



1000 Mbit/s Dedicated Token Ring 802.5v/Strawman 0.2: Full Comment Report

Comment NAJ-01

Section 0.0 Line 1 Severity A/C Type ED Status ACCEPTED

Highlight To Committe ☐ Commenter Agrees? ☐ Editing Complete ☒

Concern: Add an IEEE copyright box to front page

Solution: See 802.5t for template.

Response: OK

Comment NAJ-02

Section 0.0 Line 1 Severity A/C Type ED Status ACCEPTED

Highlight To Committe ☐ Commenter Agrees? ☐ Editing Complete ☐

Concern: Document style is not correct.

Solution: Get and use the IEEE 802 Word template.

Response: OK

Comment KTW-16

Section 0.0 Line 1 Severity DIS Type TECH Status OPEN

Highlight To Committe ☒ Commenter Agrees? ☐ Editing Complete ☐

Concern: I am concerned that it appears that all is finished when this document is put in its appropriate form. I disagree. More committee discussion is required to insure all input has been received from all parties. To date, no committee dscussion has occurred.

Solution: Open the floor for discussion.

Response: I agree.
This item is left open as a placeholder for such discussion.

Comment NAJ-03

Section 0.0 Line 1 Severity A/C Type ED Status MODIFIED

Highlight To Committe ☐ Commenter Agrees? ☐ Editing Complete ☒

Concern: Draft and strawman document have a limited lifetime. This should be contained in either the header or footer.

Solution: Add a expiry date (e.g. publication date + 6 months) to the header or footer (your call).

Response: Done - six month expiry added to header

Comment KTW-01

Section 1.0 **Line** 1 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This page needs to have a copyright statement.

Solution: I sent the appropriate statement to Richard Knight on July 28.

Response: Accepted. See NAJ-01

Comment KTW-02

Section 1.0 **Line** 1 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This page should not have a page number.

Solution: I sent a note to Richard on July 28 explaining the page numbering scheme.

Response: Accepted.

Comment KTW-03

Section 1.0 **Line** 13 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This page should be an introduction to the change and should be numbered ii.

Solution: I sent an appropriate Introduction to Richard Knight on July 28.

Response: Accepted.

Comment KTW-04

Section 1.0 **Line** 13 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: This should be page 1 of clause 1 update and numbered 1-1.

Solution: I sent a note to Richard on July 28 explaining the page numbering scheme.

Response: Accepted.

Comment NAJ-04

Section 1.1 **Line** 20 **Severity** A/C **Type** ED **Status** MODIFIED

Highlight To Committe ☐ **Commenter Agrees?** ☒ **Editing Complete** ☒

Concern: I don't think this is the next letter in the list.

Solution: Should be gg)

Response: Draft 2.2 of 802.5t takes this list to item hh).
Shouldn't the next item therefore be jj)?

Comment KTW-05

Section 1.4 **Line** 45 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: The term [17] should not be included. The editors of ISO/IEC 8802-5 have dispensed with this numbering scheme.

Solution: Remove [17]

Response: OK

Comment KTW-06

Section 1.4 **Line** 49 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: I think the answer to the question is YES.

Solution: Remove lines 49-51 on page 2. Do not number the entry (see KTW-05).

Response: Accepted.

Comment KTW-07

Section 1.4 **Line** 65 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: The term [22] should not be included. The editors of ISO/IEC 8802-5 have dispensed with this numbering scheme.

Solution: Remove [22].

Response: OK

Comment KTW-08

Section 2.2 **Line** 67 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This should be a separate clause, not part of one document.

Solution: Change this to be a clause 2 update, separate from the clause 1 update.

Response: All clauses separated into different documents.

Comment KTW-09

Section 2.2 **Line** 70 **Severity** A/C **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: Clause 2 update for 802.5t does not have a placemark for 1000 Mbit/s. Thus note can be removed.

Solution: Remove lines 70-73, but leave line 74 as is except make it larger and itialize it.

Response: OK

Comment KR-01

Section 2.2 **Line** 112 **Severity** DIS **Type** ED **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: The statement is true for 100Mbit/s but not true for 1000Mbit/s.

Solution: Delete Line 112 starting at "Operation" and line 113.

Response: Agreed.
Does anyone remember what this line was all about for 100Mbit/s anyway?

Comment KTW-10

Section 2.2 **Line** 116 **Severity** DIS **Type** TECH **Status** ACCEPTED

Highlight To Committe ☒ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: This figure needs to be changed to have the same format as Figure 2.2-1 and 2.2-2 as it relates to PSC. This eliminates the need to have PS_CONTROL,request having two entries, one for PSC and one for Hardware Repeat control.

