

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

Cl 00 SC P3 L 1 # 2
 Grow, Robert Intel

Comment Type E Comment Status A
 Needs real front matter for Sponsor ballot

SuggestedRemedy
 WG Chair to provide.

Response Response Status C
 ACCEPT.

Cl 00 SC P All L # 25
 Thompson, Geoff Nortel

Comment Type ER Comment Status A

The draft is shown as clean text without change bars. We are supposed to be evaluating whether the extraction from 802.3 and the conversion into text suitable for an 802.1 standard has been done suitably. This is exceedingly difficult to do when the new draft is not presented in change tracking form.

SuggestedRemedy
 Have the scope of the recirculation cover the entire text and make the recirculation draft for ballot be a change tracking version of the draft where the changes are the diff against 802.3-2005. There may be some areas where explanation (as editor's notes) ay be needed to explain just how and why changes are being made. When this is done, many more eyes can evaluate whether or not the extraction and conversion was done properly and completely.

Response Response Status C
 ACCEPT IN PRINCIPLE.

A change bar document between the next draft and the corresponding content of IEEE 802.3 will be provided to explicitly show the extraction changes for IEEE P802.1AX. Will include the text 'Any errors introduced during the extraction of the text from IEEE 802.3 will be considered in scope of the recirculation' in the ballot announce.

Cl 01 SC 1.2 P1 L 29 # 14
 Dawe, Piers Avago

Comment Type T Comment Status R
 higher aggregate bandwidth than the individual links that form the aggregation

SuggestedRemedy
 higher aggregate bandwidth than an individual link within the Link Aggregation Group (Actually, given the load balancing uncertainties, "aggregate bandwidth" is a dubious concept. "links that can deliver a higher aggregate throughput than an individual link within the Link Aggregation Group"?)

Response Response Status C
 REJECT.

The purpose has to match word for word the PAR purpose therefore to change this would require a modified PAR. The suggested change does not justify this.

Cl 01 SC 1.2 P1 L 29 # 15
 Dawe, Piers Avago

Comment Type T Comment Status A

1.4.207 defines link as "The transmission path between any two interfaces of generic cabling. (From ISO/IEC 11801.)", not between MAC clients.

SuggestedRemedy
 Change "links" to "logical links"?

Response Response Status C
 ACCEPT IN PRINCIPLE.

The definitions found in IEEE Std 802.3 do not apply to IEEE 802.1AX. This comment however does point out that there is no definition of link in the IEEE P802.1AX draft. The reason for this is the text that locally defined link in Clause 43 of IEEE 802.3 still remains in Clause 5 of this draft. These local definitions should be moved to Clause 3 since they should now be global for IEEE P802.1AX. To do this:

[1] Delete subclause 5.1.1

[2] Add the following to Clause 3 'Definitions':

- 3.a link: See Aggregation Link.
- 3.b port: See Aggregation Port.
- 3.c Key: See Aggregation Key.
- 3.d System: See Aggregation System.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

CI 02 SC P1 L 43 # 43
 Parsons, Glenn Nortel

Comment Type E Comment Status A

Given the desire to reference the most current version of 802.3 (presumably with LAG removed) we should use the undated convention, as described in the intro. And not try to make sure this publishes at the same time as 802.3-2007 or since we are unsure if it will happen it is listed here as 802.3-200X.

SuggestedRemedy

Change to IEEE Std 802.3, ...

Response Response Status C

ACCEPT.

See also comment #17.

CI 02 SC P12 L 17 # 3
 Grow, Robert Intel

Comment Type E Comment Status A

Errata in producing draft.

SuggestedRemedy

Needs "I" leading the line.

Response Response Status C

ACCEPT.

CI 02 SC 0 P12 L 17 # 26
 Ganga, Ilango Intel

Comment Type E Comment Status A

Typo in ISO: Change "SO/IEC 10165-2" to "ISO/IEC 10165-2"

SuggestedRemedy

As per comment

Response Response Status C

ACCEPT.

CI 02 SC 2 P1 L 36 # 16
 Dawe, Piers Avago

Comment Type T Comment Status R

"The following referenced documents are indispensable for the application of this standard.". That's just waffle. I preferd the old wording.

