

IEEE P802.3dd Clause 104 Maintenance 1st Task Force review comments

Cl **FM** SC **FM** P1 L1 # 2

Zimmerman, George CME Consulting/various  
 Comment Type **E** Comment Status **D** Editorial

Confusion with numbering of PICS, subclauses, and tables may result now that the revision is open for ballot, but not yet a the point where .3dd is written against it.

*SuggestedRemedy*

Add to front page: "Editor's Note (to be removed prior to SA ballot) - This draft is written as an amendment to IEEE Std 802.3-2018 (as amended by, among other things, IEEE Std 802.3cg-2019). The frontmatter and numbering of tables, equations, figures, subclauses, and PICS items reflects that. These are expected to be adjusted prior to the final stage of working group ballot for IEEE P802.3dd, when the appropriate sections of the draft of 802.3dc are sufficiently stable."

Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

Cl **FM** SC **FM** P6 L26 # 8

Ran, Adee Cisco  
 Comment Type **E** Comment Status **D** Editorial

The chair and editor-in-chief are the same person. No need to duplicate the name.

*SuggestedRemedy*

Merge to one person with two titles.

Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

Cl **FM** SC **FM** P13 L46 # 9

Ran, Adee Cisco  
 Comment Type **E** Comment Status **D** Editorial

IEEE P802.3bj and IEEE P802.3bk are no longer running.

I think there is no need to list all the other amendment projects that are running today.

*SuggestedRemedy*

Remove the parenthesized text.

Proposed Response Response Status **W**  
 PROPOSED REJECT.  
 802.3bj and 802.3bk are listed as examples of projects that ran together.

Cl **104** SC **104.2** P14 L16 # 10

Ran, Adee Cisco  
 Comment Type **E** Comment Status **D** Editorial

This paragraph contains four consecutive sentences which deal with two concepts. It would be more readable if it is split to two paragraphs, one for V\_PSE and one for V\_PD.

*SuggestedRemedy*

Add a paragraph break after the second sentence.

Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

Cl **104** SC **104.5.3.3** P14 L35 # 16

Graber, Steffen Pepperl+Fuchs SE  
 Comment Type **T** Comment Status **D** Technical

The text states, that the PD is requesting/net requesting full operating voltage (see also line 34). I would expect, that not only the operating voltage is requested/not requested, but also the power associated to the respective power class, as voltage on its own will not be sufficient to power up the device.

*SuggestedRemedy*

Change "full operating voltage" to "full operating voltage and power".

Proposed Response Response Status **W**  
 PROPOSED REJECT.

TFTD

The Clause 104 state diagram thresholds for operation work on the voltage presented. Current is not the control parameter.

Cl **104** SC **104.5.3.3** P14 L35 # 11

Ran, Adee Cisco  
 Comment Type **T** Comment Status **D** Editorial

"or is not otherwise requesting full operating voltage" - does not make sense logically (if I understand the intent correctly).

*SuggestedRemedy*

Change to "or is otherwise not requesting full operating voltage".

Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

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Cl 104 SC 104.5.3.6 P15 L31 # 17

Graber, Steffen Pepperl+Fuchs SE

Comment Type E Comment Status D Editorial

Arc between states "DO\_DETECTION" and "DO\_CLASSIFICATION" is not reaching "DO\_CLASSIFICATION" state. Line is going into branch "A" symbol, but should start at bottom of branch "A" symbol.

*SuggestedRemedy*  
As per comment.

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 104 SC 104.5.6.1 P17 L42 # 18

Graber, Steffen Pepperl+Fuchs SE

Comment Type E Comment Status D Editorial

Text "When either there is no PSE or the PSE is not sourcing power, the PD presents voltage on the (unpowered) pair." states that a PD (always) presents a voltage on the unpowered pair. Nevertheless this may be the case or not (e.g. if the internal capacitors are discharged or if there is a reverse polarity protection, which besides a few µA or even less prevents reverse power).

*SuggestedRemedy*  
Change text to: "When either there is no PSE or the PSE is not sourcing power, the PD might present a voltage on the (unpowered) pair."

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 104 SC 104.5.6.1 P17 L44 # 1

Zimmerman, George CME Consulting/various

Comment Type T Comment Status D PICS

PICS PD10 needs to change to reflect the changed requirement

*SuggestedRemedy*  
Add PICS table, including 104.9.4.3 Powered Device (PD) and PICS item PD10 to the draft Change Value/Comment of PICS PD10 from "At a delay of T\_OFF max after disconnection from the PSE, a PD shall not source greater than 410 uJ out o fits PI until V\_PD drops below V\_Sleep\_PD max" to "the voltage across a 5 kohm resistor connected across the PD PI shall not exceed V\_PUP as defined in Table 104-8, at a delay of T\_OFF max (see Table 104-4) after the removal of PSE power from the PD PI."

