

Unconfirmed Meeting Minutes: IEEE 802.3 25GBASE-T Study Group
January 13-14, 2015
Atlanta, GA, USA

Prepared by George Zimmerman

IEEE 802.3 25GBASE-T Study Group meeting convened at 2:07 PM, Tuesday, January 13, 2015 by David Law, 802.3 Working Group Chair.

Attendance is listed in Appendix A

ADMINISTRATIVE MATTERS

Mr. Law appointed George Zimmerman as recording secretary for this session

Mr. Law explained that the Working Group chair appoints the study group Chair, and the study group would confirm the appointment. Mr. Law then reminded the group that he had announced his intention to appoint David Chalupsky Study Group Chair at the November Closing Plenary, and he then appointed the David Chalupsky Study Group Chair.

Motion #1: To confirm David Chalupsky as the 802.3 25GBASE-T Study Group Chair

M: Pete Cibula S: Alan Flatman

Y: 34 , N: 0 , A: 1

MOTION PASSES (>= 75%)

Mr. Law turned the meeting over to Study Group Chair David Chalupsky.

Presentation: [agenda_25GBT_01_0115.pdf](#)

Presenter: Dave Chalupsky, Chair.

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

The Chair reviewed the agenda. Mr. Chalupsky turned to presentation agenda_25GBT_01_0115.pdf and reviewed the schedule of presentations for the meeting.

Motion #2: Approve the agenda from [agenda_25GBT_01_0115.pdf](#)

M: Pete Cibula S: Peter Jones

Approved by voice vote without objection (Procedural > 50%)

The Chair then resumed the review of presentation agenda_25GBT_01_0115.pdf:

- 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, although Mr. Chalupsky himself indicated that he occasionally blogs about the state of BASE-T, but would not provide ‘blow-by-blow’ descriptions of the meeting.
- Mr. Chalupsky noted that there should be no recording or photography without permission.

Guidelines for IEEE-SA Meetings: Mr. Chalupsky read aloud the policy for study groups from agenda_25GBT_01_0115.pdf, page entitled “Guidelines for IEEE-SA Meetings” (2:32pm).

Mr. Chalupsky reviewed the goals for the meeting, access to the reflector and website, and ground rules, including the WG motion from the November plenary meeting of the 802.3 WG to establish the Study Group.

Mr. Chalupsky then continued review of the presentation, Big Ticket items for this meeting, to develop PAR, 5 Criteria, and Objectives modifications for 802.3bq to include 25GBASE-T.

LIAISONS

The Chair moved to liaisons, and noted liaisons there were none for the Study Group at this time.

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.

The Chair completed review of the presentation.

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 authors.)

Title: Technical Feasibility ([souvignier_25GBT_01_0115.pdf](#))

Abstract: The presenter described the technical feasibility of 25GBASE-T Ethernet relative to existing 10GBASE-T and planned 40GBASE-T per the specification being developed in IEEE P802.3bq, showing it was between the two. The presenter also highlighted a favorable power estimate for 30m 25GBASE-T relative to 10GBASE-T 100m solutions.

Presenter: Tom Souvignier, Broadcom

Discussion:

Title: Technical Feasibility and Power ([zimmerman_25GBT_01_0115.pdf](#))

Abstract: The presenter described the technical feasibility of 25GBASE-T Ethernet relative to existing 10GBASE-T and planned 40GBASE-T per the specification being developed in IEEE P802.3bq, showing it was between the two. The presentation provided additional information for power estimation, providing a favorable power estimate for (30m) 25GBASE-T relative to (100m) 10GBASE-T.

Presenter: George Zimmerman, CME Consulting

Discussion:

The Chair called a break at 2:53 until 3:27PM.

Title: Proposed 25G Objective, PAR, and CSD Modifications for P802.3bq ([chalupsky_25GBT_01_0115.pdf](#))

Abstract: The presenter outlined the proposed changes to the 802.3bq project documentation

Presenter: David Chalupsky, Intel, Chair IEEE P802.3bq Task Force, Chair 25GBASE-T Study Group

Discussion:

Title: Proposed PAR changes ([chalupsky_25GBT_02_0115.pdf](#))

Abstract: The presenter outlined the proposed changes to the 802.3bq project documentation

Presenter: David Chalupsky, Intel, Chair IEEE P802.3bq Task Force, Chair 25GBASE-T Study Group

Discussion: There was discussion regarding referencing drafts in process in the proposed standard. Mr. Law provided a reference to 10.5.1 Citation of a normative reference in the 2014 IEEE SA Standards Style Manual at item (i):

Sponsors shall not use unpublished draft standards as normative references unless they are dated, readily available, and retrievable. A copy shall be submitted to the IEEE-SA. If an IEEE draft is cited, the sponsor shall provide a copy of the draft to be placed on file at the IEEE-SA. Consult with IEEE-SA content publishing staff if such inclusion is necessary. If the IEEE draft that is referenced is approved prior to the publication of the document, the draft reference will be updated to reflect this change by IEEE-SA content publishing staff as part of the publication process. If the working group prefers that the draft reference remain as is, the citation shall be followed by “(this version).”