Solution: This was agreed to by Andy Fierman and Ken Wilson at UNH.

Response: Accepted. Not quite as 802.5t D2.2.
Committee review of new diagram reqd.

Comment KR-02

Section 2.2 **Line** 117 **Severity** Q **Type** ED **Status** ACCEPTED

Highlight To Committe ☒ **Commenter Agrees?** ☒ **Editing Complete** ☐

Concern: Do we need to make a statement in section 2.2.3 about a crossover function in the cable plant? Should we put this in the drawing?

Solution: This sort of harks back to the discussion of figure 2.2-2. Note that I am assuming that there will be no crossover function as per 2.2-1 for GBTR. Therefore I think it is important to state here like we do with fiber at 4, 16 and 100 that the crossover function is in the cable plant. Note that this statement is made in section 9.8 lines 460-463.

Response: We didn't have such a statement in 2.2 for 16/4 fibre, so I assume that the same applies for 1000Mbit/s. However it is worth adding a statement here to clarify the difference between 100Mbit/s and 1000Mbit/s copper plants. This statement is made in full for each media type in clause 9.8.2.4.

Comment NAJ-07

Section 9.0 **Line** 1 **Severity** Q **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Is phantom supported at 1000 Mbit/s. If not, then clause 9 may need updating. Clause 14 would require a statement that SPV(PD) shall be X'0002'

Solution:

Response: At present, no phantom is proposed at 1000Mbit/s.
1000BaseCX has no magnetics.

Comment KTW-11

Section 9.0 **Line** 120 **Severity** A/C **Type** ED **Status** OPEN

Highlight To Committe ☒ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: This is just the beginning for clause 9.2 update. Also, 9.3 has changes

Solution: Add the comment:

This is a first pass to defining the changes needed in clause 9.1, 9.2 and 9.3.

Response: Left open as a placeholder for further discussion.

Comment KTW-17

Section 9.0 **Line** 120 **Severity** A/C **Type** ED **Status** MODIFIED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This should be a separate clause, not part of one document.

Solution: Change this to be a clause 2 update, separate from the clause 1 update.

Response: Clause 9.0! See KTW-08

Comment NAJ-05

Section 9.1 **Line** 1 **Severity** Q **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Frame properties may need to be revisited.

Solution:

Response: Change required to abort definition because symbols are bytes not nibbles.

Comment NAJ-06

Section 9.1 **Line** 1 **Severity** Q **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Trade-up description may need to be updated.

Solution:

Response:

Comment KTW-18

Section 9.7 **Line** 147 **Severity** A/C **Type** ED **Status** MODIFIED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This should be a separate clause, not part of one document.

Solution: Change this to be a clause 2 update, separate from the clause 1 update.

Response: Clause 9.7! See KTW-08

Comment KTW-12

Section 9.7 **Line** 157 **Severity** DIS **Type** TECH **Status** ACCEPTED

Highlight To Committe ☒ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This figure needs to be changed to have the same format as Figure 2.2-1 and 2.2-2 as it relates to PSC. This eliminates the need to have PS_CONTROL,request having two entries, one for PSC and one for Hardware Repeat control.

Solution: This was agreed to by Andy Fierman and Ken Wilson at UNH.

Response: Diagram modified. Now similar to that in 802.5t D2.2.

Comment KTW-19

Section 9.8 **Line** 161 **Severity** A/C **Type** ED **Status** MODIFIED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This should be a separate clause, not part of one document.

Solution: Change this to be a clause 2 update, separate from the clause 1 update.

Response: Clause 9.8! . See KTW-08.

Comment KR-03

Section 9.8 **Line** 250 **Severity** DIS **Type** TECH **Status** MODIFIED

Highlight To Committe ☒ **Commenter Agrees?** ☒ **Editing Complete** ☐

Concern: If I am reading 802.3Z correctly table 9.8-5 is wrong. Refer to 802.3z section 35.2.3. This section seems to me to indicate that the MSB in the GMII data stream is on TXD7 and RXD7. But then they are also stating that TXD0/RXD0 is transmitted first which is there LSB and our MSB. What a mess!

Solution: Either..
A) Remove the MSB and LSB indicators from table 9.8-5
B) Add LSB and MSB indicators to the GMII byte description
C) Write some words explaining the mess ([802.3z] defines the MSB as RXD7 on the GMII. The 1000MBit/s Token Ring Physical layer defines RXD7 as the LSB. However in both supplements this bit is the last bit received across the GMII.)
D) A combination of A, B, or C
E) Forget it. If the committee thinks it is OK I will withdraw my DIS.

