

IEEE P802.3ct Task Force: 100 Gb/s and 400 Gb/s over DWDM Systems

Opening Report

John D'Ambrosia
Futurewei, U.S. Subsidiary of Huawei
Vienna, Austria
July 15, 2019

IEEE P802.3ct Task Force Project information

Task Force Organization

- John D'Ambrosia, Chair, IEEE P802.3cn Task Force
- Editorial Team
 - Tom Issenhuth – Chief Editor, 400 GbE Optical PHY Clause
 - Pete Anslow – Supporting Clauses
 - Peter Stassar – 100 GbE Optical PHY Clause
 - Steve Trowbridge - 100 GbE PCS/FEC/PMA Extender Clauses
 - John DeAndrea - 400 GbE PCS/PMA Clauses
- Task force web and reflector information
 - Reflector: <http://www.ieee802.org/3/ct/reflector.html>
 - Home page: <http://www.ieee802.org/3/ct/index.html>
- Project Documentation –
 - PAR : http://www.ieee802.org/3/ct/P802_3ct_PAR.pdf
 - CSD: <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0249-00-ACSD-p802-3ct.pdf>
 - Objectives: http://www.ieee802.org/3/ct/3ct_Objectives_190212.pdf
 - Timeline: http://www.ieee802.org/3/ct/timeline_3ct_190119.pdf
- Ad Hoc page: <http://www.ieee802.org/3/ct/public/adhoc/index.html>

Activities since Mar 2019 Plenary (1 of 2)

- May 2019 Interim (Thanks to Ethernet Alliance)
 - 51 attendees
 - P802.3ct related
 - 5 technical presentations
 - Received liaison from ITU-T SG15 – Test Results for spectral excursion
 - ITU – Work on G.709.3 and G.698.2

Activities since Mar 2019 Plenary (2 of 2)

- Joint Task Force Ad Hoc Calls

- Mar 28 – 4 tech presentations (Microsoft DCI Survey, Rx PMD / Polarization-Demux Test / 400-ZR TX EVM Baseline / PMD Emulators for Coherent Optical Fiber Transmission)
- Apr 4 – Reviewing path forward for P802.3ct
- Apr 25 – Areas of Commonality and Steps Forward for 802.3ct 100G Optical Parameters
- May 2 – Baseline Proposal – 400GBASE-ZR Optical Specs Baseline
- May 9 - Proposal for a Common Methodology to Compute Error Vector Magnitude (EVM)

- Joint Task Force Interim Teleconference Meetings

(http://www.ieee802.org/3/ct/public/tf_interim/index.html)

