

500m and 2km SMF Optical Nomenclature

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Nomenclature Proposal Update

- At the 28 April 2022 IEEE P802.3df Optical ad hoc, an updated proposal for 500m and 2km SMF nomenclature was reviewed
 - https://www.ieee802.org/3/df/public/adhoc/optics/0422_OPTX/lusted_3df_optx_01a_220428.pdf
- A straw poll indicated strong support:
 - Straw Poll #1
 - I would support the proposed nomenclature for parallel 500m and duplex 2km SMF listed on lusted_3df_optx_01a_220428, slide 3
 - Results: Y: 41 ,N: 8

Proposal for 500m and 2km SMF

Ethernet Rate	Assumed Signaling Rate	SMF 500m	SMF 2km
200 Gb/s	200 Gb/s	Over 1 Pair: 200GBASE-DR1	Over 1 Pair: 200GBASE-FR1
400 Gb/s	100 Gb/s		Over 4 Pair: 400GBASE-DR4-2
	200 Gb/s	Over 2 Pair: 400GBASE-DR2	
800 Gb/s	100 Gb/s	Over 8 Pair: 800GBASE-DR8	Over 8 Pair: 800GBASE-DR8-2
	200 Gb/s	Over 4 Pair: 800GBASE-DR4	1) Over 4 pairs = 800GBASE-DR4-2 2) Over 4 λ 's = 800GBASE-FR4
	TBD		
1.6 Tb/s	100 Gb/s		
	200 Gb/s	Over 8 Pair: 1.6TBASE-DR8	Over 8 Pair: 1.6TBASE-DR8-2

Motions

Potential Motion

- Move to:
 - Adopt the nomenclature for the 500m and 2km SMF solutions listed on [lusted_3df_02_220602](#), slide 3
- M: Kent Lusted
- S:
- Technical ($\geq 75\%$)
- Results:

THANKS!

Nomenclature References

- Participants are invited to reference the following contributions related to nomenclature
 - Past PHY naming:
 - https://www.ieee802.org/3/cb/public/jan16/PHY_names_1115.pdf
 - 3cn naming related:
 - https://www.ieee802.org/3/cn/public/18_11/anslow_3cn_01_1118.pdf
 - 3cz naming related:
 - https://www.ieee802.org/3/cz/public/nov_2020/perezaranda_3cz_02c_1120_phyname.pdf
 - 3db naming related:
 - https://www.ieee802.org/3/db/public/March-04-2021/parsons_3db_01_030421.pdf
 - 3cu naming related:
 - https://www.ieee802.org/3/cu/public/Nov19/cole_3cu_01a_1119.pdf

Nomenclature Proposal History

- Based on the feedback and straw poll results at the 14 April 2022 IEEE P802.3df Optical ad hoc, the optical nomenclature proposal was updated
 - Straw Poll #1
 - I would support the proposed nomenclature for parallel 500m and duplex 2km SMF listed on lusted_3df_optx_01_220414, slide 8
 - Results: Y: 64 N: 0
 - Straw Poll #2
 - For the 2km parallel SMF nomenclature, I would support the direction of:
 - A. use “DR”, such as shown in Example A listed on lusted_3df_optx_01_220414, slide 11
 - B. use “FR”, such as shown in Example B listed on lusted_3df_optx_01_220414, slide 11
 - Results: A: 44 B: 12
 - Straw Poll #3
 - For the length (“LEN”) representation for the “DR” PMDs shown on lusted_3df_optx_01_220414, slide 11, I prefer the format:
 - A. units in meters, e.g. “2000”
 - B. units in km, e.g. “2”
 - C. units in km plus showing units, e.g. “2km”
 - Results: A: 5 B: 36 C: 22