

## **P802.3by 25 Gb/s Ethernet Task Force and 50G/100G/200G Study Groups Joint Ad Hoc meeting – December 9, 2015**

Prepared by Kent Lusted

### **Proposed Agenda:**

- Approval of the Agenda
- IEEE patent policy reminder (see <http://www.ieee802.org/3/patent.html> )
- 50G & NGOATH Study Groups
  - Update on Study Groups, Mark Nowell
  - “Considerations on objectives for 50G/100G/200G Ethernet SMF PMDs”, Peter Stassar
  - “50G, 100G, 200G work partitioning”, Pete Anslow and Matt Brown
- Next meeting is 13 December 2015

Presentations posted at: <http://www.ieee802.org/3/by/public/adhoc/architecture/index.html> or <http://www.ieee802.org/3/50G/public/adhoc/archive/index.html>

Meeting began at 8:04 a.m. Pacific.

Meeting began with the agenda presentation:

[http://www.ieee802.org/3/50G/public/adhoc/archive/agenda\\_120915\\_50GE\\_NGOATH\\_adhoc-v2.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/agenda_120915_50GE_NGOATH_adhoc-v2.pdf)

Kent Lusted reviewed the Attendance information related to the ad hoc. He reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. He reminded participants to mute their lines when not speaking and reviewed the steps to unmute.

Kent Lusted showed the links to the P802.3by ad hoc page and the email reflector. Kent Lusted showed the links to the 50G and NGOATH ad hoc page and the email reflector.

Kent presented the proposed agenda and asked if there was objection as written. No one responded. The agenda was approved by the ad hoc.

Kent reminded participants of the IEEE patent policy. John D’Ambrosia noted that the pre-PAR patent policy slide link should be used for the Study Group. (see <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf>)

### **Ad hoc minutes**

The December 2 meeting minutes for joint ad hoc were posted on the website. Kent Lusted asked if there were any objections to approving the posted minutes. No one responded. Minutes approved.

## **P802.3by 25G TF Agenda Items**

*Note: The link to the P802.3by 25G Task Force architecture ad hoc website is:*

<http://www.ieee802.org/3/by/public/adhoc/architecture/index.html>

The 25G TF portion was cancelled this week.

## 50G/100G/200G Study Groups Agenda Items

Note: The links to the two Study Group ad hoc websites are:

<http://www.ieee802.org/3/50G/index.html> 50Gb/s Ethernet Study Group

<http://www.ieee802.org/3/NGOATH/index.html> Next Generation 100 Gb/s & 200Gb/s Ethernet Study Group

### Update on Study Groups

Mark Nowell

- Using ad hocs for consensus building to enable progress towards the creating the new PAR/CSD documents
- Contact Kent Lusted to request agenda time in the ad hoc.
- Reviewed tentative plans for the January interim. P802.3bs meeting on Monday, Tuesday, Wednesday morning. The P802.3by 25G meeting is Monday and Tuesday. The 50G & NGOATH Study Group meeting is Wednesday-Friday.
- Tentatively plan joint session with P802.3bs on Friday morning. It will be a P802.3bs meeting to enable motions, if necessary.

### 50G & NGOATH SG Presentation #1:

“Considerations on objectives for 50G/100G/200G Ethernet SMF PMDs”, Peter Stassar

See [http://www.ieee802.org/3/50G/public/adhoc/archive/stassar\\_120915\\_50GE\\_NGOATH\\_adhoc.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/stassar_120915_50GE_NGOATH_adhoc.pdf)

- Discussed FEC assumptions in the analysis. KP4 FEC may be necessary for both copper and SMF interfaces.
- Discussed if there will be a backward compatibility objective. There will be a challenge to properly define “backward interoperability”.
- Discussed 50G (2x25G) and the deployment of IEEE Standard and MSA in the customer infrastructure.
- John D’Ambrosia noted that the output of the Study Group is generate objectives and answer the CSDs, not technical implementation details.
- Discussed use of APDs for 40km SMF and the need to substantiate it as an objective, if it should be an objective.
- Discussed the various reaches in the presentation and the need for data to support each reach. Mark Nowell encourages Study Group participants to bring data.

Mark Nowell noted that participants can follow up with any presenter offline via email or by contacting the Study Groups Chair (Mark Nowell) or the ad hoc chair (Kent Lusted)

### 50G & NGOATH SG Presentation #2:

“50G, 100G, 200G work partitioning”, Pete Anslow and Matt Brown

See [http://www.ieee802.org/3/50G/public/adhoc/archive/anslow\\_120915\\_50GE\\_NGOATH\\_adhoc.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/anslow_120915_50GE_NGOATH_adhoc.pdf)

- Reviewed partitioning goals and the current P802.3bs adopted timeline assuming a portion is picked up by the 802.3bs task force.
- Discussed partitioning proposal part 1.
- There was a concern on 50G and 200G SMF in the new TF will open a debate on breakout scenarios. There is a dependency on SMF for the logic and C2C/C2M topics.

