P802.3dm PHY names discussion

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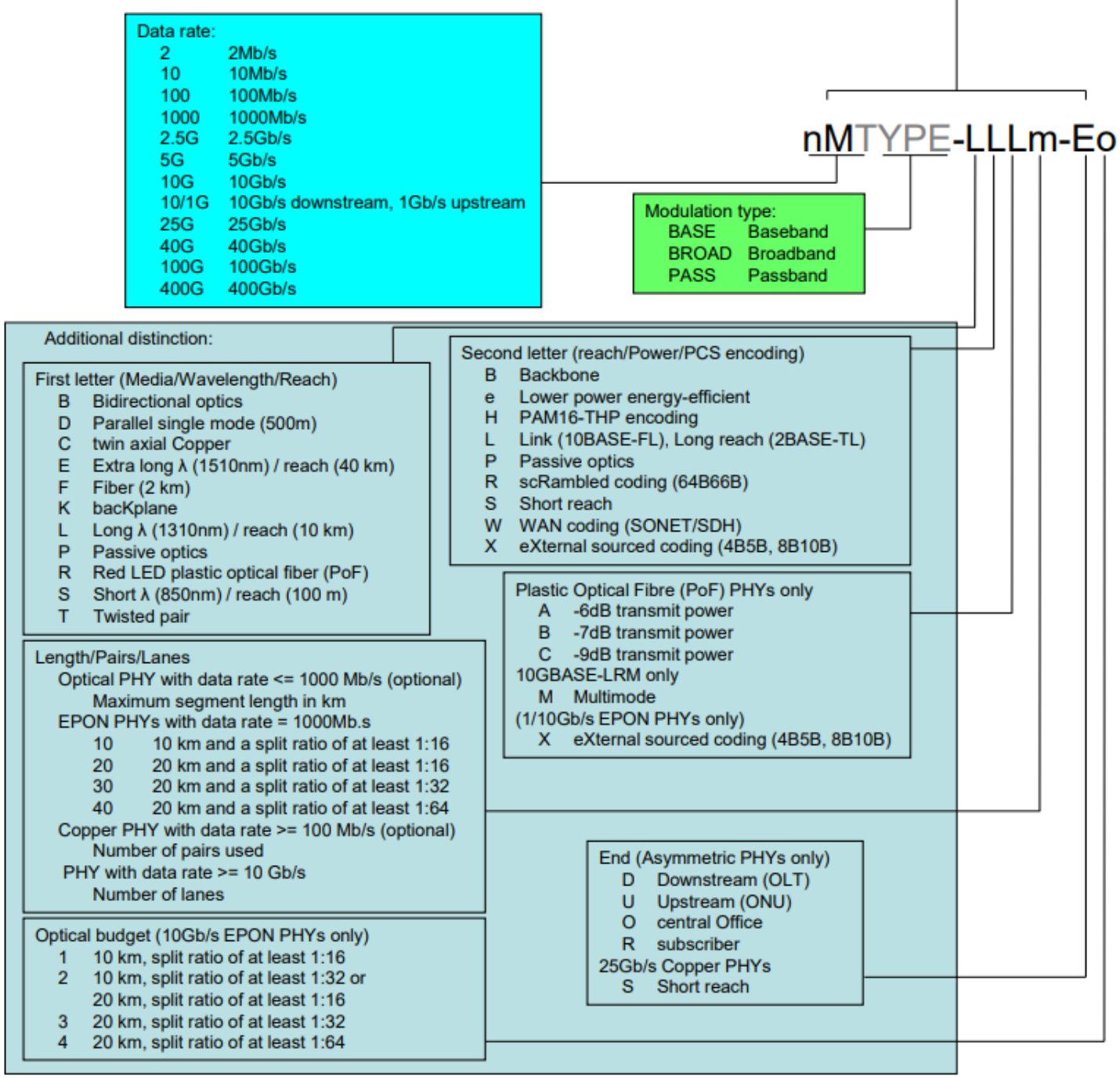
https://www.ieee802.org/3/cb/public/jan16/PHY_names_1115.pdf



Note - The PCS and PMD family names are based on use of either the first or second letter. Examples are 10GBASE-L for 10Gb/s long wavelength PMD family and 10GBASE-R for 10Gb/s scrambled encoding PCS family.

