Editor's Report
60802 Draft 3.4

IEEE 802.1
June 2025

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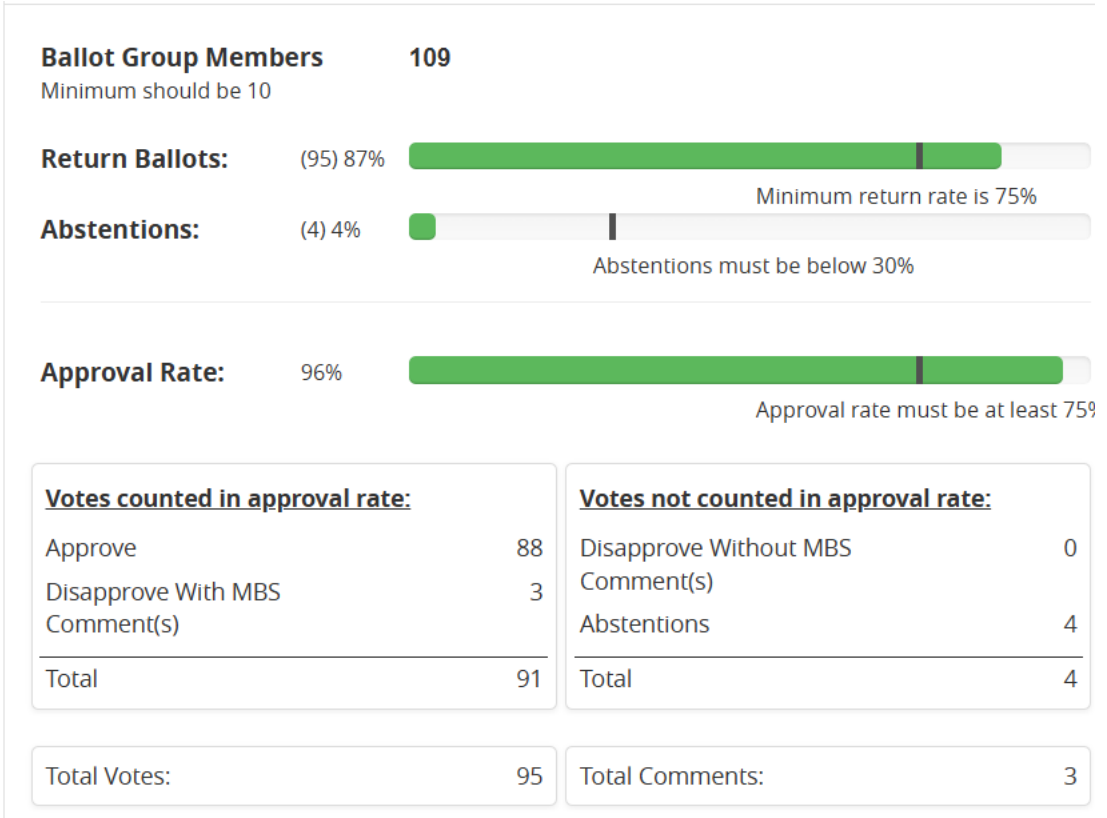
Overview

- The fourth recirculation of SA Ballot passed with 96% approval and an 87% response rate.
- There are 3 remaining disapprove votes.
  - One provided comments
  - The other 2 have provided MBS comments on prior ballots
  - All three voters have been contacted in an attempt to address their concerns
- 3 Total Comments.
  - General – 0
  - Editorial – 0
  - Technical – 3



Ballot Group Members		**109**
Minimum should be 10		
Return Ballots:	(95) 87%	
		Minimum return rate is 75%
Abstentions:	(4) 4%	
		Abstentions must be below 30%
Approval Rate:	96%	
		Approval rate must be at least 75%

Votes counted in approval rate:	
Approve	88
Disapprove With MBS Comment(s)	3
Total	91

Votes not counted in approval rate:	
Disapprove Without MBS Comment(s)	0
Abstentions	4
Total	4

Total Votes:	95

Total Comments:	3

Ballot Statistics

CATEGORY	All Respondents	
	TOTAL	%
Yes	88	96.70%
No	3	3.30%
Voting Yes or No	91	100.00%
Abstain	4	4.21%
Respondents	95	87.16%
Ballot Pool	109	
Non-voting		
No. of commenters	1	1.05%
No. of comments	3	
TR	3	100.00%
T	0	0.00%
ER	0	0.00%
E	0	0.00%
G & GR	0	0.00%

