

# 50G/100G/200G Study Groups Joint Ad Hoc meeting – May 11, 2016

Prepared by Kent Lusted

## Proposed Agenda:

- Approval of the Agenda
- IEEE patent policy reminder:
  - 50GNGOATH:  
<https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf>
- Approval of draft minutes for April 27, 2016
- 50GNGOATH Study Groups Ad Hoc
  - Study Group Update, Mark Nowell
  - “RS(544,514) FEC performance”, Pete Anslow
  - “PCS baseline proposal for 50GbE and NG 100GbE”, Gary Nicholl
  - “Towards 50 Gb/s per lane MMF baseline proposals”, Jonathan King & Jonathan Ingham

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 8:05 a.m. Pacific by Kent Lusted.

Meeting began with the agenda presentation:

[http://www.ieee802.org/3/50G/public/adhoc/archive/agenda\\_051116\\_50GE\\_NGOATH\\_adhoc.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/agenda_051116_50GE_NGOATH_adhoc.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 50G and NGOATH ad hoc page and the email reflector.

Kent Lusted 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.

## **Ad hoc minutes**

The April 27 meeting minutes for joint ad hoc are posted on the website. Request made if there was any opposition to approving the minutes. No one responded. Minutes approved.

## 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

### 50G/NGOATH Update, Mark Nowell:

- The PAR was recommended for approval by Nescom on May 3 and will complete it's Standard's Board 10-day ballot soon – after which the Study Group expects to be P802.3cd
- Task Force meeting in May will be the first chance to make decisions and adopt baseline proposals
- Contributions are needed for baseline proposals.
- Presentation requests due 13 May. Presentation submittals are due 17 May.
- Meet Monday morning to Wednesday Lunch in Whistler on the week of 23 May

Kent allocated 20 minutes for the presentation and 5 minutes for the Q&A.

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

“RS(544,514) FEC performance”, Pete Anslow

See: [http://www.ieee802.org/3/50G/public/adhoc/archive/anslow\\_051116\\_50GE\\_NGOATH\\_adhoc.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/anslow_051116_50GE_NGOATH_adhoc.pdf)

- There was a request to include the bit-mux curves and provide it for the May interim.
- Discussed the BER requirements for copper cables and backplane when the value of “a” changes. A contribution for the impact to copper cables and backplane is needed for comparison.
- Discussed the effect and allowable length of a burst error at the partner TX.

Kent allocated 20 minutes for the presentation and 5 minutes for the Q&A.

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

“PCS Baseline proposal for 50GbE and NG 100GbE”, Gary Nicholl

See: [http://www.ieee802.org/3/50G/public/adhoc/archive/nicholl\\_051116\\_50GE\\_NGOATH\\_adhoc-v2.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/nicholl_051116_50GE_NGOATH_adhoc-v2.pdf)

- There will be an updated ‘01a’ presentation with additional details and supporter.
- Ali Ghiasi noted that his support as listed was contingent upon incorporating his feedback. His feedback on 50GbE FEC was not included and therefore withdrew his support.
- Discussed the 50G and NG100G proposals. There was discussion on the 50G bit-mux solution.

### 50G & NGOATH SG Presentation #3:

“Towards 50 Gb/s per lane MMF baseline proposals”, Jonathan King & Jonathan Ingham

See: [http://www.ieee802.org/3/50G/public/adhoc/archive/king\\_051116\\_50GE\\_NGOATH\\_adhoc.pdf](http://www.ieee802.org/3/50G/public/adhoc/archive/king_051116_50GE_NGOATH_adhoc.pdf)

- It was noted that there was disagreement between the co-authors on the 100G proposal so the presentation focuses on 50G and 200G.
- The architecture diagram on slide 7 should not include the RS-FEC box since it is included in the 200G PCS proposal.
- There was a request to include the burst assumptions in the proposal, as well as future proposal for other PMDs.

The next ad hoc call will occur after the May interim meeting.

The ad hoc meeting ended at 9:44 a.m. Pacific.

List of attendees (captured from Webex tool)

Upen Kareti	cisco
Mark Nowell	cisco
Eric Baden	broadcom
will bliss	broadcom
Tongtong Wang	huawei
Kenneth Jackson	sei-device
Brandon Chen	te
Arturo Pachon	te
Andre Szczepanek	inphi
Yaniv Sabag	intel
Jonathan Ingham	foit-foxconn
Raj Hegde	broadcom
John D'Ambrosia	Futurewei
David Law	hpe
Tom McDermott	us.fujitsu
Rick Rabinovich	ixiacom
Matt Brown (APM)	apm
kent lusted (intel)	intel
salvatore rotolo	st
Peter Anslow	ciena
Jeff Slavick	broadcom
Ghani Abbas	ericsson
John Nelson	arista
Vivek Telang	broadcom
Rob Stone	broadcom
Ali Ghiasi	gmail
Qing Xu	belden
Jing Fang	marvell
Vittal Balasubramani	dell
jonathan king	finisar
John Dillard	microsemi
martin white	caviumnetworks
Gary Nicholl	cisco
Mark Gustlin	xilinx
Zvi Rechtman	mellanox
Cedrik Begin	cisco
Farzin Firoozman	yahoo
Ed Ulrichs	sourcephotonics
Rick Pimpinella	panduit

Jane Lim	cisco
david malicoat	hpe
Venu B (Marvell)	marvell
Ray Nering	cisco
Yuri Vandyshv	cisco
Chris Roth (Molex)	molex
martin langhammer	altera
Alexey Frolov	aquantia
Mark Gravel	hp
Chris Roth (Molex)	molex
A Mehta	brocade
David Ofelt	Juniper
Vasu	broadcom
Peter Stassar	huawei
Mark Kimber	semtech
Wheling Cheng	ericsson
JIM NADOLNY	samtec
Amrik Bains	cisco
Ron Muir	jae
Tao Hu	qlogic
Oded Wertheim	mellanox
magesh	broadcom
John Dillard	microsemi
david malicoat	hpe
Jose Castro	panduit
Phil Sun	credosemi
ramin.farjad	aquantia
John Ewen	globalfoundries
Peter Van Dyck	aquantia
Phong Pham	usconec
Dimitris G	apm
david malicoat	hpe
Jeff slavick	broadcom
Venu B	marvell
yizhaoping	h3c