

# IEEE 1904.4 25G/50G Task Force

Opening report

Curtis Knittle, c.knittle@cablelabs.com

### **Topics**



- Scope
- Timeline
- □ Draft 0.1
- ☐ Gaps/Areas of Focus
- ☐ Future meetings

### Scope



This standard describes the system-level requirements needed to provide service-level, multi-vendor interoperability of Ethernet Passive Optical Network (EPON) equipment. The specifications complement the existing IEEE 802.3<sup>(TM)</sup> and IEEE 802.1<sup>(TM)</sup> standards, which enable the interoperability at the Physical Layer and Data Link Layer. Specifically included in this specification are:

- 25G-EPON and 50G-EPON system-level interoperability specifications covering equipment functionality, traffic engineering, and service-level quality of service/class of service (QoS/CoS) mechanisms;
- Management specifications covering equipment management, service management, and power utilization.

### **Timeline**



■ See tf4\_2102\_timeline\_draft.pdf

#### Motion #4



■ Approve the P1904.4 timeline as presented in tf4\_2102\_timeline\_draft.pdf

Moved: Marek Hajduczenia

Second: Kevin Noll

(Procedural, > 50%)

All attendees may vote:

Motion passes by voice vote without opposition

#### Draft 0.1



☐ Review of

https://www.ieee1904.org/private/4/drafts/D0\_1/tf4\_ D0\_1.pdf

#### Motion #5



- Approve <a href="https://www.ieee1904.org/private/4/drafts/D0\_1/tf4\_D0\_1.pdf">https://www.ieee1904.org/private/4/drafts/D0\_1/tf4\_D0\_1.pdf</a> as task force draft 0.2 with the following changes:
  - Delete attribute aLlidReportThresholds
  - Modify branch values as shown in tf4\_2102\_Kramer\_1.pdf, slide 24
  - Change draft title to match PAR

Moved: Marek Hajduczenia

Second: Curtis Knittle

(Technical,  $\geq$  75%)

Only 1904 wg voting members may vote:

Yes: 4

No: 0

Abstain: 0

#### **Gaps/Areas of Focus**



Relative to 1904.1...

| Feature in 1904.1                          | New capabilities or changed behavior in 802.3ca  |
|--|--|
| Multicast provisioning                     | Based on multicast ULID  |
| Queue srevice discipline                   | New behavior due to fragmentation  |
| Report format and queue length calculation | New behavior: gratuitous reports, dynamic reporting priorities   |
| Transceiver status monitoring              | Similar, but should be wavelength-specific   |
| Port selective loopback                    | Maybe different to enable inter-channel loopback   |
| Optical link protection                    | New behavior in multi-channel PON  |
| Data encryption                            | New, envelope based  |
| Power saving                               | New, multi-channel mode  |
| Events and management attributes           | New attributes and events/alarms; ULID provisioning; GLID definitions and provisioning, scheduling policies, and member management |
| Device and capability discovery            | New capabilities (fragmentation, multiple channels, etc.)  |

■ **Possible reuse**: VLAN and tunneling modes; Performance monitoring; ONU authentication; Software update.

#### **Possible New Features**



Low latency x-haul (AKA cooperative transport interface, mobile/PON coordination, Cooperative DBA)

### **Future TF4 Meetings**



Propose to move future 1904.4 meetings to Tuesday evenings

### **Unfinished/New Business**

Does anyone have any other business to discuss?



## **Thank You**