

Comments

CiD	Commenter	Vote	Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied	Response	Proposed Change
3	Mark Hamilton	Disapprove	Technical	21	3.1	8	The definition of bridge adds the term "bridgeable" as a qualifier on IEEE 802 networks. But, this is not a defined term. It seems that subclause 6.1 is trying to define it, to be, effectively, any network that supports the MAC service (and ISS?) specified in 802.1AC. If that's the intent/meaning, then let's define it as such.	Add a definition: "bridgeable: A network that that provides sufficient capabilities to support the MAC Service and Internal Sublayer Service specified in IEEE Std 802.1AC."	Yes	Revised	Make the changes indicated in document 11-24-0598-00 with the change "In the context of this standard" to be "in the context of IEEE Std 802"
4	Mark Hamilton	Disapprove	Technical	21	3.1	8	Why does a bridge have to connect specifically/only IEEE 802 networks (in fact we note later that some non-802 networks are also bridgeable)? "Bridge" is a generic term, and is further specified as IEEE Std 802.1Q Bridge when it is specifically following IEEE 802 protocols and uses.	P21.8, delete "IEEE 802". Same thing at P26.25. P35.4, replace "bridged IEEE 802 network" with "bridged network". Same thing at P35.6. P35.19, delete "IEEE 802.1Q". P39.3, delete "IEEE 802". Same thing at P39.7 and P39.10.	Yes	Revised	Make the changes indicated in document 11-24-0598-00 with the change "In the context of this standard" to be "in the context of IEEE Std 802"
19	Don Fedyk	Approve	Editorial	29	\$. \$	4	Figure 1 and 2 are duplicates	Remove one	Yes	Rejected	The two versions of Figure 1 only occur in the comparison document (CMP) and not the draft, which is what is being balloted. It is not possible to show the differences between figures with red lines, so both are provided for comparison.
5	Mark Hamilton	Disapprove	Technical	32	5.2.2	19	The "definitions" of EPD and LPD in 5.2.2 are very confusing: 1) They overlap (consider a SNAP frame, which is apparently both); 2) They leave a gap (consider an OUI-based local protocol identifier, which is apparently neither); 3) they conflate the information being carried (EtherType or LSAP address) with the format of how it is carried, without making the distinction clear.	A contribution is being worked/will be provided to replace the EPD/LPD content, and clarify these concerns.	Yes	Revised	Make the changes to 5.2.2 and Clause 9 as indicated in document 1-24-0010-02
7	Lily Lyu		Technical	32	5.2.2	24	"New IEEE 802 standards shall ..." How to distinct which is 'New' IEEE 802 standards and which is 'old'?	Change to "IEEE 802 standards published after year xxx shall..."		Revised	Change to "IEEE 802 standards published after 2020 shall"
8	Lily Lyu		Editorial	33	5.2.2	5	OUI Extended EtherType is described in 9.2.5	Change "9.2.4" to "9.2.5"		Accepted	
9	Lily Lyu		Editorial	33	5.2.2	6	Local Experimental EtherType is described in 9.2.4	Change "9.2.3" to "9.2.4"		Accepted	
14	Paul Bortoff	Approve	Technical	33	5.2.2	7	Unclear intent of first sentence. Does this mean Ethertype ending should not be used to identify a LPD SNAP using the LLC encapsulation Ethertype or does this mean that a length should not be encoded using SNAP?	Delete the first sentence on line 7.	No	Revised	Make the changes to 5.2.2 and Clause 9 as indicated in document 1-24-0010-02
12	Roger Marks	Disapprove	Technical	35	5.3.2.1	19	The sentence is misleading. Though it does not actually say that people use the term "switch" to indicate compliance with IEEE Std 802.1Q, people may get that impression.	Change note to "The term "switch" is sometimes used in the industry to refer to products that include bridging capability, often with other interconnection functions as well."	Yes	Revised	Change note to "NOTE—The term switch is sometimes used in the industry to refer to products that include a bridging capability, such as an IEEE 802.1Q bridging capability, often with other interconnection functions. IEEE 802 Standards do not use the term switch to refer to IEEE 802.1Q bridging functions or capabilities."
