IEEE P802.3av Task Force Meeting Minutes Dallas, Texas, USA November 11-13, 2008

Recorded by Alan M. Brown, Enablence Technologies

Tuesday, November 11, 2008

Meeting started at 9:07. At this time, there are 29 Task Force members in the room.

Participants introduced themselves and stated their affiliation.

Alan Brown is taking these meeting minutes. In these notes, TF = this task force.

Reviewed Bylaws and Rules. Chair emphasized to TF the importance of accurately disclosing affiliation.

Patent policy was reviewed (four patent slides). Call for patents at 9:18. One response was received. PMC Sierra holds a potential patent on a proposed start-of-packet alignment method. A comment was received that referenced this patent. Later TF will decide whether to add this comment to database, as it arrived after the deadline.

Reviewed other guidelines for TF meeting, including statements that meetings shall be conducted in compliance with antitrust and competition rules.

Chair discussed where we are in the standardization process. He further noted that according to our project schedule, this meeting is the last opportunity for technical changes, or we will miss sponsor ballot in January.

Chair reminded TF of our ground rules.

Chair mentioned the reflector, URL, and private area password. Currently, there are 405 subscribers on our reflector.

TF officers were reviewed.

TF project timeline was reviewed.

Motion #1: Approve minutes of September 2008 meeting as recorded in *3av_0809_minutes_unapproved.pdf* Post the approved minutes on the TF website as *3av_0809_minutes_approved.pdf* Moved – Duane Remein Seconded – Marek Hajduczenia Procedural vote, thus requires 50% At 9:33, motion passed by voice vote without opposition.

There are 296 new comments and 14 unsatisfied from previous meeting.

Received two liaison letters – one from ITU-T SG15 and one from SCTE. See slide 20 of *3av_0811_agenda.pdf*. It was determined that no response is required for ITU-T SG15 letter. For SCTE, it appears that a courtesy response would be appropriate.

Reviewed proposed schedule for this meeting.

| Motion #2: |
|--------------------------------------------------------------|
| Approve the agenda for November 2008 meeting as presented in |
| 3av_0811_agenda.pdf on slides 21-23 |
| Moved – Jeff Mandin |
| Seconded – Jim Farmer |
| Procedural vote, thus requires 50% |
| At 9:42, motion passed by voice vote without opposition. |

Electronic Attendance Tool is mandatory for IEEE 802.3. Also, this task force will use paper attendance doc.

Chair gave info about Sponsor Ballot. See slide 26 of *3av_0811_agenda.pdf*. He stated that TF members will not be automatically added and thus must specifically add their names if they wish to participate. Invitation to join the ballot group is open through Nov. 20.

Future meeting dates and venues. See slide 27 of *3av_0811_agenda.pdf*. Next two are:

- Jan 12-16 New Orleans, LA USA
- Mar 9-12 Hyatt Regency Vancouver, Canada

The following comment was received after the deadline:

Comment Type: T

Comment: Given the existence of essential patent claims for the mechanism of start-ofpacket alignment at the ONU, the task force should reevaluate the merits of having this function in the draft. Suggested Remedy: Remove the mechanism of start-of-packet alignment from the draft.

There were no objections from TF to add this comment to database as #2787 for consideration at the November 2008 meeting.

At 9:59, TF began comment resolution process for Clause 75.

Break at 10:40, resumed at 11:00.

11:04 began discussion of comment #2663 (and several related comments) about wavelength selection of 1590 or 1577 for PR(X)10/20.

Post-deadline presentation "Wavelength Issues in the Downstream Direction" was accepted by TF without any objections (*3av_0811_farmer_1.pdf*).

Presentation "Reducing the PMD Types of Downstream" (3av_0811_tajima_1.pdf).

It was noted that this presentation was predicated on decision for 1577 nm, which is still under discussion. With no objections from the TF, the consideration of the second presentation was deferred until the wavelength plan comment resolution.

Straw poll #1

- 1) I prefer PR10, PR20, and PR30 all to operate at 1577+/- 3 nm (as in D2.1)
- 2) I prefer PR10 and PR20 to operate at 1590 +/-10 nm and PR30 to operate at 1577 +-3 nm (as in D2.0)
- 3) I prefer PR10 and PR20 to operate at 1590 +/-3 nm and PR30 to operate at 1577 +/- 3 nm.
- 4) I prefer something else.

Vote for one only.

1) =16

- 2) =8
- 3) =7
- 4) =2

Break at 12:07; resumed at 1:38.

Straw poll #2

- 1) I prefer PR10, PR20, and PR30 all to operate at 1577 nm (as in D2.1)
- 2) I prefer PR10 and PR20 to operate at 1590 nm and PR30 to operate at 1577 nm
- 3) I prefer PR10, PR20, and PR30 all to operate at 1590 nm

Chicago rules, you can vote for more than one

1) = 22

2) =14

3) =11

37 total voters

At 14:14 the TF resumed discussions on wavelength.

