

Agenda for the 100 Gb/s per lane Electrical “100GEL” Study Group ad hoc meeting, Feb. 26, 2018

Beth Kochuparambil, Cisco

100 Gb/s per Lane Electrical PHY Study Group Chair

Meeting

- Attendance
 - Attendee names and affiliations for these ad hoc meetings will be taken from the WebEx participants list.
 - If the WebEx participants list does not correctly indicate your name or we have previously misrepresented your affiliation, please send an e-mail to the chair, Beth.
- WebEx
 - Please mute your lines if you are not speaking
 - *6 to mute/unmute or click on mute button in the WebEx window
 - Noisy, unmuted lines will be muted by the WebEx organizer
 - *6 to unmute if this happens to you
 - We have a VERY full schedule today, please let presenter completely finish presentation before questions. Will use hand raising tool in WebEx to for a que for clarifying questions.
- Participants wishing to contact the presenter can contact the Chair for their contact info

100GEL Study Group ad hoc communications

- The SG web page is here:
 - <http://www.ieee802.org/3/100GEL/index.html>
- All e-mail communications are via the SG reflector
 - archive and subscription links are here:
<http://www.ieee802.org/3/100GEL/reflector.html>

Proposed agenda

- Approval of the Agenda
- Approval of Previous Ad Hoc Minutes – Feb. 12
- IEEE Patent Policy reminder:
 - <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf>
- IEEE Participation Requirements reminder

- Study Group Update, Beth (5 min)
- Channel Model Simulations for 112Gbps Backplane Applications – Geoff (25min)
- FEC Schemes for 100G Electrical Link – Phil (20min)
- Using Chiplets to Lower Package Loss – Brian (20min)
- 100GEL C2M Channel Estimate – Jane (15min) *clarifying questions only
- 2m Passive Copper Cable Feasibility at 112G – Alex (15min) *clarifying questions only
- TBD/Budget Discussion (15min) β the tabled discussion from the above two presentations
 - Slides posted in “Ad Hoc Area” - <http://www.ieee802.org/3/100GEL/index.html>

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) 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 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”. (subclause 4.2.1 “Establishment”, of the IEEE 802 LMSC Working Group Policies and Procedures)**
- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant’s obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**
- **Participants 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 section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 “Chair”, 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.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: <http://www.ieee802.org/devdocs.shtml>)

Logistics for March Plenary

- **Wednesday 10:30am-6pm & Thursday 8am-Noon**
- Goals of the March meeting:
 - Fill in TBDs in Objectives
 - Gain approval of Objectives (WG)
 - Gain approval of PAR & CSD responses (WG and EC)
- Request for on-time presentations are past due.
- Presentations are due by 5pm PST Wednesday, Feb. 28th.
- Late presentations can/should still be submitted, but will be subject to available time on the agenda and study group approval.

Study Group Update

- <http://www.ieee802.org/3/100GEL/index.html>

IEEE 802.3 100 Gb/s per Lane Electrical Study Group

The IEEE 802 LMSC Executive Committee has chartered a Study Group under the IEEE 802.3 Ethernet Working Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for "100 Gb/s per Lane Electrical Interfaces and Electrical PHYs".

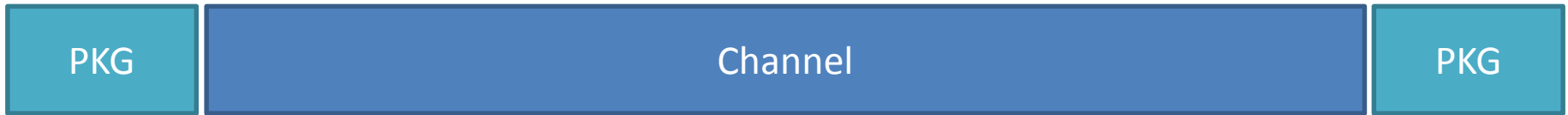
- Draft project documents
 - [PAR](#)
 - [Criteria for Standards Development](#)
 - [Objectives](#)

- BUT several objectives have TBDs:
 - Define a single-lane 100 Gb/s PHY for operation over electrical backplanes supporting an insertion loss \leq **TBD** dB at **TBD** GHz.
 - Define a single-lane 100 Gb/s PHY for operation over twin-axial copper cables with lengths up to at least **TBD** m.

