



# Joint ITU-T/IEEE Workshop on Carrier-class Ethernet

## 31 May - 1 June, 2007 ITU Headquarters, Geneva, Switzerland

## Workshop Key objectives;

- Focus on the standardization aspects of Ethernet based network services, requirements and technologies
- Cover above subjects for core, metro and access networks
- Opportunities for collaboration between ITU-T and IEEE

## Tentative Session Structure and examples of key session topics:

## DAY 1 14:00 – 17:30

#### Opening session

- Welcome address
- Keynote speeches
- Standards overviews of ITU-T (thernet based networks)
- Standards overviews of IEEE 802 (IEEE Local and Metropolitan Area Network)

#### Session 1 - Ethernet network services and architecture

- Ethernet services (G.8011; Ethernet over Transport Ethernet services framework, G.8011.1; EPL (Ethernet private line service), G.8011.2; EVPL (Ethernet virtual private line service), Ethernet architecture and equipment (G.8010, G.8021)
- LAN/MAN Bridging & Management (IEEE 802.1)
- Scalable provider networks (IEEE 802.1ad; Virtual Bridged Local Area Networks, 802.1ah; Provider Backbone Bridges)
- MEF-6 (Metro Ethernet Services Definitions Phase I),
- MEF-10 (Ethernet Services Attributes Phase I)

#### 18:00- Welcome reception

### DAY 2 9:00 - 18:00

#### Session 2 - Ethernet Core/Metro network transport

- HSSG (IEEE 802.3; Higher Speed Study Group)
- Higher speed Ethernet over OTN (Optical Transport Network); larger than 40Gb/s serial rates
- Future Ethernet transport mechanisms

#### Session 3 – Ethernet based access networks

- $-1G\ E-PON\ (802.3ah;\ Ethernet\ in\ the\ First\ Mile\ Task\ Force)\ and\ 10G\ E-PON\ (IEEE\ 802.3av;\ 10Gb/s\ PHY\ for\ EPON\ Task\ Force)$
- G-PON (G.984; Gigabit-capable Passive Optical Networks) and B-PON (G.983; Broadband Passive Optical Networks)
- Ethernet based access network management (IEEE 802.1aj; Two-port MAC Relay)
- Point-to-Point Ethernet access
- Home networks

#### Session 4 - Ethernet OAM and management

- -Ethernet OAM requirements, OAM functions and mechanisms (Y.1730, Y.1731), Ethernet protection switching and ring protection (G.8031)
- ASON (G.8080; Architecture for the automatically switched optical network, G.7718: ASON management)
- Ethernet restoration (xSTP, IEEE 802.1aq; Shortest Path Bridging)
- NGNM-FG (Next-Generation Networks Management Focus Group)
- NMS-EMS Management Interface of Ethernet over Transport and Metro Ethernet Network (Q.840.1), Management interface of EPON (Q.838.1)
- MEF-7; EMS-NMS Information Model
- TMF mTOP Ethernet management aspects in MTNM and MTOSI

#### Session 5 -Ethernet QoS, timing and synchronization

- Audio Video bridging task group (IEEE 802.1AS; Timing and Synchronization, IEEE 802.1Qat; Stream Reservation Protocol)
- IEEE 802.1Qau; Congestion Notification
- Timing and synchronization aspects of packet networks (G.8261)
- IETF PWE3 (Pseudowire Emulation Edge to Edge)
- MEF-9 (Ethernet Services at the UNI) on synchronization

#### Closing session

- Reports by all session chairs
- Wrap-up discussion