

IEEE P802.3as Comments

Cl 00 SC P L Comment # 1
Parsons, Glenn Nortel

Comment Type TR Comment Status A

There is text in clause 43B.2 on basic and tagged frames that needs to be modified based on the

Suggested Remedy

Change 43B.2.d from:

d) PDUs generated by these protocols shall use the Basic and not the Tagged frame format (see Clause 3).

to:

d) PDUs generated by these protocols shall use the basic and not the tagged or envelope frame format (see Clause 3).

Response Response Status C

ACCEPT.

Cl 01 SC 1.4 P3 L38 Comment # 27
Thompson, Geoff Nortel

Comment Type E Comment Status R

I don't think I am going to like the terms "tagged frame" and "envelope frame" but we will see after I complete my review.

Suggested Remedy

Extended frame may be more appropriate

Response Response Status U

REJECT. 'tagged' is a grandfathered term. 'envelope' was chosen as the most appropriate. Extended implies that there are extra .3 defined fields -- and there are not.

Cl 02 SC 2.1 P5 L37 Comment # 28
Thompson, Geoff Nortel

Comment Type E Comment Status A

I would like an editors note added here that this change is a service to humanity and doesn't actually have anything to do with the substance of frame extensions.

Same is true for Figure 2-1.

Suggested Remedy

Add editors note.

(Why isn't this change in 802.3am instead?

Response Response Status C

ACCEPT. The editor's note will be removed before publication.

Cl 02 SC 2.1 P5 L38 Comment # 16
Squire, Matt Hatteras Networks

Comment Type T Comment Status A

Given the MAC control sublayer is optional and the primitive exist whether or not that optional sublayer is there, I don't think this statement can be true.

Suggested Remedy

Delete the added sentence - I'm not sure what it adds.

Response Response Status C

ACCEPT IN PRINCIPLE. The sentence as is could be confusing. Reword to indicate that the the same primitive interfaces to both MAC control (if present) and then to the MAC, or just to the MAC.

Cl 03 SC 3.1 P9 L34 Comment # 29
Thompson, Geoff Nortel

Comment Type E Comment Status A

Rather than deleting this text I would prefer to see the existing text modified to accommodate this project.

Suggested Remedy

Change existing text to:

Two ??? frames are specified in this clause:

a) A basic frame

b) An extended (expanded?) frame to accommodate EtherType protocols that tag or encapsulate a basic frame.

Response Response Status C

ACCEPT IN PRINCIPLE. retain 'envelope' -- see also comment 30

Cl 03 SC 3.1.2 P11 L7 Comment # 2
Parsons, Glenn Nortel

Comment Type E Comment Status A

The vertical lines of figure 3-2 do not line up symmetricly with the primitives because of font substitutions in the conversion to PDF from Frame.

Suggested Remedy

Editor to fix the font problems so that the Figure appears correctly.

Response Response Status C

ACCEPT.

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

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Cl 03 SC 3.1.2

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CI 03 SC 3.2.6 P11 L 36 Comment # 31

Thompson, Geoff

Nortel

Comment Type ER Comment Status A

This is probably a bad idea.

It is generally a bad idea to specify paramters in more than one place

Suggested Remedy

Response Response Status C

ACCEPT IN PRINCIPLE. Add '(equal to 05DC hexadecimal)' after '1500'

CI 03 SC 3.2.6 P11 L 60 Comment # 3

Martin, David

Nortel Networks

Comment Type E Comment Status A

Within Footnote 1 there is a reference to Footnote 1 for the RAC address, which isn't provided.

Suggested Remedy

Add the RAC address to Footnote 1 and delete the circular reference.

Response Response Status C

ACCEPT.

CI 03 SC 3.2.7 P12 L 14 Comment # 5

Martin, David

Nortel Networks

Comment Type E Comment Status A

Typo.

Suggested Remedy

Change "implemenation" to "implementation".

Response Response Status C

ACCEPT.

CI 03 SC 3.2.7 P12 L 15 Comment # 17

Squire, Matt

Hatteras Networks

Comment Type E Comment Status A

"determined by the application of the particular implemenation" is confusing (at least to me).

Suggested Remedy

Maybe: "The maximum size of the data field is determined by the particular implementation. Ethernet implemenations may support one of three application modes as defined below: "

Response Response Status C

ACCEPT.

CI 03 SC 3.2.7 P12 L 15 Comment # 6

Martin, David

Nortel Networks

Comment Type E Comment Status A

Suspect an incorrect cross-reference.

Suggested Remedy

Change "Figure 3-2" to "Figure 3-1".

Response Response Status C

ACCEPT.

