802.3 PARs ad hoc report

IEEE 802.3 ad hoc on PARs from other WGs

Robert M. Grow, ad hoc chair RMG Consulting Rosemont, Illinois, USA 6 March 2018

P802.1X

Amendment: Port-Based Network Access Control

<u>PAR</u>

- 5.2 Since you are doing a revision, you may want to update the scope to match IEEE Style (colon on the sentence preceding the list and list items punctuated correctly).
- Response They added the colon and semicolons on first two list tiems.
- 6.1.b Minor nit, but listing the MIB arc type(s) could be helpful. One can guess URN is included because of the YANG amendment being merged, but will the amendment also include use of OID management arcs?
- Response Ample information on MIB arc types added.
- 8.1 It is strange to have a note for #7.3 which does not appear on the PAR. Did 7.3 get marked No by accident?
- Response It is a "feature" of the PAR tool.

P802.1CBcv

Amendment: Information Model, YANG Data Model and Management Information Base Module

PAR

• No comments.

<u>CSD</u>

- 1.2.1.b Though numbers are significant, they are rather dated, isn't more current data available to justify market sizes? In the second paragraph, a 2014 projection is especially awkward as that was a projection from 8 years ago for a year where actual data is more than 3 years old.
- Response: "Network equipment and integrated circuit vendors for Industrial Automation, In-vehicle networking, Professional Audio-Video (AV), Data Center and other systems requiring the base standard will participate in the development of the project."

P802.1CBcv (cont.)

- 1.2.1.b Though 802.3 folk will eventually understand FE:GE: 10+GE, the acronyms without expansion/definition are likely to cause other folk problems (Fast Ethernet is especially archaic as it isn't directly a speed of operation). Replace with precise speed descriptions.
- Response: As 1.2.1.b has been changed due to the second comment submitted, these acronyms are no longer present in the text.

P802.1DC

Standard for Quality of Service Provision by Network Systems
PAR

• No comments.

<u>CSD</u>

• No comments.

P802.1CBdb

Amendment: Extended Stream Identification Functions
PAR

• No comments.

<u>CSD</u>

• No comments.

802.1Qcz

Amendment: Congestion Isolation

NOTE: Per 802.1 Chair email to EC, this project failed to pass at WG level.

PAR

- 5.3 It certainly isn't clear why a YANG "extension" to 802.1ABcu specifications is in an 802.1Q amendment. The scope of 802.1AB and 802.1ABcu indicate that the appropriate location for such specifications would be in 802.1AB. Explain why the PAR should not be split into two amendments (or split the PAR into two projects), one for 802.1Q and another for 802.1AB. If on the other hand, "extension" is a misleading word, rephrase. (e.g., This project will reference and require use of capabilities being specified in P802.1ABcu.) If "extension" is a misleading word, then also correct the Explanation in 6.1.b.
- Long explanation provided, no changes: http://www.ieee802.org/1/files/ public/docs2018/cz-congdon-PAR-CSD-comment-response-0318-v1.pdf

802.1Qcz (cont.)

- 8.1 It looks like a cut and paste included too much. OID is not referenced in 6.1.b of this PAR. Either correct the Explanation in 6.1.b, the project scope, etc. to include SNMP management requiring OID, or remove the OID line from 8.1.
- Accept. Removed reference to OID

<u>CSD</u>

- General It is helpful to identify what project the CSD justifies (other than in the file name). Other 802.1 projects do this following the title.
- Accept Update Title in CSD

P60802

Standard: Time-Sensitive Networking Profile for Industrial Automation,

PAR

• No comments.

<u>CSD</u>

• No comments.

P802.11bb

Amendment: Light Communications (LC)

PAR

- General Because of observed inconsistencies, it appears that this PAR was not generated on the myProject system. Thank you for the preview of a myProject version, some comments may highlight things corrected in that myProject version.
- ➢ Response: The final submission will use myProject.

P802.11bb (p.2)

5.5 - This need statement mostly expresses a technology push based project, not a market demand justified project. The increase in availability of unlicensed spectrum provided by light covered in the Broad Market Potential is better at justifying from a market side than does this need statement. Please improve to describe market demand

Response: Changing the following sentence: "The wider context for the economic considerations for LC is presented in doc. 11-17/0803r1 (https://mentor.ieee.org/802.11/ dcn/17/11-17-0803-01-00lc-economic-considerations-for-lc.ppt)" To:

"The wider context for the economic considerations like decreasing costs for LEDs/LDs and the availability of unregulated light spectrum for LC is presented in doc. 11-17/0803r1 (

https://mentor.ieee.org/802.11/dcn/17/11-17-0803-01-00lceconomic-considerations-for-lc.ppt).

