Motions and Straw Polls

IEEE P802.3cg 10 Mbps Single-Pair Ethernet Task Force

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Salt Lake City – May 2019

Motion #1

- **Motion #1:   Move to approve the agenda as shown in <u>agenda_3cg_01a_0319.pdf</u>.**

- **M:**

- **S: Approved by voice without opposition (Procedural > 50%)**

- **Motion Passes**

Motion #2

- **<u>Motion #2:</u>** **Move to approve minutes of IEEE P802.3cg 10 Mbps Single Pair Ethernet Task Force from March 2019 with the following change:**

- **M:**

- **S: Approved by voice without opposition (Procedural > 50%)**

- **Motion Passes**

Motion #3

- **Move to consider 1 comment (i-430) submitted after the P802.3cg draft 3.0 SA ballot deadline, included with Editor's proposed resolutions**
- **M: Valerie Maguire**
- **S: Peter Jones**
- **(Technical >= 75%)**
- **Motion Passes by voice without opposition**

Motion #4

- **Accept the resolutions to all P802.3cg d3p0 comments marked with the Topic "EZ" and posted as, "EZ Bucket" comments with proposed resolutions sorted by Comment ID, excluding comments i-20, i-68, i-72, i-73, i-74, i-78, i-80, i-121, i-125, i-137, i-141, i-146, i-152, i-162, i-243, i-251, i-326, i-359, i-361, i-362, i-366, and i-422.**

- **M: Valerie Maguire S: Bob Voss**

- **(Technical >= 75%)**

- **Motion Passes by voice without objection**

Motion #5

- **Accept the resolutions to all P802.3cg d3p0 comments marked with the Topic "EZ" and posted as, "EZ Bucket" comments with proposed resolutions sorted by Comment ID, excluding comments i-8, i-207, i-208, i-263, i-274, i-288, i-289, i-312, and i-343.**

- **M: Valerie Maguire S: Stefan Graber**

- **(Technical >= 75%)**

- **Motion Passes by voice without objection**

Motion #6

- Motion: Move to accept the response for comment i-46 as:

REJECT.

According to IEEE Standards style, 'may' can be replaced by 'is/are allowed'. The text "may be used" would therefore be understood as "are allowed to be used", which does not convey that these "have to be used" as the commenter suggests.

Further, the additional text that the connectors meet IEC 63171 would levy new requirements on the MDI connector without justification.

(Technical >= 75%)

M: Jon Lewis   S: Masood Shariff

Y:29   N:1   A:4

MOTION PASSES

Motion #7

- **Motion #7: Move to accept the following response to comment i-196:**

  ACCEPT IN PRINCIPLE

  Replace, "Connectors meeting the requirements of IEC 63171-1 or IEC 61076-3-125 may be used as the mechanical interface to the balanced cabling."

  With, "Connectors meeting the requirements of IEC 63171-1 may be used as the mechanical interface to the balanced cabling in environments meeting the E1 and E2 electromagnetic classifications specified in Table 146-7. Connectors meeting the requirements of IEC 63171-6 may be used as the mechanical interface to the balanced cabling in environments meeting the E3 electromagnetic classifications specified in Table 146-7."

  Editor's implementation note: The 1, 2, and 3 in E1, E2, and E3 are subscript.

- **M: Masood Shariff   S: Valerie Maguire**

(Technical >=75%)

Y:16   N: 5   A: 16

MOTION PASSES

Motion #8

- **Motion #8: Move to accept the above proposed reject response to comment i-27:**
- **M: Chad Jones   S: Valerie Maguire**
- **Proposed reject response is on the next slide.**

- **(Technical >=75%)**
- **Y: 27 N: 4   A: 8**
- **MOTION PASSES**

Motion #8 Proposed Reject Response

REJECT.

The CRG disagrees with the commenter. The specification of PLCA is appropriately placed in the physical layer and carries out the operations delegated to the physical layer in the 802.3 architecture, providing mapping of PLS primitives to signalling for the PHY, and aligning the MAC data with the needs of the PHY. Nodes implementing the PLCA RS are interoperable on the same mixing segment with nodes without the PLCA RS implemented or enabled. The functions are located in the physical layer according to the definitions in ISO 7894-1:1994, which states that the physical layer provides "functional and procedural means to activate, maintain, and de-activate physical-connections for bit transmission between data-link-entities." (7.7.2), and that "functions may be provided by the (N)-layer to enhance the facilities offered to, and the quality of service seen by the (N+1)-entities over those which are offered to the (N)-layer by the (N-1)-layer" (5.3.3.1.2). The PLCA RS conforms to the Physical layer service specifications in IEEE 802.3 by interfacing with the MAC at the existing PLS_CARRIER, PLS_DATA_VALID, and PLS_SIGNAL primitives and providing the information necessary for the local MAC sublayer entity to perform media access functions. (IEEE Std 802.3-2018 6.2.3). The augmentation of the physical layer is consistent with prior augmentation of these primitives in IEEE Std 802.3 over its lifetime, but particularly the last 20 years. For further information, please see http://www.ieee802.org/3/cg/public/adhoc/brandt_020619_3cg_01a_adhoc.pdf

Motion #9

- **Accept the text above as the response to comment i-265 without the text in angle brackets, as described by straw poll #3 choice B.**
- **M: Peter Jones   S: Phil Brownlee**
- **(Technical >=75%)**
- **Y: 21   N: 2   A:5**
- **Motion Passes**

Motion #9 – Referenced Response for comment i-265

ACCEPT IN PRINCIPLE.