Study Group Update

What a PHY can do with current KP BER budget?

35/36dB

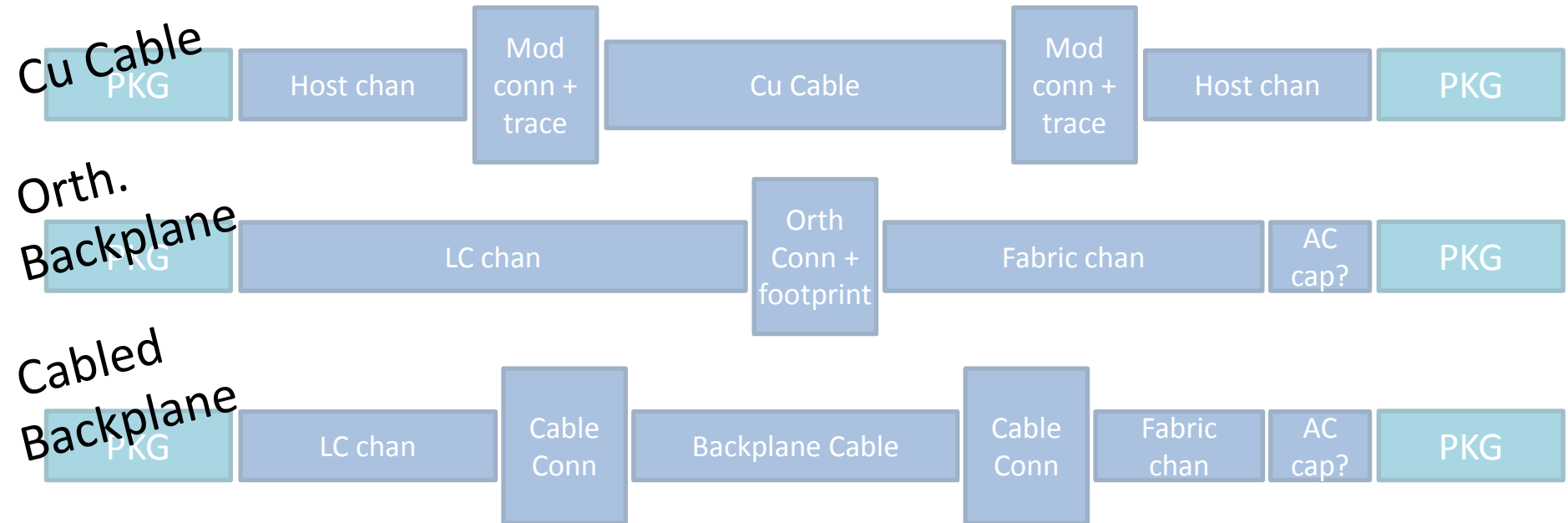
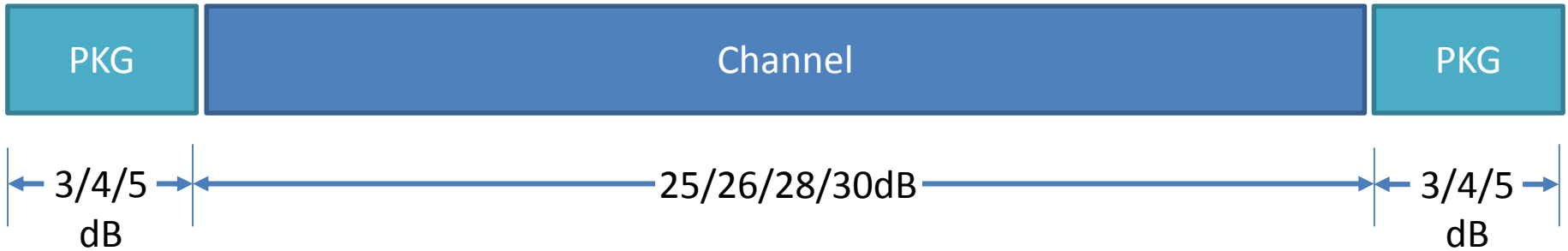


3/4/5
dB

25/26/28/30dB

3/4/5
dB

Study Group Update



TBD/Budget Discussion

