

# **Joint ITU-T/IEEE Workshop on Next Generation Optical Access Systems**

## **Operators' deployment experiences**

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# Highlights from Presentation 1

## “Drivers for 10Gbps PON”

- MSOs represent a significant share of the residential broadband business and a growing share of commercial services access business.
- MSOs benefit now, and will increasingly in the future, benefit from PON technology for a variety of applications
- Service providers need 10X their service offering
  - Demand exists for 1Gbps Ethernet today
  - Therefore 10Gbps transport is required
- History shows MSOs are technology agnostic
  - Must have a single clear standard to make investments
    - Delays caused by dual-technology solutions
  - Must be an industry standard from a recognized standards body
- Need a definite technology direction

# Highlights from Presentation 2 “NTT’s FTTH Deployment status and perspective toward next generation”

- **Commercial FTTH history**
  - Significant cost reduction and transmission speed.
  - Simplified access system design.
- **Current FTTH**
  - GE-PON is the mainstay of FTTH access system.
  - Internet access, PSTN-quality VoIP and Video services
- **FTTH enhancements for the next step**
  - OPEX reduction
    - Faults detection and isolation, fiber management
  - Power saving

# Highlights from Presentation 3 “Verizon FiOS FTTP Deployment and NG PON Perspectives”

- FTTP is the only infrastructure that gives the necessary headroom for the future
- RF Overlay Adds Value
- Beyond GPON: NG PON
  - Smart migration path needed
  - Increased bandwidth supporting new service opportunities
- Migration Considerations
  - Co-existence with GPON ?
  - Use of existing fiber and link budgets
  - Service interruption to customers needs assessment
- Equipment Targets
  - Reduce equipment size, footprint
  - Simplify installation
  - Maximize power conservation
    - Improve battery back-up duration

# Conclusions / Recommendations

- Need for 10Gb/s
  - Operators already see a need for the next bit rate level for optical access. Keep working on next generation optical access specifications.
- Reduce power consumption
  - As well as being part of the effort to reduce ICTs power usage it is also important for battery back-up duration in ONUs. Power is an important consideration for next generation optical access specifications.
- Need for a single standard
  - Dual standards cause delay in adoption of both standards. Need to keep talking to see how we can work together on a single set of specifications for next generation optical access.