- There was a concern that the C2C/C2M budget in P802.3bs made assumptions that may not be desirable for the 50G copper channels. Further discussion on the copper channels and objectives is necessary.
- Discussed partitioning proposal part 2.
- John D'Ambrosia emphasized the importance of consensus building in the weeks prior to the January interim meeting
- Discussed that the need for 100G copper and optic can be fulfilled with 802.3bj and 802.3bm.
- Discussed that 100G C2C/C2M and SMF could go to either the proposed new 50G TF or the 802.3bs, depending on the assumptions made on backward compatibility and channel budgets.
- Mark Nowell summarized that this presentation outlines where the work could be done, not what work needs to be or should be done. The work to be done is determined by setting and approving objectives.
- David Law noted that the approved CFI covers all of the work areas and are within scope. If there are questions, please contact David offline.
- It was noted that MMF in this presentation is the 50Gb/s single lane version.

Mark Nowell stated that all areas need contributions to solidify the objectives. He noted there is work on-going in SMF, MMF and copper. The biggest deficiency to date is the 100G area.

John D'Ambrosia asked that the minutes for the joint meeting be sent to the P802.3bs reflector. Kent Lusted noted that he will send a link to this meeting's minutes to the P802.3bs and the P802.3by reflectors.

Mark Nowell noted that the 50G reflector is the only reflector for both the 50G and NGOATH Study Groups. See the webpage for the details.

Kent Lusted noted that the next joint ad hoc meeting will be on 16 December.

The ad hoc meeting ended at 9:38 a.m. Pacific.

## List of attendees (captured from Webex tool)

<b>Name</b>	<b>company</b>
Ali Ghiasi	Ghiasi Quantum
Amrik	cisco
Andre Szczepanek	inphi
Brett	panduit
Brian Teipen	advaoptical
Chris Roth (Molex)	molex
Dale Murray	lightcounting
Dan	aurrion
Dan Cunningham	arista
Dan Dillow	fci
david chalupsky (intel)	intel
David Law	hpe
david malicoat	hpe
David Ofelt	juniper
Ed Ulrichs	sourcephotronics
Erdem Matoglu - Amphenol	amphenol-tcs
Eric Baden (Broadcom)	broadcom
Flavio Marques	furukawa.co
Gary Nicholl	cisco
Geoffrey Chacon	hpe
Gianpiero	cisco
Greg McSorley	amphenol-highspeed
Jacky Chang	hpe
Jeff H	yahoo
Jing Fang	marvell
John D'Ambrosia	independent
John Dillard	microsemi
John Ewen	globalfoundries
John Nelson	arista
jonathan	finisar
Juan-Carlos Calderon	inphi
Justin Abbott	lumentum
Kapil Shrikhande	dell
Ken Van Orman	spirent
Kenneth Jackson	sei-device
kent lusted (intel)	intel
Kumaran Krishnasamy	broadcom

Marc Dupuis	molex
Mark	semtech
Mark Gravel	hp
Mark Gustlin	xilinx
Mark Nowell	cisco
martin white	caviumnetworks
mbrown	apm
Megha Shanbhag	te
Mike Dudek	qllogic
Nathan Tracy	te
David Ofelt	juniper
Peter Jones	cisco
Peter Stassar	huawei
Phil Sun	marvell
Piers	mellanox
Qing Xu	belden
Raj Hegde	broadcom
rakesh sambaraju	nexans
Randy k Rannow (APIC)	n/a
Rich Mellitz	intel
Rita Horner	synopsys
Rob Stone	broadcom
Ron Muir (JAE)	jae
salvatore rotolo	st
sam sambasivan	labs.att
Scott Irwin	mosys
Scott Sommers	molex
Steve Swanson	corning
Steve Trowbridge	alcatel-lucent
Tom Issenhuth	microsoft
Tom McDermott	us.fujitsu
Tom Palkert	visi
upen	cisco
Vasu	broadcom
Vipul Bhatt	inphi
Vittal	dell
Vivek Telang	broadcom
Wheling Cheng	ericsson
Xinyuan Wang	huawei
Yaniv Sabag	intel

Yasuo Hidaka	us.fujitsu
Yong Kim (Broadcom)	broadcom
Yu	huawei
Yuri Vandyshv	cisco
Zvi Rechtman	mellanox