

IEEE 802.3 10SPE Multidrop Enhancements (SPMD) Study Group PAR and CSD Comment Report

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PAR and CSD Comments from 802.11

May 2020

doc.: IEEE 802.11-20-0264r3

802.3da Amendment: 10Mb/s Single Pair Ethernet Multidrop Enhancements, [PAR](#) and [CSD](#)

PAR: 2.1 missing the word “network” -suggest add to title: “Physical Layer Specifications and Management Parameters for 10 Mb/s Operation over Single Balanced Pair Multidrop Network Enhancements”

5.2.b suggest add text from the CSD “This amendment specifies optional power delivery supporting multiple powered devices on the mixing segment.”

5.5 “from legacy networks to Ethernet” what are “legacy networks” in this context? Suggest “legacy non-Ethernet networks”.

CSD: 1.2.2 Broad Market Potential: suggest same change as in PAR 5.5.

PAR: 2.1

Comment: Missing the word “network” -suggest add to title:
“Physical Layer Specifications and Management Parameters
for 10 Mb/s Operation over Single Balanced Pair Multidrop
Network Enhancements”

Accepting comment:

2.1 Project Title: IEEE Standard for Ethernet

Amendment: Physical Layer Specifications and Management
Parameters for Enhancement of 10 Mb/s Operation over
Single Balanced Pair Multidrop Segments ~~Enhancements~~

PAR 2.1 Response

The comment suggested the addition of Network. The group thought that network would not be the proper term as we are specifying enhanced operation over a segment of the network and not the network as a whole.

AIP

Amendment: Physical Layer Specifications and Management Parameters for Enhancement of 10 Mb/s Operation over Single Balanced Pair Multidrop Segments ~~Enhancements~~

PAR: 5.2.b

suggest add text from the CSD “This amendment specifies optional power delivery supporting multiple powered devices on the mixing segment.”

Existing PAR 5.2b:

5.2.b Scope of the project: Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery to enhance 10Mb/s multidrop single balanced pair networks

PAR: 5.2.b

Accepting comment

5.2.b Scope of the project: Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery supporting multiple powered devices on the 10Mb/s multidrop mixing segment. ~~to enhance 10Mb/s multidrop single balanced pair networks~~

PAR 5.2.b Response

5.2.b was modified to be consistent with the title change (see PAR 2.1 response).

AIP

5.2.b Scope of the project: Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery **supporting multiple powered devices on the 10Mb/s multidrop mixing segment.** ~~to enhance 10Mb/s multidrop single balanced pair networks~~

PAR: 5.5

“from legacy networks to Ethernet” what are “legacy networks” in this context? Suggest “legacy non-Ethernet networks”.

Accepting comment:

5.5 Need for the Project: Many applications in building, industrial, and transportation industries have begun the transition from legacy **non-Ethernet** networks to Ethernet. A number of these applications require enhancements to 10Mb/s multidrop single balanced pair networks, e.g., larger multidrop topologies, power delivery, TSSI (Time Synchronization Service Interface). These enhancements will increase the applications addressed by this technology.

Par 5.5 Response

Accept

5.5 Need for the Project: Many applications in building, industrial, and transportation industries have begun the transition from legacy **non-Ethernet** networks to Ethernet. A number of these applications require enhancements to 10Mb/s multidrop single balanced pair networks, e.g., larger multidrop topologies, power delivery, TSSI (Time Synchronization Service Interface). These enhancements will increase the applications addressed by this technology.

CSD: 1.2.2

“from legacy networks to Ethernet” what are “legacy networks” in this context? Suggest “legacy non-Ethernet networks”.

Accepting comment:

Broad Sets of Applications:

Many applications in building, industrial, and transportation sectors have begun the transition from legacy **non-Ethernet** networks to Ethernet. A number of these applications require enhancements to 10Mb/s multidrop single balanced pair networks, e.g., larger multidrop topologies, power delivery, and Ethernet support for time synchronization protocols.

CSD1.2.2 Response

Accept

5.5 Need for the Project: Many applications in building, industrial, and transportation industries have begun the transition from legacy **non-Ethernet** networks to Ethernet. A number of these applications require enhancements to 10Mb/s multidrop single balanced pair networks, e.g., larger multidrop topologies, power delivery, TSSI (Time Synchronization Service Interface). These enhancements will increase the applications addressed by this technology.

Motion 3

Approve the proposed IEEE P802.3da 10SPE Multidrop Enhancements PAR <https://mentor.ieee.org/802-ec/dcn/20/ec-20-0012-01-00EC-ieee-p802-3da-draft-par-response.pdf> with modifications detailed in slides 3, 6, and 8 of SPMD_PAR_CSD_comment_report_051820.pdf

M: Peter Jones

S: Bob Voss

Passes by unanimous consent

Motion 4

Approve the modified IEEE P802.3da 10SPE Multidrop Enhancements CSD “Managed Objects”, “Coexistence”, “Broad Market Potential”, “Compatibility”, “Distinct Identity”, “Technical Feasibility”, and “Economic Feasibility” responses, as per <https://mentor.ieee.org/802-ec/dcn/20/ec-20-0013-00-00EC-ieee-p802-3da-draft-csd-response.pdf> with modification detailed in slide 10 of SPMD_PAR_CSD_comment_report_051820.pdf

M: George Zimmerman

S: Bob Voss

Passes by unanimous consent

Questions?

Thank you!