

## Minutes IEEE 802.3 10SPE SG AdHoc meeting 24 OCTOBER 2016

Prepared by Peter Jones

### Proposed Agenda:

1. Agenda/Admin Peter Jones

### Presentations posted at:

<http://grouper.ieee.org/groups/802/3/10SPE/public/adhoc/index.html>

### Agenda/Admin Peter Jones:

Meeting began at 9:05am PST.

1. Reviewed the Attendance information related to the ad hoc.
2. Displayed pre-par patent slide deck, Asked if we needed to review patent policy.
  - a. No one requested review.
3. Reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes.
4. Approval of minutes for 19 October 2016
  - a. Minutes have only just been posted, not asking for approval today.
5. Presented the proposed agenda.
  - a. Approved without objection.

### Presentations/Discussion.

#### Chair's Comments George Zimmerman CME

- Coming up to deadline for presentation requests for November – Wednesday. Please send these at least to George and Jon Lewis. Even better – send them to the reflector so people can collaborate more effectively.
- We have PAR & CSD pre-submitted, we just need to close objectives that support those docs to move forward towards being a TF.
- We have the ability to add objectives later as long as they are within scope.

#### 10SPE Power Distribution Steffen Graber Pepperl+Fuchs

- “Possible Work Flow for Task Force”
  - May be really more like a “relationships within the technical areas of work”.
  - There are a lot of moving parts, how can we do this effectively?
  - What lessons can we/should we learn from PoE and also PoDL and 100/1000BASE-T1?
    - Some opinion from the call to keep the groups together because they are tightly interrelated.
    - Possible treat this like the optical groups do with sub-tracks.

- Need to make sure that we have the right people attending, places constraints on meeting planning.
  - Possibly our biggest decision we need to make right now.
  - Can leave this as one project (PHY + Power) now, and split later if we have to, would not affect when a dedicated power project could get started.
- “Powering Examples”
  - “Parameter (Ex ia/ib) Value”(IS) vs “Parameter (Ex e) Value” (non-IS)
    - Q about 48N and IS.
    - IS can’t use 48V because the voltage/current tables become non-linear.
    - Presenter showed some relevant figures and tables from IEC doc IEC 60079-11 2001. Will update presentation to identify doc source and some key references.
    - Normally trunk is not IS, just the 200m spur.

## 10SPE Power Link Segment Disturbances **Steffen Graber** **Pepperl+Fuchs**

- Overview
  - Suggestion of new Objective “Provide a PHY impulse noise tolerance of at least 50 ms.”
    - Discussion on call – if required, this would be an optional objective. Power is optional, and it’s likely that support for daisy chains (with or without power) is an additional option.
- Disturbances by Connecting Components
  - The discussion is about keeping “link” up, there is no requirement that this causes no packet drop.
  - Must be clear in objective to avoid mis-communication.
- Influence on Communication
  - Needs to restore communication service within the defined time period.
  - Need to be clear about what is needed, about how we can clearly express that in an objective.
    - Something like “Optionally keep link up over impulse noise event up to 50ms of up to xxxxx characteristics.”
    - George Z will send out strawman objective to reflector.
  - Types of noise, Impulse vs emi – need to think about types of noise event, what types exist where, does this impact other user cases. If this was a continuous occurrence, the answer would change because we would want to define the PHY to resist packet loss, as opposed to drop packets and keep link up.

Meeting closed – ~10:20 am PT

## Attendees (from Webex + emails)

| Name               | Affiliation                                   | attended 10/24 |
|--------------------|-----------------------------------------------|----------------|
| Ahmad Chini        | Broadcom                                      | Y              |
| Bernd Horrmeyer    | Phoenix Contact                               | Y              |
| Chad Jones         | Cisco                                         | Y              |
| Chen, Li-Chung     | Realtek                                       | Y              |
| Ching-Yao Su       | Realtek                                       | Y              |
| Claude Gauthier    | OmniPHY                                       | Y              |
| Daniel Wiesmayer   | DRÄXLMAIER                                    | Y              |
| David Brandt       | Rockwell Automation                           | Y              |
| David Hoglund      | Johnson Controls                              | Y              |
| Dieter Schicketanz | Consultant, Reutlingen University             | Y              |
| Geoff Thompson     | Independent                                   | Y              |
| George Zimmerman   | CME Consulting /<br>Commscope, LTC & Aquantia | Y              |
| Harald Müller      | Endress+Hauser                                | Y              |
| Heath Stewart      | Linear Technology                             | Y              |
| Helge Zinner       | Continental Corp.                             | Y              |
| Jacky Chang        | HPE                                           | Y              |
| Jean Picard        | TI                                            | Y              |
| Jens Gottron       | Siemens                                       | Y              |
| Jim Bauer          | Marvell                                       | Y              |
| Laura Schweitz     | Turck                                         | Y              |
| Ludwig Winkel      | Siemens                                       | Y              |
| Maris Graube       | Relcom Inc.                                   | Y              |
| Masood Shariff     | CommScope                                     | Y              |
| Matthias Fritsche  | HARTING Electronics GmbH                      | Y              |
| Matthias Jaenecke  | Yazaki                                        | Y              |
| Oisín Ó Cuanacháin | Analog Devices                                | Y              |
| Peter Jones        | Cisco                                         | Y              |
| Peter Wu           | Marvell                                       | Y              |
| Qing Xu            | Belden                                        | Y              |
| Steffen Grabber    | Pepperl+Fuchs                                 | Y              |
| Steve Carlson      | HSD                                           | Y              |
| Tobias Belitz      | Renesas                                       | Y              |
| Attendee count     |                                               | 32             |