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 104 SC 104.5.6.3 P18 L9 # 3

Zimmerman, George CME Consulting/various

Comment Type T Comment Status D PICS

PICS PD16 needs to change to reflect the new requirement

*SuggestedRemedy*  
Add PICS table, including 104.9.4.3 Powered Device (PD) and PICS PD16 to the draft and change the Feature text to "Input current while in DISCONNECT state" (showing strikeout as in the change on page 18)

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 104 SC 104.6.2 P18 L36 # 4

Zimmerman, George CME Consulting/various

Comment Type T Comment Status D PICS

PICS item for Type E is missing (wasn't added by 802.3cg)

*SuggestedRemedy*  
Add PICS table, including 104.9.4.4 Fault Tolerance to draft, with: Feature "Type E PD fault tolerance", Subclause 104.6.2, Value/Comment "The PI shall meet the fault tolerance requirements as specified in 146.8.5 and 146.8.6"

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 104 SC 104.7.1.3 P22 L10 # 12

Ran, Adeo Cisco

Comment Type E Comment Status D Editorial

The change seems to be from 31 to 39, but the digit "9" is not underlined.

*SuggestedRemedy*  
Underline "9".

Proposed Response Response Status W  
PROPOSED ACCEPT.

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Cl 104 SC 104.7.2 P22 L33 # 5

Zimmerman, George CME Consulting/various  
 Comment Type T Comment Status D SSCP

PICS item needs to be added for the new requirement.

*SuggestedRemedy*

Add PICS table, and new PICS item SSCP21a (after SSCP21) to draft, Feature: "Unsupported SSCP comment", Subclause: 104.7.2, Description: "Any unsupported command shall return all 1s in the data and CRC8 fields", Status: "SCCP:M", Value: "Yes[] N/A[]"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.  
 Text of description to be adjusted per comment 13 resolution

Cl 104 SC 104.7.2 P22 L43 # 13

Ran, Adeo Cisco  
 Comment Type T Comment Status D SSCP

"shall" should a requirement from a device (probably the PD, since the PSE is the initiator), not from the command.

I assume the PD should return all-ones as a response to an unsupported command.

*SuggestedRemedy*

Change to "The PD shall return all 1s in the data and CRC8 fields for any unsupported command".

Proposed Response Response Status W

PROPOSED ACCEPT.  
 (note - do before comment 5)

Cl 104 SC 104.7.2.6 P23 L8 # 14

Ran, Adeo Cisco  
 Comment Type T Comment Status D Editorial

Slide 4 of [https://www.ieee802.org/3/dd/public/Stewart\\_3dd\\_01a\\_04272021.pdf](https://www.ieee802.org/3/dd/public/Stewart_3dd_01a_04272021.pdf) says change the +/- 20 mV tolerance to +20 mV. In the draft it is -20 mV.

It would be preferable to state the tolerance as "0 to +20 mV" instead.

*SuggestedRemedy*

Change - to +.  
 Consider changing to "0 to +20 mV".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 104 SC 104.7.2.6 P24 L1 # 19

Graber, Steffen Pepperl+Fuchs SE  
 Comment Type E Comment Status D Editorial

Page is empty.

*SuggestedRemedy*

Remove empty page.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 146 SC 146.8.5 P25 L15 # 6

Zimmerman, George CME Consulting/various  
 Comment Type T Comment Status D PICS

PICS needs to be added to reflect new requirement, this PICS needs to reflect clause 104 is an option]

*SuggestedRemedy*

Insert Clause 146 PICS table to draft, (146.11) with 146.11.3 Major capabilities/options, inserting new option at the end, "\*\*PPSE", MDI encompasses a Clause 104 PSE, 146.8.5, 146.8.6 ; Status=O, Support, "Yes[] No[]". Insert 146.11.4.5 MDI specifications to draft, and PICS item MDI4 to draft, changing status to M:!PPSE

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 146 SC 146.8.6 P25 L30 # 7

Zimmerman, George CME Consulting/various  
 Comment Type T Comment Status D PICS

PICS needs to be added to reflect new requirement, this PICS needs to reflect clause 104 is an option]

*SuggestedRemedy*

Insert Clause 146 PICS table to draft, (146.11) with 146.11.3 Major capabilities/options, inserting new option at the end, "\*\*PPSE", MDI encompasses a Clause 104 PSE, 146.8.5, 146.8.6; Status=O, Support, "Yes[] No[]". Insert 146.11.4.5 MDI specifications to draft, and PICS item MDI5 to draft, changing status to M:!PPSE

Proposed Response Response Status W

PROPOSED ACCEPT.

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Cl 146 SC 146.8.6 P 25 L 33 # 15

Ran, Adee

Cisco

Comment Type T Comment Status D Faults

The limitation to 2000 mA is unclear. The requirement is stated as "application of short circuits of any wire to the other wire of the same pair or ground potential" and short circuits can draw any current. What or who is limiting the source current?

Does it mean that the fault tolerance requirement is not application of "short circuits" but instead application of a current source of up to 2000 mA as a load?

*SuggestedRemedy*

This should be phrased differently but I'm not sure what to suggest.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

TFTD.

Insert " where applicable due to applied voltage." after "2000 mA".