CI 03 SC 3.2.7 P12 L 17 Comment # 7

Martin, David

Nortel Networks

Comment Type E Comment Status A

Typo.

Suggested Remedy

Change "additional" to "additional".

Response Response Status C

ACCEPT.

CI 03 SC 3.2.7 P12 L 20 Comment # 8

Martin, David

Nortel Networks

Comment Type E Comment Status A

Grammer preference.

Suggested Remedy

Change "contain a IEEE" to "contain an IEEE".

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

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CI 03 SC 3.2.7

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CI 03 SC 3.2.7 P12 L 23 Comment # 26
Fakterman, Boris Intel

Comment Type T Comment Status R

The NOTE defines that MAC Client Data field encapsulation details are not visible to 802.3as standard. However encapsulated prefixes and suffixes of new extensions may hurt management and acceleration technology applied in already deployed MACs.

MAC Data Client field extensions shall include a general descriptor guiding management and acceleration technology applications to the IP payload, even if the extension is unknown to the MAC.

The NOTE shall be replaced with the suggested remedy

Suggested Remedy

3.2.7.1 Extension general structure

The envelope frame is intended to allow inclusion of additional prefixes and suffixes required by encapsulation. These frames will contain at least one Ethertype within the data field in addition to the type field. If present, they follow the MAC Type field and are carried as MAC Client Data. Note that the original client data must not exceed 1500 bytes which is its size in the basic frame.

Each separate extension shall start with an Ethertype and a two octet descriptor field adjacent to it. The extension shall contain even number of octets.

The descriptor shall provide information defining attributes for the extension prefix and suffix. Following format shall be applied for the Ethernets inside a data field:

Figure describing proposed extension descriptor is located in the attached file.

Prefix length - 7 bits indicating number of prefix two-octets in the Ethertype, starting after the suffix length indication octet.

Suffix length - 7 bits indicating number of suffix two-octets in the Ethertype

FM - when set, this bit indicates that extension function modifies fields encapsulated by the extension

LM - when set, this bit indicates that extension function modifies the length of the fields encapsulated by the extension

Note 1: 802.1ae standard is an example of a payload fields changed by the extension.

Note 2: Extensions belonging to the following standards may not meet requirements in this subsection:

- a)802.1q
- b)802.1ad
- c)802.1ae
- d)802.1ag
- e)802.1ah
- f)802.1ak

Response Response Status U

REJECT.

802.3 cannot prescribe or indicate the contents of the data field.

Propose that P802.3as Chair forward the comment and response to 802.1 WG Chair with the annotation that we judged it is outside the scope of 802.3.

Move that the P802.3as TF accept the response (above) as the resolution to comment #26
Moved: Tom Dineen

Second: Pat Thaler

Y: 6 N: 2

Requires ≥ 75%

Motion passes

CI 03 SC 3.2.7 P12 L 24 Comment # 18
Squire, Matt Hatteras Networks

Comment Type E Comment Status A

Maybe just a nitpick, but do the encapsulation protocols have to contain at least one Ethertype within the data field? Example: MPLS may encapsulate TDM via pseudowires - can it use a 2K frame size? MPLS may encapsulate a frame that's length encoded on the inside - it won't have an inner Ethertype (though it will have an inner length / type field).

Suggested Remedy

Clean up that sentence a little.

Response Response Status C

ACCEPT. This is a nitpick. Reword to indicate that another length/type field is in the data field and it is typically an Ethertype.

CI 03 SC 3.2.7 P12 L 25 Comment # 9
Martin, David Nortel Networks

Comment Type E Comment Status A

Clarification text.

Suggested Remedy

Change "in addition to the type field" to "in addition to the MAC type field".

Response Response Status C

ACCEPT.

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CI 03 SC 3.2.7

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CI 03 SC 3.2.7 P12 L 26 Comment # 19
Squire, Matt Hatteras Networks

Comment Type T Comment Status A

Just to nitpick on the last note, what happens if the original client data does exceed 1500B? We aren't enforcing anything in this standard to prohibit that, all we can do is make recommendations. The "must not" seems a bit strong for what we can actually detect and guarantee.

Suggested Remedy

Change to "Note that the additional MAC client data bytes are not intended for general purpose use by any application. They extra frame capacity is added with the specific intent that it be used by layer two encapsulation protocols that require additional encapsulation around an application originated Ethernet frame. Use of these extra octets for other purposes is not recommended, and may result in the frames being dropped as they may violate maximum frame size restrictions if encapsulation protocols are required to operate on them."

Response Response Status C

ACCEPT IN PRINCIPLE.

