

**IEEE 802 Jul 2024**

**IEEE 802.3 Ethernet WG  
Opening Plenary  
15 Jul 2024**

**IEEE P802.3dj  
200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s  
Ethernet Task Force  
Opening Report**



# IEEE P802.3dj Task Force Project information

## ■ Organization

- **John D'Ambrosia, Chair, IEEE P802.3dj Task Force**
- **Mark Nowell, Vice-Chair, IEEE P802.3dj Task Force; Chair, Optics Track**
- **Kent Lusted, Secretary, Chair, Electrical Track**
- **Gary Nicholl, Chair, Architecture and Logic Track**
- **Matt Brown, IEEE P802.3dj Chief Editor**

## ▪ Task force web and reflector information:

- Home page: <https://www.ieee802.org/3/dj/index.html>
- Reflector Info - <https://www.ieee802.org/3/df/reflector.html>
  - TF Reflector: [stds-802-3-b400g@listserv.ieee.org](mailto:stds-802-3-b400g@listserv.ieee.org)
  - Logic Reflector: [stds-802-3-b400g-logic@listserv.ieee.org](mailto:stds-802-3-b400g-logic@listserv.ieee.org)
  - Optical Reflector: [stds-802-3-b400g-optx@listserv.ieee.org](mailto:stds-802-3-b400g-optx@listserv.ieee.org)
  - Electrical Reflector: [stds-802-3-b400g-elec@listserv.ieee.org](mailto:stds-802-3-b400g-elec@listserv.ieee.org)

## ▪ Project Documentation –

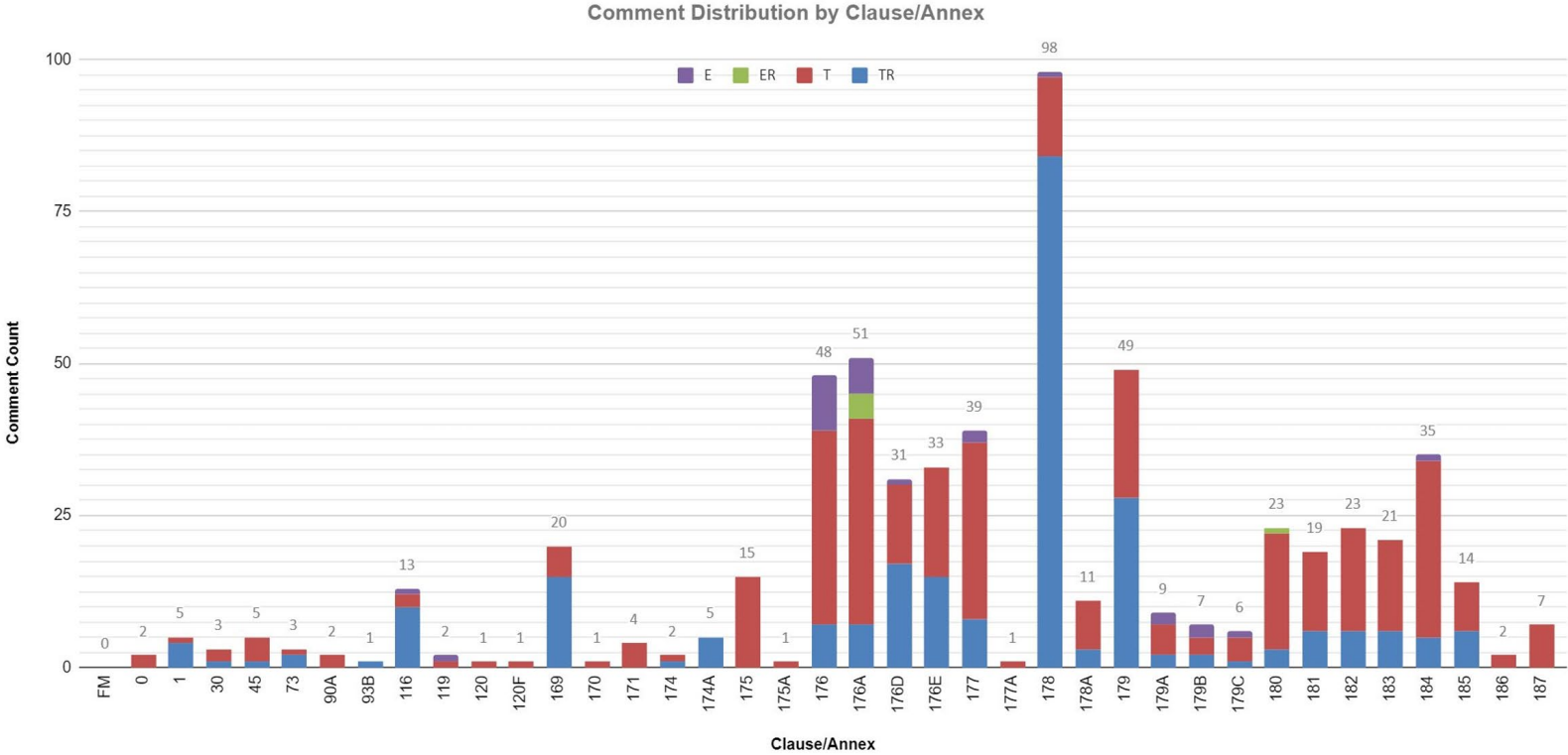
- PAR : [https://www.ieee802.org/3/dj/projdoc/P802d3dj\\_PAR.pdf](https://www.ieee802.org/3/dj/projdoc/P802d3dj_PAR.pdf)
- CSD: <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0256-00-ACSD-p802-3dj.pdf>
- Objectives: [https://www.ieee802.org/3/dj/projdoc/objectives\\_P802d3dj\\_230518.pdf](https://www.ieee802.org/3/dj/projdoc/objectives_P802d3dj_230518.pdf)
- Adopted Timeline: [https://www.ieee802.org/3/dj/projdoc/timeline\\_3dj\\_230116.pdf](https://www.ieee802.org/3/dj/projdoc/timeline_3dj_230116.pdf)

