

Unconfirmed Meeting Minutes: IEEE P802.3bq 40GBASE-T Task Force
and IEEE 802.3 25GBASE-T Study Group

July 13-15, 2015
Waikoloa, HI, USA
Prepared by Jon Lewis

Joint meeting of the IEEE P802.3bq 40GBASE-T Task Force and IEEE 802.3 25GBASE-T Study Group meeting convened at 1:23 PM, Monday, July 13, 2015 by David Chalupsky, 802.3bq Task Force/25GBASE-T Study Group Chair

Attendance is listed in Appendix A

ADMINISTRATIVE MATTERS

Presentation: [agenda_3bq-and-25gbtSG_01a_0715.pdf](#)

Presenter: Dave Chalupsky, Chair.

The Chair called for introductions and affiliations, the participants introduced themselves, and the Chair then proceeded with the agenda.

Mr. Lewis assumed the duties of secretary so Mr. Zimmerman could present and resolve comments as Chief Editor.

The Chair reviewed the agenda. Mr. Chalupsky turned to presentation [agenda_3bq-and-25gbtSG_01a_0715.pdf](#) and reviewed the schedule of presentations for the meeting.

Motion Approve the agenda from [agenda_3bq-and-25gbtSG_01a_0715.pdf](#)

M: Jon Lewis S: George Zimmerman
Approved by voice vote without objection (Procedural > 50%) at 1:31pm

Motion #2: Approve the minutes from the May 2015 P802.3bq, and 25GBASE-T SG joint meeting with a modification to correct the agenda title.

M: Theo Brillhart S: Bob Wagner
Approved by voice vote without objection (Procedural > 50%) at 1:33pm

The Chair then resumed the review of the agenda presentation:

- Mr. Chalupsky asked if anyone was attending from the press including those who would run a public blog on this meeting – there were no indications from the group.
- Mr. Chalupsky noted that there should be no recording or photography without permission.

Mr. Chalupsky reviewed the goals for the meeting, access to the reflector and website, and ground rules.

Mr. Chalupsky then continued review of the presentation, including the objectives for the projects, Big Ticket items for this meeting and the details on adding 25GBASE-T into the 802.3bq project.

Attendance. Mr. Chalupsky advised the group of the IEEE meeting attendance tool and procedures, including both the attendance book and the web attendance tracking tool.

IEEE Patent Policy, at **1:51 PM**, Mr. Chalupsky asked if anyone was unfamiliar with the patent policy shown in slides 0 through 4 on the patent policy from [agenda 3bq-and-25gbtSG 01a 0715.pdf](#), none responded. Mr. Chalupsky made the call for potentially essential patents at **1:52 PM**, and none responded. Mr. Chalupsky then completed the reading of slide #4.

Mr. Chalupsky then continued review of the presentation, discussing that the group had entered the “Working Group Ballot” phase where we would be primarily comment driven.

LIAISONS

The Chair moved to liaisons, and noted the Task Force had received two liaisons for 802.3bq. From TIA for this meeting. ([TR42-2015-10-111 Outgoing Liaison to IEEE 802.3bq re TIA-568-C.2-1 Draft....pdf](#)) and from IEC for this meeting ([IEC SC48B response to request for status of two SC48B projects \(IEC 60603-7-81 Ed. 1 and IEC 60603-7-82 Ed. 1\)](#))

The Chair completed review of the presentation noting the project objectives for each group which were unchanged from the prior meeting.

PRESENTATIONS

The Chair then moved to the presentations for the meeting. (Secretary’s note – where significant group discussion occurred, particularly involving future actions, a summary of any follow-on points is provided. Abstracts are given as a guide to the presentation material, where possible, these are as provided by the authors.)

Title: 802.3bq Editor’s Report ([zimmerman 3bq 01a 0715.pdf](#))
Abstract: The editor reported on the status and comments received of the draft 2.0, along with a proposed agenda for comment resolution.
Presenter: George Zimmerman, CME Consulting / Aquantia & Commscope, Chief Editor IEEE 802.3bq

Discussion:

The Chief Editor presented his report, including the present status of the draft, a summary of comments received against D 2.1.
The Editor outlined the comments by topic, and reminded participants that the comments had been posted by topic on the website, with the Editor reminding the group via reflector to review the EZ bucket, as this group was intended to be approved by a single motion.

Mr. Zimmerman presented the Proposed Comment Resolution Agenda and asked the group if there were objections or modifications to the agenda. None heard.

The editor then asked the group if anyone wished to view the EZ bucket comments on the screen; no request was made and the comments were not displayed. The Editor then asked the group that if anyone wished to remove a comment from the EZ bucket, they do so now. The following comments were requested to be removed from the EZ bucket.

Comments 99 requested to be removed from the EZ bucket by the submitter.

The Editor then presented the following motion:

Motion #3: Approve the proposed resolution of all EZ comments, marked with the EZ Topic in http://www.ieee802.org/3/bq/comments/p802.3bq_2.1_EZ_CommentID_proposed_responses.pdf excepting comment 99.