SuggestedRemedy

Change to "The following documents contain provisions that, through reference in this text, constitute provisions of this standard."

Response Response Status C

REJECT.

The text you recommend is from an old version of the style guide. This text follows the style guide text which we are being continually encouraged to use. While we may continue to push back on this in respect to the revision of IEEE 802.3, it is difficult to justify not meeting the recommendation of the style guide on a new standard.

CI 02 SC 2 P1 L 37 # 17
 Dawe, Piers Avago

Comment Type T Comment Status R

"For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.". That's handing a blank cheque to other SDOs - and not all SDOs have our high standards. At least there aren't many references here, and all are dated.

SuggestedRemedy

Delete the sentence.

Response Response Status C

REJECT.

See comment #16. In additon see comment #17 which removed the date on IEEE 802.3.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

CI 02 SC 2 P1 L 37 # 18
Dawe, Piers Avago

Comment Type T Comment Status R

Do we want to encourage a common-sense check for updates and errata of the references?

SuggestedRemedy

If so, add "Parties subject to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the {documents|standards} indicated below."

Response Response Status C

REJECT.

See comment #16.

CI 02 SC 2 P1 L 48 # 24
Thompson, Geoff Nortel

Comment Type E Comment Status A

The name format in the RFC 1155 Reference should be done consistently.
The first name (Rose) is of the form: LastName, FirstNameInitial.,
The second name is of the form: FirstNameInitial. LastName

SuggestedRemedy

Pick one format or the other for the names (presumably that is consistent with the way other references are done in 802.1) and stick to it.

Response Response Status C

ACCEPT IN PRINCIPLE.

From looking at IEEE Std 802.1Q the style is LastName, FirstNameInitial. This will be referred to publication editor and will await guidance.

CI 02 SC 2 P2 L 17 # 13
Dawe, Piers Avago

Comment Type E Comment Status A

SO/IEC

SuggestedRemedy

ISO/IEC

Response Response Status C

ACCEPT.

CI 03 SC 3 P12 L 30 # 38
Law, David 3Com

Comment Type T Comment Status A

Add the following definitions from IEEE Std 802.3-2005 to the IEEE P802.1AX draft as these terms are used in this draft.

SuggestedRemedy

Add definition for based on the text in IEEE Std 802.3-2005, and approved amendments, with edits necessary for the new context.

agent (1.4.55)
bridge (1.4.82)
MAC frame (1.4.127 from IEEE Std 802.3as-2006) but consider changing this to define just frame, not MAC frame.
data terminal equipment (DTE) (1.4.129)
full duplex (1.4.172)
half duplex (1.4.177)
Management Information Base (MIB) (1.4.205)
Media Access Control (MAC) (1.4.209)
switch (1.4.328)

Response Response Status C

ACCEPT.

CI 03 SC 3.7 P3 L 7 # 41
Law, David 3Com

Comment Type T Comment Status A

Should we be using the term 'MAC Bridge' or simply 'bridge' which was the term that was actually defined in IEEE Std 802.3-2005, MAC bridge was not. At a minimum 'Bridge' should be changed to read 'bridge'.

SuggestedRemedy

Change 'MAC Bridge' to read 'bridge' or at a minimum 'Bridge' to read 'bridge'. Do this change to Page 76, line 6 and line 53 as well.

Response Response Status C

ACCEPT IN PRINCIPLE.

Change 'MAC Bridge' to 'bridge'.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

Cl 05 **SC 5.1.1** **P** **L** # **4**
 Grow, Robert Intel
Comment Type **E** **Comment Status** **A**
 "3"? Without subsections, could use a leading "Clause".
SuggestedRemedy
 Insert "Clause" before clause number.
Response **Response Status** **C**
 ACCEPT IN PRINCIPLE.
 This subclause has been deleted in response to comment #15.