# Activities Since Mar 2024 Plenary

- **IEEE P802.3dj D1.0 released – 10 Apr 2024 (698 pages)**
- Initial Task Force Review
  - Opened 10 Apr 2024
  - Closed 02 May 2024
  - **613 comments received from 47 reviewers**
    - Primary focus was technical comments
    - 11 comments not considered ([https://www.ieee802.org/3/dj/comments/D1p0/8023dj\\_D1p0\\_comments\\_not\\_closed\\_id.pdf](https://www.ieee802.org/3/dj/comments/D1p0/8023dj_D1p0_comments_not_closed_id.pdf))
    - Scope of review to be left open until at least D1.2
- Meetings
  - May 2024 Interim – [https://www.ieee802.org/3/dj/public/24\\_05/index.html](https://www.ieee802.org/3/dj/public/24_05/index.html)
  - June 2024 Electronic Meeting - [https://www.ieee802.org/3/dj/public/24\\_06/index.html](https://www.ieee802.org/3/dj/public/24_06/index.html)
  - Key Decisions – [https://www.ieee802.org/3/dj/projdoc/KeyMotions\\_3dj\\_240516.pdf](https://www.ieee802.org/3/dj/projdoc/KeyMotions_3dj_240516.pdf)
    - Optical Link Training Baseline Adopted
    - Generate D1.1
- Ad Hoc Meetings - <https://www.ieee802.org/3/dj/public/adhoc/index.html>
  - Electrical Ad hoc – 4/4, 6/20
  - Optical / Logic Ad hoc – 4/11, 4/25, 6/27
  - Joint Electrical / Optical / Logic – 4/18
  - COM – 4/2, 4/9, 4/16, 4/23, 4/30, 5/21, 5/28, 6/18, 6/25, 7/2
- **IEEE P802.3dj D1.1 released – 12 Jul 2024**
- **Project/timeline to be re-evaluated during gen of D1.2 by leadership and discussed with TF@ Nov Plenary**

