Comments responses for P802.3bv D1.1

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Summary

- Grand total of received comments: 480

- TR: 82

- T: 52

- ER: 62

- E: 284

Comments categorization - higher to lower priority

- OAM side-channel protocol and registers - bucket

- Clause 45 registers, except OAM - bucket

- EEE and the PMD service interface - bucket

- MPD based on EAF specification in PMD - bucket

- Adaptive THP protocol - bucket

- Interface of PCS to PMD

- Clause 30

- Other T and TR comments

- Comments on PICS

- T comments on POF cabling (Yuki)

- Other relevant ER comments

- Motions

OAM side-channel protocol and registers

- Description of clause 114.4 is not clear, and lacks consistency.

- The correspondence of status bits values and the status of the outstanding OAM messages, which is included in this clause, should be included in clause 45, as it is useful for the usage of the OAM channel, but is not needed for the implementation.

- Inconsistency in C/45 registers

- 79 comments:
  - 305, 98, 1, 38, 2, 99, 100, 39, 101, 3, 102, 40, 4, 5, 41, 6, 68, 42, 43, 172, 7, 103, 104, 8, 9, 144, 48, 71, 69, 105, 132, 106, 70, 107, 112, 10, 108, 44, 45, 109, 46, 110, 47, 111, 145, 146, 436, 56, 306, 181, 247, 119, 138, 133, 236, 235, 237, 240, 241, 238, 239, 248, 150, 149, 152, 147, 153, 148, 120, 121, 122, 57, 123, 58, 134, 59, 60, 139, 346

- All comments above are resolved by the remedy provided in comment #305.

- New text for sub-clause 114.4 and for OAM registers in clause 45 attached to comment #305: "ortiz_gepof_c45_114_proposal_v1.0.docx".

- All the proposed responses that resolve the comments above are collected within a preview of sub-clause 114.4, "P8023bv_D1p1_OAM_comments_preview", that is attached

Clause 45, except OAM registers

- Comments received on Clause 45, not included the ones related to OAM protocol

- 78 comments:
  - 350, 429, 430, 431, 251, 22, 124, 432, 283, 257, 386, 258, 249, 125, 284, 250, 312, 403, 285, 402, 252, 286, 23, 26, 140 , 24, 287, 313, 288, 25, 61, 363, 27, 289, 253, 62, 404, 28, 244, 405, 63, 369, 370, 185, 371, 66, 372, 242, 406, 30, 292, 141, 293, 364, 184, 29, 290, 365, 366, 367, 291, 368, 64, 407, 243, 294, 295, 126, 65, 254, 408, 296, 373, 127, 255, 256, 67, 374

- All the proposed responses that resolve the comments above are collected within a preview of clause 45, "P8023bv_D1p1_clause45_comments_ preview", that is attached

- This preview also includes proposed solution for OAM registers

EEE and the PMD service interface

- Affected clauses: 114, 78, 115

- The specification of PCS depends on the maximum transition times (t_{on} and t_{off}) of the PMD receive function for EEE implementation.

  - "perezaranda_GEPOF_1_0715" is provided as attachment and contains the rational behind of the comments and suggested remedies

- PMD_TXPWR.request(OFF) implies no light from PMD TX. It is independent of AOP_{OFF} specification at TP2. There is no a minimal power requirement

- PMD service interface should also include a primitive to inhibit the signal detect circuitry in order to avoid wrong operation of that circuitry when PHY is operating in LPI mode (the average optical power at TP3 is strongly reduced).

  - Inhibition should be asserted as a function of the link status.

  - Similar issue is addressed in D1.1 C/115 by means of a timer in the PMD. Because PMD receiver is going to be typically implemented in a pure analog circuit w/o clock, it is more feasible that signal detect inhibition being provided from PCS and not self-managed.

- 32 comments:

  - 361, 380, 381, 450, 382, 383, 384, 279, 344, 385, 409, 390, 395, 391, 392, 393, 394, 453, 347, 435, 434, 309, 396, 348, 397, 438, 398, 439, 399, 310, 400, 410

- All the proposed responses to comments above are collected within a preview of clause 114, 78, 115, "P8023bv_D1p1_LPI_comments_preview", that is attached

MPD based on EAF specification in PMD

- 5 comments received:

  - 460, 466, 464, 401, 465,

- See attachments:

  - "IEEE802.3bv_1000Base-RH_EAF_results"

  - "perezaranda_GEPOF_4_0715"

Adaptive THP protocol

- Sub-clause affected: 114.3.2.2

- Protocol for adaptive THP is not clear: THP equalization is described as a set of 2 filters, FFF and FBF, the first implemented in the receiver and the second in the transmitter

- FFF is implementation dependent and THP protocol specification does not require of it for consistency ➤ eliminate FFF, providing clear specification

- Linearization is up to the implementer, provided that transmission of S2 pilot allows to receiver to implement that. It should be stated clear.

- The THP REQ state diagram requires modifications for consistency: it is not clear in D1.1 the events that trigger modifications of PHD fields and sate variables

- 28 comments:
  - 423, 94, 270, 271, 95, 340, 341, 445, 342, 446, 272, 273, 378, 274, 447, 424, 448, 169, 275, 83, 276, 96, 425, 277, 360, 97, 170, 426

- See attachment "perezaranda_GEPOF_5a_0715"

Interface PCS to PMD

- Errors in equations and some editorial issues

- 4 comments:

    - 387, 72, 280, 84

- See attachment "perezaranda_GEPOF_3a_0715"

Clause 30

- Lack of aMediaAvailable primitive

- PHY identification is not representative and does not follow convention

- 3 comments:

  - 362, 345, 427

Other T and TR comments

- These comments should be addressed one by one (51):

  - 473, 259, 76, 442, 260, 77, 410, 478, 411, 78, 307, 412, 135, 261, 262, 299, 413, 142, 301, 375, 73, 74, 143, 75, 79, 414, 415, 80, 388, 81, 82, 376, 417, 419, 416, 377, 136, 420, 418, 421, 422, 269, 379, 389, 281, 480, 479, 437, 178, 463, 440

Comments on PICS

- 472, 474

- Bob Grow's presentation

T comments on POF cabling

- See attachment "perezaranda_GEPOF_6_0715"

Other relevant ER comments

- These comments should be addressed one by one

    - 351, 130, 353, 358, 359, 343