Cl 05 **SC 5.1.3** **P 16** **L 36** # **5**
 Grow, Robert Intel
Comment Type **E** **Comment Status** **A**
 This line seems very stange now in this format.
SuggestedRemedy
 Either delete line, or move State Machine instructions to its own clause.
Response **Response Status** **C**
 ACCEPT IN PRINCIPLE.
 Suggest that subclause 5.1.4 'State diagram conventions' be moved to subclause 5.1.1 which has been deleted by comment #15. This will make the flow of the Clause much better and avoid the state diagram conventions breaking up the architectural introduction as the comment points out.

Cl 05 **SC 5.1.4.4** **P 18** **L 54** # **6**
 Grow, Robert Intel
Comment Type **E** **Comment Status** **A**
 Bad table page break
SuggestedRemedy
 Fix table border.
Response **Response Status** **C**
 ACCEPT.

Cl 05 **SC 5.2.4.1.1** **P 24** **L 24** # **27**
 Ganga, Ilango Intel
Comment Type **E** **Comment Status** **A**
 Typo: Change "IEEE Srd 802.3" to "IEEE Std 802.3"
SuggestedRemedy
 As per comment
Response **Response Status** **C**
 ACCEPT.

Cl 05 **SC 5.2.5** **P 25** **L 31** # **28**
 Ganga, Ilango Intel
Comment Type **E** **Comment Status** **A**
 Change "with an mac_service_data_unit" to "with a mac_service_data_unit"
SuggestedRemedy
 As per comment
Response **Response Status** **C**
 ACCEPT.

Cl 05 **SC 5.2.5** **P 25** **L 33** # **29**
 Ganga, Ilango Intel
Comment Type **T** **Comment Status** **R**
 Refer to the statement "..the timing restrictions for Slow Protocols specified in IEEE Std 802.3 Annex 57A"
 The timing requirements for LACP are referenced back to 802.3.
 Consider to move the LACP specific requirements to a separate annex in 802.1X. Currently Annex 57A has references specific to LACP and marker protocol that could possibly moved to 802.1X.
SuggestedRemedy
 Consider to move the LACP and marker protocol specific requirements to a separate annex in 802.1X, so that the requirements are self contained in 802.1X. Morever any future enhancements can be made within 802.1
Response **Response Status** **C**
 REJECT.
 Slow Protocols will still be used by IEEE Std 802.3 for Clause 57 OAM, and based on this the agreement with IEEE 802.1 was that Slow Protocols would remain under the control of IEEE 802.3.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

Cl 05 SC 5.4.10 P 53 L 24 # 30
Ganga, Ilango Intel

Comment Type E Comment Status R

State diagram Variables, Functions and Timers are not listed in alphabetical order.
Consider listing these in alphabetical order. Here and in other places in Clause 5.

SuggestedRemedy
As per comment

Response Response Status C
REJECT.

To allow easy comparison with the existing Clause 43 we will preserve the order as is at this time.

Cl 05 SC 5.5.1 P 55 L 54 # 31
Ganga, Ilango Intel

Comment Type E Comment Status A

Delete period at the end of line. "algorithms.)."

SuggestedRemedy
As per comment

Response Response Status C
ACCEPT.

Cl 05 SC 5.5.4.1 P 68 L 32 # 1
Anslow, Pete Nortel

Comment Type E Comment Status A

Text "as specified in Annex IEEE Std 802.3 Annex 57A.3." should read "as specified in IEEE Std 802.3 Annex 57A.3."

SuggestedRemedy
Delete the word "Annex" before "IEEE Std 802.3 Annex 57A.3"

Response Response Status C
ACCEPT.

Cl 06 SC P 95 L 1 # 7
Grow, Robert Intel

Comment Type E Comment Status A

Nothing in this clause appear in the bookmarks.

SuggestedRemedy
Add bookmarks.

Response Response Status C
ACCEPT.

Cl 06 SC 6.1 P 85 L 14 # 46
Parsons, Glenn Nortel

Comment Type TR Comment Status A

Given the fact that this is supposed to be a simple extraction of LAG into a separate standard, it is inappropriate to re-root the management arc. And actually in Annex 6A and Annex 6B it is not.

SuggestedRemedy
Change this note back to the original text in 802.3-2005

Response Response Status W
ACCEPT IN PRINCIPLE.