Responses

Name	Current Vote	Comments
Tomoko Adachi	Approve	N
Iwan Adhicandra	None	N
Boon Chong Ang	Approve	N
BUTCH ANTON	Approve	N
William Armstrong	Approve	N
Stefan Aust	Approve	N
Harry Bims	Approve	N
Christian Boiger	Approve	N
Rich Boyer	Approve	N
Travis Breitkreutz	Approve	N
Vern Brethour	Approve	N
Richard Bugg	Approve	N
Radhakrishna Canchi	Approve	N
Paul Cardinal	Approve	N
Pin Chang	Approve	N
zhiman chen	Approve	N
Baw Chng	None	N
Rodney Cummings	Approve	N
Michael Dood	Approve	N
Anthony Downs	None	N
MARC EMMELMANN	Approve	N
Janos Farkas	Approve	N
Matthias Fritsche	Abstain	N
Madhukar Gaganam	None	N
Geoffrey Garner	Approve	N
Sachin Goel	None	N
Paulo Goncalves	Approve	N
Yanjie Gong	Approve	N
Stephen Haddock	Approve	N
Marek Hajduczenia	Approve	N
Mark Hantel	Approve	N
Marco Hernandez	Approve	N
Werner Hoelzl	Approve	N
Oliver Holland	Approve	N
C Huntley	Disapprove	N
Abdul Jabbar	Abstain	N
Raj Jain	Approve	N
SangKwon Jeong	None	N
Pranav Jha	Approve	N
Thomas Joergensen	Approve	N
Lokesh Kabra	Approve	N
Piotr Karocki	Approve	N
Stephan Kehrer	Approve	N
Stuart Kerry	Approve	N
Marcel Kiessling	Approve	N
Yongbum Kim	Approve	N
Takashi Kuramochi	Approve	N
Gavin Lai	Approve	N
Hyeong Ho Lee	Approve	N
Xiao Liang	None	N
Ru Lin	Approve	N
Greg Luri	Approve	N
Jingfei Lv	Approve	N
Michael Lynch	None	N
Yongsen Ma	Abstain	N

Name	Current Vote	Comments
Christophe Mangin	Approve	N
Scott Mansfield	Approve	N
David McCall	Approve	N
Jonathon Mclendon	Approve	N
Sven Meier	Disapprove	N
Richard Mellitz	Approve	N
Martin Mittelberger	Approve	N
Michael Montemurro	Approve	N
Rajesh Murthy	Approve	N
Yukimasa Nagai	Approve	N
Paul Nikolich	Approve	N
Glenn Parsons	Approve	N
Bansi Patel	Approve	N
Dev Paul	None	N
Arumugam Paventhan	Approve	N
Richie Pearn	Approve	N
Cam Posani	Approve	N
Dieter Proell	Approve	N
Adee Ran	Approve	N
Alon Regev	Approve	N
Denis Reilly	Approve	N
Maximilian Riegel	Approve	N
Silvana Rodrigues	Approve	N
Benjamin Rolfe	Abstain	N
Jessy Rouyer	Approve	N
Atsushi Sato	Approve	N
Bartien Sayogo	Approve	N
Maik Seewald	Approve	N
Jhony Sembiring	Approve	N
Veselin Skendzic	Approve	N
Johannes Specht	None	N
Dorothy Stanley	Approve	N
Kevin Stanton	None	N
Guenter Steindl	None	N
Walter Struppler	Approve	N
Gary Stuebing	Approve	N
Bo Sun	Disapprove	Y
David Tepen	Approve	N
Richard Tse	Approve	N
Max Turner	Approve	N
Ganesh Venkatesan	Approve	N
John Vergis	Approve	N
James Weaver	None	N
Karl Weber	None	N
Scott Willy	Approve	N
Ludwig Winkel	Approve	N
Andreas Wolf	None	N
Jordon Woods	Approve	N
Lei Yang	Approve	N
Yi Yuan	None	N
Yu Yuan	Approve	N
Oren Yuen	Approve	N
Janusz Zalewski	Approve	N
Sven Zeisberg	Approve	N

Comments from Prior Ballots

- From Initial SA Ballot (d3.0)
- Editor's Position (as explained to the commentor):
  - IEC/IEEE 60802 is a profile.
  - The profile cannot deviate from the base standard.
  - The base standard (IEEE Std 802.1AS) must be changed.
  - There is nothing the Joint Project can do to address these concerns.

Cl **0** *SC* **0** *P* **17** *L* # **I-101**

Huntley, C SEL

Comment Type **ER** *Comment Status* **R**

The use of "Grandmaster" when there is no "Master" is not acceptable.
Note that there is no mandate from IEEE to not use "Master"
There is an overwhelming anger in the IEEE WG to this ridiculous change, causing much confusion to those involved in the many challenges of implementing and using 1588.

