

IEEE 802.3 Beyond 10km Optical PHYs SG - Agenda & General Information

John D'Ambrosia,
Acting Chair, IEEE 802.3 Beyond 10km Optical PHYs Study Group
Futurewei, Subsidiary of Huawei
December 12, 2017

Agenda

- Approval of Agenda
- IEEE 802 Participation
- Pre-PAR Patent Policy
- Study Group Information
- Chartering Motion
- What are we talking about?
- Terminology
- Presentations
 - Gary Nicholl (Cisco) – “Considerations on objectives for Beyond 10km Ethernet Optical PHYs running over a point-to-point DWDM system”
 - Knittle / Schmitt (CableLabs) and Villarruel (Cisco) – “Beyond 10km PHYs MSO Reference Channels”
- Liaison Review – ITU-T SG15

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis

- **Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1)**
- **IEEE 802 Working Group membership is by individual; “Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives”. (subclause 4.2.1 “Establishment”, of the IEEE 802 LMSC Working Group Policies and Procedures)**
- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant’s obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**
- **Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 “Chair”, list item x.**

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: <http://www.ieee802.org/devdocs.shtml>)

Guidelines for IEEE-SA Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
- **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
- **Don't discuss specific license rates, terms, or conditions.**
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain primary focus
- **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
- **Don't discuss the status or substance of ongoing or threatened litigation.**
- **Don't be silent if inappropriate topics are discussed... do formally object.**

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy” for more details.

This slide set is available
at <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.ppt>

IEEE 802.3 Beyond 10km Optical PHYs SG Information

- John D'Ambrosia, Acting Chair
- Home Page - <http://www.ieee802.org/3/B10K/index.html>
- Reflector Information – <http://www.ieee802.org/3/B10K/reflector.html>

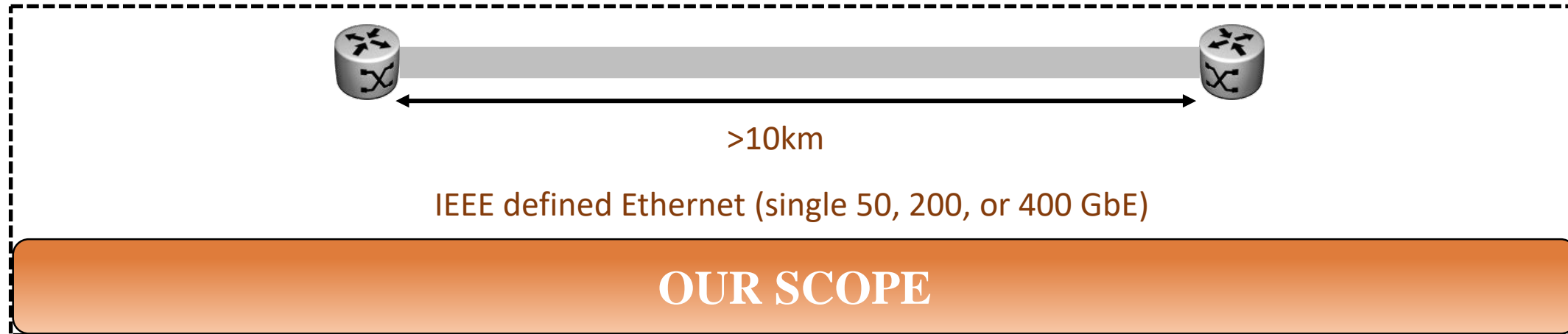
Chartering Motion

Based on IEEE 802.3 Nov 2017 Plenary

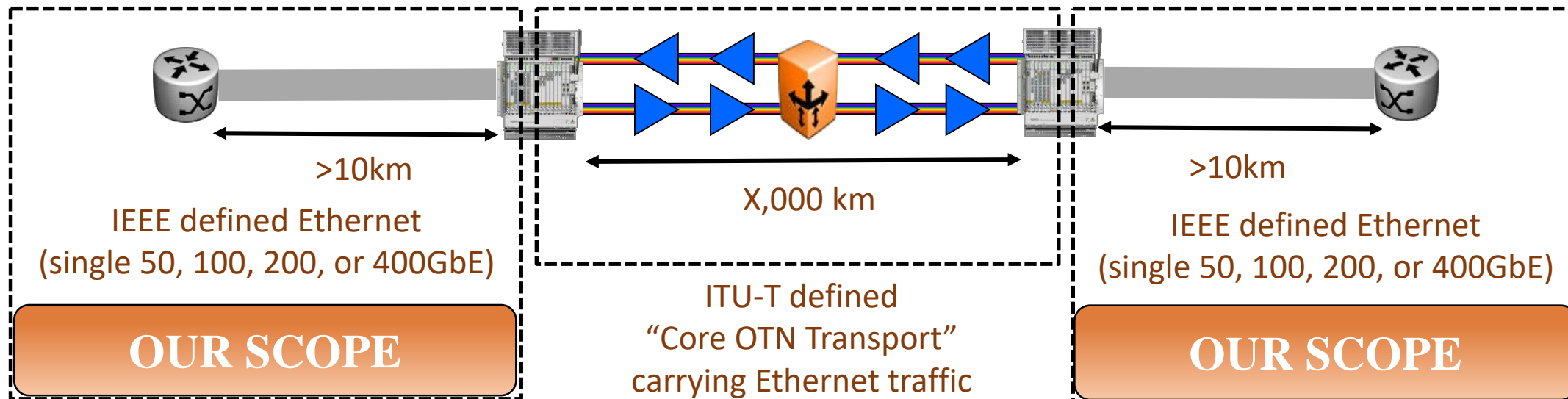
Move that the IEEE 802.3 Ethernet Working Group authorizes the formation of a study group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for “Beyond 10km Optical PHYs for 50 Gb/s, 100 Gb/s, 200 Gb/s, and 400 Gb/s Ethernet”

What Are We Talking About?

Scenario #1



Scenario #2



Terminology

- In my opinion
 - Terminology is impacting our discussions
 - IEEE 802.3 standard does not necessarily help in all situations
 - Example – “DWDM” - only instance in IEEE 802.3-2018 – 1.3 Normative References
 - ITU-T Recommendation G.694.1—Spectral grids for WDM applications: DWDM frequency grid.
 - Example – IEEE 802.3bs - Section 1.4 - 400GBASE-LR8
 - IEEE 802.3 Physical Layer specification for 400 Gb/s using 400GBASE-R encoding and 4-level pulse amplitude modulation over eight WDM lanes on single-mode fiber, with reach up to at least 10 km. (See IEEE Std 802.3, Clause 122.)
- Some terms people have been using we may wish to make sure is clearly defined (or point to existing definitions) –
 - PHY, Link ,DWDM, Channel, Lambda, In-line amplification, point-to-point link

ITU-TSG15 Liaison

- Sent – http://www.ieee802.org/3/minutes/nov17/incoming/ITU_SG15-LS-73_to_IEEE_802d3.pdf
- Response (Nov 2017 Plenary) - http://www.ieee802.org/3/minutes/nov17/outgoing/IEEE_802d3_to_SG15_B10k_1117.pdf
- Additional request for further information?