Proposal for PMD Naming, John Johnson, Broadcom Inc., 5/22/18

Rd/RuGBASE-PmnC-D/Uk

Rd	Downstream MAC rate = {25,50,100}
/	Leave off if Rd = Ru
Ru	Upstream MAC rate = {10,25,50,100}. MUWt be ≤ Downstream MAC rate. Leave off if Rd = Ru.
G	Gigabit/s rate (in reference to the above numbers)
BASE	Baseband Signal
-	
P	PON medium
Q	PCS type: Q for 256b/257b
m	Number of downstream wavelengths = {1,2}
n	Number of upstream wavelengths = {1,2}
C	Upstream wavelength coexistence code = {G,X}. G and X refer to the first 25G channel.
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D/U	Downstream-facing PMD (i.e., in the OLT) or Upstream-facing PMD (i.e., in the ONU)
k	Power class = {2, 3}

UW0	1270±10	nm
UW1	1300±10	nm
UW2	1320±2	nm
DW0	1358±2	nm
DW1	1342±2	nm

	DW Line Rate:	25G		50G (Future)	
UW Line Rate	**UW/DW Wavelengths:**	**DW0**	**DW0+DW1**	**DW1**	**DW1+DW2(TBD)**
10G	**UW0**	25/10GBASE-PQ11G-[U,D][2,3]	50/10GBASE-PQ21G-[U,D][2,3]	50/10GBASE-PQ11G-[U,D][2,3]	100/10GBASE-PQ21G-[U,D][2,3]
	UW1	25/10GBASE-PQ11X-[U,D][2,3]	50/10GBASE-PQ21X-[U,D][2,3]	50/10GBASE-PQ11X-[U,D][2,3]	100/10GBASE-PQ21X-[U,D][2,3]
25G	**UW0**	25GBASE-PQ11G-[U,D][2,3]	50/25GBASE-PQ21G-[U,D][2,3]	50/25GBASE-PQ11G-[U,D][2,3]	100/25GBASE-PQ21G-[U,D][2,3]
	UW1	25GBASE-PQ11X-[U,D][2,3]	50/25GBASE-PQ21X-[U,D][2,3]	50/25GBASE-PQ11X-[U,D][2,3]	100/25GBASE-PQ21X-[U,D][2,3]
	UW1+UW2		50GBASE-PQ22X-[U,D][2,3]		
	UW0+UW1		50GBASE-PQ22G-[U,D][2,3]		
50G (Future)	**UW0**			50GBASE-PQ11G-[U,D][2,3]	100/50GBASE-PQ21G-[U,D][2,3]
	UW1			50GBASE-PQ11X-[U,D][2,3]	100/50GBASE-PQ21X-[U,D][2,3]
	UW1+UW2				100GBASE-PQ22X-[U,D][2,3]
	UW0+UW1				100GBASE-PQ22G-[U,D][2,3]

Notes:
50G wavelengths may not exactly align with 25G wavelengths but have same coexistence behavio
50G DW2 may be same as DW0 or may be a new wavelength with lower dispersion
Assuming 50G will reUWe 256b/257b coding, but could be different