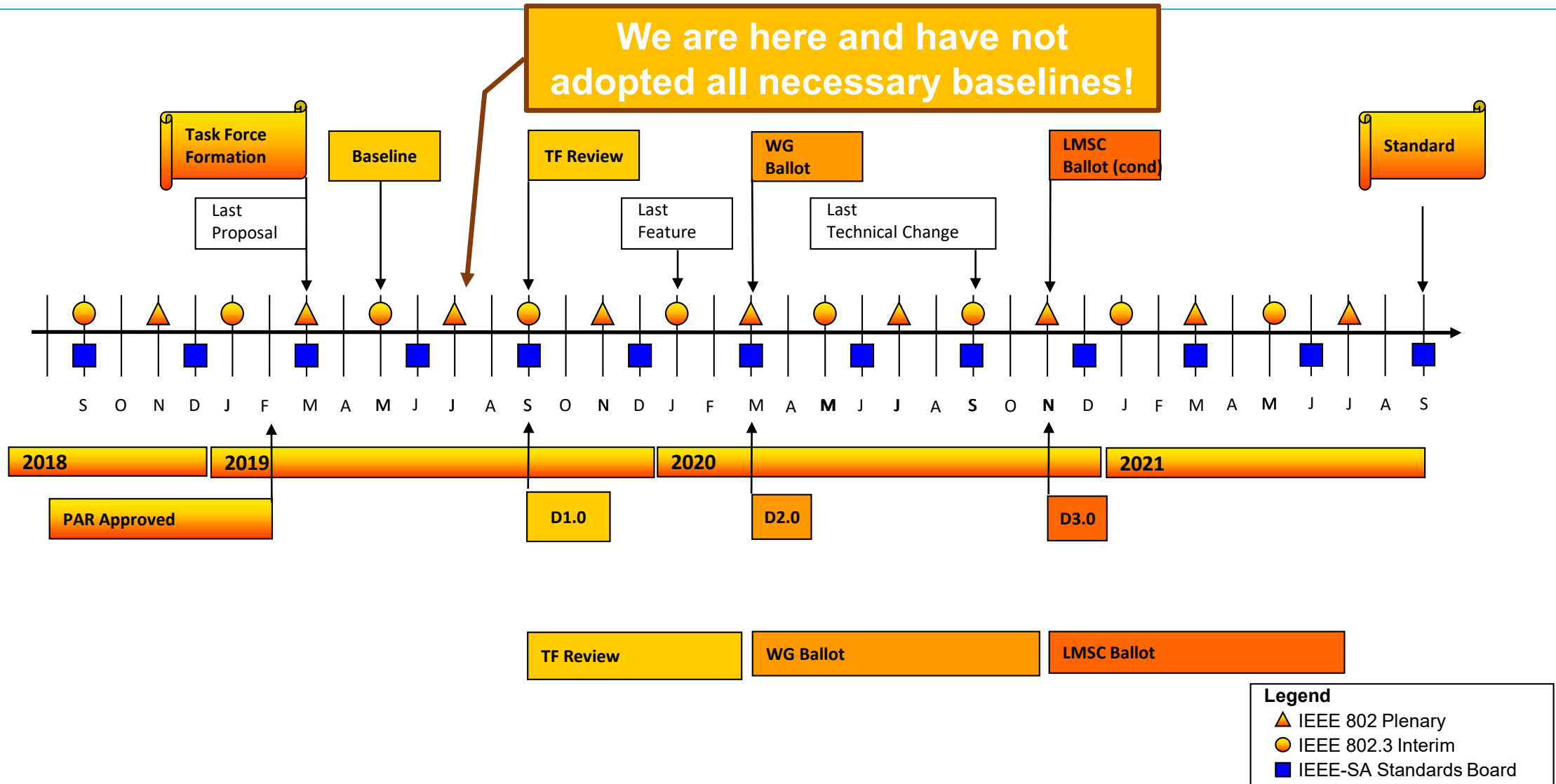
- June 6 – Specification methodology for 100GBASE-ZR & 400GBASE-ZR, Moving forward with the IEEE P802.3ct Project
- June 20 – Grid Summary Update
- June 27 – Bridge proposal for 400GBASE ZR specification methodology baseline

Status - High Level Decisions

	100GbE	400 GbE
Channel Model	stassar_3ct_01a_0519.pdf	stassar_3ct_01a_0519.pdf zhang_3ct_01a_0519.pdf
# of Channels	?	?
Channel Spacing	100 GHz	100 GHz
Modulation Format	DP-DQPSK	DP-16QAM
Frame Assumption	Same as OTN uses for 100G-DP-DQPSK	400GBASE-ZR PCS/PMA
FEC	Staircase (ITU-T G.709.2)	CFEC
Tx Metric	stassar_3ct_01a_0519.pdf	stassar_3ct_01a_0519.pdf zhang_3ct_01a_0519.pdf
AUI Attachment	Inverse RS-FEC Sublayer	400G XS

IEEE P802.3ct Adopted Timeline

Adopted – Jan 2019
Reaffirmed – Mar 2019



Task Force Meeting Week Plan

- Joint Meeting with P802.3cn Task Force
 - Tues (1pm – 6pm) / Wed (8am to noon)
 - Hear technical presentations / baseline proposals
- P802.3ct Task Force Meeting – Wed 2pm to 6pm
 - Additional time for presentations / strawpolls
 - Motions & Closing Business

Questions?

Thank you!