Change last line of note to read: "NOTE: The envelope frame is intended to allow inclusion of additional prefixes and suffixes required by encapsulation protocols such as P802.1ad, P802.1ah, P802.1AE and MPLS. The original client data is not intended to exceed 1500 bytes, which is its size in the basic frame. Use of these extra octets for other purposes is not recommended, and may result in the frames being dropped or corrupted as they may violate maximum frame size restrictions if encapsulation protocols are required to operate on them."

CI 03 SC 3.2.7 P12 L 3 Comment # 4
Martin, David Nortel Networks

Comment Type E Comment Status A

Need to decide on the case level for the data field size "n" or "N" octets. In this line it is lowercase. In Figure 3-1 it is uppercase. In lines 17, 20, 21 on page 12 it is uppercase. In the formula in line 40 on page 12 it is lowercase.

Suggested Remedy

My preference would be to use uppercase throughout, but I leave that call to the esteemed Chair and Editor.

Response Response Status C

ACCEPT IN PRINCIPLE. Consult editorial experts on case.

CI 03 SC 3.2.7 P12 L 41 Comment # 20
Squire, Matt Hatteras Networks

Comment Type E Comment Status A

The maximum size of the data field sentence should be in the previous section. When the data/pad section was divided, this sentence should have been moved to the earlier stuff.

Suggested Remedy

move to preceding (data) section.

Response Response Status C

ACCEPT.

CI 03 SC 3.5 P13 L 22 Comment # 33
Thompson, Geoff Nortel

Comment Type ER Comment Status R Thompson, Geoff

I would like to see this material preserved in an Informative Annex.

I know of no place in 802.1 where there is such a succinct description of an 802.1Q frame.

Suggested Remedy

Place deleted material (with appropriate editing) into a (probably new) Informative Annex.

Response Response Status U

REJECT.

Request P802.3as Chair forward comment to 802.1 WG Chair for consideration during the P802.1Qrev project.

CI 03 SC Figure 3-1 P10 L 3 Comment # 30
Thompson, Geoff Nortel

Comment Type ER Comment Status A

If there are going to be definitions for different kinds of frames (and I think there should be unless we are just throwing everything out and going completely all the way to Jumbo) then I think we should keep two diagrams.

Suggested Remedy

Keep the "X'd" out diagram.

The diagram representing extended frames should say "50-N OCTETS" (Which would imply a minimum tag size of 4 octets. This is not strictly a necessity, I can imagine a possibility that someone might ask for a TAG which is only the EtherType itself. I think that is a bad idea and there would be no great loss in precluding it.)

Response Response Status C

ACCEPT IN PRINCIPLE.

Add three values and a reference to 3.2.7 to Figure 3-1

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CI 03 SC Figure 3-1

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CI 03 SC Figure 3-2 P11 L3 Comment # 32

Thompson, Geoff

Nortel

Comment Type ER

Comment Status R

See comment #28

Suggested Remedy

Response

Response Status C

REJECT.

This comment was WITHDRAWN by the commenter.

CI 04 SC 4.2.1.4 P17 L35 Comment # 22

Squire, Matt

Hatteras Networks

Comment Type TR

Comment Status A

Its not clear that the truncating is dependent on the supported application. in the earlier section (3.2.7), we should give names to the various max frame sizes that can be supported, and then use those application names here to say when you can/can't truncate. The way the text reads now, for example, a MAC claiming support for envelope frames can truncate after 1522 bytes (q-tag support), but that would seem wacky to allow that.

Suggested Remedy

maybe something like: The receiving CSMA/CD sublayer is not required to enforce the frame size limit, but it is allowed to truncate frames longer than those it supports based upon the maximum frame size supported by this implementation as defined in 3.2.7. When truncating a long frame, the CSMA/CD sublayer should report this event as an (implementation-dependent error). For basicFrame support, frames longer than maxBasicFrameSize can be truncated. For qtagFrame support, frames longer than maxQtagFrameSize can be truncated. For envelopeFrameSupport, frames longer than maxEnvelopFrameSize can be truncated.

Response

Response Status C

ACCEPT IN PRINCIPLE.

"...but it is allowed to truncate frames longer than its supported maxValidFrameSize." Editor instructed to remove rest of paragraph.

CI 04 SC 4.2.4.2.1 P17 L38 Comment # 10

Martin, David

Nortel Networks

Comment Type E

Comment Status A

Suspect incorrect cross-reference.

Suggested Remedy

Change "(see 3.2.1)" to "(see 3.2.7)".

