

# Update on Consensus for 500m and 2km Optical Objectives

Kent Lusted, Intel

Brian Welch, Cisco

Dave Ofelt, Juniper Networks

Guangcan Mi, Huawei

Peter Stassar, Huawei

Gary Nicholl, Cisco

Vasu Parthasarathy, Broadcom

Mike Dudek, Marvell

John Johnson, Broadcom

Roberto Rodes, Coherent

# Proposal

- Adopt RS(544,514,10) as the only FEC encoding for 200GBASE-DR1, 400G-BASE-DR2, 800GBASE-DR4 and 1.6TBASE-DR8
- Adopt PMD baselines as shown in welch\_3dj\_04\_2311 pages 5,7-8,10-12 identified as “200GBASE-DR1 400GBASE-DR2 800GBASE-DR4 1.6TBASE-DR8 ” for 200GBASE-DR1, 400GBASE-DR2, 800GBASE-DR4 and 1.6TBASE-DR8 based on FECo
- Adopt PMD baselines as shown in welch\_3dj\_04\_2311 slides 6-8,10-12 identified as “200GBASE-FR1 400GBASE-DR2-2 800GBASE-DR4-2 1.6TBASE-DR8-2” for 200GBASE-FR1, 400GBASE-DR2-2, 800GBASE-DR4-2 and 1.6TBASE-DR8-2 based on FECi
- Adopt PMD baselines as shown in welch\_3dj\_04\_2311 slides 6-8,14-16 identified as “800GBASE-FR4” for 800GBASE-FR4 based on FECi
- Adopt a new objective:
  - Define a physical layer specification that supports 800 Gb/s operation:
    - over 4 wavelengths over a single SMF in each direction with lengths up to at least 500 m

# 802.3dj Objective/Baseline Summary

(Jointly Adopt All Items in the Table)

	<b>FEC=TBD</b>	<b>FEC<sub>o</sub></b>	<b>FEC<sub>i</sub></b>
1λ		200GBASE-DR1 400GBASE-DR2 800GBASE-DR4 1.6TBASE-DR8 <i>(adopt baselines)</i>	200GBASE-FR1 400GBASE-DR2-2 800GBASE-DR4-2 1.6TBASE-DR8-2 <i>(adopt baselines)</i>
4λ	800GBASE-FR4-500 <i>(add new objective only)</i>		800GBASE-FR4 <i>(adopt baseline)</i>
<b>Reach (loss)</b>	<b>500m</b>	<b>500m (3dB)</b>	<b>2km (4dB)</b>