# IEEE P802.3dj Joint Optics/Logic Track Ad Hoc Report

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# Report

- 2 ad hoc calls since July 2023 meeting
  - 15 Aug, 29 Aug
  - 70+ attendees each time
  - 7 contributions
- Next meetings will occur between Sept  and November TF meetings :
  - Will be announced over the track email reflector

- Minutes:
  - 15 August, 29 August

# Presentations

August 29

- "DGDmax specification for 10km Ethernet" presented by Maxim Kuschnerov, Huawei
- "Study on the Dependence of TDECQ on SER" presented by Xiang Liu, Huawei
- "Considering FEC Bypass" presented by John D'Ambrosia, Futurewei, US Subsidiary of Huawei
- "Discussion: 'FEC Bypass' topic", presented by Mark Nowell, Cisco

August 15

- "FEC Bypass: Procedural Considerations " presented by John D'Ambrosia, Futurewei, US Subsidiary of Huawei
- "Performance Evaluation of Inner FEC Synchronization Methods " presented by Xiang He, Huawei
- "Specifying BER in PMD clauses " presented by Adee Ran, Cisco
- "DGDmax specification for 10km Ethernet" presented by Maxim Kuschnerov, Huawei (not presented until 8/29)

# Key Themes

- ~~FEC Bypass~~ (now referred to as FEC Modes)
  - Multiple detailed presentations on the procedural/architectural/market needs aspects around this topic
  - Main takeaways:
    - "FEC Bypass" has different meanings for different people.  Prefer to explicitly refer to the FEC modes
    - One PHY vs two PHYs as an approach for P802.3dj to specify investigated
    - Both are viable paths forward with their pros and cons. Straw polls were taken to gauge TF position

  Straw poll:

  I would support adding objectives to support physical layer specifications based on only RS544 FEC for:

  1. Single wavelength 500m and 2km optical PMDs:
     - 200GBASE-DR1, 200GBASE-FR1, 400GBASE-DR2, 400GBASE-DR2-2, 800GBASE-DR4, 800GBASE-DR4-2, 1.6TBASE-DR8, and 1.6TBASE-DR8-2
  2. Four-wavelength 2km PMDS:
     - 800GBASE-FR4

Result Q1: Yes: 30 No: 26 Abstain:16  Result Q2:  Yes:20 No: 34 Abstain:18

# Other topics

Some useful inputs on topics that will help drive baseline proposal details:

- $DGD_{max}$ specification for SMF PMDs (leveraging proposed $CD_q$/$PMD_q$ approach)
- A self-sync method was proposed for inner FEC
- Specifying optical performance in presence of Inner FEC (BER vs FLR)
- Experimental investigation into TDECQ performance in presence of higher SER (inner code FEC)

# THANKS!