Minutes P802.3bz Architecture AdHoc meeting July 7th 2015

Prepared by Peter Jones

Proposed Agenda:

1. Agenda/Admin   Peter Jones

Presentations posted at:

http://grouper.ieee.org/groups/802/3/NGEBASET/public/archadhoc/index.html

Agenda/Admin Peter Jones:

Meeting began at 9:06pst

1. Reviewed the Attendance information related to the ad hoc.
2. Asked if we needed to review patent policy, no one requested review.
3. Reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes.
4. Asked for corrections of draft minutes 6/23 and 6/30 or approval
   a. Both minutes approved without objection.
5. Presented the proposed agenda.
   a. Added a presentation from Chris Diminico.
   b. Brett McClellan indicates his presentation only need ~15 minutes.

Presentations/Discussion.

Cable Qualification for 2.5G and 5GBASE-T – Hossein Sedarat, George Zimmerman

- Many responses to questions asked during this section came from the call participants, not just the presenter(s).
- Q about measurements, can they be taken from existing field instruments? A – Presenter and other participants believe so with sufficient post-processing. Similar issues exist elsewhere (e.g. ANSI DSL standard). This approach is different to ACMC (55.7.3.3 Alien crosstalk margin computation) because of the mixed cross talk environment, but that's not really a problem.
   o Net/Net – expect that we can use the same HW for recording measurements (basic data), and use algorithms to define the results based on local (or later) processing to derive Salz SNR numbers.
- Q – Effect on draft? A – Editor outlines two relevant strawman sections of draft as of today. If this approach is accepted, remove "limit lines" section(s), and use this presentation approach to fill in ACMC section of the draft, which is probably simpler than we were heading.
- Q – If we have no limit lines, does this create a problem of not being able to bound issues? A – If a case was going to fail a limit line, it will fail the matching calculation.
- Q – What should be measured, and what should be computed, one cable or a cable plant? A – Want to qualify the cable plant (at least one bundle). Follow up – how to measure the alien cross talk? A- Use existing measurements, but post process differently.

- Q – Do we need access to all endpoints in the bundle (tricky for active installed base cable plant in building)? A – May be an issue, but this presentation just proposes measurement primitives and post processing. Follow up – can we provide any guidance based on an individual cable (to ease the qualification burden). R – If we create limit lines it looks like we are re-defining existing cable specs (not something we want to do).
- Q – Is there going to be a recommendation to qualify before deployment? R – Depends, if you want to qualify, this gives us a path.
- Q - Do we need a different approach for new buildings vs existing? R - Do not want to define new cable types, so no new limit lines above existing specs for Cat5e/6. Guidance for new installations and low risk is CAT6a (where the existing specs address the needs).

EEE timing – Brett McClellan

- Summary
  - 10GBASE-T EEE development started in 2008 and interoperability started in 2012 with systems starting to ship last year
  - Baseline proposal : scale 10GBASE-T EEE parameters with baud rate to avoid interoperability problems
  - Work in ad hoc to determine if changes are needed
  - Presenter will submit comments against D0.1 as per this presentation.

- Questions:
  - Q - Differs from graba_EEEParameters802d3bz20150630.pdf in Sleep timing? R - Yes, based on existing 10GBASE-T timing.
  - Q - Quiet times for 2.5G will be 4 times longer than 10GBASE-T? R - Yes, but we have margin for timing drift.
  - Further work can be done in the ad hoc to determine if changes are necessary.
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802.3bz Link Segment Considerations – Chris DiMinico

- Q – When looking at cat5e above 100Mhz, does this imply a new cable name/spec? R – No, this is just defining Link Segment Definition that meets 802.3bz objectives. F1 – how do we explain to the outside world that only knows cat5e? R1 – can't rename cable that exists today. We will define what we need to run on, in terms of performance that we see based on existing definitions for cable and installation practice.
- Q – Qualification using Salz SNR, would qualifying a subset of links in a bundle extend to the bundle as a whole? R – Maybe not, this is highly dependent on cable/pair alignment within the bundle. More work to do here (not a surprise).
- Net/Net – we need to firm up this work (and Hossein's) before we can get really solid on what needs to get done in the real world. Need to fix some of the variables (even if we come back and update later), trying to solve for all possible conditions doesn't make sense.

802.3bz Editors comments – George Zimmerman

- Very few (if any) comments so far (one commenter so far).
- Deadline is Wednesday July 8th, 11:59pm AOE.

- Focus on technical comments, editorials already filed against shared material (e.g. overview) from 802.3bq will be ported across.
- The earlier the better to enable thoughtful ordering and responding to comments, but better late than missing.
- Q – what if objective out of July? R – If we do well, get proposals for major holes in July, close major issues in September, and shoot for WG ballot in November.
- Follow up on plan to get to standard.
  - Net/Net – get draft as complete as possible as soon as possible.
  - July should authorize D1.0. If that's fairly clean, authorize D1.1 in September, and look at WG ballot in November.
  - July needs to close on the list of major outstanding technical issues, and drive these to closure probably using the Arch AdHoc as a venue.

Other Discussion/Observations:

- Arch Ad Hoc will resume after July in the same timeslot. May take a week's break (chair on PTO), but we can figure that out in Hawaii.

Meeting closed – 10:40 PST

Attendees (from Webex + emails)

Name	Affiliation	Attended 7/7
Amrik Bains	Cisco	y
Brett McClellan	Marvell	y
Bryan Moffitt	Commscope	y
Ching-Yao Su	Realtek	y
Chris Diminico	MC Communications	y
David Chalupsky	Intel	y
David Estes	Spirent	y
Dieter Schicketanz	Leoni Kerpen/ University of Reutlingen	y
Duane Remein	Huawei	y
Geoffrey Chacon	HP	y
George Zimmerman	CME - Commscope, Aquantia, Linear tech	y
German Feyh	Broadcom	y
Hossein Sedarat	Aquantia	y
Jacky Chang	HP	y
Jerome-Yu	Realtek	y
Jim Graba	Broadcom	y
Kamal Dalmia	Aquantia	y
Keng Hua Chuang	HP	y
Mark Gravel	HP	y
Masood Shariff	Commscope	y
Mike Good	Berk-Tek, LLC	y
Paul Kish	Belden	y
Peter Jones	Cisco	y
Ramin Farjad	Aquantia	y
Ramin Shirani	Aquantia	y
Rick Rabinovich	ALE	y
Ron Tellas	Panduit	y
Sterling Vaden	Vaden Enterprises	y
Thuyen Dinh	Pulse	y
Yong Kim	Broadcom	y