

Report to 802.3 Closing Plenary
Thursday, March 18, 2004

Ad Hoc report re:
TIA “DTE Power” draft (D3.0)

Ad hoc met on Wed. AM
8:30 – 10:30
Captain’s Galley

Review of TIA
SP-4425-AD6 Draft 3.0
“Additional Cabling Guidelines for
DTE Power” (??, Draft is untitled)

- DTE Power Ad Hoc
 - Bob Grow
 - Mike McCormack
 - Steve Carlson
 - Geoff Thompson

Major Issues

- Specifies configs not allowed under 802.3
- Allows hot outlets
- Allows mid-span disruption of transmission line characteristics
- Destroys generic nature of 568

Ad hoc generated comments to be submitted as
NEGATIVEs from 802.3

802.3 Participants encouraged to (a) pile on, (b)
generate their own add'l comments

Draft available for your inspection and comment

- Comments due to Shadi AbuGhazaleh
<sabubhaz@hubbell-premise.com>
- Comment due date: April 2
- Draft & comment form available on our web site
http://www.ieee802.org/3/private/liaison_docs/index.html
 - LogIn: *****
 - Password: *****
- Our comments (to follow) posted w/ draft

Comment #1

Page: 7

Line : 4

Clause: 5.2.3

Vote: TN

ID: 802.3 #1

Comment: Case III is non-conformant to IEEE Std 802.3af-2003, 33.4.8 first paragraph of page 65: “Midspan PSE shall not provide DC continuity between the two sides of the segment for the pairs that inject power.” This requirement was placed in the standard because: 1. It is acceptable and common implementations of the non DCPS Switch/Hub to terminate directly to ground the non-data pairs (see TP-PMD, annex I, figure I.2). 2. Our studies show that there is insufficient margin for the requirement in lines 4 and 5 to be met. Please note that the same problem also exists for FDDI equipment.

Proposed Change: Delete Case III, or insert a specific warning note that this case is non-conformant with IEEE Std 802.3 links, and will damage some conformant implementations of IEEE 802.3 equipment.

Comment #2

Page: 6

Line : 16

Clause: 5.2.2

Vote: TN

ID: 802.3 #2

Comment: Case II does not provide DC continuity as required by IEEE Std 802.3af-2003, 33,4.8, page 64 last paragraph: “Configurations with the Midspan PSE in the cabling channel shall not alter the transmission requirements of the “permanent link”. A Midspan PSE inserted into a channel shall provide continuity for the signal pairs.” While it is conceivable that this could be compatible with some clauses of 802.3, our studies show that it has insufficient margin to build worst case systems. This configuration will also render some types of LAN/telecommunications equipment non-operational.

Proposed Change: Delete Case II, or insert a specific warning note that use of Case II might work some of the time, is not guaranteed to work all of the time and will result in non-operational links of other LAN equipment

Comment #3

Page:

Line :

Clause: General

Vote: TN

ID: 802.3 #3

Comment: The industry expects that TIA/EIA 568 specifications are for generic cabling, and values the ability to use the standard for a broad range of equipment. This addendum severely muddles the generic specification because it includes application specific requirements. Inclusion of these specifications will remove the generic nature. For example, it associates data pairs with connector contacts application specific to IEEE 802.3, where other standards use different 568 pairs for data.

Proposed Change: If TIA desires to continue with this work, it should be a separate application specific standard, not included in 568, Generic Cabling

Comment #4

Page:

Line :

Clause: General

Vote: TN

ID: 802.3 #4

Comment: This specification does not provide sufficient power supply specifications to guarantee safe operation or prevent destruction of connected equipment.

Proposed Change: Remove as an aspect of generic cabling and reposition as a standard for application specific equipment. Further, the resulting standard must address safety requirements so that hot jacks do not exist.

Recommendations

Motion:

- 802.3 endorse the comments generated by the ad hoc.
- 802.3 direct that the chair submit these comments to TIA editor and Chair of TIA TR-42
- Moved: Steve Carlson
- Second: Geoff Thompson
- YES__55__, NO__3__ Abstain__8__
- Technical PASS/FAIL