Naming Convention – Data rate

Name format **nM**TYPE–LLLm–Eo

nM is for the data rate.

When there are two speeds, there are separated by “/”

2.5G/100M

5G/100M

10G/100M

Abbreviate as

MultiG/100M

Data rate:

2	2Mb/s
10	10Mb/s
100	100Mb/s
1000	1000Mb/s
2.5G	2.5Gb/s
5G	5Gb/s
10G	10Gb/s
10/1G	10Gb/s downstream, 1Gb/s upstream
25G	25Gb/s
40G	40Gb/s
100G	100Gb/s
400G	400Gb/s

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Naming Convention – Link Segment

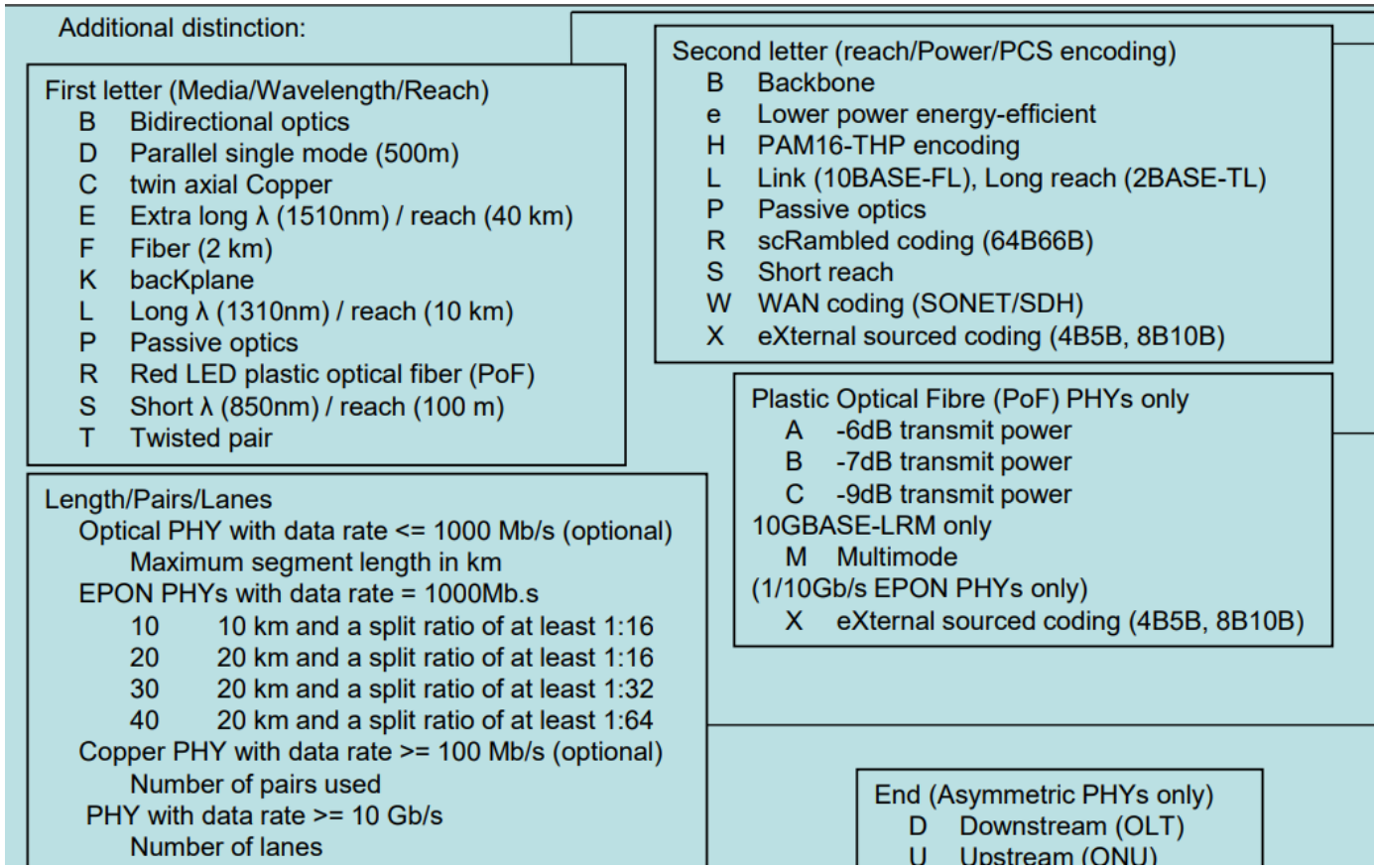
Name format nMTYPE–**LLLm**–Eo

LLLm is for the link segment type

1st letter
- T for Twisted pair
- V for coax (new)

