

Editor's Questions and assumptions re: The IEC/IEEE 60802 TSN Profile for Industrial Automation

July 16, 2018

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Editor's Assumptions

- Document Format: The IEC format will be adopted.
 - Some accommodations to the format may be required to meet IEEE guidelines
 - Document Editor will be Microsoft Word, not Framemaker
- The IEEE balloting process will be used. The IEEE process:
 - requires ballot statistics for each ballot,
 - has semi-automated tools for constructing the statistics,
 - has tools for systematically reviewing and resolving each comment,
 - lots of support for the editor to draw upon.

Editor's Assumptions

- IEC comment submission:

MB/ NC ¹	Page number	Clause/ Subclause	Par/Fig/ Table/	Type	Comments	Proposed change	Observation secretariat
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- IEEE comment submission (available at /private/commenting-tool/MyBallot-tools):

Task Force Review and Working Group Ballot comment input form

First name	Surname	Affiliation	Phone

Click on column headers for help

Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied

- The forms are quite similar; however, use of the IEC template will place the burden on the editor to copy and paste comments from the IEC template to the IEEE template

Terminology

Term	IEEE Definition	IEC Definition
Shall	is required to	is required to
should	is recommended that	it is recommended that
may	“may” means “is permitted to,” and hence, “may” and “may not” mean precisely the same thing	is permitted
can	can is used for statements of possibility and capability, whether material, physical, or causal (can equals is able to)	Possibility and capability - is able to
must	must is deprecated and shall not be used when stating mandatory requirements; must is used only to describe unavoidable situations	external constraint or obligation on the user of the document, typically due to one or more legal requirements or laws of nature, that is not stated as a provision of the standard. Use of the word "must" does not imply that the external constraint referred to is a requirement of the document.

Format of Terminology is almost identical.

Terminology

- Document formats are similar.
- “Front matter” content will need to be worked out.
- Clause numbers in IEEE seem to be a “best practices” approach rather than formally declared in the style guide.
- Where do the conformance clause (clause 5) and PICS proforma reside?

IEC Major subdivision	Mandatory/Optional/Conditional	IEEE Major subdivision	Mandatory/Optional/Conditional
Title	Mandatory	Title	Mandatory
		Draft copyright statements	Mandatory
		Permissions list	Conditional
		Abstract and keywords	Optional
		Committee lists	Mandatory
		Acknowledgments	Conditional
ToC	Optional	ToC	Optional
Foreword	Mandatory		
Introduction	Optional/Conditional	Introduction	Mandatory
Scope	Mandatory	Scope	Mandatory
		Purpose	Optional
Normative references	Mandatory	Normative references	Mandatory
Terms and definitions	Mandatory	Definitions	Mandatory
Symbols and abbreviated terms	Conditional	Acronyms and abbreviations	Conditional
Technical content			
For example: test methods	Mandatory/Optional/Conditional	Body of an IEEE Standard	Mandatory/Optional/Conditional
Annexes	Optional	Annexes	Optional
Bibliography	Conditional	Bibliography	Conditional

Analysis based upon ISO/IEC Directives, Part 2, Edition 7.0, 2016-05, 2014 IEEE-SA Standards Style Manual and IEEE-SA Standards Board Operations Manual, June 2018

Project Scope

- Scope: This standard defines time-sensitive networking profiles for industrial automation. The profiles select features, options, configurations, defaults, protocols, and procedures of bridges, end stations, and LANs to build industrial automation networks.

<http://www.ieee802.org/1/files/public/docs2018/60802-Winkel-Principles-of-Standards-0518-v0.pdf>

Compatibility levels

- Interchangeability, Interoperability, Interworkability, are typically outside of the scope of IEEE 802.3 and mostly outside of IEEE 802.1
- Coexistence and interconnectability is the scope of the IEC/IEEE 60802.

(Figure is used in IEEE P2413)

Pertinent meta-model	Needed feature	Compatibility levels					
		Incompatible	Co-existent	Inter-connectable	Inter-workable	Inter-operable	Inter-changeable
IEEE 2413	Dynamic performance						
	Application functionality						
	Parameter semantics						
IoT-A, IETF, IEC, IEEE 802	Data types						
	Communication interface						
	Communication protocol						

Questions

- Where will the content we've already created reside? There's lots of good content that we don't want to lose.
 - Appendices?
 - Separate IEC and IEEE documents?
- Where are outstanding issues to be recorded?
 - IEEE generally creates an Annex Z, is there a similar approach in IEC?
- Who needs to be involved in the establishment of the "front matter" (boilerplate)?

Thank you