

Unconfirmed Meeting Minutes: IEEE P802.3bp 1000BASE-T1 Task Force  
March 9-10, 2015  
Berlin

Prepared by Brett McClellan

IEEE P802.3bp 1000BASE-T1 Task Force meeting convened at 01:00 PM, Monday, March 9, 2015 by Steven B. Carlson, 802.3bp Task Force Chair.

Attendance is listed in Appendix A

**ADMINISTRATIVE MATTERS**

**Presentation:** [http://www.ieee802.org/3/bp/public/mar15/agenda\\_3bp\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/agenda_3bp_0315.pdf)

**Presenter:** Steven B. Carlson, Chair.

Appointment of Recording Secretary – Brett McClellan, Marvell  
The Chair called for introductions and affiliations, and participants introduced themselves.  
The Chair reviewed the agenda.

**Motion #1:** Move to accept the agenda.

**M:** Mehmet Tazebay **S:** Thomas Hogenmueller  
**Approved by voice vote without objection (Procedural > 50%)**

**Motion #2:** Approve the minutes from the September 2014 meeting  
([http://www.ieee802.org/3/bp/public/feb15/minutesu\\_3bp\\_0215.pdf](http://www.ieee802.org/3/bp/public/feb15/minutesu_3bp_0215.pdf) )

**M:** Thomas Hogenmueller **S:** Mehmet Tazebay  
**Approved by voice vote without objection (Procedural > 50%)**

Task Force Decorum slide was shown. Chair asked if persons from the press are in the room: No press in the room recognized.

The Chair reviewed the goals for the meeting, access to the reflector and website, and ground rules.  
Attendance: Chair advised the group of the IEEE meeting attendance tool and procedures, including both the attendance sheet and the web attendance tracking tool.

IEEE Patent Policy: At 1:15PM the Chair asked if everyone in the room saw the patent slides in the opening plenary. The response was yes. Chair made the call for potentially essential patents at 1:16 AM. Call was answered and information will be provided to chair.

The Chair then continued review of the presentation, including overview of the IEEE standards organization and the standards development process.

The Chair presented action items for this meeting

The Chair invited Bob Grow to present at 1:27 PM

**Title:** Common problem for 100BASE-T1, 1000BASE-T1 and 1000BASE-RH  
( [http://www.ieee802.org/3/bp/public/mar15/grow\\_3bp\\_02\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/grow_3bp_02_0315.pdf) )

**Abstract:** 100BASE-T1, 1000BASE-T1 and 1000BASE-RH all have a conflict by specifying both MII/GMII and the use of Clause 45 registers but 802.3 includes statements that both MII and GMII include use of the Clause 22 management. Bob presented possible solutions.

**Presenter:** Bob Grow, RMG Consulting

**Discussion:** There was discussion about whether making the needed changes in the Maintenance revision will delay the Revision process.

**Title:** DRAFT Proposed Changes, Clause 22,33,34,35  
([http://www.ieee802.org/3/bp/public/mar15/grow\\_3bp\\_01\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/grow_3bp_01_0315.pdf) )  
**Abstract:** Proposed text for the suggested resolution.  
**Presenter:** Bob Grow, RMG Consulting  
**Discussion:** no questions

### Liaison letter responses

TR-42 Liaison to IEEE 802.3 Working Group  
[http://ieee802.org/3/minutes/mar15/incoming/TR42-2015-02-051b\\_to\\_IEEE\\_802d3.pdf](http://ieee802.org/3/minutes/mar15/incoming/TR42-2015-02-051b_to_IEEE_802d3.pdf)  
The Chair presented the proposed response letter.

**Motion #3:** 802.3bp task forces accepts the draft IEEE\_802d3\_to\_tr42\_0315.doc as the response to tr42-2015-02-051b\_2\_ieee\_802\_d3.pdf.

**M:** Brett McClellan     **S:** Thomas Hogenmueller  
Approved by voice vote without objection (Procedural > 50%)

ISO/IEC JTC 1/SC 25 to IEEE 802.3 on MICE classification  
[http://ieee802.org/3/minutes/mar15/incoming/SC25\\_N2404\\_to\\_IEEE802d3\\_on\\_MICE\\_classification.pdf](http://ieee802.org/3/minutes/mar15/incoming/SC25_N2404_to_IEEE802d3_on_MICE_classification.pdf)

**Motion #4:** Move that 802.3bp grant the chair editorial license to respond to 25n2404\_LiaisonRep\_toIEEE802.3onMICEclassification.pdf

**M:** Thomas Hogenmueller     **S:** Brett McClellan  
Approved by voice vote without objection (Procedural > 50%)

### PRESENTATIONS

The Chair then moved to the presentations for the meeting.