Straw poll #3

- 1) I oppose PR10, PR20, and PR30 all to operate at 1577 nm (as in D2.1)
- 2) I oppose PR10 and PR20 to operate at 1590 nm and PR30 to operate at 1577 nm
- 3) I oppose PR10, PR20, and PR30 all to operate at 1590 nm

Chicago rules, you can vote for more than one

1) =12

2) =18

3) = 20

36 total voters (Chair did not vote)

Straw poll #4

In choosing wavelength, I am most concerned with:

- 1) OLT laser cost
- 2) ONT filter cost
- 3) Coexistence with 1550 nm RF overlay
- 4) Coexistence with OTDR

Chicago rules, you can vote for more than one

1) =8

- 2) =18
- 3) =21

4) =12

Chair noted that there appears to be two camps relating to wavelength selection

- for 1577 only
- for 1577/1590 or 1590 only

Straw poll #5

- 1) Form ad hoc to resolve wavelength plan issue
- 2) Close wavelength plan comments now

Vote for one only.

1) =20

2) =0

Co-chairs for ad hoc are from the different camps: Jim Farmer and Ken-Ichi Suzuki.

At 14:40 moved on to resolve other comments.

Post-deadline presentation "Recommendation of lower minimum extinction ratio for 10GBASE-PR-U" was allowed by TF without any objections (*3av_0811_tsuji_2.pdf*).

Post-deadline presentation "6dB Extinction Ratio 6dB Extinction Ratio for 10GBASE for 10GBASE-PR PR-U" was allowed by TF without any objections (*3av_0811_hamano_2.pdf*).

Break at 15:32, resumed at 15:45.

At 15:54, moved into comment resolution process for Annexes to 75. At 16:15, moved into comment resolution process for Clause 76.

Post-deadline proposal for new text for the FEC Encoder section was allowed by TF without any objections (*3av_0811_hirth_1.pdf*).

Break at 18:20; resumed at 18:36.

Chair stated that because comment discussion is taking significantly longer than expected and the TF running out of time, he is implementing "opt-in procedure" for determining which comments are to be discussed. The chair is distributing a spreadsheet of comments. Each of TF members is to review each comment, and indicate in the spreadsheet if he/she agrees or disagrees with the proposed resolution. A comment with at least one member disagreeing with the proposed resolution will be brought to TF discussion.

Chair made these announcements:

- Maintenance group motion at 3 PM tomorrow about GDMO during our break.
- Start tomorrow 08:30 AM.
- Arrangements for wavelength plan ad hoc tonight

Tuesday recessed at 20:16.

Wednesday, November 12, 2008

Meeting started at 8:25. Resumed comment resolution.

Straw poll #6

- 1) The three corner cases should be fixed as suggested on slides 6-8 and 13-15 of *3av_0811_kramer_2.pdf*.
- 2) The delay variability due to the three corner cases should be considered a part of expected transmission overhead. No changes to state diagrams should be made.
- 3) Abstain

Vote for one only

1) =17

2) =0

3) = 18

Post-deadline supplement to comment 2762 was allowed by TF without any objections (*3av_0811_kozaki_3.pdf*).

At 11:36, resumed wavelength plan discussion with a report from ad hoc chartered on Tuesday, November 11, 2008. In summary, both camps seem to understand each other's arguments, but their positions have not changed.

Straw poll #7
If a single wavelength is chosen, I can accept this wavelength to be:

1) 1577 +/-3 nm
2) 158x +/- 3 nm

Vote for one only

1) =18
2) =14

Chair stated that we should proceed with vote on comment #2663. Vote will be recorded in comment database. A request was made for a roll call vote. Chair has requested a delay of the vote until after lunch, so he can prepare a spreadsheet with the TF members to expedite taking the vote. .

Break at 12:15; resumed at 1:30.

The roll call vote is taken and the results are recorded in file $3av_0811_2663_roll_call.pdf$. Yes=18, no=10, abstain=2, present=31 (chair did not vote). . Did not get 75% to approve the response (to reject comment), thus the comment remain open for now.

Motion #3: The Task Force agrees that a single wavelength band should be used for all power budgets. Moved – Frank Effenberger Seconded – Marek Hajduczenia Technical vote, thus requires 75% For: 27 Against: 4 Abstain: 3 At 13:56, motion passed.

Correction, we needed to specify downstream.

Motion #4: Amend Motion #3 to read: The Task Force agrees that a single downstream wavelength band should be used for all power budgets. Moved – Frank Effenberger Seconded – Marek Hajduczenia Technical vote, thus requires 75% For: 29 Against: 1 Abstain: 5 At 14:00, motion passed.

