Path Forward for IEEE P802.3df / .3dj

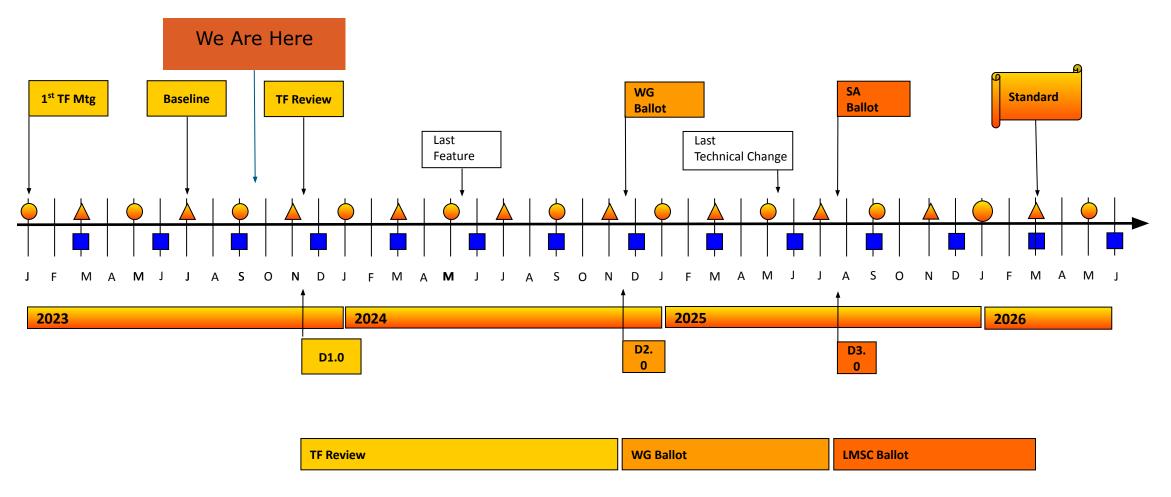
Joint Session - IEEE P802.3cw Task Force IEEE P802.3df Task Force IEEE P802.3dj Task Force

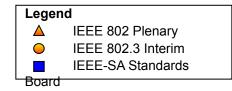
IEEE 802.3 Sept 2023 Interim Campinas, Brazil



John D'Ambrosia, Futurewei, U.S. Subsidiary of Huawei Mark Nowell, Cisco Kent Lusted, Intel Matt Brown, Alphawave Semi Mark Gustlin, Cisco

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





Summary IEEE P802.3dj Progress @ End of 14 Sept 2023 Meeting – Logic

	AUI	Backplane	CU Cable	SMF 500m/2km	SMF 10km 4 Wavelength	SMF 10km 1 Wavelength	SMF 40km
Ethernet Rate	PCS/FEC/PMA?	PCS/FEC/PMA?	PCS/FEC/PMA?	PCS/FEC/PMA?	PCS/FEC/PMA?	PCS/FEC/PMA?	PCS/FEC/PMA?
200 Gb/s							
400 Gb/s							
800 Gb/s							Two proposals
1.6 Tb/s							

Adopted baselines

Proposed Baselines

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Summary IEEE P802.3dj Progress @ End of 14 Sept 2023 Meeting – PMDs (& AUIs)

Ethernet Rate	Assumed Signaling Rate	AUI	Backplane	Cu Cable	SMF 500m	SMF 2km	SMF 10km	SMF 40km
200 Gb/s	200 Gb/s	200GAUI-1 C2C <mark>C2M</mark>	200GBASE-KR1	200GBASE-CR1	200GBASE-DR1	200GBASE-FR1		
400 Gb/s	200 Gb/s	400GAUI-2 C2C <mark>C2M</mark>	400GBASE-KR2	400GBASE-CR2	400GBASE-DR2	400GBASE-DR2-2		
800 Gb/s	200 Gb/s	800GAUI-4 C2C <mark>C2M</mark>	800GBASE-KR4	800GBASE-CR4	800GBASE-DR4	1. 800GBASE-DR4-2 2. 800GBASE-FR4	800GBASE-LR4	
	800 Gb/s						Over single SMF in each direction Coherent	Over single SMF in each direction Coherent
1.6 Tb/s	100 Gb/s	1.6TAUI-16 C2C C2M						
	200 Gb/s	1.6TAUI-8 C2C <mark>C2M</mark>	1.6TBASE-KR8	1.6TBASE-CR8	1.6TBASE-DR8	1.6TBASE-DR8-2		

Adopted baselines

Proposed Baselines

List of Issues (as of end of Sept Interim)

Reference - Sept 2023 IEEE P802.3dj Chief Editor's Report - https://www.ieee802.org/3/dj/public/23 09/brown 3dj 01 2309.pdf

Logic:

40km logic definition

Optics:

- Clarity on FEC modes and what (form of) baselines to adopt
- Technical feasibility (data) contributions in support of proposed baselines
- Baseline proposals improvement/completeness

Electrical:

- Clarity on AUI C2M and C2C BER allocation
- Baseline proposals partial: C2M, open: CR/KR/C2C
- Technical feasibility (data) contributions in support of proposed baselines

IEEE P802.3df Status and Path Forward

- Targeting 09 Feb 2024 RevCom submission
- Initial SA Ballot
 - 145 comments Submitted
 - 84 comments remaining in bucket #1
 - 61 comments to be addressed (26-28 Sept)
- Estimated 1st SA Ballot Recirculation (D3.1)
 - Opening 14 Oct 2023
 - Closing 29 Oct 2023
- Potential to request conditional approval @ Nov 2023 Plenary
 - Need to consider comments submitted against D3.1
- Based on # of D3.1 Comment two possible paths
 - Minimal comments (resolve < 1 day) consider @ Nov Plenary
 - Large # of comments consider @ interim meeting (week of 27 Nov)
- Two additional recirculations (D3.2, D3.3) scheduled

Proposed Plan Going Forward

- IEEE P802.3dj timeline to generate D1.0 out of Nov 2023 does not seem feasible.
 - D1.0 generation depends on successful adoption of baselines
 - New target Jan 2024?
- If editorial team feels comments submitted against IEEE P802.3df D3.1 can be addressed in one day, utilize some of the F2F time at Nov 2023 Plenary to address these comments submitted against IEEE P802.3df D3.1, and request conditional approval to proceed to Standards Association Ballot
- Hold IEEE P802.3dj ad hoc meetings in both October and early Dec to discuss any new material
- Revisit IEEE P802.3dj timeline @ Nov 2023 Plenary