

# IEEE 802.3cu 100 Gb/s per lane optical PHYs Task Force

## Update

Mark Nowell, Cisco  
May 21st, 2020

# IEEE 802.3cu 100 Gb/s per lane optical PHYs Task Force

## Project information

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### Task Force Organization

Mark Nowell, Cisco, Chair

Kenneth Jackson, Sumitomo Electric, Recording Secretary

Gary Nicholl, Cisco, Editor-in-Chief

### Task Force web and reflector information

Reflector information: <http://www.ieee802.org/3/cu/reflector.html>

Home page: <http://www.ieee802.org/3/cu/index.html>

### Project Documentation

PAR: [http://www.ieee802.org/3/cu/P802\\_3cu\\_PAR.pdf](http://www.ieee802.org/3/cu/P802_3cu_PAR.pdf)

CSD: <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0062-00-ACSD-p802-3cu.pdf>

Objectives: [http://www.ieee802.org/3/cu/Objectives\\_Approved\\_Sept\\_2019.pdf](http://www.ieee802.org/3/cu/Objectives_Approved_Sept_2019.pdf)

Draft Timeline: [http://www.ieee802.org/3/cu/public/July19/agenda\\_3cu\\_01\\_1119.pdf](http://www.ieee802.org/3/cu/public/July19/agenda_3cu_01_1119.pdf)

# Activities since March 2020

A series of multiple interim (7) and ad hoc (1) teleconference meetings have been held

Interim Teleconferences <http://www.ieee802.org/3/cu/public/index.html>

Ad hocs [http://www.ieee802.org/3/cu/public/cu\\_adhoc/cu\\_archive/index.html](http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/index.html)

“March 2020” series of meetings resolved all comments against D2.0 and generated D2.1

D2.1 Working Group Initial Ballot completed

Review Period: Apr 25<sup>th</sup>– May 10<sup>th</sup>, 2020

33 Comments: ER/E/TR/T - 2/4/7/20

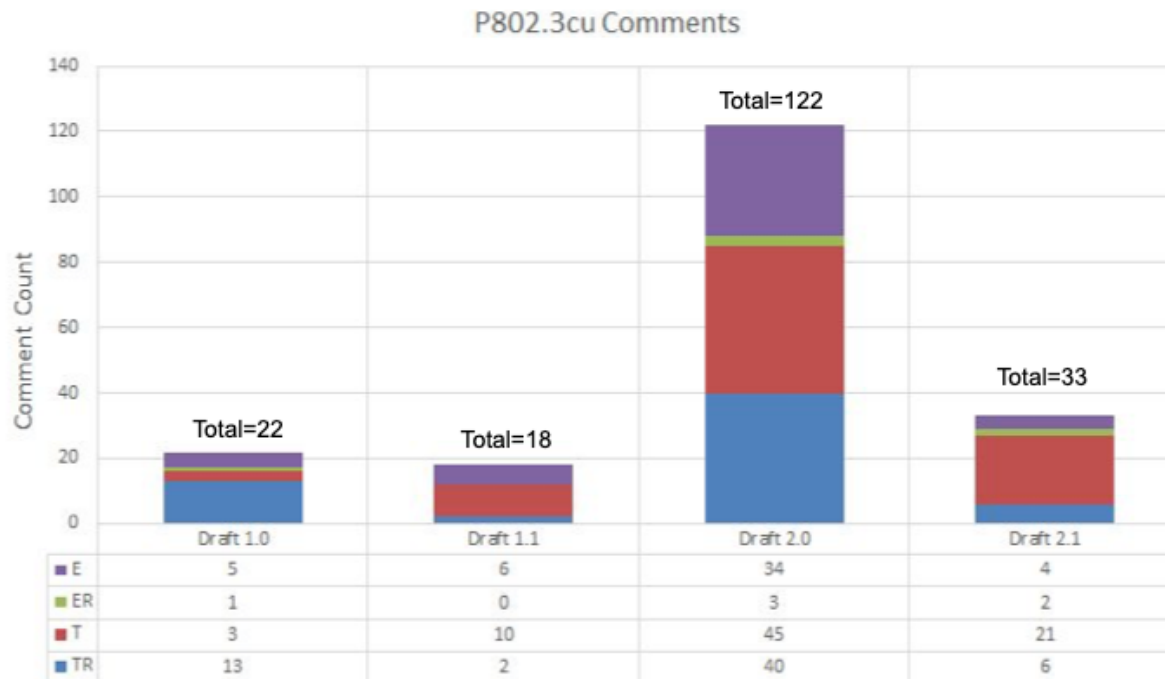
Comments and proposed responses: <http://www.ieee802.org/3/cu/comments/index.html>

Voters	177		
Approve	101	Response rate:	69.49%
Disapprove with comment	4	Approval rate:	96.19%
Abstain	18	Abstain rate:	14.63%

“May 2020” series meetings have begun.