With this motion passed, the TF returned to a previously-deferred consideration of PMD consolidation.

Presentation "Reducing the PMD Types of Downstream" is given again (*3av_0811_tajima_1.pdf*). In the following discussion it was observed that this proposal does not reduce the number of PMD types (5).

Straw poll #8

I would like to reduce the number of transmitter types for downstream by:

- 1) Combining PR10 and PR30 to a single transmitter while keeping PR10 and PR20 receivers the same.
- 2) Combining PR10 and PR30 to a single transmitter and make PR20 and PR30 receivers the same.
- 3) Keep Transmitters and Receivers as-is.

Vote for one only

- 1) =13
- 2) =16
- 3) =3

Motion #5: (relevant to comment #2737) Accept combining PR10 and PR30 at the OLT. Develop proposal for necessary adjustments to the ONU Rx. Moved – Frank Effenberger Seconded – Duane Remein Technical vote, thus requires 75% For: 32 Against: 0 Abstain: 3 At 14:55, motion passed.

Break at 14:56; resumed at 15:05.

A comment was offered from the floor:.

CommentType: TR

Comment: ONU Idle Deletion state diagram per Figure 76-10 can be significantly simplified by removing Start of Packet alignment mechanism without substantial performance degradation (at most 0.07% per *3av_0705_kramer_1.pdf*).

SuggestedRemedy: Introduce changes to Clause 76 per *3av_0811_hajduczenia_6.pdf*. Page 1 presents elements of Figure 76-10 which can be removed, page 2 presents updated Figure 76-10, remaining pages list editorial changes to the draft necessary to satisfy this comment.

TF allowed this post-deadline comment with no objections. The comment was added to the database as comment #2788 along with a supplemental file *3av_0811_hajduczenia_6.pdf*.

Break at 17:17; resumed at 17:42.

The TF proceeded with the wavelength plan discussion.

Straw poll #9 I can not accept a downstream wavelength range of: 1) +/- 2 nm 2) +/-2.5 nm

- 3) +/-3 nm
- 4) +/-4 nm
- 5) +/-5 nm

Chicago rules, you can vote for more than one

- 1) =10
- 2) =7
- 3) =1
- 4) =15
- 5) =17

Motion #6: (applicable to comment #2663) The downstream wavelength range should be 1575 – 1580 nm. Moved – Frank Effenberger Seconded – Duane Remein Technical vote, thus requires 75% For: 23 Against: 1 Abstain: 9 At 18:15, motion passed.

Resumed comment resolution at 18:32.

Wednesday recessed at 19:25.

Thursday, November 13, 2008

Meeting started at 8:30. Resumed comment resolution.

Returned to discuss comment #2788. Glen Kramer recused himself for the duration of this discussion. The chairmanship has passed to Duane Remein.

Further discussion and votes on comment 2788 (refer to comment database *3av_0811_comments_d2_1_accepted.pdf*).

Comment #2788 was resolved. Chair was returned to Glen Kramer.

Chair reminded the TF to review all comments currently targeted for bulk processing, and bring to group's attention any comments with objectionable or unclear proposed response. These comments are to be discussed individually.

Break at 10:15; resumed at 10:45.

Discussion on draft response to SCTE. Also includes updated table 75-1 to be attached to the letter.

Motion #7: Approve the liaison response to SCTE IPS WG5 as presented in *3av_0811_SCTE_IPS_response.pdf*. Moved – Lowell Lamb Seconded – Jim Farmer Technical vote, thus requires 75% At 11:06, motion passed by voice vote without opposition.

Announcement about 10G-EPON Plugfest from Ethernet Alliance. Discuss the interest and timing for a plugfest and interoperability demo. Chair noted that unless the plugfest participation is open to EA non-members, such presentation cannot be discussed at the IEEE meeting.

Remaining comments proposed for bulk processing are posted in *3av_0811_comments_d2_1_consensus.pdf*. Chair made the last call for list of comments for individual review. No responses were noted.

Chair reviewed proposed timeline for 2nd recirculation: 11/13/08 End of plenary 11/24/08 Editors publish Draft 2.1.5 11/30/08 Comments due on Draft 2.1.5 about implementation errors only

- 12/3/08 Editors publish Draft 2.2
- 12/3/08 2nd Recirculation Ballot opens
- 12/18/08 Comments on Draft 2.2 due
- 12/18/08 2nd Recirculation Ballot closes
- 1/5/09 D2.2 proposed responses posted
- 1/12/09 Interim meeting in New Orleans

Motion #8:

The Task Forces accepts the proposed comment resolutions for all comments recorded in *3av_0811_comments_D2_1_consensus.pdf*.

In the event of a conflict between comment resolutions, the editors are to give precedence to comments individually discussed at the meeting.