M: George Zimmerman S: Jon Lewis
Approved by voice vote without objection (Technical $\geq 75\%$) at 2:09pm

Motion #4: Move that the Task Force consider the late comments shown on slides 10 & 11 of [zimmerman_3bq_01b_0715.pdf](#) after resolving other comments

M: George Zimmerman S: Jon Lewis
Approved by voice vote without objection (Procedural $> 50\%$) at 2:17pm

The Editor reviewed a summary of the remaining topics and the comment resolution agenda.

At this time, the editor's report was concluded and comment resolution began.

Decisions during comment resolution were made by consensus, except where noted that motions were taken.

COMMENT RESOLUTION

Comment resolution began at 2:19 PM. Resolution of comments by consensus or motion is listed in the comment database. Procedural events and significant motions are below.

See comment database for motions regarding comment resolution.

The group took a short break at 3:26 PM to resume at 3:50 PM.

Meeting resumed after the break at 4:00 PM.

In connection with comments, the following presentations were heard:

Ad Hoc Report

Title: P802.3bq Receiver Common Mode Noise Rejection Ad Hoc Report
([cibula_3bq_01_0715.pdf](#))

Abstract: The presenter described the status and next steps for the ad hoc organized to investigate the receiver common mode noise rejection (aka "cable clamp") test, and develop corresponding text for 802.3bq to adopt for clause 113.5.4.3. The ad hoc had held 1 telephonic meeting since the May Task Force meeting. The meeting focused on providing changes to the annex 113A to genericize it and refine the description of the cable clamp to respond to comments.

Presenter: David Chalupsky, Intel for Pete Cibula, Intel, Chair 802.3bq RxCMNR ad hoc

Discussion: No discussion or comments.

Title: “Periodic Training Sequence Issues for 40G/2.5/5GBASE-T”
[McClellan 3bq 01 0715.pdf](#)

Abstract: This contribution details issues with the periodic training sequence in connection with comment 122.

Presenter: Brett McClellan, Marvell Semiconductor Inc.

Discussion: No discussion or comments.

Title: “Advantages of the use of the periodic training sequence” [feyh 3bq 01 0715.pdf](#)

Abstract: This contribution details advantages of the periodic training sequence, in objection to comment 122.

Presenter: German Feyh, Broadcom

Discussion: It was suggested that the stub shown on page 4 is not representative of installed cabling. Blind training isn’t blind in most implementations as most implementations do some type of testing and start from a point suggested by that testing. Startup times may be impacted.

Additional presentations not related to comments:

Title: “Category 8 Short Channel Performance Demonstration Using Multiple Sourced Prototypes of Cabling and ICM”
[moffitt 3bq 02 0715.pdf](#)

Abstract: This contribution shows the addition of the ICM to the link segment has .

Presenter: Bryan Moffitt, Commscope.

Discussion: No discussion or comments.

The Chair stated that the start time for the conclusion of P802.3bq and the 25GBASE-T Study Group would be 9:00AM Wednesday, July 15th, 2015.

The joint meeting was recessed for the day at 6:32PM, Monday, July 13, 2015.

The joint meeting was called to order and resumed at 10:04AM Wednesday July 15, 2015.

The Chair then turned the meeting over to George Zimmerman, Chief Editor, to resume comment resolution for those items deferred from Monday.

Motion #5: Instruct the editor to create Draft 2.2 for WG recirculation from Draft D2.1 and closed comments.

M: Jon Lewis S: George Zimmerman
(Technical >=75%)

Y: 41 N: 0 A: 1

MOTION PASSES at 10:34 AM

Mr. Chalupsky transitioned the meeting to discuss the PAR modifications for 25GBASE-T Study Group.

Motion #6: Adopt the modified PAR text in draft_P802_3bq_PAR_150715.pdf

M: Paul Vanderlaan S: Theo Brillhart

(Technical >=75%)

Y: 40 N: 0 A: 0

MOTION PASSES at 10:38 AM

Meeting recessed for a short break at 10:38 AM

Meeting resumed at 11:07 AM

Comment Resolution continued and concluded prior to lunch.

Meeting recessed for lunch at 11:49 AM to resume at 1:08 PM

Meeting resumed after lunch at 1:19 PM

25GBASE-T Study Group Presentations

Having concluded the business of the 802.3bq Task Force, the group focused on presentations related to the 25GBASE-T Study Group.

Title: “Size of the Category 7A Installed Base” ([maguire_25gbit_01_0715.pdf](#))

Presenter: Valerie Maguire, The Siemon Company

Discussion: Clarifications around the plugs at the end of the Cat7A channel. Discussion around the installed base and how the data was gathered.

Title: “Comparison of Cat7A / Class FA Channel and 802.3bq Link Segment Specification”

([rossbach_25gbit_01_0715a.pdf](#))

Presenter: Martin Rossbach, Nexans Cabling Solutions

Discussion: Discussion around the specifics of Cat7A and if the installed qualified base would be suitable for the 25GBASE-T link segment. It was indicated that the draft already includes support for any cable that meets the link segment specified. It was agreed that Cat 7A was good enough to meet the requirements of the link segment specified in P802.3bq and could be used for 25GBASE-T operation.

