

10G and 25G Bidirectional Optical Access PHYs (802.3cp)

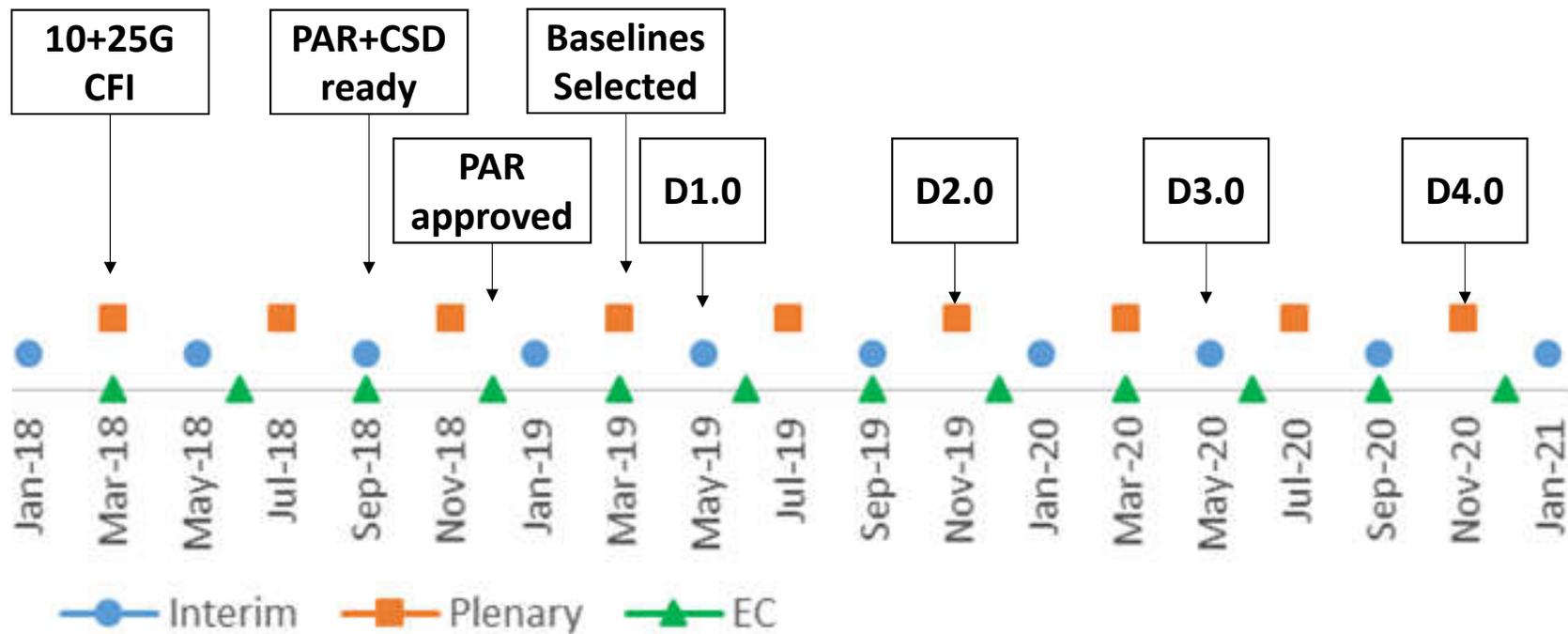
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Chairman 802.3cp Study Group

Events to date

- Topic introduced at January IEEE-ITU workshop
- CFI was issued 30 days before March meeting
- CFI was held in March, and was approved by 802.3
- Study group was initialized in May
 - Chairman appointed
 - PAR and CSD were reviewed, and included 10, 25, and 50G topics
 - 50G was later ruled out of scope: This will require a new CFI (July 2018)
- In any case, PAR and CSD are ready to move forward
 - Anticipated 802.3 approval in November, final approval in December
- Consensus building on “big ticket items” will continue

Proposed timeline for 802.3cp



Big ticket items

- Loss budget
 - 10km and 20~40km budgets are envisioned
 - Must translate these into loss and dispersion values
 - Use 0.5dB/km (O-band)? Assume 4 connectors with 0.5dB loss?
- Wavelength plan
 - 10G has existence proof at 1270nm upstream, 1330nm downstream
 - Is there any objection to continuing with these values?
 - 25G has a few obvious possibilities:
 - Reuse 100GBase-LR4 wavelengths (1295nm and 1310nm)?
 - Reuse 25G PON ONU Channel 0 wavelength options (1270nm and 1300nm)?
- Silent start
 - How to capture that into the standard?

Publicly available resources

- Website: <http://www.ieee802.org/3/NGBIDI/index.html>
 - How to join Email exploder is explained there
 - All meeting documents are stored there
- Future meetings: <http://www.ieee802.org/3/interims/index.html>