Moved - Marek Hajduczenia

Seconded – Duane Remein

Technical vote, thus requires 75%

For: 35

Against: 0

Abstain: 0

At 11:42, motion passed.

Motion #9:

Produce draft D2.2 by incorporating all closed comment responses, as recorded in *3av_0811_comments_D2_1_accepted.pdf*, into a base draft D2.1, and conduct recirculation ballot on D2.2. Moved – Duane Remein Seconded – Marek Hajduczenia Technical vote, thus requires 75% At 11:45, motion passed by voice vote without opposition.

Discussion on requirements for getting a conditional approval to initiate sponsor ballot. At the suggestion of 802.3 chair, the task force has reviewed procedure 19 of IEEE 802 Policies and Procedures (<u>http://standards.ieee.org/board/aud/LMSC.pdf</u>).

Motion #10:

Request that the 802.3 WG seek authorization under procedure 19 of the LMSC P&P to conduct a sponsor ballot on P802.3av pending successful completion of the WG ballot process. Moved –Jeff Mandin Seconded –Jim Farmer Technical vote, thus requires 75% For: 33 Against: 0 Abstain: 0 At 11:57, motion passed.

Motion #11:

Motion to request that the 802.3 WG authorize the 802.3av Task Force to respond to comments received during sponsor ballot and conduct recirculation ballots as required. Moved – Marek Hajduczenia Seconded – Lowell Lamb

At 12:08, after further discussion, the motion was withdrawn).

Motion #12:

Motion to adjorn. Moved – Lowell Lamb Seconded – Frank Chang Technical vote, thus requires 75% For: 33 Against: 0 Abstain: 0 A motion to adjourn is not debatable. At 12:19, motion was passed.

Meeting adjourned at 12:19.

| Name | Affiliation | Attendance | | |
|-------------------|------------------------|-------------------------|---------------------------|--------------------------|
| | | Tuesday, 11 Nov 2008 | Wednesday, 12 Nov 2008 | Thursday, 13 Nov 2008 |
| Akira Agata | KDDI R&D Labs | x | x | x |
| Denis Beaudoin | Texas Instruments | x | | x |
| Haim Ben Amram | PMC Sierra | x | x | |
| Alan Brown | Enablence Technologies | x | x | x |
| Martin Carroll | Verizon | x | | |
| Frank Chang | Vitesse | | | x |
| Fumio Daido | Sumitomo Electric | x | x | х |
| Frank Effenberger | Huawei | x | x | x |
| Jim Farmer | Enablence Technologies | x | x | x |
| Hao Feng | Eudyna Devices | x | x | х |
| Bob Frazier | Ericsson | x | | |
| Sameer Gupta | ANUE Systems | x | x | x |
| Marek Hajduczenia | ZTE | x | x | x |
| Hiroshi Hamano | Fujitsu Labs | x | x | x |

Meeting Attendance

| Kengo Hirano | NEC | x | x | x |
|-------------------|---------------------------------------|---|---|---|
| Ryan Hirth | Teknovus, Inc. | x | x | x |
| Hiroki Ikeda | Hitachi | x | x | x |
| Yoshihiro Ishida | Kawasaki Microelectronics | X | x | x |
| Mitsunobu Kimura | Hitachi Communications Tech. | x | x | x |
| Seiji Kozaki | Mitsubishi Electric | X | x | x |
| Glen Kramer | Teknovus, Inc. | x | x | X |
| Yasuyuki Kuroda | OF Networks | X | x | x |
| Toshihiko Kusano | PMC Sierra | x | x | X |
| Lowell Lamb | Teknovus, Inc. | X | x | x |
| Raymond Leung | Huawei | x | x | X |
| Rick Li | Teknovus | x | | |
| Rujian Lin | Shanghai Luster Teraband Photonics | x | x | x |
| Jeff Mandin | PMC Sierra | x | x | x |
| Tatsuro Moritsugu | Teknovus Japan K.K. | x | x | x |
| Takeshi Nagahori | NEC | x | x | x |
| Vijay Pathak | Kawasaki Microelectronics | x | x | X |
| Duane Remein | Alacatel-Lucent | x | x | x |
| Siddharth Sheth | Netlogic Microsystems | | x | |
| Ken-Ichi Suzuki | NTT | X | x | X |
| Naoki Suzuki | Mitsubishi Electric | x | x | X |
| Akio Tajima | NEC | х | x | X |
| Seigo Takahashi | NEC Corporation | x | x | X |
| Motoyuki Takizawa | Fujitsu Telecom Networks | X | x | x |
| Akihiro Tsuji | Mistubishi Electric | | | x |
| Shinji Tsuji | Sumitomo Electric | X | x | x |
| Amarildo Viera | Motorola | X | x | x |
| Emil Yan | ZTE | | | x |