P802.11bb (p.3)

- 5.6 So a company that views itself as an established IoT company isn't a stakeholder? A small or medium sized industrial manufacturer isn't a stake holder? Delete "established", "large".
- Response: Accept. "Stakeholders include chip makers to deliver PHY & MAC sub-systems, system integrators and lighting companies, telecom operators, Internet Service Providers (ISPs), IoT companies, industrial manufacturers, aviation and transportation industries."
- 5.6 The stakeholder list does not agree with the CSD Broad Market Potential answer. The Broad Market answer basically says light communications is applicable everywhere existing radio PHY wireless LANs are used. Please make the documents consistent.
- > Response:

-- The set of stakeholders in the updated PAR and CSD are now consistent

-- The "Broad Market Potential" Section 1.2.1 (a) looks at the "Broad set of applicability" that aims to identify the possible use-cases for the technology.

P802.11bb (p.4)

- 6.1.b The myProject version of the PAR generated in response to Mr. Grow's early proposed comment addressed the 6.1.b concern.
- > Response:
- 7.1 Had the PAR been prepared on myProject, the person preparing the PAR would know that an explanation is required. Why an additional standard is needed for a yes answer, not just a list of the similar scope standards. The PAR form instruction reads: "Identify any standard(s) or project(s) of similar scope(s), both within or outside of the IEEE, and explain the need for an additional standard in this area."
- Response: 7.1 Revise PAR (doc. 11-17/1604r8) Section 7.1 to include the explanation from the CSD (doc. 11-17/1603r7) Section 1.2.3, which reads: (continued next slide)

P802.11bb (p.5)

"The difference between LC and the existing IEEE 802 light based communication standards is the use of the IEEE 802.11 MAC as well as the reuse of associated services. This new approach will allow LC to address a wider range of use cases that are served by local wireless area networks compared to the existing (IEEE P802.15.7m and IEEE P802.15.13) efforts that are focusing on deploying the technology for optical camera communications, low data rate photodiode communications, and industrial applications. The key difference between the ITU-T G.vlc effort compared to the proposed IEEE 802.11 LC amendment is the use of the IEEE 802.11 MAC as well as the targeted deployment of the technology in wider range of use cases including electromagnetic interference (EMI) sensitive environments, in contrast to the focused home networking use-case for the G.vlc technology. Critically, being part of the IEEE 802.11 ecosystem enables LC to leverage the existing brand awareness and processes for product development, testing and market introduction. Tight integration with IEEE 802.11, the coexistence and hand-over with other IEEE 802.11 PHY types (through the use of Fast-Session Transfer) will help to increase the LC market by addressing large volume applications together with traditional lighting."

P802.11bb (p.6)



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802.15.4w

Amendment: LPWA (Low Power Wide Area)

PAR

- 5.3 Question is not answered, please do so.
- ➢ Response: Answer is now No.
- 6.1.b Not sure who recommended review but if so, the RAC Chair is unaware of a recommendation from the RAC or from editorial staff (typically occurring because of content found in MEC review). RAC review can also be requested by the WG/TG later without a PAR modification if "not anticipated" registry related content appears in the draft. Please refer to the PAR form instructions (copied at end of slide deck) for when a Yes answer is appropriate and consider if the answer should be changed to No. (The RAC has reviewed IEEE Std 802.15.4.)
- Response: Answer changed to No.

P802.15.4w (cont.)

<u>CSD</u>

- 1.2.5,c The answer about manufacturing costs is nonresponsive to the question about installation costs.
 Please provide a responsive answer.
- Response: This project can be implemented with no hardware changes and therefore change to the existing device cost basis which has been demonstrated, through billions of shipped devices.
- 1.2.5,d Change IEEE Std. 802.15.4 to IEEE Std 802.15.4 (remove the dot after Std).
- Response: Accept.

P802.15.4x

Amendment: FANE (Field Area Network Enhancements) PAR

- 6.1.b The RAC Chair is not aware of a recommendation from the RAC to review this project (nor it being flagged for review by editorial staff, typically occurring because of content found in MEC review), nor a request in general for PHY oriented projects. RAC review can also be requested by the WG/TG later without a PAR modification if "not anticipated" registry related content appears in the draft. Please refer to the PAR form instructions (copied at end of slide deck) for when a Yes answer is appropriate and consider if the answer should be changed to No. (The RAC has reviewed IEEE Std 802.15.4.)
- Response: Answer changed to No.

P802.15.4x

<u>CSD</u>

- 1.2.1,b Change IEEE Std. 802.15.4 to IEEE Std 802.15.4 (remove the dot after Std)
- Response: Accept.
- 1.2.5,c The answer about manufacturing costs is non-responsive to the question about installation costs. Please provide a responsive answer.

