# PAR/CSD Comments

IEEE 802.3

Greater than 10 Mb/s Long-Reach Single-Pair Ethernet Study Group

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# SG Adopted Objectives, PAR, CSDs

- https://www.ieee802.org/3/GT10MSPE/Objectives_11102021_SGadopted.pdf
- https://www.ieee802.org/3/GT10MSPE/P802.3dg.pdf
- https://www.ieee802.org/3/GT10MSPE/CSD_3GT10M_01_11102021_out.pdf

# Comments - Nescom

1. In the title, insert non-breaking space between "100" and "Mb/s".
   - Response: Accept

2a. In 5.2b, who is the entity that specifies?
   - Replace "Specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer (PHY) specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors."
   - With "This standard [specifies/provides/adds/describes] modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer (PHY) specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors."
   - Response: Thank you for your comment. I would note that item 5.2b is 'Scope of the project' while item 5.2a is 'Scope of the complete standard'. As a result, I suggest that item 5.2b be changed to read 'This project will specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer (PHY) specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors.'.

# Comments - Nescom

2b. 5.2b should begin with "This project specifies [...]" because future tense is prohibited in the scope, see 5) of https://standards.ieee.org/about/sasb/nescom/conv/

- Response: I believe that the use of future tense is only with respect to the document scope statement provided in item 5.2a. The reason for this is the text in item 5.2a will be published in the document, the item 5.2.a help starts 'The Scope should appear as it will in the draft standard.'. I believe that this is confirmed by NesCom convention 5 as its title is 'Document Scope and Document Purpose' and references IEEE SA Standards Style Manual subclause 12.2.3 'Scope' which starts 'The scope of the standard shall explain in statements of fact what is covered in the standard ...'.
- I therefore don't believe the use of future tense applies to the project scope provided in item 5.3a as this text is not the document scope, is not published in the standard and is only provided for amendment and corrigendum PARs. The help text for item 5.2.b reads 'State what the Amendment is changing or adding.'.

# Comments - Nescom

3. In 5.2.a, is "Physical Layer entities (PHY)" a definition? In 5.2.b, is it re-defined?

- Response: Thank you for this comment. The correct expansion for the abbreviation 'PHY' is 'Physical Layer entity' as found in the IEEE Std 802.3 scope statement in item 5.2.a. As a result, the text '... Physical Layer (PHY) specifications ...' in item 5.3.b is not the correct use of the abbreviation 'PHY' and therefore the text '... Physical Layer (PHY) specifications ...' in item 5.3.b should be changed to read '... Physical Layer specifications ...'. I will ask the NesCom administrator to make this change.

# Comments - Nescom

4. In 5.2.a, change "media access control (MAC)" to "Media Access Control (MAC)" to make it consistent.
   - Response: Thank you for this comment. The text in item 5.2.a is from the published IEEE Std 802.3 scope statement, so I believe the capitalisation of 'media access control' is correct. I understand that the reason for this capitalisation is that 'media access control', and for that matter 'management information base', are both common nouns in the first sentence of the scope statement (i.e., '... a ... media access control ... and management information base'). In the following sentence 'Carrier Sense Multiple Access with Collision Detection (CSMA/CD) MAC' is a proper noun and is therefore capitalised (i.e., 'The Carrier Sense Multiple ...'). I will be the first to admit that capitalisation rules are not one of my strong points, so I did confirm my above understand with a member of the IEEE-SA professional editor team.

All NesCom responses approved by Study Group without objection 3/16/2022 (54 on the call)

# Comments from 802.1

- PAR: 5.2.b Scope of the project:
  - Distinct identity is not justified in the scope of the PAR. The scope is lacking the distinguishing characteristic of length. How does this differ from 100BASE-T1? Suggest the following additions (or similar) to the scope:
    - Specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer (PHY) specifications and management parameters for operation, and associated optional provision of power using a single balanced pair of conductors longer than 40m.
  - We understand scope is restricted to single pair. We don't understand the maximum distance. Is the intent purely to bound the scope by stating minimum distance?
- Suggested Response:
  - It is the 802 CSD that places a constraint on IEEE 802.3 as far as distinct identity. The CSDs state an ability to reach greater than 40m under distinct identity. Further, the suggested modification would seemingly prevent specifying operation on links under 40m.
  - In answer to the question, the intent is a PHY suitable for industrial and building automation, mobile machinery, and non-automotive transportation (e.g., buses, trains, aircraft, and ships), as specified in the PAR stakeholders section.

Approved by Study Group without objection 3/16/2022 (52 on the call)

# Comments from 802.11

- 1.2 Title – need space between 100 and Mb/s. “100 Mb/s”
  - We accept this comment (redundant to Nescom #1)
- 1.2 Title – remove “IEEE” from first word.
  - We accept this comment
- 5.2b – remove unwarranted “PHY” Acronym: suggest change to “Specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer ~~(PHY)~~ specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors.
  - We accept this comment (redundant to Nescom #3)
- 5.4 – Change “IEEE 802.3” to “IEEE Std 802.3” and add full name to list in 8.1
  - We accept this comment
- 8.1 list names of standards cited.
  - We accept this comment - add “IEEE Std 802.3 – Standard for Ethernet” to 8.1

Approved by Study Group without objection 3/16/2022 (54 on the call)

# Thank You!