The note is indeed incorrect as the arcs have not been deprecated. There however doesn't seem to be much point including the old note either. Based on this the note will simply be deleted.

Cl 06 SC 6.1 P 85 L 40 # 39
Law, David 3Com

Comment Type E Comment Status A

Change 'Agent' to read 'agent'.

SuggestedRemedy
See comment.

Response Response Status C
ACCEPT.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

Cl 06 SC 6.1 P 95 L 35 # 8
 Grow, Robert Intel
 Comment Type E Comment Status R
 "Layer Management"
 SuggestedRemedy
 Not a defined term, can probably be lower case.
 Response Response Status C
 REJECT.
 We have been lead to believe that this is a reserved word in ISO seven layer model.

Cl 06A SC P 123 L 6 # 9
 Grow, Robert Intel
 Comment Type E Comment Status A
 This isn't 802.3
 SuggestedRemedy
 Change 802.3 to 802.1AX.
 Response Response Status C
 ACCEPT.

Cl 06A SC 6 P 113 L 12 # 47
 Parsons, Glenn Nortel
 Comment Type TR Comment Status A
 Given the fact that this is supposed to be a simple extraction of LAG into a separate standard, it is inappropriate to re-root the management arc. And actually in Annex 6A and Annex 6B it is not.
 SuggestedRemedy
 Change this note back to the original text in 802.3-2005
 Response Response Status W
 ACCEPT IN PRINCIPLE.
 See comment #46. This note will simply be deleted.

Cl 06A SC 6A P 113 L 6 # 22
 Barrass, Hugh Cisco
 Comment Type T Comment Status A
 This is a draft of 802.1AX, clause title should reflect that.
 SuggestedRemedy
 GDMO specification for IEEE 802.3 managed object classes to GDMO specification for IEEE 802.1 managed object classes
 Response Response Status C
 ACCEPT.

Cl 06A SC 6A.1.1 P 114 L 14 # 23
 Barrass, Hugh Cisco
 Comment Type T Comment Status A
 This is a draft of 802.1AX, the objects should be registered in the 802.1 tree.
 SuggestedRemedy
 Change
 {iso(1) std(0) iso8802(8802) csma(3) csmacdmgt(30)
 to
 {iso(1) std(0) iso8802(8802) bridge(1) bridgemgt(10)
 (or something like that :-)

... and many more identical changes throughout the Clause.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 The most likely destination for the GDMO MIB once the standard is complete and IEEE 802.1 takes over is the great bit bucket in the sky. Based on this, the most sensible action is to delete all GDMO from IEEE P802.1AX. The GDMO will remain in IEEE 802.3 but will be marked as deprecated. This avoids the issue of having a deprecated version in IEEE 802.3 and another version in IEEE 802.1AX.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

Cl **06A** SC **6A1.1** P **123** L **12** # **10**
 Grow, Robert Intel

Comment Type **T** Comment Status **A**

The arcs in 6A and 6B are the same as those in 30A and 30B. The note states the arcs are deprecated, if so why are they still here?

SuggestedRemedy

Reconcile.

Response Response Status **C**

ACCEPT IN PRINCIPLE.

See comment #46, the note will be deleted.

Cl **06B** SC **6B.1** P **136** L **17** # **21**
 Barrass, Hugh Cisco

Comment Type **TR** Comment Status **R**

This is a draft of 802.1AX, the objects should be registered in the 802.1 tree.

SuggestedRemedy

Change
 REGISTERED AS (iso(1) std(0) iso8802(8802) csma(3) csmacdmgt(30)
 to
 REGISTERED AS (iso(1) std(0) iso8802(8802) bridge(1) bridgemgt(10)
 (or something like that :-)

Change
 REGISTERED AS (iso(1) std(0) iso8802(8802) csma(3) csmacdmgt(30)
 to
 REGISTERED AS (iso(1) std(0) iso8802(8802) bridge(1) bridgemgt(10)
 (or something like that :-)

Response Response Status **C**

REJECT.

See comment #23.

In addition the advice of SNMP experts is that SNMP items should not have duplicate arcs - allocating IEEE 802.1 arcs would so this.

