# Editor's Report 60802 Draft 1.1

September, 2019
IEEE802 Interim, Edinburgh

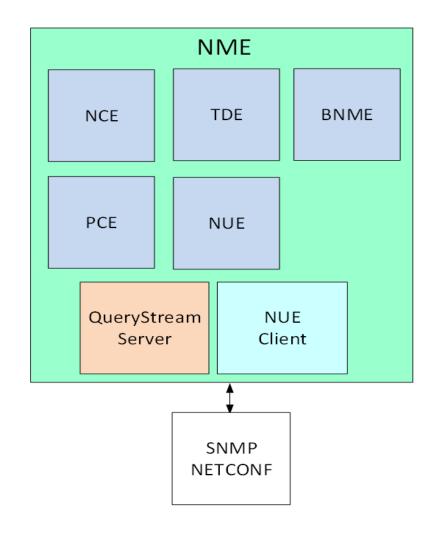


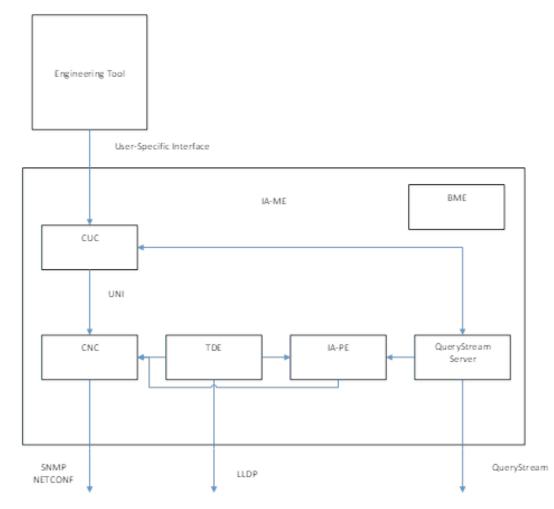
**Jordon Woods, Analog Devices** 

#### **Draft Status**

- Draft 1.1 is ready for review and incorporates
  - The restructuring discussed during comment resolution.
  - Contribution for Clause 4.1.1, Control loop operation (now clause 6.1.1).
  - Contributions for Time synchronization and "hot/cold swap"
  - Contribution for a proposed management model.
- The following comment resolutions are not reflected in this draft:
  - 627, 4, 9, 10, 17, 19, 34, 35, 53, 54, 55, 69, 72, 73, 96, 98, 99, 132, 134, 114, 117, 173, 159, 197, 198, 199, 201, 202, 225, 226, 242, 245, 246, 247, 251, 252, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 461, 462, 463, 467, 506, 507, 527, 528, 529, 553, 578, 599, 600, 601, 610, 611, 612, 613, 621.
- Awaiting contributions for Traffic Types, security and Quantities/Parameters/ Data Sheets

- The management model proposed is based upon the contribution: http://www.ieee802.org/1/files/public/docs2019/60802-Steindl-ExampleSelections-0119-v02.pdf.
- The editor has attempted to replicate the content and intent of the contribution but has changed terminology to reflect existing IEEE 802.1 standards. Any misrepresentation of the original contribution is unintentional.





- The Topology Discover Engine (TDE) The topology discovery engine is responsible for the topology discovery and bridge/end station identification.
- The Industrial Automation Path Establishment Entity (IA-PE) This entity is responsible for the establishment and control of explicit paths through the network.
- The Best Management Entity (BME) The BME is responsible for the management of the active IA-ME. If multiple IA-ME are detected, one is selected.
- The Query Stream Server (QSS) The QSS is a network management engine server responsible for:
  - the handling of Query Path requests
  - the forwarding of Query Path requests to its CUC
  - the establishment of the path
- Together with the CNC and CUC, these entities comprise the IA-ME (Industrial Automation Management Entity.

- Arguably, the TDE and the IA-PE could be considered part of the CNC since Qcc implies that the CNC has an understanding of paths and topology.
- Likewise, the QSS could be considered an extension of the CUC.
- For the purpose of this draft, the editor has attempted, to the extent practical, to maintain the partitioning proposed by the original contributor while expressing the model in terms familiar to reader of IEEE 802 standards.

### **Draft Summary**

- With over 600 comments, comment resolutions were sometime contradictory.
  - Disposition of a later comment in conflict w/ disposition of an earlier comment.
  - Comment Disposition rendered meaningless by the restructuring.
  - Comment disposition addressed, sometimes obliquely, by a subsequent contribution.
  - Frankly, I may have missed some things.
- The editor has reconciled these contradictions to the best of his ability.
- Any omission of a resolution is inadvertent and will be resolved on subsequent ballots.