13	Roger Marks	Disapprove	Technical	35	5.3.2.1	8	This list seems to be a mix of items characteristic of generic bridges (along the lines of the initial sentence "Bridges are stations that interconnect multiple access domains.") and those characteristic of IEEE 802.1Q bridges.	Split the list into two lists, first for the generic bridge and then for the 802.1Q bridge.	Yes	Revised	Change "A bridged network" to "An IEEE 802 bridged network" in the introductory line on line 8. Change the title of the subclause to be "IEEE 802 bridged networks"

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				<p>The introductory three sentences are enhanced over the previous draft, but can be improved. I tried to develop my suggested remedy carefully, because the final formulation may need to survive for a longer time unaltered once 802 REVc is published.</p> <p>Issues I see with the current three sentences: 1) The lettered list (line 38ff.) shows IEEE 802 standards with protocols and procedures. In contrast, the second introductory sentence these standards describing TSN capabilities. Both terms are mixed. 2) I do not think there is a common understanding of what "TSN capabilities" are. For example: - The referred 802 standards have no definition of what a TSN capability is and what not. - Different equipment vendors may have "TSN..." products that differ significantly in the supported 802 protocols and mechanisms, which may sometimes be a result of different target markets, link speeds, or a variety of other reasons. - Different individuals in WG 802.1 may likewise different views on what the "relevant"/"important" protocols and procedures are. - The set of relevant protocols and procedures may also vary between profile projects and standards (Std 802.1BA, Std 802.1CP, P802.1DG, P802.1DP, IEC/IEEE P60802) for different markets. In addition, listing many transmission selection algorithms here may be misinterpreted. For example, classic strict priority transmission selection is sufficient for bridges in Std 802.1CM ("TSN for Fronthaul"). None of the other transmission selection algorithms are listed as mandatory, and the strict priority algorithm was there before "TSN" and is also there in pure best-effort networks. In a weaker form, something similar applies for the upcoming Std 802.1DP for the mandatory transmission selection algorithms in bridges - strict priority and credit-based shaper are sufficient for some bridges in the current draft of P802.1DP. Credit-based shaper was also there before "TSN", although it is at least listed in the current 802 REVc draft. 3) Along the lines of item 2), I do not think there is a common understanding of "TSN traffic streams". 4) The entire second sentence (the one with the "TSN traffic streams") appears not very helpful for readers of Std 802 at all. 5) "latency" and "delay" are used as synonyms. One is enough. 6) "networking protocols and mechanisms" and "network protocols and mechanisms" are used as synonyms. One is enough.</p> <p>Background on my suggested remedy: On item 1): IMHO it is a good idea to separate "TSN capabilities" from "protocols and mechanisms"/not use both interchangeably. On item 2): In fact, Std 802 can leave it entirely open what protocols and mechanisms are "TSN" by avoiding indications or implications to the furthest extent. This would reduce the chance for misinterpretation. There may be a unified view in a far future of what TSN is (beyond the name of an IEEE 802.1 Task Group), but I do not think that this view is available now. TSN capabilities, on the other hand, can be used as a generic term for capabilities in 802 networks like data transport with low and bounded latency, low and bounded delay variation, and low packet loss. But the term can reside as a definition left to the profiles, vendors, users, individuals, whomever by letting "TSN capabilities" being an application-specific definition. On item 3): I had a look into IEEE Std 802.1Q-2022 and 802.1CB-2017 on terms close to "TSN traffic stream". - In 802.1Q: "time-sensitive streams", "guaranteed streams", "traffic streams", just "streams" (also with different capitalization), and "TSN Streams" (note that there is no match for "TSN traffic streams"). There is just "Stream" and "time-sensitive stream" have definitions in 3.259 and 3.270, respectively. The others have no definition. - In 802.1CB: "Stream" and other more specific ones. "Stream" has a definition in clause 3. The definitions of "Stream" in 802.1Q and 802.1CB are fortunately very similar: - In 802.1Q: "A unidirectional flow of data (e.g., audio and/or video) from a Talker to one or more Listeners."