optical amplifier
- Higher PON splitter ratio (more users per PON) by using optical amplifier

- o Critical issues for Home Networking and Transport
 - Domain control and Digital Rights Management (DRM)
 - Quality of Services (QoS) definition
- o Global harmonisation of WiMAX required to promote it as a global standard
- o Polymer Optical Fibre (POF) solution for Home Networking?