Response: Implementation of this amendment requires no change to current installation costs and costs could potentially be reduced because less network equipment could be required

P802.15.4y

Amendment: SECN (Security Next Generation)
PAR

- 2.1 As an amendment to 802.15.4, it is unnecessary to repeat what standard the extensions are for (especially when Std is incorrectly followed by a dot). Also the title doesn't need to include a repeat of the project scope. How about Amendment Security extensions (preferred) or Amendment Security extensions including Advanced Encryption Standard (AES)-256.
- Response: Title changed to: Amendment defining support for Advanced Encryption Standard (AES)-256 encryption and security extensions.
- 5.2.b Change IEEE Std. 802.15.4 to IEEE Std 802.15.4 (remove the dot after Std).
- Response: Accept

P802.15.4y (cont.)

- 5.2.b The "possible" does not seem to be properly placed in: "It also defines possible methods to simplify the addition of future encryption modes and key lengths." (Hopefully no standard will define an impossible method.) Is the project really planning to define a set ("methods") of ways to add new modes and keys; or is the possible supposed to mean the project may or may not define a method to simplify adding new keys and modes; or should "possible" simply be deleted?
- Response: The word "possible" deleted.

<u>CSD</u>

- Title If PAR title is changed per comments, also change on the CSD.
- Response: Accept.

P802.15.4y (cont.)

- 1.2.1,a Not all that responsive to the question about broad applicability. Isn't the point that 802.15.4 has significant market presence and that addition of better security is demanded for that broad application base, and continued deployment to 802.15.4 will require better security? Adding something on that line would make the answer more responsive to the question.
- Response: IEEE 802.15.4 has significant market presence and the addition of better security is demanded for that broad application base and continued deployments.
- 1.2.3 Change IEEE Std. 802.15.4 to IEEE Std 802.15.4 (remove the dot after Std).
- Response: Accept.
- 1.2.3, last sentence Should it read: "The SECN extensions will be unique from features in the existing standard which is currently limited to AES-128 encryption or no security."
- Response: Accept.

P802.15.4z

Amendment: EIR (Enhanced IR-UWB Ranging)

PAR

- 5.5 Change IEEE Std. 802.15.4 to IEEE Std 802.15.4 (remove the dot after Std).
- Response: Accept.
- 6.1.b The RAC Chair is not aware of a recommendation from the RAC to review this project (nor it being flagged for review by editorial staff, typically occurring because of content found in MEC review), nor a request in general for PHY oriented projects. RAC review can also be requested by the WG/TG later without a PAR modification if "not anticipated" registry related content appears in the draft. Please refer to the PAR form instructions (copied at end of slide deck) for when a Yes answer is appropriate and consider if the answer should be changed to No. (The RAC has reviewed IEEE Std 802.15.4.)
- Response: Answer changed to No.

P802.15.4z (cont.)

<u>CSD</u>

- Broad Market, a Typo and grammar: "is a widely" -> "is widely", "Ihings" -> "Things"
- > Response: Accept.
- Broad Market, b Doesn't the phrase "into automotive remote control and associated Smart Phone Applications, to cite just one example" have two examples?
- Response: Changed to "two".
- Distinct Identity Change IEEE Std. 802.15.4 to IEEE Std 802.15.4 (remove the dot after Std).
- > Response: Accept.
- Technical Feasibility, b Change IEEE Std.802.15.4 to IEEE Std 802.15.4 (replace the dot after Std with a space).
- Response: Accept.

P802.22.3

Standard: Spectrum Characterization and Occupancy Sensing

PAR Modification to a revision PAR

• No comment.

<u>CSD</u>

• 1.2.3, a - Typo: "Characteization"

> Response: Accept

PAR form 6.1.b instruction

The IEEE Registration Authority Committee (RAC) is a mandatory coordination body. A YES answer to this question provides early notification that RAC mandatory coordination will occur during Sponsor ballot. Working groups are welcome to engage the RAC if appropriate earlier in the project.

If the proposed standard requires (or is expected to require) the unique identification of objects or numbers for use in industry, the project has registration activity. This does not cover things like code points defined within the standard.

A YES answer with brief explanation is appropriate if:

1. The proposed standard creates a new registry.

2. The proposed standard includes new use of an existing registry (whether IEEE RA or other registry authority). An existing IEEE registry example would be use of an Organizationally Unique Identifier (OUI). An explanation of a new registration activity should be supplied on the PAR. Please visit the IEEE Registration Authority website (http://standards.ieee.org/regauth/index.html) for additional information regarding existing registries.

3. When RAC review of previously reviewed text is appropriate to assure terminology and descriptions of usage are current.

A NO answer is appropriate:

1. When the project has no registration activity.

2. When a project modifying an existing standard with registration activity will not be adding new text nor modifying existing registration activity text previously reviewed by the IEEE Registration Authority (e.g., corrigendum on non-registry content). Please briefly explain why RAC review is not required.

Please note that the RAC may request mandatory coordination on any project, independent of the answer to this question.