Based on this discussion, the document would be able to reference the 802.3by draft standard, and therefore, the PAR could be completed with an answer of NO to “is the standard dependent on the completion of another standard.” (question 5.3)

The presenter modified the proposed PAR modification during presentation, specifically to clarify that the 25GBASE-T and 40GBASE-T PHY specifications were separate PHYs (e.g., not requiring support of BOTH rates).

Mr. Chalupsky asked for the following straw poll:

STRAW POLL #1

**I support the P802_3bq proposed modifications from
chalupsky_25gbt_02a_0115.pdf**

Yes: 36
No: 0
A: 1

Title: Proposed CSD Changes ([chalupsky_25GBT_03_0115.pdf](#))
Abstract: The presenter outlined the proposed changes to the 802.3bq project documentation
Presenter: David Chalupsky, Intel, Chair IEEE P802.3bq Task Force, Chair 25GBASE-T Study Group
Discussion: The presenter edited the CSD during discussion.

Having completed discussion, and needing to formalize the edited PAR and CSD modifications to prepare for motions, at 4:38PM, the Chair called a recess until 9AM Wednesday morning.

Meeting reconvened at 9:15AM Wednesday, January 14, 2015.

The Chair asked for introductions and affiliations and then briefly reviewed presentation agenda_25GBT_01_0115.pdf:

- 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 briefly reviewed the goals for the meeting, access to the reflector and website, and ground rules, including the WG motion from the November plenary meeting of the 802.3 WG to establish the Study Group.

Guidelines for IEEE-SA Meetings: Mr. Chalupsky read aloud the policy for study groups from agenda_25GBT_01_0115.pdf, page entitled “Guidelines for IEEE-SA Meetings.” (9:23am).

Mr. Chalupsky then continued review of the presentation, Big Ticket items for this meeting, to develop PAR, 5 Criteria, and Objectives modifications for 802.3bq to include 25GBASE-T.

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.

DISCUSSION, MOTIONS & STRAW POLLS

Having concluded the presentations for the meeting, the Chair then moved to discussion, motions and (additional) straw polls.

The chair then reviewed that the PAR and CSD changes made the previous day had been uploaded to the website, and then began reviewing the online PAR form.

Title: [draft_P802.3bq_PAR_modification_0115.pdf](#)

Abstract: Draft of PAR modification entered into IEEE-SA online PAR tool.

Presenter: David Chalupsky, Chair IEEE 802.3 25GBASE-T Study Group.

Discussion: The presenter reviewed the completed PAR form. There were no further changes offered by the group.

Title: Proposed CSD Changes - as modified by group ([chalupsky_25gbit_03a_0115.pdf](#))

Abstract: Draft of CSD modifications reflecting modifications made the prior day

Presenter: David Chalupsky, Chair IEEE 802.3 25GBASE-T Study Group.

Discussion: There were no further changes offered by the group.

Motion #3: Move to adopt the objectives as presented in [Proposed 25G Objective, PAR, and CSD Modifications for P802.3bq](#) ([chalupsky_25gbit_01_0115.pdf](#)).

M: George Zimmerman **S:** Paul Vanderlaan

Y: 27 **N:** 0 **A:** 1 Technical ($\geq 75\%$)

MOTION PASSES

Motion #4: Move to adopt the modification to the PAR as written in [draft_P802.3bq_PAR_modification_0115.pdf](#)

M: George Zimmerman **S:** Jon Lewis

Y: 30 **N:** 0 **A:** 1 Technical ($\geq 75\%$)

MOTION PASSES

Motion #5: Move to adopt the response to the Managed Objects CSD as written in Proposed CSD Changes - as modified by group ([chalupsky_25gbit_03a_0115.pdf](#))

M: George Zimmerman **S:** Shadi AbuGhazaleh

Y: 31 **N:** 0 **A:** 1 Technical ($\geq 75\%$)

MOTION PASSES

Motion #6: Move to adopt the response to the Coexistence CSD as written in Proposed CSD Changes - as modified by group ([chalupsky_25gbit_03a_0115.pdf](#))

M: George Zimmerman **S:** Shadi AbuGhazaleh

Y: 29 **N:** 0 **A:** 1 Technical ($\geq 75\%$)

MOTION PASSES

Motion #7: Move to adopt the modification to the Broad Market Potential CSD as written in Proposed CSD Changes - as modified by group ([chalupsky_25gbt_03a_0115.pdf](#))

M: George Zimmerman S: Paul Vanderlaan

Y: 28 N: 0 A: 1 Technical (>= 75%)

MOTION PASSES

Motion #8: Move to adopt the modification to the Compatibility CSD as written in Proposed CSD Changes - as modified by group ([chalupsky_25gbt_03a_0115.pdf](#))

