

IEEE 802.3

Opening Plenary Report

IEEE 802.3
400 Gb/s Ethernet Study Group

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Request for Formation of Study Group (as per Mar ' 13 Plenary Motion)

- Move the IEEE 802.3 Working Group authorizes the formation of a study group for “400 Gb/s Ethernet.”

Reflector and Web

- To subscribe to the 400G reflector, send an email to:

ListServ@ieee.org

with the following in the body of the message (do not include “<>”):

*subscribe stds-802-3-400G <yourfirstname> <yourlastname>
end*

- Send 400G reflector messages to:

STDS-802-3-400G@listserv.ieee.org

- Task Force web page URL:

<http://www.ieee802.org/3/400GSG/index.html>

- Ad hoc area URL:

<http://www.ieee802.org/3/400GSG/public/adhoc/index.shtml>

Activities Since July 2013 Plenary

- IEEE 802.3 September Interim, York, UK
- Logic Ad hoc
- Applications Ad hoc
 - 01-Oct
 - 30-Oct

Sept Interim Summary

- 90 Attendees
- 14 Technical Presentations
- Summary
 - New Objective adopted – new interfaces
 - Motion: Move that the 400Gb/s Study Group adopt the following objective: “Support optional 400Gb/s Attachment Unit Interfaces for chip-to-chip and chip-to-module applications”.
 - Results (all, room count 66): Y: 57 N: 0 A: 5
 - Approved Informal communication to ITU-T SG15
 - Group recognizes need to focus on objectives
 - Other Issues: BER, Reach Objectives
- Thanks to ADVA and John Messenger

Overview of Stated Reach Needs

Presentation	100m	500m	1km	2km	10km	40km
maki_400_01a_0513	x	x				
song_400_01_0513	x					
trowbridge_400_01_0513	x	x		x	x	x
hirai_400_01_0713					x	x
issenhuth_400_01_0713		x	x	Beyond 1km		
jewell_400_01a_0713	X (200m)	x				
nicholl_400_01_0713	←—————→					
palkert_400_01_0713	x	x		x	x	x
song_400_01a_0713				x	x	
takahara_400_01_0713		x			x	x
vijn_400_01a_0713	←—————→					
wenyu_400_01_0713		x		x	x	x
palkert_400_01_0913	←—————→					
song_x_400_01_0913				x	x	x

Sept 2013 Straw Polls

Straw Polls #4 and #5

SMF “Inside Building”
Reach Objectives

	Chicago Rules	Choose One
500m	30	18
1km	13	1
2km	34	27
Undecided	11	16

Straw Polls #6 and #7

SMF “Outside
Building” Reach
Objectives

	Chicago Rules	Choose One
2km	10	4
2km < x < 10km	5	0
10km	39	34
10km < x < 40km	8	1
40km	31	11
Undecided	10	12

Sept-13 Interim Straw Poll #8 (Chicago Rules)

- I would support an objective that reads “Define a 400Gb/s PHY for operation up to at least X of MMF” wherein X is:
 - a) a distance less than 30m
 - b) 30m
 - c) a distance between 30m and 100m
 - d) 100m
 - e) a distance between 100m and 200m
 - f) 200m
 - g) a distance greater than 200m
 - h) undecided
- Results (All)
- a) 0 b) 3 c) 2 d) 25 e) 2 f) 1 g) 0 h) 42

Sept-13 Interim Straw Poll #9 (Chicago Rules)

- I would support an objective that provides 400Gb/s operation over:
 - a) at least 100m over OM-Y MMF and at least 100m over OM4
 - b) about 200m over OM-Y MMF and at least 100m over OM4
 - c) about 200m over OM-Y MMF and at least 30m over OM4
 - d) at least 200m over OM-Y MMF
 - e) at least 300m over OM-Y MMF
 - f) none of the above
 - g) Undecided
- Results (All)
- a) 8 b) 6 c) 1 d) 1 e) 1 f) 2 g) 53

Logic Ad hoc

- The 400 Gb/s Ethernet Study Group Logic Ad hoc:
 - Held 1 meeting on October 23rd
 - Previously opportunity on October 1st was cancelled due to lack of presentation requests
- Reviewed 3 presentations:
 - A 400GbE PCS Option – Mark Gustlin
 - 400GbE PCS Direct Coding Analysis - Haoyu Song
 - Error performance objective for 400GbE – Pete Anslow

Applications Ad hoc Activities

- 09-Oct Conference Call
 - Webex / Teleconference hosted by Hugh Barrass, Cisco. Thanks!
 - 4 Technical Presentations
 - Objectives to Support Cloud Scale Data Center Design, Booth / Issenhuth
 - Ethernet Deployment from an Optical Module Perspective, Murray
 - Early Market PMD Types for Core Router to Transport Interconnect, Moorwood
 - Objective Considerations: Given Today's Data Center Environment, D'Ambrosia / Law
- 30-Oct Conference Call
 - Webex / Teleconference hosted by Hugh Barrass, Cisco. Thanks!
 - 1 Technical Presentation
 - Breakout Functionality: D'Ambrosia

Goals for the meeting week

- Hear presentations (20) related to Objectives and 5 Criteria
- Develop consensus on Objectives
- Lay the ground work for the next meeting

Thank You!