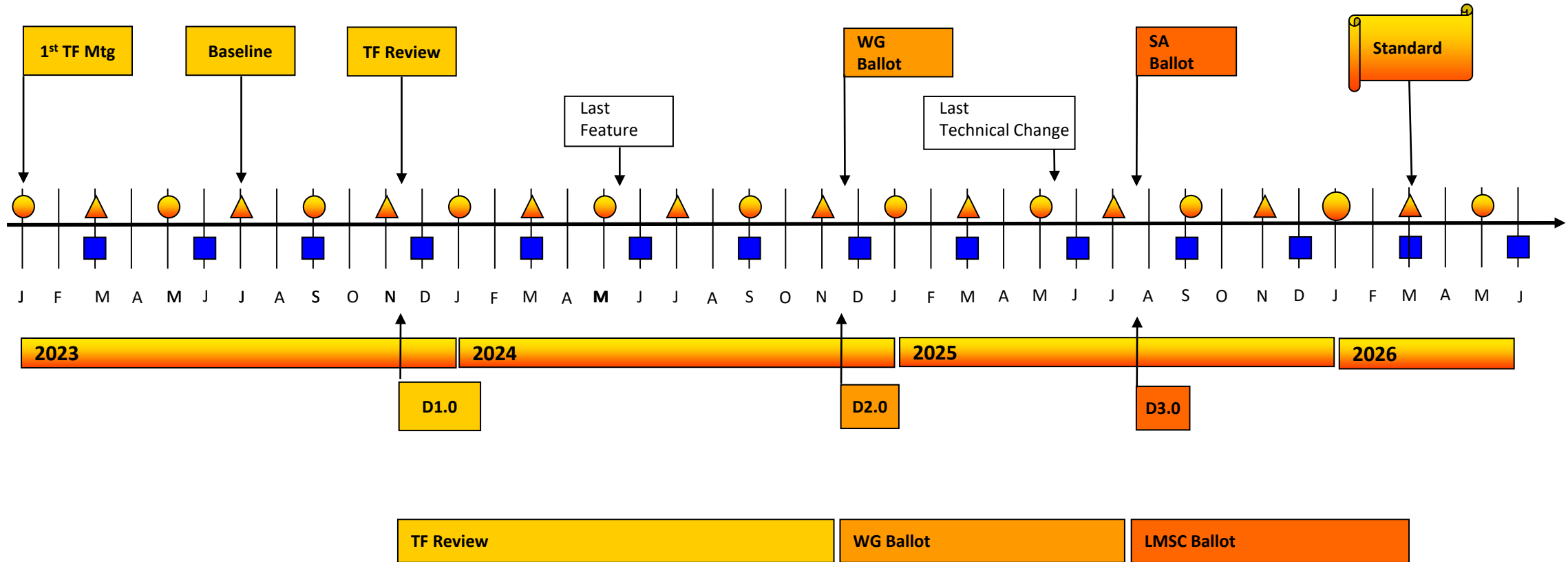
# Comment Summary

## Comment summary by clause/annex



E/ER = editorial, T/TR = technical, G/GR = general

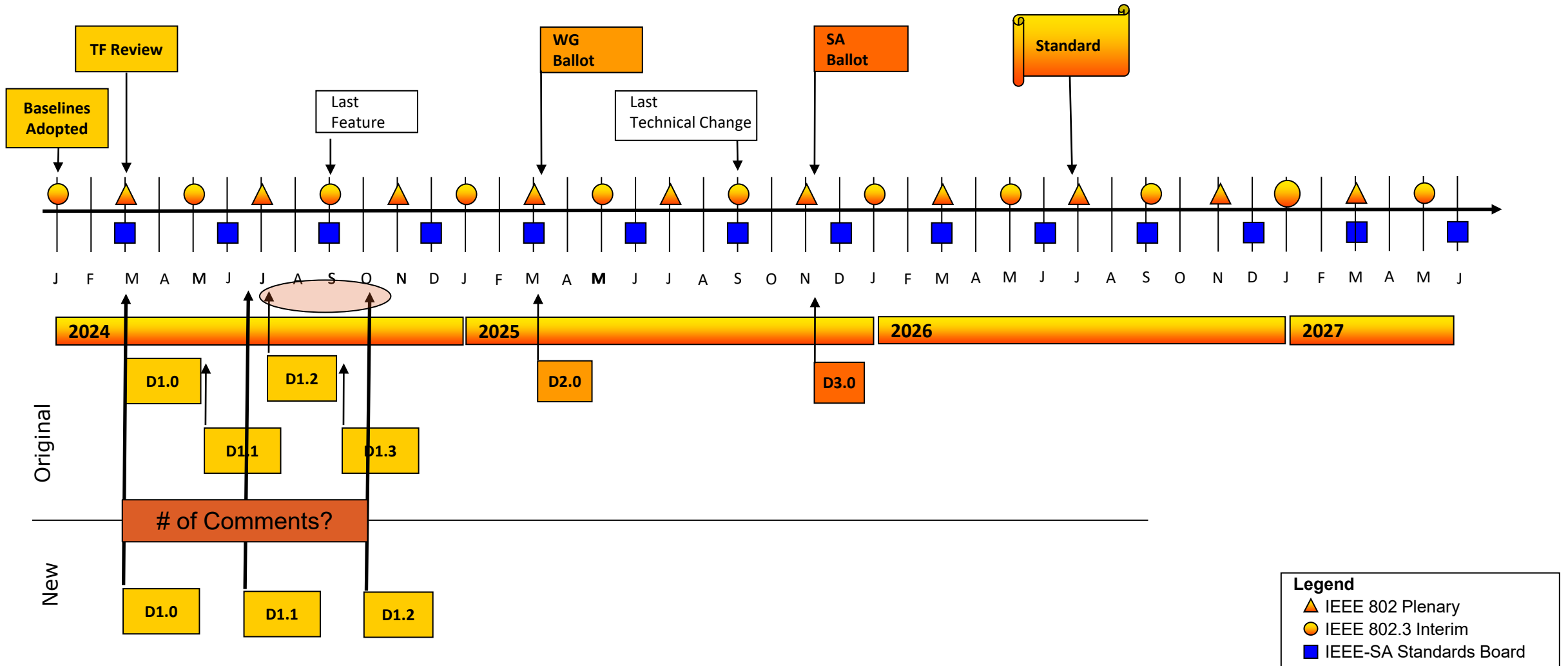
# Adopted IEEE P802.3dj Timeline (16 Jan 2023)