Response: I don't think that the diagram is wrong. I agree that it is rather confusing because of the MSB/LSB conventions adopted by the 802.3 and 802.5 groups, but it is correct.
We went through a similar argument with these diagrams at 100Mbit/s and their relationship with the diagrams in 802.3u was equally confusing. The conclusion then was to draw the diagrams in this way, and I therefore think that option (E) - to leave it alone - is the best one.

Comment KR-04

Section 9.8 **Line** 274 **Severity** DIS **Type** TECH **Status** MODIFIED

Highlight To Committe ☒ **Commenter Agrees?** ☒ **Editing Complete** ☐

Concern: Same as KR-03

Solution: Same as KR-03

Response: Same as KR-03

Comment NAJ-08

Section 11.0 **Line** 1 **Severity** DIS **Type** TECH **Status** ACCEPTED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: << Placeholder >>

Clause 11 does not support 1000 Mbit/s

Solution:

Response: It does now.

Comment KTW-13

Section 14.0 **Line** 480 **Severity** A/C **Type** ED **Status** WITHDRAWN

Highlight To Committe ☐ **Commenter Agrees?** ☒ **Editing Complete** ☒

Concern: The Title of Clause 14 needs to be changed.

Solution: Change the title to read:

14 Formats and Facilities for 100 Mbit/s and 1000 Mbit/s

Response: Why?

What's wrong with "High Media Rate"- that covers both?

Comment KTW-20

Section 14.0 **Line** 490 **Severity** A/C **Type** ED **Status** MODIFIED

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☒

Concern: This should be a separate clause, not part of one document.

Solution: Change this to be a clause 2 update, separate from the clause 1 update.

Response: Clause 14! See KTW-08

Comment KTW-14

Section 14.2 **Line** 509 **Severity** DIS **Type** TECH **Status** MODIFIED

Highlight To Committe ☒ **Commenter Agrees?** ☒ **Editing Complete** ☐

Concern: I fail to see how adding one /R/ causes the IFG to be aligned on a "word" alignment. It seems alignment is determined by the SSD. Then it must be determined how many /R/ symbols must be added to get word aligned. Am I missing something. For example, I assume a frame can contain 3 symbols short of word alignment.

Solution: Fix this statement or explain it.

Response: Sentence to be changed to describe end of frame on "odd octet" rather than using the term "word alignment".

Comment KTW-15

Section 14.2 **Line** 513 **Severity** Q **Type** ED **Status** ANSWERED

Highlight To Committe ☒ **Commenter Agrees?** ☒ **Editing Complete** ☐

Concern: Do I understand the IFG could be only 5 octets in size (or are symbols 2 octets in size).

Solution:

Response: The following explanation applies only to 1000BaseX PHY:
Symbols are single octets. /I/ "Code Groups" contain two octets. 5 /I/ code groups plus the ESD /T/R/ gives 12 symbol octets of IFG.
Note that this is a rather arbitrary decision based on the 802.3z inter-frame gap. It is open to possible change.

Add terms inherited from 802.3 to Clause 1.3 to clarify.

Comment NAJ-09

Section A.0 **Line** 1 **Severity** DIS **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Annex A does not support 1000 Mbit/s

Solution:

Response: PICS changes to be made when draft standard matures.
Item remains open for now.

Comment NAJ-10

Section P.0 **Line** 1 **Severity** Q **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Does the lobe test calculation need to be revisited for 1000 Mbit/s?

Solution:

Response:

Comment NAJ-11

Section Y.0 **Line** 1 **Severity** DIS **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Annex Y needs to be updated for 1000 Mbit/s.

Solution:

Response: What is required to extend the auto-detection FSM to 1000Mbit/s ?

Comment NAJ-12

Section Z.0 **Line** 1 **Severity** Q **Type** TECH **Status** OPEN

Highlight To Committe ☐ **Commenter Agrees?** ☐ **Editing Complete** ☐

Concern: << Placeholder >>

Do we do auto-negotiation at 1000 Mbit/s?

Solution:

Response: The third party PHY issues which prevented us using autonegotiation at 100Mbit/s also apply at 1000Mbit/s. In principle it exists for all media types at 1000Mbit/s, but we should not mandate it. We must wait to see whether autonegotiation turns out to be a compulsory part of link bring-up for the 1000BaseT UTP PHY. If it is then we might have a problem. This issue remains open.



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Total A/C Comments:	19
Total DIS Comments:	10
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Total Comments:	36

Comment IDs by Type. Bold IDs require closure.

Q Comment IDs: KR-02 KTW-15
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