M: George Zimmerman S: Shadi AbuGhazaleh

Y: 30 N: 0 A: 1 Technical (>= 75%)

MOTION PASSES

Motion #9: Move to adopt the modification to the Distinct Identity CSD as written in Proposed CSD Changes - as modified by group ([chalupsky_25gbt_03a_0115.pdf](#))

M: George Zimmerman S: Theo Brillhart

Y: 31 N: 0 A: 1 Technical (>= 75%)

MOTION PASSES

Motion #10: Move to adopt the modification to the Technical Feasibility CSD as written in Proposed CSD Changes - as modified by group

([chalupsky_25gbt_03a_0115.pdf](#))

M: George Zimmerman S: Tom Souvignier

Y: 30 N: 0 A: 1 Technical (>= 75%)

MOTION PASSES

Motion #11: Move to adopt the modification to the Economic Feasibility CSD as written in Proposed CSD Changes - as modified by group

([chalupsky_25gbt_03a_0115.pdf](#))

M: George Zimmerman S: Steve Sedio

Y: 29 N: 0 A: 2 Technical (>= 75%)

MOTION PASSES

FUTURE MEETINGS

The Chair then advised the group of upcoming meetings, per the presentation [agenda_25GBT_01_0115.pdf](#).

At the time of the discussion there were 37 attendees in the room.

No further motions of business were offered.

Adjournment

Motion #12: To adjourn the meeting.

M: Shadi AbuGhazaleh S: Paul Vanderlaan

MOTION PASSES by voice without opposition

The Meeting was adjourned at 10:00AM, Wednesday, January 14, 2014.

Appendix A: Attendees at the IEEE P802.3 25G BASE-T Study Group Meeting, January 13-14, 2015

Total attended:	46		Daily # attended:	42	37
IEEE 25GBASE-T Study Group January'15				1/13/2015	1/14/2015
Last Name	First Name	Employer	Affiliation	Tues	WEDS
Abughazaleh	Shadi	Hubbell	Hubbell	x	x
Bains	Amrik	Cisco	Cisco	x	x
Belopolsky	Yakov	Bel Stewart	Bel Stewart	x	x
Bourgeois	Stephane	Belden	Belden	x	x
Brillart	Theo	Fluke Electronics	Fluke Electronics	x	x
Carlson	Steve	High Speed Design	Broadcom, Marvell, Huawei	x	
Carty	Clark	Cisco	Cisco	x	x
Cates	Ron	Marvell	Marvell	x	x
Chalupsky	David	Intel	Intel	x	x
Chang	Jacky	HP	HP	x	x
Choudhury	G. Mabud	Commscope	Commscope	x	
Chuang	Keng Hua	HP	HP	x	x
Cibula	Pete	Intel	Intel	x	x
Dalmia	Kamal	Aquantia	Aquantia	x	x
Dinh	Thuyen	Pulse Electronics	Pulse Electronics		x
Estes	Dave	Spirent	Spirent		x
Farjad	Ramin	Aquantia	Aquantia	x	x
Feyh	German	Broadcom	Broadcom	x	x
Flatman	Alan	LAN Technologies	LAN Technologies	x	x
Graba	Jim	Broadcom	Broadcom	x	
Hammond	Bernard	TE Connectivity	TE Connectivity	x	x
Hess	Dave	Cord Data	Cord Data	x	
Jimenez	Andrew	Anixter Inc.	Anixter Inc.	x	x
Jones	Peter	Cisco	Cisco	x	
Kish	Paul	Belden	Belden	x	x
Lewis	Jon	Dell	Dell	x	x
McClellan	Brett	Marvell	Marvell	x	
Mei	Richard	Commscope	Commscope	x	x
Miller	Jonas	Pulse Electronics	Pulse Electronics	x	x
Moffitt	Bryan	Commscope	Commscope	x	x
Nielsen	Allan	TE Connectivity	TE Connectivity		x
Renteria	Victor	Belfuse Inc	Belfuse Inc	x	x

Sedarat	Hossein	Aquantia	Aquantia	x	x
Sedio	Steve	Foxconn	Foxconn	x	x
Shariff	Masood	Commscope	Commscope	x	
Shrinani	Ramin	Aquantia	Aquantia	x	x
Souvignier	Tom	Broadcom	Broadcom	x	x
Sparrowhawk	Bryan	Leviton	Leviton	x	x
Vaddineni	Manos	JDSU	JDSU	x	
Vaden	Sterling	Vaden Enterprises	Vaden Enterprises	x	
Vanderlaan	Paul	Berk-Tek LLC	Berk-Tek LLC	x	x
Wagner	Bob	Panduit Corp.	Panduit Corp.	x	x
Wang	Xiaofeng	Qualcomm	Qualcomm		x
Wu	Peter	Marvell	Marvell	x	x
Yu	Jerome	Realtek	Realtek	x	x
Zimmerman	George	CME	Commscope, Aquantia	x	x