Title: “Cable addition for 25GBASE-T” ([feyh_25gbit_01a_0715.pdf](#))

Presenter: German Feyh, Broadcom

Discussion: It was clarified that the Salz SNR calculations were on bundled 6 around 1 cables.

Straw Poll #1: I would support the upper frequency limit of the link segment parameters of 802.3bq being rate scaled if we incorporate 25GBASE-T.

Y: 31 N: 0 A: 7

Straw Poll #2: I would support investigation of the use of category 7A and category 6A cabling components to support appropriately scaled IEEE P802.3bq link segments.

Y: 11 N: 12 A: 12

Break at 3:10 back at 3:30 PM

Meeting resumed after the break at 3:41 PM

Motion #7: Request 802.3 to provide an extension of the 25GBASE-T Study Group.

M: Peter Jones S: Jon Lewis

(Procedural >=50%)

Y: 36 N: 0 A: 1

MOTION PASSES at 4:28 PM

Having completed the presentations and comment resolution business for the meeting, the Chair reviewed future meeting plans.

No further motions of business were offered.

Adjournment

Motion #8: To adjourn the meeting.

M: Jon Lewis S: Ramin Shirani

MOTION PASSES by voice without opposition

The Meeting was adjourned at 4:31PM, Tuesday, May 18, 2015.

Appendix A: Attendees at the joint IEEE P802.3bq Task Force/25GBASE-T Study Group Meeting, July 13-15, 2015

Total attended:	47		Daily # attended:	38	45	39
P802.3bq TF & 25GBASE-T SG; P802.3bz July'15				7/13/15	7/14/15	7/15/15
Last Name	First Name	Employer	Affiliation	Monday	Tuesday	Wednesday
Bains	Amrik	Cisco	Cisco	X	X	
Brillhart	Theo	Fluke Electronics	Fluke Electronics	X	X	X
Carty	Clark	Cisco	Cisco	X	X	X
Cates	Ron	Marvell	Marvell		X	X
Chacon Simon	Geoffrey	HP	HP	X	X	X
Chadha	Mandeep	Microsemi	Microsemi		X	X
Chalupsky	David	Intel	Intel	X	X	X
Chang	Jacky	HP	HP		X	X
Chuang	Keng Hua	HP	HP	X	X	X
Dalmia	Kamal	Aquantia	Aquantia	X	X	X
Deborde	William	Intel	Intel		X	X
DiMinico	Christopher	MC Communications	Panduit	X	X	
Dinh	Thuyen	Pulse Electronics	Pulse Electronics	X	X	X
Donahue	Curtis	UNH - IOL	UNH - IOL	X	X	
Estes	Dave	Spirent	Spirent	X	X	X
Farjad	Ramin	Aquantia	Aquantia	X	X	X
Feyh	German	Broadcom	Broadcom	X	X	X
Flatman	Alan	LAN Technologies	LAN Technologies	X	X	X
Hammond	Bernard	TE Connectivity	TE Connectivity	X	X	X
Jimenez	Andrew	Anixter Inc.	Anixter Inc.	X	X	X
Jones	Peter	Cisco	Cisco	X	X	X
Kawatsu	Yasuaki	Hitachi-Cable	Hitachi-Cable		X	
Kim	Yong	Broadcom	Broadcom	X	X	X
Klempa	Mike	UNH-IOL	UNH-IOL	X	X	X
Kountz	Dennis	Chemours	Chemours		X	
Lackner	Hans	QoSCom Gmbh	QoSCom Gmbh	X	X	X
Lewis	Jon	Dell	Dell	X	X	X
Lo	William	Marvell	Marvell		X	X
Maguire	Valerie	Siemon	Siemon	X	X	X
McClellan	Brett	Marvell	Marvell	X	X	X
Mei	Richard	Commscope	Commscope		X	X
Moffitt	Bryan	Commscope	Commscope	X	X	X
Rabinovich	Rick	ALE	ALE		X	
Renteria	Victor	Belfuse Inc	Belfuse Inc	X	X	X
Rossbach	Martin	Nexans	Nexans	X	X	X
Sedarat	Hossein	Aquantia	Aquantia	X	X	X
Shariff	Masood	Commscope	Commscope	X		X
Shirani	Ramin	Aquantia	Aquantia	X	X	X
Souvignier	Tom	Broadcom	Broadcom	X	X	

Vaden	Sterling	Vaden Enterprises	Vaden Enterprises	X	X	X
Vanderlaan	Paul	Berk-Tek LLC	Berk-Tek LLC	X	X	X
Wagner	Bob	Panduit Corp.	Panduit Corp.	X	X	
Wahn	Hazfez	Huawei	Huawei	X		X
Wang	Roy	Hewlett-Packard	Hewlett-Packard	X	X	X
Wu	Peter	Marvell	Marvell	X	X	X
Yu	Jerome	Realtek	Realtek	X	X	X
Zimmerman	George	CME	Commscope, Aquantia	X	X	X