No 2nd or 3rd letter

m is for the number of pairs/cables
- 1 (1 pair or coax)



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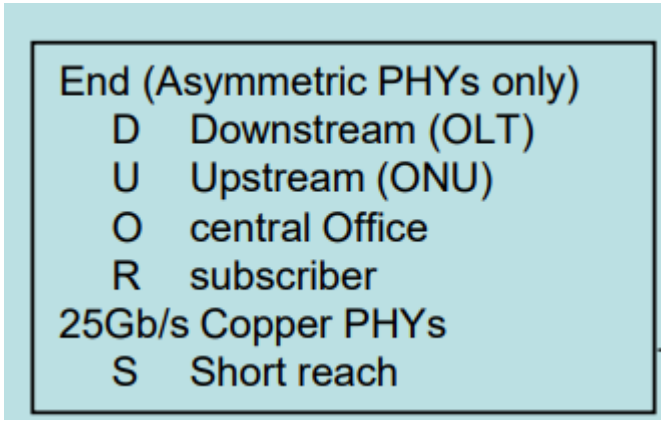
Naming Convention - End

Name format nMTYPE–LLLm–**Eo**

Eo is for the End for Assymetric PHYs

- D/U is currently used, but is prone to confusion
- F/S (Fast/Slow) is not possible as “S” is used
- H/L (High/Low) “speed” is the current proposal



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Alternatives for End Names Brainstorming

High Speed transmitter	Low Speed transmitter
High (H)	Low (L)
High Speed (HS)	Low Speed (LS)
Put H before T or V, only one -	Put L before T or V, only one -
2.5G+100MBASE-T1	
2.5G/100MBASE-H-T1	2.5G/100MBASE-L-T1
2.5G_100MBASE-H-T1	2.5G_100MBASE-L-T1
2.5G/100MBASE-T1	100M/2.5GBASE-T1

Options for Indicating Transmit speed

Options for how to designate the "fast" vs. the "slow" transmitter.
Not all speeds or cable types are shown. A single example is given for each option.

Option	High Speed transmitter	Low Speed transmitter	example name	example name
1	High (H)	Low (L)	2.5G/100MBASE-T1-H	2.5G/100MBASE-T1-L
2	High Speed (HS)	Low Speed (LS)	2.5G/100MBASE-T1-HS	2.5G/100MBASE-T1-LS
3	Put H before T or V, only one -	Put L before T or V, only one -	2.5G/100MBASE-HT1	2.5G/100MBASE-LT1
4	Put H before T or V, two -	Put L before T or V, two -	2.5G/100MBASE-H-T1	2.5G/100MBASE-L-T1
5	Put the transmit speed first and the receive speed second		2.5G/100MBASE-T1	100M/2.5GBASE-T1

Straw Poll #4
I prefer Option #:

1. 10
2. 13
3. 8
4. 10
5. 25

Straw Poll #5
I prefer Option #:

1. 11
2. 14
3. 13
4. 17

Straw Poll #6
I prefer Option #:

4. 25
5. 42

Options for Symbol Between Speeds

Options for the symbol between the speeds.
The name after the speeds is not shown and was discussed on the previous slide.

Option	High Speed transmitter	Low Speed transmitter	example name
1	Continue to use "/" between speeds		2.5G/100MBASE-
2	Use "+" instead of "/" between speeds		2.5G+100MBASE-
3	Use "_" instead of "/" between speeds		2.5G_100MBASE-
4	Use “-" instead of "/" between speeds		2.5G-100MBASE-

Straw Poll #7
I prefer Option:
1. 9
2. 37
3. 13

Straw Poll #8
I prefer Option:
2. 32
4. 22