</p>	<p>Change</p> <p>"Some IEEE 802 standards specify TSN capabilities to provide network protocols and mechanisms for use by applications that need data transport with low and bounded latency, low and bounded delay variation, and low packet loss. The TSN capabilities augment networking protocols and mechanisms to support both TSN traffic streams as well as other traffic. Some TSN capabilities are described in the following standards:"</p> <p>to one of the following options A or B (for discussion):</p> <p>A: "Some IEEE 802 standards specify network protocols and mechanisms for applications that need TSN capabilities such data transport with low and bounded latency, low and bounded latency variation, and low packet loss. Some of these network protocols and mechanisms are the following ones:"</p> <p>B: "Some IEEE 802 standards specify network protocols and mechanisms for applications that need TSN capabilities such as data transport from one end station to one or more other end stations with low and bounded latency, low and bounded latency variation, and low packet loss. Some of these network protocols and mechanisms are the following ones:"</p> <p>Remarks: - My choices on items 5) and 6) was more or less randomly. - Term "end station" in option B should imply 802 network.</p>	<p>Yes</p>	<p>Revised</p>	<p>Revised: Change "Some IEEE 802 standards specify TSN capabilities to provide network protocols and mechanisms for use by applications that need data transport with low and bounded latency, low and bounded delay variation, and low packet loss. The TSN capabilities augment networking protocols and mechanisms to support both TSN traffic streams as well as other traffic. Some TSN capabilities are described in the following standards:" to "Some IEEE 802 standards specify network protocols and mechanisms for applications that need TSN capabilities such as data transport from one end station to one or more other end stations with low and bounded latency, low and bounded latency variation, and low packet loss.* Some of these network protocols and mechanisms are the following:" Add a footnote: "IEEE 802.1 standards (IEEE 802.1Q and IEEE 802.1CB) sometimes use the term "stream" to describe such a data transport."</p>
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Comments

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18	Johannes Specht	Disapprove	Editorial	36	5.3.2.6	39	Change "Credit-Based Shaper:" to "Credit-Based Shaper" (i.e., remove the colon)	Remark: I set "Must Be Datisfied" = NO. The change is not in scope in a recirculation ballot, but maybe it can be implemented due to its trivial editorial nature.	No	Accepted	
2	Weiyi Li	Disapprove	Technical	38	5.3.3	8	Perhaps adding an RM with IP, or a reference to IP layering, might further clarify the context.	As stated.	No	Revised	In 5.3.3, change "These process network layer protocols that operate directly above the LLC sublayer, with forwarding decisions based on network layer addresses." with "These process network layer protocols that operate directly above the LLC sublayer, as shown in Figure 3, with forwarding decisions based on network layer addresses."
10	Roger Marks	Disapprove	Technical	38	5.2.2	16	The introduction of encoding types for protocol identifiers is helpful but has failed to fully clarify their role in the LLC. The concepts of EPD and LPD are insufficient to address these issues. With 802.2 in a nebulous state with respect to IEEE 802, IEEE Std 802 should explain the role of the LLC in the IEEE 802 network.	As a start, adopt the changes specified in "Proposed Protocol Identification updates to IEEE Std 802" < https://mentor.ieee.org/802.11/documents?is_dcn=35&is_year=2024 >.	Yes	Revised	Make the changes to 5.2.2 and Clause 9 as indicated in document 1-24-0010-02
6	Mark Hamilton	Disapprove	Technical	39	6.1	8	Why does a bridge have to support EtherTypes?	Delete "and support the use of EtherTypes for protocol identification at the LLC sublayer". Add a new sentence, "An IEEE Std 802.1Q Bridge will further support the use of EtherTypes for protocol identification, and conform to other requirements of IEEE Std 802.1Q."	Yes	Revised	Delete "and support the use of EtherTypes for protocol identification at the LLC sublayer".
1	Marek Hajduczenia		Editorial	52	9.1	14	" as well as a protocol identifiers based on OUI-36" – "a protocol identifiers" is wrong, we do not need "a" before a plural noun	Change to " as well as protocol identifiers based on OUI-36" to make sure the article and noun match	No	Accepted	
11	Roger Marks	Disapprove	Editorial	55	9.2.5	19	Spelling error ("cointain").	Change "cointain" to "contain".	No	Accepted	
15	Paul Bortoff	Approve	Editorial	67	B	3	Use of acronym to start an appendix.	Change RM to Reference Model	No	Accepted	
16	Paul Bortoff	Approve	Editorial	88	F.2	12	typo	ink -> Link	No	Accepted	