

IEEE 802.3  
Beyond 10km Optical PHYs Study Group  
Opening Report

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# IEEE 802.3 Beyond 10km Optical PHYs Study Group Project information

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## Study Group Organization

John D'Ambrosia, Chair, IEEE 802.3 Beyond 10km Optical PHYs SG

## Task force web and reflector information

Reflector: <http://www.ieee802.org/3/B10K/reflector.html>

Home page: <http://www.ieee802.org/3/B10K/index.html>

- PAR: No Draft Yet
- CSD: (Draft responses, not approved by Study Group, based on adopted objectives, Jan 2018)  
[http://www.ieee802.org/3/B10K/project\\_docs/csd\\_draft\\_0118\\_notapproved.pdf](http://www.ieee802.org/3/B10K/project_docs/csd_draft_0118_notapproved.pdf)
- Objectives: [http://www.ieee802.org/3/B10K/project\\_docs/objectives\\_180125.pdf](http://www.ieee802.org/3/B10K/project_docs/objectives_180125.pdf)
- Timeline: None Adopted

Ad Hoc page <http://www.ieee802.org/3/B10K/public/adhoc/index.shtml>

Private Area None Yet

# Activities since Nov 2017 Plenary

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- Jan 18 Interim
  - Study Group reformed with new chartering motion - “Beyond 10km Optical PHYs for 50 Gb/s, 100 Gb/s, 200 Gb/s, and 400 Gb/s Ethernet”
  - All Adopted objectives - [http://www.ieee802.org/3/B10K/project\\_docs/objectives\\_180125.pdf](http://www.ieee802.org/3/B10K/project_docs/objectives_180125.pdf)
    - PHY - Provide physical layer specifications which support 50 Gb/s operation over at least 40 km of SMF
  - Strawpolls
    - No expressed interest in 100GbE /40km, based on PAM4 (y/n/a/need more info): 0 / 14 / 22 / 15
    - Technical Feasibility 200GbE /40km, based on PAM4 (y/n/nmi): 22 / 1 / 9
    - Technical Feasibility 400GbE /40km, based on PAM4 (y/n/nmi): 4 / 4 / 30
    - Objective – 200 Gb/s operation over 4 optical  $\lambda$ 's for at least 40 km of SMF: (y/n/a/nmi): 20 / 3 / 19 / 8
    - Objective – 400 Gb/s operation over 8 optical  $\lambda$ 's for at least 40 km of SMF: (y/n/a/nmi): 0 / 9 / 15 / 23
    - Need more information on coherent and / or DWDM technologies before adopting objectives (y/n): 35 / 5
- Terminology Ad hoc Teleconferences (2/13, 2/27) –
  - Defined terminology for use within the Study Group for the purpose of clarity of communications to move the group forward.
- Study Group Ad Hoc Teleconference (2/20)
  - Technical Presentation - [Backhaul Optics for Remote PHY](#)

# Study Group Meeting Week Plan

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- Consider liaisons
  - Proposed Response to OIF Jan 18 Liaison, RE: 400ZR Interop Project
- Terminology
- 4 technical presentations
- Consensus building on PAR / Objectives / CSD

# Questions?

# Thank you!