SuggestedRemedy

Please restore the IEEE 1588 use of the term "Master" and "Slave"

Response *Response Status* **W**

REJECT. IEEE Std 802.1AS have been amended to use inclusive terminology. IEEE Std 1588 has been amended to allow usage of alternative terminology.

Comments from Prior Ballots

- From Initial SA Ballot (d3.0)
- Editor's Position (as explained to the commentor):
  - The intent of our profile is to provide a common set of TSN mechanisms which can be used to achieve determinism.
  - This allows the various industrial consortia to make use of various TSN features, depending upon their requirements.
  - The inclusion of a common, interoperable approach to management (i.e., a common control plane) allows device which use different mechanisms (e.g., scheduled traffic vs. standard QoS) to "coexist" in the same network and still have their traffic reservations respected.

Cl **4** *SC* **4.5** *P* **30** *L* **873** # I-120

Huntley, C SEL

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

"scheduled time slots" are arguably the most important technology for achieving a deterministic latency for critical-latency traffic, but the algorithm to achieve this is missing.

SuggestedRemedy

Add an annex to cover all the issues to support "scheduled time slots", including algorithms and proven use cases.

Response *Response Status* **W**

REJECT. No specific remedy provided. It is not the role of this document to specify specific implementations. Mechanisms for achieving "scheduled time slots" are clearly specified in Clause 5.

Comments from Prior Ballots

- From Initial SA Ballot (d3.0)
- Editor's Position (as explained to the commentor):
  - While the response is correct, the term "transmission selection timing point" no longer appears in the document. That requirement was removed in a subsequent ballot based upon technical considerations, so no definition is needed.

Cl **5** *SC* **5.7.2** *P* **49** *L* **1571** # I-121

Huntley, C SEL

Comment Type **ER** *Comment Status* **R**

"transmission selection timing point" is not defined

SuggestedRemedy

Add definition for "transmission selection timing point"

Response *Response Status* **W**

REJECT. The "transmission selection timing point" is shown in 802.1Q-2022, figure 12-6 which is referenced.

Comments from Prior Ballots

- From Third Recirculation Ballot (d3.3)
- Editor's Position (as explained to the commentor):
  - The proposed change assumes that the committee understands what you consider to be essential and what is nice to have.
  - Committee members have intimate knowledge of industrial automation and industrial Ethernet communications. The draft comprises a consensus amongst the committee members as to what is needed for TSN in industrial automation.
  - After discussion, it seemed the commenters primary concern was with the time synchronization requirements.
    - The time synchronization requirements are the result of many man-months of exhaustive simulation with the involvement of Industry experts.

Cl **0** *SC* **0** *P* *L* # R3-1

Meier, Sven NetTimeLogic GmbH

Comment Type **GR** *Comment Status* **R**

In my point of view this standard defines unrealistic requirements and in general an overkill way bejond what is required for Industrial communication. The goal was to have a common set of TSN features that must be fullfilled for Industrial communication but as the standard is right now there is basically no existing TSN infrastructure that can satisfy the full standard as such. This will either lead to a scenario where vendors will kind of create a subset of it which is not the idea of Profile, making profiles of profiles or even worse create again incompability since vendors are simply not able to fullfill a lot of the requirements defined.
The strength of this should have been in simplicity taking only the realy essential parts of TSN which are needed for Industrial communication rather than making the blown up thing it is right now.

SuggestedRemedy

Strip the profile down to the realy essential parts and not having all thoses nice to have things in there. Looking at the existing Realtime Ethernet Solutions which shall basically be replaced by TSN it should be clear that this profile is an overkill and must be stripped down to the essentials.

Response *Response Status* **W**

REJECT. As the comment does not provide a proposed change, from a process perspective it is rejected.

Comments from Prior Ballots

- From Initial SA Ballot (d3.0)
- Editor's Position (as explained to the commentor):
  - The time synchronization requirements are the result of many man-months of exhaustive simulation with the involvement of Industry experts.

Cl **0** SC **0** P L # I-213

Meier, Sven NetTimeLogic GmbH

Comment Type **GR** *Comment Status* **R**

Way to narrowed down standard, chance that any actual implementation will be 100% compliant with all requirements are low.
Especially the time synchronization requirements, a lot of them can not be satisfied by current HW (accuracy and conceptual wise).
The goal should have been to find the real base requirements which need to be satisfied and these requirements are way off from what is typically needed for industrial network.
In my point of view this standard should have been a defacto alternative to other realtime-industrial ethernet networks like Profinet, Powerlink, Ethercat ... and not a whish list which can not be satisfied without throwing all existing (which is still not a lot) HW away and start from scratch. As a profile it shall be a subset and not a superset.

SuggestedRemedy

Response *Response Status* **W**

REJECT. As the comment does not provide a proposed change, from a process perspective it is rejected.

Thank you