- TF Motion approved to request conditional approval to SA-Ballot

# P802.3cu comment trends



E/ER = editorial, T/TR = technical

Pre-TF Review, 150 comments resolved on D0.4

[http://www.ieee802.org/3/minutes/nov19/1119\\_cu\\_open\\_report.pdf](http://www.ieee802.org/3/minutes/nov19/1119_cu_open_report.pdf)

# P802.3cu Ballot Summary

	Initial D2.0			1 <sup>st</sup> Recirculation D2.1		
	#	%	Status	#	%	Status
Abstain	17	16	PASS	18	15	PASS
Disapprove with comment	11	-	-	4	-	-
Disapprove without comment	0	-	-	0	-	-
Approve	81	88	PASS	101	96	PASS
Ballots returned	109	62	PASS	123	69	PASS
Voters	177	-	-	177	-	-
Comments	122	-	-	33	-	-

# Summary of unsatisfied comments

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6 unsatisfied “TR” comments from 2 commenters

[http://www.ieee802.org/3/cu/comments/8023cu\\_D20\\_comment\\_unsatisfied\\_by\\_ID.pdf](http://www.ieee802.org/3/cu/comments/8023cu_D20_comment_unsatisfied_by_ID.pdf)

(note: posted report lists 8 comments, but commenter has subsequently indicated satisfaction on 2 since posting)

The unsatisfied comments are associated with the two optical PMD clauses.

- CI 140: 100GBASE-FR1 and 100GBASE-LR1 SMF PMDs
- CI 151: 400GBASE-FR4 and 400GBASE-LR4-6 SMF PMDs

With the increasing industry experience with 100 Gb/s per wavelength SMF specifications and product development, P802.3cu has had proposals to update or improve methodologies for specification (compared to 802.3bs and 802.3cd standards). These changes were rigorously tested for consensus before adopting. The unsatisfied comments are associated with comments not aligned with the consensus position that was achieved.

Topic	# Unsatisfied Comments	More information
Removal of TDECQ-10logCeq parameter	4	Numerous Straw Polls and motions since January to reach current situation
Addition of overshoot parameter and test methodology	2	Numerous Straw polls and motions since January to reach current situation

# IEEE 802.3cu Task Force Motion (Tues 5/19)

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## Motion #3

Move that the IEEE 802.3cu Task Force re-affirm the CSD responses in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0062-00-ACSD-p802-3cu.pdf> and request conditional approval to progress the IEEE P802.3cu draft to IEEE 802 SA ballot once the Working Group ballot process has been successfully completed.

M: Mark Nowell

S: Gary Nicholl

Motion passes by voice vote without opposition

# Motion

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Move that the IEEE 802.3 Working Group re-affirm the CSD responses in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0062-00-ACSD-p802-3cu.pdf> and request conditional approval to progress the IEEE P802.3cu draft to IEEE 802 SA ballot once the Working Group ballot process has been successfully completed.

M: Mark Nowell

S: Gary Nicholl



Questions?

Thank you!

# For reference: Technical straw polls related to unsatisfied comments

Overshoot relevant polls			Results
Straw Poll#1	Jan Interim	I would support adding a transmitter overshoot parameter for 100GBASE-FR1, 100GBASE-LR1, 400GBASE-FR4 and 400GBASE-LR4-6 as proposed in cole_01b_0120:	Y/N 23/6
Straw Poll #2	3/17 Interim	I support removing the relative Tx overshoot/undershoot specification	Y/N/A 10/26/16
Straw Poll #3	3/17 Interim	I support the addition of an absolute value for Tx overshoot/undershoot into the specification	Y/N/A 31/5/16
Straw Poll #4	3/17 Interim	I support adopting the values proposed in rodes_3cu_01a_0320 (Slide 11) for the relative and absolute Tx overshoot/undershoot	Y/N/"Need more Info" 12/3/23
"TDECQ-10logCeq" relevant polls			
Straw Poll #2	Jan Interim	I would support removing TDECQ-10Log(Ceq) for 100GBASE-FR1,100GBASE-LR1, 400GBASE-FR4 and 400GBASE-LR4-6 as proposed in cole_01b_0120.	Y/N 13/11
Straw Poll#1	3/17 Interim	With regards to the inclusion of TDECQ-10log(Ceq) parameter, I support:	
		A) Full removal from both Tx and Rx tables:	27
		B) Reinstate for both Tx and Rx tables:	9
		C) Abstain	17