**Title:** 1000BASE-T1 Registers Proposed Text  
([http://www.ieee802.org/3/bp/public/mar15/Lo\\_McClellan\\_3bp\\_01a\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/Lo_McClellan_3bp_01a_0315.pdf) )  
**Abstract:** Proposed text for Clause 45 registers addressing comments 288, 286, 289, 290, 292, 293, and 307.  
**Presenter:** William Lo, Marvell  
**Discussion:** no questions

**Title:** Synchronization State Machine Modification  
([http://www.ieee802.org/3/bp/public/mar15/Lo\\_3bp\\_01\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/Lo_3bp_01_0315.pdf) )  
**Abstract:** Proposed changes to the PHY Link Synchronization state machine to enable link between devices that support auto-negotiation and devices that do not.  
**Presenter:** William Lo, Marvell  
**Discussion:** There was concern that the state machine appears complicated. Agreed to work offline on an updated proposal.

**Title:** Proposed PCS Text for tx\_mode=SEND\_S  
([http://www.ieee802.org/3/bp/public/mar15/tu\\_3bp\\_01\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/tu_3bp_01_0315.pdf) )  
**Abstract:** Proposed text to define SEND\_S signal generation in the PCS addressing comment 306.  
**Presenter:** Mike Tu, Broadcom  
**Discussion:** There was discussion whether the Link Synchronization functions should reside in the PMA/PCS or as a separate unit in parallel to auto-negotiation.

Break for ad hoc started at 3:30. Task force reconvened at 3:54.

**Title:** Proposed Text and Figures for Clause 97.1  
([http://www.ieee802.org/3/bp/public/mar15/regev\\_3bp\\_01\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/regev_3bp_01_0315.pdf) )  
**Abstract:** Proposed text and block diagram for front matter addressing comments 256 and 298.  
**Presenter:** Alon Regev, Ixia  
**Discussion:** .

**Title:** Updated TX PSD Figure 97-28  
([http://www.ieee802.org/3/bp/public/mar15/chini\\_3bp\\_01\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/chini_3bp_01_0315.pdf) )  
**Abstract:** Proposed change to figure 97-28 addressing comment 196. Changed start of mask from 20 to 10MHz matching the MDI RL spec.  
**Presenter:** Ahmad Chini, Broadcom  
**Discussion:**

**Title:** Proposed baseline texts for 1000BASE-T1 PMD sub clauses  
([http://www.ieee802.org/3/bp/public/mar15/chini\\_3bp\\_2a\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/chini_3bp_2a_0315.pdf) )  
**Abstract:** Proposed text for PMD sub clauses including electrical limits. .  
**Presenter:** Ahmad Chini, Broadcom  
**Discussion:** Ahmad asked the task force to review this proposal and provide feedback. The text will be submitted as a comment on draft 1.4.

#### **MEETING RECESSED TO RESUME AT 8AM TUESDAY**

#### **THE MEETING RECONVENED TUESDAY MARCH 10, 2015 AT 8:00 AM**

Editor's report [http://www.ieee802.org/3/bp/public/mar15/8023bp\\_D13\\_report.pdf](http://www.ieee802.org/3/bp/public/mar15/8023bp_D13_report.pdf)  
editor recommended reviewing comments that were flagged by task force members and approving the rest in bulk.

#### **EDITOR'S REPORT**

**Presentation:** [http://www.ieee802.org/3/bp/public/mar15/8023bp\\_D13\\_report.pdf](http://www.ieee802.org/3/bp/public/mar15/8023bp_D13_report.pdf)  
**Presenter:** Marek Hajduczenia, Editor.  
**Abstract:** Editor recommended reviewing comments that were flagged by task force members and approving the rest in bulk.

Editor began comment resolution  
End of comment resolution at 11:25 AM

The Chair stated we plan to request to go to WG ballot in July and presented slides from The Road to WG Ballot ([http://www.ieee802.org/3/bp/public/mar15/agenda\\_3bp\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/agenda_3bp_0315.pdf) )

Chair reviewed and updated action item list from the February minutes.  
([http://www.ieee802.org/3/bp/public/feb15/minutesu\\_3bp\\_0215.pdf](http://www.ieee802.org/3/bp/public/feb15/minutesu_3bp_0215.pdf) )

**Motion 5** The IEEE P802.3bp 1000BASE-T1 Task Force accept the comment resolutions to D1.3 as detailed in [http://www.ieee802.org/3/bp/comments/8023bp\\_D13\\_approved.pdf](http://www.ieee802.org/3/bp/comments/8023bp_D13_approved.pdf) along with the results of motions accepted at the March 2015 Task Force meeting and charter the editor to produce D1.4 for review and comment.

**M: W. Lo**      **S: M Chadha**

No discussion

**Passed by acclamation 11:44 AM    MOTION PASSES**

Chair noted that the next Interim meeting is in Pittsburg the week of May 18

## **LIAISONS**

**Title:** P802.3bu PoDL Report  
([http://www.ieee802.org/3/bp/public/mar15/dwelley\\_3bp\\_01\\_0315.pdf](http://www.ieee802.org/3/bp/public/mar15/dwelley_3bp_01_0315.pdf) )

**Abstract:** Updates to PoDL Clause: 100BASE-T1 low frequency RL spec change, new classification table, new MPS scheme. Draft is now feature complete.

