

Standardization in ITU-T Study Group 15

Networks, Technologies and Infrastructures for Transport,
Access and Home

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SG15 mandate

SG15 is responsible for the development of **standards** on:

optical transport
network

systems

instrumentation
and
measurement
techniques

access network

equipment

maintenance

management

test

home network and
power utility network
infrastructures

optical fibres and cables and
their related installation

control plane technologies

to enable the evolution toward intelligent transport networks, including the support of smart-grid applications.



SG15 Working Parties

- **WP1/15:** Transport aspects of access, home and smart grid networks
- **WP2/15:** Optical technologies and physical infrastructures
- **WP3/15:** Transport network characteristics

WP1 – Broadband Access

G.FAST

Broadband access
up to 2 Gbps

G.mgfast

Next generation
G.fast targeting 5-10 Gbps

DTA

G.fast dynamic time assignment
(DTA) – downstream/upstream
bit-rates responsive to
customer traffic



Continue collaboration with



G.RoF

Radio over fiber
for mobile fronthaul



NG-PON2

Next generation of
converged fiber access
going to higher speeds



Visible Light
Communication
for home networking

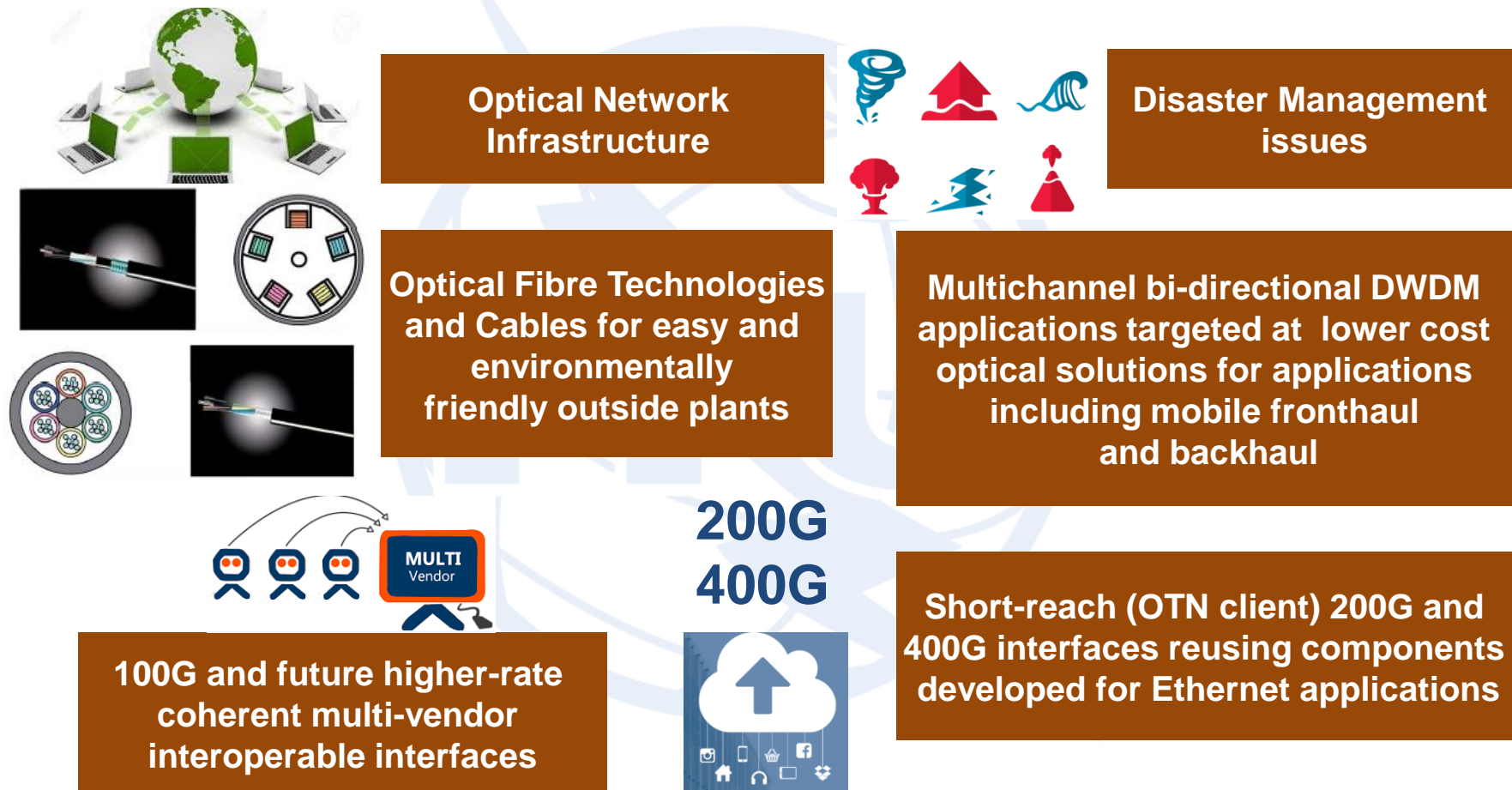


Powerline
communication
(PLC)

G.Hn

G.hn home networking over
indoor phone, power,
and coax wires >2 Gbps

WP2 – Optical Technologies



WP3 – Optical Transport Networks



5G

Transport and synchronization supporting 5G mobile fronthaul and backhaul



Optical Transport Networks

Synchronization of packet networks and future OTN networks, e.g., beyond 100G



Architecture and other Transport SDN Aspects



Network survivability (protection and restoration)



BEYOND
100G

New “B100G” OTN interfaces, including the use of coherent G.698.2 interfaces under development



Management aspects of control and transport planes



Equipment & management specifications for OTN, Ethernet and MPLS-TP



Core Information model enhancement for management of synchronization and optical media

Meetings

- Past meetings since 2016
 - SG15 meetings
 - Geneva, 15 – 26 February 2016
 - Geneva, 19 – 30 September 2016
 - Geneva, 19 – 30 June 2017
 - Geneva, 29 January – 9 February 2018
- Next SG15 meeting
 - Geneva, 8 – 19 October 2018

Presentations

- Hot topics in Optical Transport Networks (OTN), *Dr Steve Trowbridge (Nokia), Chairman, ITU-T Study Group 15*
- ITU-T PON standards - progress and recent activities, *Dr Yuanqiu Luo (Futurewei)*
- Specifications for coherent 100 Gbit/s DP-DQPSK optical interfaces in a revision of ITU-T G.698.2, *Mr Fabio Pittalà (Huawei)*

