Cl **189**   *SC* **189.1**   *P* **132**   *L* **9**   *#* 1

Thompson, Geoff   GraCaSI S.A.

Comment Type **T**   *Comment Status* **D**   *Editorial*

The current text says "using the same cabling that is used for data transmission." That is not precisely sufficient.

SuggestedRemedy

Replace with: "using the same cabling conductors that are used for data transmission."

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The TF discussed in prior comment resolutions that clause 189 specifically enables powering on conductors which may not carry the data transmission, but may be within the same cabling. The current wording reflects both possibilities accurately.

Cl **189**   *SC* **189.1.3.1**   *P* **134**   *L* **4**   *#* 2

Thompson, Geoff   GraCaSI S.A.

Comment Type **E**   *Comment Status* **D**   *DTE with Multi MPI*

Confusing grammar: "A DTE often has an MPI sharing the same power/data pair."

SuggestedRemedy

Replace with: "A particular DTE port often has an MPI sharing the same pair for data and power."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Note that there is not discussion of a "DTE port" in 802.3. Furthermore, such usage would be counter to most other usage in IEEE Std 802.3-2022.
"DTE" is synonymous with the presence of a MAC, as stated in 1.1.2 Basic Concepts, "The term "CSMA/CD MAC" is used throughout this standard synonymously with "802.3 MAC," and may represent an instance of either a
half duplex or full duplex mode data terminal equipment (DTE),..." Further, definitions distinguish a DTE from a repeater or a hub, which does not have a MAC, and otherwise refer to ports which may be on a multiport bridge (with MAC), known commonly as an ethernet switch, as each port being "a DTE". For example, the definition of link partner (1.4.375) states, "The link partner device may be either a DTE or a repeater." - clearly, it is a single port on a bridge that is the link partner, and hence the DTE.

Therefore, the change to "DTE port" is rejected, but grammar can be improved by the second part of the suggested remedy, with modification for clarity:
change "sharing the same power/data pair." to "sharing the same pair of conductors for data and power."

As the change is grammar only, commenter is encouraged to consider withdrawing and resubmitting for initial SA ballot.

Cl **189**   *SC* **189.1.3.1**   *P* **134**   *L* **15**   *#* 3

Thompson, Geoff   GraCaSI S.A.

Comment Type **T**   *Comment Status* **D**   *DTE with Multi MPI*

This statement says that you are not allowed to have two 802.3ba networks that are coupled together with a bridge which is clearly an unreasonable restriction in the real world and out of scope for this document (layer violation).

SuggestedRemedy

Replace with text that only reflects the actual restriction you are trying to impose.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
More than one MPI may be associated with a DTE, as an MPI doesn't have to have data. However, only on MPI on a DTE may also have data. Multiport ethernet devices allowed for these networks include only those with MACs (as repeaters are not defined for clause 147 or 188 PHYs). Commenter misstates the definition of DTE, and ignores other usage and clarification in IEEE Std 802.3. The definition states (1.4.279) is "Any source or destination of data connected to the local area network.".
"DTE" is synonymous with the presence of a MAC, as stated in 1.1.2 Basic Concepts, "The term "CSMA/CD MAC" is used throughout this standard synonymously with "802.3 MAC," and may represent an instance of either a
half duplex or full duplex mode data terminal equipment (DTE),..." Further, definitions distinguish a DTE from a repeater or a hub, which does not have a MAC, and otherwise refer to ports which may be on a multiport bridge (with MAC), known commonly as an ethernet switch, as each port being "a DTE". For example, the definition of link partner (1.4.375) states, "The link partner device may be either a DTE or a repeater." - clearly, it is a single port on a bridge that is the link partner, and hence the DTE. Further note that a hub (a multiport repeater, see clause 12) is distinguished from a DTE both in it's definition (A device used to provide connectivity between DTEs. Hubs perform the basic functions of restoring signal amplitude and timing, collision detection, and notification and signal broadcast to lowerlevel hubs and DTEs. (See IEEE Std 802.3, Clause 12.), and in clause 12 (see 12.1.1 and 12.1.4, not repeated here which clearly describes hubs connecting DTEs in a way that makes it clear that a hub is something different from a DTE, with statements like "Point-to-point interconnection of DTEs to hubs...".

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **3**

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Cl **189**   *SC* **189.1.3.1**   *P* **134**   *L* **15**   *#* 4

Thompson, Geoff   GraCaSI S.A.

Comment Type **T**   *Comment Status* **D**   *DTE with Multi MPI*

This draft misuses the term DTE. It becomes especially egregious at this point where it forbids the use of more than one powered port on a multiport ethernet devices (e.g. hub, switch/bridge, router). Per the 1.4.279 definition of DTE, a DTE is a (single) communications device without regard to the number of communications ports the device has.

SuggestedRemedy

Use the term DTE correctly throughout the draft. Come up with another term for the (singular) port on a DTE and the MultiDrop network under consideration. Perhaps "given DTE port."

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The TF discussed exactly this situation in prior comment resolution, and the text reflects the desired restriction. A device that has local power would be an MPSE (and if that device is a multiport bridge, they'd all be MPSEs), whereas a device that does not have local power draws power as an MPD. Having a piece of equipment draw power as an MPD and then regenerate and pass that power on to another port as an MPSE is an inefficient use of multidrop power and is discouraged (so you wouldn't have an MPSE powered as an MPD). Rather, an efficient use would just be to continue tapping multiple devices (including possibly the "MPSE" port) off the multidrop power bus. If local power is provided, then a device should not be drawing from the limited bus power, so an MPI associated with multiport equipment that was capable of being an MPSE would not also be an MPD.

Cl **189**   *SC* **189.1.3.2**   *P* **134**   *L* **24**   *#* 5

Thompson, Geoff   GraCaSI S.A.

Comment Type **E**   *Comment Status* **D**   *Editorial*

The text here is a little obscure without concrete examples.

SuggestedRemedy

E.g. MPI w/o a DTE attached, segment connection to a dumb power supply.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
There are many possibilities and examples of a power source or load not associated with a DTE are obvious and varied. Listing one or more examples would likely cause confusion as it may be viewed as restrictive.

Cl **189**   *SC* **189.1.4**   *P* **134**   *L* **28**   *#* 6

Thompson, Geoff   GraCaSI S.A.

Comment Type **E**   *Comment Status* **D**   *Nomenclature*

The text fails to point out that the convention is just the opposite, That is, non-state diagrams are all informative and the specifying text rules.

SuggestedRemedy

Add text to complete the convention.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The text states, "Should there be a discrepancy between a state diagram and descriptive text, the state diagram prevails.". This is a restatement of the standard requirement, and is about state diagrams, not about non-state-diagram figures. For state diagrams, the convention is as stated, for example, 24.1.7 states, "Should there be a discrepancy between a state diagram and descriptive text, the state diagram prevails.", as do 25.1.1, and 50 other places in 802.3 where the same text exists.

Cl **189**   *SC* **189.4.4.1**   *P* **137**   *L* **37**   *#* 7

Thompson, Geoff   GraCaSI S.A.

Comment Type **E**   *Comment Status* **D**   *Editorial*

Redundant to 189.1.4

SuggestedRemedy

Remove 189.4.4.1

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The TF disagrees with the commenter. 189.1.4 says only "The body of this clause contains state diagrams including definitions of variables, constants, and functions. Should there be a discrepancy between a state diagram and descriptive text, the state diagram prevails." 189.4.4.1 goes further and adopts the notation of state diagrams found in 145.2.5.2, which defines operators and precedence, and adopts the notation of 21.5. The two are not redundant.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

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