Response

Response Status C

ACCEPT IN PRINCIPLE. point to definition of envelope frames per resolution of comment 30

CI 04 SC 4.2.4.2.1 P17 L38 Comment # 21

Squire, Matt

Hatteras Networks

Comment Type T

Comment Status A

3.1.2 is the mapping of service interface to primitives, not the definition of envelope frames (which aren't as a whole defined anywhere any more, I don't think).

Suggested Remedy

It would seem useful to define:
maxBasicFrameSize
maxQtagFrameSize
maxEnvelopFrameSize
rather than including formulas in the text

Response

Response Status C

ACCEPT IN PRINCIPLE. See comment #22

CI 04 SC 4.2.7.1 P18 L21 Comment # 11

Martin, David

Nortel Networks

Comment Type E

Comment Status A

Suspect incorrect cross-reference.

Suggested Remedy

Perhaps change "see 3.2.1" to "see 3.2.7", but there may be a more explicit subclause to point to.

Response

Response Status C

ACCEPT. May need to create some text to define 'envelope' -- perhaps 3.1 per comment 29,30

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CI 04 SC 4.2.7.1

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CI 04 SC 4.2.7.1 P18 L 27 Comment # 23
Squire, Matt Hatteras Networks

Comment Type E Comment Status R

I mentioned this in an earlier comment, but rather than typing maxBasicFrameSize+qTagPrefixSize everywhere, can't we just name that to maxQtagFrameSize and use it consistently.

Suggested Remedy

Just think it would be easier to follow.

Response Response Status C

REJECT. This is legacy grandfathered pascal syntax.

CI 04 SC 4.2.7.1 P18 L 48 Comment # 24
Squire, Matt Hatteras Networks

Comment Type T Comment Status A

Eliminate the whole ""For Envelope frames..." sentence - its unnecessary and therefore confusing. The data value is everything after length/type and before FCS, period.

Suggested Remedy

Delete delete delete...

Response Response Status C

ACCEPT IN PRINCIPLE.
The entire contents within the braces = "{Contains the portion of the frame that starts with the first bit following the Length/Type field and ends with the last bit prior to the FCS field.}"
802.3 does not know about the contents of the data field beyond the length/type field.

CI 04 SC 4.2.7.1 P18 L 53 Comment # 12
Martin, David Nortel Networks

Comment Type E Comment Status A

Suspect incorrect cross-reference.

Suggested Remedy

Change "See 3.2.1" to "See 3.2.7".

Response Response Status C

ACCEPT IN PRINCIPLE.
point to definition of envelope frames per resolution of comment 30

CI 04 SC 4.2.9 P20 L 22 Comment # 25
Squire, Matt Hatteras Networks

Comment Type T Comment Status R

Can envelope frames be determined dynamically (e.g. be determined as envelop frames vs basic vs tagged)? Note tagged frames may in fact include envelope frames inside the VLAN tag so even "old" tagged frames can't be identified by Ethertype to be limited to 1522B.

Suggested Remedy

We could say MAC implementations supporting a maximumFrameSize of maxQtagFramesize (or basic+qtag) have the option of truncating based on whether a frame is basic or q-tagged, but implemenations supporting a maximumFrameSize of maxEnvelopeFrameSize must truncate only based on that constant value.

Response Response Status C

REJECT.
The standard does not preclude nor require envelope frames be determined dynamically.

CI 04A SC 4A.2.4.2 P29 L 38 Comment # 13
Martin, David Nortel Networks

Comment Type E Comment Status A

Suspect an incorrect cross-reference.

Suggested Remedy

Change "(see 3.2.1)" to "(see 3.2.7)".

Response Response Status C

ACCEPT IN PRINCIPLE.
point to definition of envelope frames per resolution of comment 30

CI 04A SC 4A.2.7.1 P30 L 30 Comment # 14
Martin, David Nortel Networks

Comment Type E Comment Status A

Suspect incorrect cross-reference.

Suggested Remedy

Change "See 3.1.2}" to "See 3.2.7}".

Response Response Status C

ACCEPT IN PRINCIPLE.
point to definition of envelope frames per resolution of comment 30

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CI 04A SC 4A.2.7.1

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CI 99 SC P1 L 25 Comment # 15

Squire, Matt Hatteras Networks

Comment Type E Comment Status A

Rather than introduce the "envelope" term in the immediate abstract, use more traditional terminology so people can understand without knowing about "envelope".

Suggested Remedy

Replace "requiring envelope information" with "requiring additional encapsulation before and/or after a traditional (basic) Ethernet frame."

Response Response Status C

ACCEPT IN PRINCIPLE. Retain 'envelope' term with additional explanation (including some of this wording) per comment 30

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

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