**Presenter:** Dave Dwelley, Linear Technology

**Discussion:** .

## **ADJOURNMENT**

**Motion #6:** Move to adjourn the meeting.

**M: Sasha Babenko S: Mehmet Tazebay**

**MOTION PASSES by voice without opposition**

The Meeting was adjourned at 9:40 AM, Thursday, November 6, 2014.

P802.3 bp Task Force Sign-In Sheet

March 2015

| Name                | Company                      | Affiliation          | Mon  | Tue   |  |
|---------------------|------------------------------|----------------------|------|-------|--|
| STEVE CARLSON       | HSD                          | BRCM, MARVELL, BOSCH | SBC  | SBC   |  |
| Bob Groul           | RMG Consulty                 | KDPIF                | RG   |       |  |
| Burkhard Triess     | ETAS GmbH                    | ETAS GmbH            | BT   |       |  |
| Thomas Hogenmüller  | Robert Bosch GmbH            | Robert Bosch GmbH    | TH   |       |  |
| MIKE CHORLTON       | BRAND-REX LTD                | BRAND-REX LTD.       | MC   | MC    |  |
| William Lo          | MARUBU                       | MARUBU               | WJ   | WJ    |  |
| Brett McClellan     | Marvell                      | Marvell              | BB   | BB    |  |
| Michael Hilyner     | TE connectivity              | TE connectivity      | MH   | MH    |  |
| Bert Bergner        | TE Connectivity              | TE Connectivity      | BB   | BB    |  |
| Mike Tu             | Broadcom                     | Broadcom             | MT   | MT    |  |
| Ahmad Chini         | Broadcom                     | Broadcom             | Ach. | A.ch. |  |
| Thomas Miller       | Rosenberger                  | Rosenberger          | TM   |       |  |
| Kirsten Matheus     | BMW                          | BMW                  | KM   | KM    |  |
| Natalie Wienckowski | GM                           | GM                   | NW   | NW    |  |
| Peter Wu            | Marvell                      | Marvell              | PW   | PW    |  |
| MOHAMMAD SABOORE    | PULSE <sup>ELECTRONICS</sup> | PULSE ELECTRONICS    | MS   |       |  |
| DAVE KESS           | CORD DATA                    | CORD DATA            | DK   | DK    |  |
| Will Bliss          | broadcom                     | scree                | WB   |       |  |
| German Feigh        | Broadcom                     | Broadcom             | GF   |       |  |
| Bryan Moffitt       | CommScope                    | CommScope            | BM   | BM    |  |
| Matthias Fritsche   | HARTING                      | HARTING              | MF   | MF    |  |
| Sebastian Herten    | Airbus                       | Airbus               | SH   |       |  |
| Stefan Schneele     | Airbus                       | Airbus               | SS   |       |  |
| Sasha Babenko       | Molex                        | Molex                | SB   | SB    |  |
| Jürgen Herrle       | Audi                         | Audi                 | JH   | JH    |  |

P802.3 Task Force Sign-In Sheet

March 2015

| Name                    | Company           | Affiliation    | Mon          | Tue          |
|-------------------------|-------------------|----------------|--------------|--------------|
| Mandup Chedda           | VTSS              | VTSS           | <del>M</del> | <del>T</del> |
| RAINER PÖTNERER         | LEONI             | LEONI          | R            |              |
| Mathias Schrap          | Audi AG           | Audi / AEU     | M. Schrap    | M. Schrap    |
| HENRY MUYSHONDT         | MICROCHIP         | MICROCHIP      | #H           |              |
| Baruch Bublil           | Cadence           | Cadence        | B            | B            |
| Jerome Yu               | Realtek           | Realtek        | Yu           |              |
| Benson Huang            | Realtek           | Realtek        | lw           |              |
| YANUS BELOPOLSKY        | BEL STEWART       | BEL            | YB           |              |
| Victor Rantaria         | Bal Magnetic      | Bal Magnetics  | VR           |              |
| Chris Mash              | Marvell           | Marvell        | cm           | cm           |
| Alex Tan                | Marvell           | Marvell        | AT           |              |
| VIJAYA CEEKALA          | Texas Instruments | TI             | C            | C            |
| Curtis Donahue          | UNH-IOL           | UNH-IOL        | CKD          | CKD          |
| Antony Joseph           | NXP               | NXP            | AJ           | AJ           |
| Bz Shen                 | Broadcom          | Broadcom       | BZS          | BZS          |
| Alon Regu               | IXIA              | IXIA           | AR           | AR           |
| Mehmet Tazebay          | Broadcom          | Broadcom       | M            | M            |
| Marek Hajduk            | BAN               | BAN            |              | Hajduk       |
| <del>XXXXXXXXXXXX</del> |                   |                |              |              |
| James Malkemus          | General Cable     | General Cable  |              | JM           |
| Yasuaki Kawatsu         | Hitachi Metals    | Hitachi Metals |              | Y.K.         |
| German Feyh             | Broadcom          | Broadcom       |              | GF           |
|                         |                   |                |              |              |
|                         |                   |                |              |              |
|                         |                   |                |              |              |