**Legend**

- ▲ IEEE 802 Plenary
- IEEE 802.3 Interim
- IEEE-SA Standards Board

# May 24 Estimate of IEEE P802.3dj Timeline (Comparison / Forecast)



**Legend**

- ▲ IEEE 802 Plenary
- IEEE 802.3 Interim
- IEEE-SA Standards Board

# July Plenary Plans

- **Continue work towards a technical complete document**
  - **39 Technical Presentations**
  - **Preparation for Second Task Force Review**
  - **Big Ticket Items (See Next Pages)**
- **Dual Tracks on Tuesday**
  - **Track 1 – Logic / Optic**
  - **Track 2- Electrical**
- **Consider liaisons**
  - **From OIF: 800LR / 800ZR IA Project Updates**
  - **From OIF: Updated Rev. 05 of the CEI-224G-LR-PAM4 specification**
  - **Anticipate one from ITU-T on G.652 Fiber**

# Meeting Map

	Mon	Tues	Wed	Thurs
AM1		Track#2 - E	TF	TF
AM2		Track #1 - L/O	Track#2 - E	TF
LUNCH				
PM1	TF	Track #1 - L/O	Track#2 - E	TF
PM2	TF	Track #1 - L/O	Track#2 - E	TF

- Track Chairs will chair track sessions.
- Meeting invites have been sent out for all sessions and are on the 802.3 calendar. Please note that Track #1 will use the same bridge as the Task Force meeting. A separate invite has been sent out for Track #2.
- Any announcements regarding meetings and or presentations will be sent to the Task Force reflector ([stds-802-3-b400g@listserv.ieee.org](mailto:stds-802-3-b400g@listserv.ieee.org)). Individuals should be subscribed to the reflector (See <https://www.ieee802.org/3/df/reflector.html> if not currently subscribed).



# Logic Track – Big Ticket Items

- 800GBASE-ER1[-20] PCS/PMA (Clause 186)
  - Initial review of Clause 186 in D1.1 necessary
- TimeSync support related to new SM-PMA and inner FEC sublayers
  - Potential updates to Clause 90/Annex 90A and/or addition of associated references in other clauses
- ILT implications for AN and link\_status
- Skew Budget
  - Revisit skew specification in context of the new SM-PMA and inner FEC sublayers

# Electrical Track – Big Ticket Items

- CR/KR:
  - COM parameters ( $\eta_0$ ,  $d_w$ ,  $N_{fix}$ ,  $N_g$ , etc.), CA, TX values, SNDR, etc.
- MLSD: using for CR/KR or not? Implementation penalty proposal?
- ILdd C2M and C2C
- Jitter: J6u
- C2M Test1/Test2 losses and channel calibration

# Optical Track – Big Ticket Items

## IMDD

- Link budget methodology
  - TDECQ correlation with BER/FLR
  - refinement or improvement
- Reference Receiver definition
  - Tap weights
- Optical Channel model/Fiber specs topic
  - Resolve the fiber model/data/ITU analysis
  - 800G-LR4 related baseline concerns
  - Other PMDs
- Adopted PMDs
  - continued experimental validation to support current specs

## Coherent

- Transmitter TQM
  - Reference receiver
- Initial review of Clause 186 in D1.1 necessary

## OLT/OAN

- Clarity on baseline adoption/completion

**THANK YOU!**