Cl **06C** SC **6C.5.4** P **146** L **3** # **42**
 Law, David 3Com

Comment Type **T** Comment Status **A**

The text '.. can receive packets and forward them up to a higher layer entity for local consumption.' is the only use of the term packet within the IEEE P802.1AX draft and the term 'frame' would seem more correct based on what I believe are the correct definitions based on IEEE Std 802.3as-2006 give below:

frame - From Destination Address to Frame Check Sequence inclusive
 packet - MAC frame plus Preamble, Start Frame Delimiter and Extension

SuggestedRemedy

Suggest that '.. can receive packets and forward them ..' is changed to read '.. can receive frames and forward them ..'.

Response Response Status **C**

ACCEPT.

Cl **06C** SC **6C.6** P **146** L **17** # **19**
 Barrass, Hugh Cisco

Comment Type **TR** Comment Status **A**

This is a draft of 802.1AX, the SNMP should reflect that.

References to 802.3, 802.3ad, dot3, etc. should be changed.

SuggestedRemedy

Change
 1; The ASCII for 6C.6 is available at <http://www.ieee802.org/3/publication/index.html>.
 to
 1; The ASCII for 6C.6 is available at <http://www.ieee802.org/1/publication/index.html>.

Many similar changes through the next few pages...

Response Response Status **C**

ACCEPT IN PRINCIPLE.

The SNMP MIB will be provide through a IEEE 802.1 web site.

IEEE 802.3ax (IEEE P802.1AX) D1.0 Link Aggregation comments

CI 06C SC 6C.6 P 146 L 29 # 44
 Parsons, Glenn Nortel

Comment Type ER Comment Status A

The REFERENCES in the MIB have changed. So the MIB has changed. You must at least change the date, and possibly add a REVISION line to acknowledge the original. And we may want to change the WG name as well...

SuggestedRemedy

Change the LAST-UPDATED date to today
 Add a REVISION line for the original version noting it was published in 802.3ad
 Add another REVISION line with today's date indicating that the references were updated as a result of moving to a separate document.
 Finally, update the CONTACT-INFO to point to 802.1 WG and update the DESCRIPTION to 802.1AX

Response Response Status W
 ACCEPT.

CI 06C SC 6C.6 P 146 L 39 # 20
 Barrass, Hugh Cisco

Comment Type T Comment Status A

The "last updated" should reflect the 2007 revision (this one).

SuggestedRemedy

Change
 LAST-UPDATED Å9911220000Z,
 to
 LAST-UPDATED Å200705140000Z,

Response Response Status C
 ACCEPT IN PRINCIPLE.

See comment #44.

CI 06C SC 6C.6 P 148 L 19 # 45
 Parsons, Glenn Nortel

Comment Type ER Comment Status A

The REFERNECES in the MIB have changed to match the referenes in 802.1AX which is appropriate. However the preamble 'IEEE 802.3 Subclause' is no longer correct. And it is not necessary since the MIB is part of the standard that it is managing.

SuggestedRemedy

Delete 'IEEE 802.3 Subclause' from the REFERENCE lines of the MIB throughout the MIB

Response Response Status W
 ACCEPT.

CI 99 SC P L # 11
 Grow, Robert Intel

Comment Type E Comment Status A

There is probably a problem with the FrameMaker book. Clause 6 follows the annexes of Clause 5.

SuggestedRemedy

Correct document order.

Response Response Status C
 ACCEPT.

CI 99 SC P ii L 2 # 40
 Law, David 3Com

Comment Type E Comment Status A

Since these are the first occurrences of these abbreviations in the draft suggest that they should be spelt out in full.

SuggestedRemedy

Change 'MAC' to read 'Media Access Control (MAC)' and on line 3 'DTE' to read 'data terminal equipment (DTE)'.

Response Response Status C
 ACCEPT.

CI 99 SC P iii L 26 # 12
 Dawe, Piers Avago

Comment Type E Comment Status A

One in style of Shift+x, several in style of Shft-x.

SuggestedRemedy

Change all to style of Shift-x.

Response Response Status C
 ACCEPT.