### Restructuring

=C	DREWO	RD	4
N	TRODU	CTION	2
1		e	
2	•	ative references	
3		s, definitions, symbols and abbreviated terms	
,	3.1	List of terms and definitions given in IEC 61784-2, IEEE 802, IEEE 802.3-	
	3.1	2018, IEEE 802.1Q-2018 and IEEE Draft P802.1AS-REV	2
	3.2	TSN-IA defined Terms	5
	3.3	Abbreviated terms and acronyms	6
	3.4	Conventions	6
	3.4.1	Principles for (sub) clause selections of referenced documents	6
	3.4.2	Convention for Capitalizations	7
	3.4.3	Unit conventions	7
4	Conf	ormance	7
	4.1	Requirements Terminology	7
	4.2	Profile Conformance Statement (PCS)	8
	4.3	Common requirements	8
	4.3.1	Common TSN-IA Profile requirements	8
	4.3.2	Common PHY and MAC requirements	8
	4.3.3	Common requirements for synchronization	9
	4.4	Common options	
	4.4.1	Common PHY and MAC options	11
	4.4.2		
	4.4.3	,,	
	4.5	Bridge requirements	
	4.6	Bridge options	
	4.7	End station requirements	
	4.8	End station options	
	4.9	Conformance Classes	
	4.9.1	Conformance Class A (ccA)	
	4.9.2	Conformance Class B (ccB)	20

	Task Force Review and Working Group Ballot comment input form						
First name	First name			Surname□	Affiliation□		
Jordon				Woods	Analog Devices Inc.		
				Click on column headers for	r help		
Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied	
Technical	13	6.1.2	249	In table 7, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes	
Technical	14	6.1.2	251	In table 8, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes	
Technical	19	6.2.4.4	331	In table 14, the maximum number of hops in a network is not a bridge or end station requirement.	Either remove the table or change the language to indicate that the text/table is informative	Yes	

- Please use the latest ballot comment form
  - <a href="http://www.ieee802.org/1/files/private/commenting-tool/MyBallot-tools/">http://www.ieee802.org/1/files/private/commenting-tool/MyBallot-tools/</a>
- Do not alter the from in any way.

	Task Force Review and Working Group Ballot comment input form						
First name	First name			Surname□	Affiliation□		
Jordon				Woods	Analog Devices Inc.		
				Click on column headers for	r help		
Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied	
Technical	13	6.1.2	249	In table 7, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes	
Technical	14	6.1.2	251	In table 8, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes	
Technical	19	6.2.4.4	331	In table 14, the maximum number of hops in a network is not a bridge or end station requirement.	Either remove the table or change the language to indicate that the text/table is informative	Yes	

• Please do not "cut and paste" into fields w/ drop down menus.

First name				Surname□	<b>Affiliation</b> □	
Jordon				Woods	Analog Devices Inc.	
				Click on column headers fo	or help	
Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied
Technical	13	6.1.2	249	In table 7, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes
Technical	14	6.1.2	251	In table 8, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes
Technical <b>Section</b>	19	6.2.4.4	331	In table 14, the maximum number of hops in a network is not a bridge or end station requirement.	Either remove the table or change the language to indicate that the text/table is informative	Yes

• Please **DO NOT** include table or figure numbers in the page, subclause or line number fields. If you want to refer to a table or figure please refer to them in the "comment" field.

First name				Surname□	Affiliation□	
Jordon				Woods	Analog Devices Inc.	
				Click on column headers for	r help	
Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied
					As 6.1.1 is mandatory in the sense that one PHY	
				In table 7, the contraint "Applies only if	must be selected, the constrain should be	
Technical	13	6.1.2	249	6.1.1fulfilled" is non-specific.	changed to "applies only if this PHY is selected"	Yes
					As 6.1.1 is mandatory in the sense that one PHY	
				In table 8, the contraint "Applies only if	must be selected, the constrain should be	
Technical	14	6.1.2	251	6.1.1fulfilled" is non-specific.	changed to "applies only if this PHY is selected"	Yes
				In table 14, the maximum number of hops in a		
				network is not a bridge or end station	Either remove the table or change the language to	
Technical	19	6.2.4.4	331	requirement.	indicate that the text/table is informative	Yes

• Please use period rather than a comma as the decimal separator.

First name Jordon				Surname□	Affiliation□	
				Woods	Analog Devices Inc.	
				Click on column headers for	r help	
Category	Page	Sub-clause	Line #	Comment	Proposed Change	Must Be Satisfied
Technical	13	6.1.2	249	In table 7, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes
Гесhnical	14	6.1.2	251	In table 8, the contraint "Applies only if 6.1.1fulfilled" is non-specific.	As 6.1.1 is mandatory in the sense that one PHY must be selected, the constrain should be changed to "applies only if this PHY is selected"	Yes
Technical <b>Section</b>	19	6.2.4.4	331	In table 14, the maximum number of hops in a network is not a bridge or end station requirement.	Either remove the table or change the language to indicate that the text/table is informative	Yes

- Please provide clear suggestions for resolution. Comments like "clarify" are not helpful.
- PLEASE: meet the ballot deadline

## Thank you