Change "This clause specifies the optional Physical Layer Collision Avoidance (PLCA) capabilities. PLCA is defined for half-duplex mode of operation only. The PLCA RS is specified for operation with the PHY defined in Clause 147 (10BASE-T1S). PLCA is designed to work in conjunction with CSMA/CD and can be dynamically enabled or disabled via management interface."

to

"This clause specifies a reconciliation sublayer to provide optional Physical Layer Collision Avoidance (PLCA) capabilities among participating stations. The PLCA RS is specified for operation with Clause 147 (10BASE-T1S) PHYs operating in half-duplex multidrop mode. PLCA can be dynamically enabled or disabled via management interface.

When enabled, the PLCA RS aligns data from the MAC with transmission opportunities of the physical layer and maps the physical layer signals to PLS primitives towards the MAC. The use of PLCA-enabled physical layers in CSMA/CD half-duplex shared-medium networks provides enhanced performance relative to CSMA/CD without PLCA. PLCA-enabled nodes can coexist with nodes without PLCA enabled on the same mixing segment, all using 802.3 CSMA/CD."

Motion #10

- **Resolve comment i-270 with the proposed reject response above:**
- **M: Peter Jones**
- **S: Tim Baggett**
- **(Technical >=75%)**
- **Y: 20   N: 0   A: 10**
- **Motion Passes**

Motion #10 – Proposed Reject Response for comment i-270

REJECT.

The CRG disagrees with the commenter's description of layering and the proper placement of PLCA in the layering model. PLCA performs the functions delegated by the 802.3 layer model to the physical layer - carrier sense and collision detection. Commenter seems to posit an implementation which is not described in the amendment, where the PLCA sublayer interfaces to the MAC via an MII. (a "top MII" per the commenter), whereas PLCA maintains the layering and communicates to the MAC via the primitives PLS_CARRIER and PLS_SIGNAL defined in IEEE Std 802.3, and communicates with the remainder of the physical layer through the MII interface. For more detail on how PLCA relates to OSI layering please see http://www.ieee802.org/3/cg/public/adhoc/brandt_020619_3cg_01a_adhoc.pdf.

Additionally, the fact that PLCA-enabled half-duplex CSMA/CD stations may operate with and coexist with non-PLCA enabled half-duplex CSMA/CD stations on the same mixing segment is evidence that the PLCA RS is located beneath the CSMA/CD MAC and not a new MAC function in itself. See http://www.ieee802.org/3/cg/public/Jan2019/Tutorial_cg_0119_final.pdf and http://www.ieee802.org/3/cg/public/Sept2018/beruto_3cg_mixing_PLCA_with_non_PLCA_enabled_nodes_r1.2.pdf

Motion #11

- Move to grant the Task Force editors license to editorially conform the responses to RevCom guidelines
- M: James Gilb
- S: Steffen Graber
- (Technical >= 75%)
- Motion passes by voice without objection
- (room count = 15)

Motion #12

- **Move to instruct the Task Force editors to generate draft 3.1 from draft 3.0 and the closed comments, and conduct a 15-day first SA Recirculation ballot.**

- **M: David Brandt**

- **S: Brian Franchuk**

- **(Technical >= 75%)**

- **Motion Passes by voice without opposition**

- **(Room count = 15)**

Motion #13

- Adjourn the meeting.
- M: Piergiorgio Beruto
- S: Steffen Graber
- (Procedural > 50%)
- Motion Passes by voice

Straw Polls

Straw Poll #1

- Would you support removing the (3) proposed 42V to 50V classes in stewart_3cg_01_0519_v2?

- Yes: 30

- No: 1

Straw Poll #2:

- Comment i-196 (to get direction, separate action will resolve comment):
- I support the following response: (Chicago rules)
- A: ACCEPT the commenter's remedy
- B: REJECT with explanatory text and liaison per the editor's published proposed response.
- C: ACCEPT IN PRINCIPLE with the proposed response:
  – Align the text for the two example connector types with the guidance provided by TIA and ISO/IEC (e.g.,, IEC 63171-1 for E1 and E2 per Table 146-7 and IEC 61076-3-125 for E3 per Table 146-7).
  – A: 10
  – B: 8
  – C: 21

Straw Poll #3(pick one)

- A: I am happy with an ACCEPT IN PRINCIPLE with the text above in angle brackets

- B: I am happy with an ACCEPT IN PRINICPLE with the text above without the text in angle brackets

- C: I am unhappy with either A or B.

- A: 1   B: 9   C: 2

- Note: For referenced text see comment i-265 or Motion #9.

Future Meetings

- July 2019 Plenary
  - Vienna, Austria
  - July 15-18

  Y: 25

  N: 9

  Maybe: 8

- Sept 2019 Interim
  - Indianapolis, IN, USA
  - September 9-13

  Y: 22

  N: 2

  Maybe:20

Thank You!