

# Agenda and General Information

IEEE 802.3

MultiGigabit Automotive Ethernet PHY  
Study Group Ad Hoc

George Zimmerman (Ad Hoc Chair)

CME Consulting, Inc.

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# MultiGigabit Automotive Ethernet PHY SG

## Ad Hoc Communications

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- The web page and reflector are up.
- The ad hoc area files are posted at:
  - <http://www.ieee802.org/3/NGAUTO/public/adhoc/index.html>
- Reflector instructions are at:
  - <http://www.ieee802.org/3/NGAUTO/reflector.html>

# Attendance

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- Attendee names and affiliations for these ad hoc meetings will be taken from the Webex participants list.
- Please ensure that your full name and employer/affiliation are indicated correctly.
- If the Webex participants list does not correctly indicate your name and employer/affiliation, please send an e-mail to the SG and/or AdHoc chair.

# Goals for a SG

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- Develop a set of objectives for the project
- Develop responses for the CSD (Criteria for Standards Development)
- Develop a PAR
- Review presentations substantiating the above
- Lay the ground work for the next meeting

# Ground Rules

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- Based upon IEEE 802.3 Rules
  - Foundation based upon Robert's Rules of Order
  - Anyone in the room may speak
  - Anyone in the room may vote
- **RESPECT**... give it, get it
- NO product pitches
- NO corporate pitches
- NO prices!!!
  - This includes costs, ASPs, etc. no matter what the currency
- NO restrictive notices

# Participation in IEEE 802 Meetings

November 2016

IEEE Participation Requirements

All participation in IEEE 802 Working Group meetings is on an individual basis

- *Participants in the IEEE standards development individual process shall act based on their qualifications and experience.*  
([https://standards.ieee.org/develop/policies/bylaws/sb\\_bylaws.pdf](https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf) section 5.2.1)
- *IEEE 802 Working Group membership is by individual; “Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives”.*  
([http://ieee802.org/PNP/approved/IEEE\\_802\\_WG\\_PandP\\_v19.pdf](http://ieee802.org/PNP/approved/IEEE_802_WG_PandP_v19.pdf) section 4.2.1)
- You have an obligation to act and vote as an individual and not under the direction of any other individual or group. Your obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.
- You shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see [https://standards.ieee.org/develop/policies/bylaws/sb\\_bylaws.pdf](https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf) section 5.2.1.3 and [http://ieee802.org/PNP/approved/IEEE\\_802\\_WG\\_PandP\\_v19.pdf](http://ieee802.org/PNP/approved/IEEE_802_WG_PandP_v19.pdf) section 3.4.1, list item x

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

Policy: IEEE 802 Executive Committee

# Guidelines for IEEE-SA Meetings

- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
- Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
- Don't discuss specific license rates, terms, or conditions.
  - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
    - Technical considerations remain primary focus
- Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
- Don't discuss the status or substance of ongoing or threatened litigation.
- Don't be silent if inappropriate topics are discussed... do formally object.

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If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at [patcom@ieee.org](mailto:patcom@ieee.org) or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association’s Antitrust and Competition Policy” for more details.

This slide set is available  
at <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.ppt>

# The Study Group

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- Normal function is to draft a complete PAR and Five Criteria
- Provide a plenary week tutorial to the LMSC.
- Gain approval at the IEEE 802.3 WG, IEEE 802 EC, IEEE-SA NesCom and IEEE-SA Standards Board.
- SG only exists for 6 months
  - Extensions can be requested
  - Voted on by IEEE 802.3
  - Ratified by IEEE 802 EC
- Development of Objectives helps set the goals for the Task Force
- Consensus required to move forward
  
- Not a goal – choosing a solution.



# Request for Formation of Study Group (as per November 2016 Plenary Motion)

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- Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for MultiGig Automotive Ethernet PHY
  
- What do we know?
  - It's a PHY project!
  - It's more than a 1 Gigabit!
  - It's Automotive!

# Crash course on Study Group goals

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For an overview of Study Group activities, please refer to:

Overview of the Process – Wael Diab

[http://www.ieee802.org/3/400GSG/public/13\\_05/diab\\_400\\_01\\_0513.pdf](http://www.ieee802.org/3/400GSG/public/13_05/diab_400_01_0513.pdf)

Review of the 5 Criteria – Howard Frazier

[http://www.ieee802.org/3/400GSG/public/13\\_05/frazier\\_400\\_01\\_0513.pdf](http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_01_0513.pdf)

Guidelines for Project Objectives – Howard Frazier

[http://www.ieee802.org/3/400GSG/public/13\\_05/frazier\\_400\\_02\\_0513.pdf](http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_02_0513.pdf)

The following slides are adapted from these excellent presentations.  
The originals, while a little dated, remain, in spirit, correct.

(THANKS TO MARK NOWELL and the 25Gbps Study Group)

# What does the Study Group Produce?

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- PAR
  - Our “contract” with the IEEE-SA and “authorization” to develop a standard
    - Goes all the way up the hierarchy
  - Broadly focuses on what the standard is that group will work on including scope, purpose, broad timeline (not a project plan)
  - High level - to notify anyone interested as to what we’re attempting to do
- 5 Criteria (now called CSDs)
  - Broad Market Potential, Compatibility, Distinct Identity, Technical Feasibility, Economic Feasibility
    - Controlled at the 802 EC level
- Objectives
  - Our “contract” with 802.3 – controlled at the 802.3 level

# Presentations

<b>Title</b>	<b>Presenters(s)</b>	<b>Affiliation(s)</b>	<b>Approx Time</b>
Agenda	George Zimmerman, Chair, Ad Hoc	CME Consulting / BMW, Commscope, LTC, & Aquantia	7-7:15
SG Chair's Comments	Steve Carlson	High Speed Design	7:20-7:30
NGAUTO – Objectives Uses Cases + speedgrades	Helge Zinner	Continental AG	7:30-7:50
MGbps Link Segment open questions	Kirsten Matheus	BMW	7:50-8:00
NGAUTO - Objectives Uses cases, need of different speedgrades	Olaf Grau	Robert Bosch	8:00-8:20
NGAUTO – Objectives Uses Cases + speedgrades/ link length / EMC	Stefan Buntz	Daimler	8:20-8:40
Possible Objective Text	George Zimmerman	CME Consulting	8:40-8:50
Discussion & Next Steps	All		8:50-9:00

# Future Meetings

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- See: <http://www.ieee802.org/3/interims/index.html>
- Ad hoc meetings every 2 weeks, this time slot
  - Feb 15, Mar 1 (?)
- Off-cycle interim SG meeting – Feb 21,22  
Warren Michigan
- March 2017 802 Plenary
  - Vancouver, BC Canada (Hyatt Regency/Fairmont Vancouver)
  - March 12-17, 2017

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# Thank You!