802.3 PARs ad hoc report

IEEE 802.3 ad hoc on PARs from other WGs

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RMG Consulting

July Virtual Plenary

21 July 2021

28 June ad hoc agenda and notes

- Agenda
  - Welcome
  - PAR and ICAID review
- Note:
  - Comments reflect a consensus of ad hoc meeting attendees.
  - Ad Hoc Chair tasked to post comments to EC reflector prior to deadline.
  - Ad Hoc Chair tasked to report on responses from other WGs during 802.3 plenary.

Draft P802.15.14 (1)

New Standard: Ad-Hoc Impulse Radio Ultra Wideband Wireless Network

PAR

- General — Even though this document might be copied from myProject output, it is not output from myProject, and therefore, reduces confidence that the correct form is being used, and that the NesCom submittal will match what is reviewed. It is expected the pdf from myProject is used for 802 preview. Further, there are formatting problems that should be fixed when entering into myProject, and some of the formatting indicates changes in the docx that likely didn't come from myProject.
  - ➢ Response – The PAR Draft, with changes per the responses in this document, has been regenerated from myProject.

Draft P802.15.14 (2)

- 3.1 — Why does the WG name not agree with what is listed on http://ieee802.org Did the WG change its name without approval of the EC, or is the EC page wrong? (The draft PAR WG name does agree with the WG name in myProject.)

➢ Response – The 802.15 WG Chair will contact the 802 EC Secretary w.r.t. updating the multiple places still using the old WG name and to update it with the new WG name - “Wireless Specialty Networks”.

- 5.5 — Typo: “805.15.4w” should be “802.15.4w”.

➢ Response – This has been corrected in the PAR Draft to “802.15.4w”.

Draft P802.15.14 (3)

- 5.5, General – The IEEE standards numbers in the answer should be prefaced by “IEEE Std”. Similar errors are found throughout the PAR, sometimes including IEEE but not Std (e.g., in 8.1).
  - ➢ Response – This has been corrected throughout the PAR Draft.
- 5.5, General – Though somewhat murky, we believe the proper reference to the standard and its approved amendments/corrigenda is undated (IEEE Std 802.15.4).
  - ➢ Response – This has been changed in the PAR Draft to state that the project will “…benefit by including (via. referencing)…”.

Draft P802.15.14 (4)

- 5.6 — Grammar: “and manufacturers and”.
- ➢ Response – This has been changed in the PAR Draft to “… consumer electronics equipment, manufacturers, and users of equipment involving…”
- 6.1.2, Explanation — "Unique Identifiers (EUI)” should be “Extended Unique Identifiers (EUI)”.
- ➢ Response – This has been changed in the PAR Draft to “Extended Unique Identifiers (EUI)”.

Draft P802.15.14 (5)

- 7.1 — The response only partially answers the question. What project will remove the extracted content from IEEE Std 802.15.4? If a future revision project will remove the IEEE Std 802.15.4 content after approval of P802.15.14 and P802.15.15, that should be stated. Or, should there be a co-contingent revision project of IEEE 802.15.4 to run in parallel? (Require simultaneous approval of P802.15.4, P802.15.14, and P802.15.15.) Is there any contingency on the active project P802.15.4aa?
  - Response – This has been changed in the PAR Draft to "As specified in the need for the project, some IEEE Std 802.15.4 functionality will be included (via. referencing) into IEEE P802.15.14."

Draft P802.15.14 (6)

- 7.1 — The PAR indicates extraction of material from IEEE Std 802.15.4. There appear to be 30 Letters of Assurance on IEEE Std 802.15.4 and its amendments in the PatCom LOA listing. Based on this, please see PatCom FAQ 14, in particular the last paragraph. New LOAs may be required.
- ➢ Response – The 802.15 WG Chair, along with the 802.15.14 TG Chair (once the TG is formed) will work together along with PatCom on the most suitable way to address this.
- 7.1.1 — "P802.15.4-2020" is neither a proper standard nor project number. (There is no date on a project number.)
- ➢ Response – This has been changed in the PAR Draft to “IEEE Std 802.15.4-2020”.
- 7.1.1 – Typo in the title "IEEE Standard for Low?Rate Wireless Networks” the published standard uses “Low-Rate“.
- ➢ Response – This has been changed in the PAR Draft to “…Low-Rate…”.

Draft P802.15.14 (7)

CSD: https://mentor.ieee.org/802.15/dcn/21/15-21-0278-04-0014-sg14-draft-csd-for-ns-uwb.docx

- No comments.

Draft P802.15.15 (1)

New Standard: Ad-Hoc Low-Rate Wireless Networks

PAR

- 3.1 — Why does the WG name not agree with what is listed on http://ieee802.org Did the WG change its name without approval of the EC, or is the EC page wrong? (The draft PAR WG name does agree with the WG name in myProject.)
- ➢ Response – The 802.15 WG Chair will contact the 802 EC Secretary w.r.t. updating the multiple places still using the old WG name and to update it with the new WG name - “Wireless Specialty Networks”.
- 5.2 — Different form than in the project title: “adhoc” should be "ad-hoc”.
- ➢ Response – Changed to ad hoc per referencing multiple grammar sites.

Draft P802.15.15 (2)

- 5.5 — Typo: “805.15.4w” should be 802.15.4w.
- ➢ Response – This has been corrected in the PAR Draft to “802.15.4w”.
- 5.5 – The IEEE standards numbers in the answer should be prefaced by “IEEE Std”. Similar errors are found throughout the PAR, sometimes including IEEE but not Std (e.g., in 8.1).
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Draft P802.15.15 (3)

- 7.1 — The response only partially answers the question. What project will remove the extracted content from IEEE Std 802.15.4? If a future revision project will remove the IEEE Std 802.15.4 content after approval of P802.15.14 and P802.15.15, that should be stated. Or, should there be a co-contingent revision project of IEEE 802.15.4 to run in parallel? (Require simultaneous approval of P802.15.4, P802.15.14, and P802.15.15.) Is there any contingency on the active project P802.15.4aa?
  - Response – This has been changed in the PAR Draft to "As specified in the need for the project, some IEEE Std 802.15.4 functionality will be included (via. referencing) into IEEE P802.15.15."
- 7.1 — The PAR indicates extraction of material from IEEE Std 802.15.4. There appear to be 30 Letters of Assurance on IEEE Std 802.15.4 and its amendments in the PatCom LOA listing. Based on this, please see PatCom FAQ 14, in particular the last paragraph. New LOAs may be required.
  - Response – The 802.15 WG Chair, along with the 802.15.15 TG Chair (once the TG is formed) will work together along with PatCom on the most suitable way to address this.

Draft P802.15.15 (4)

- 7.1.1 — "P802.15.4-2020" is neither a proper standard nor project number. (There is no date on a project number.)
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- 7.1.1 – Typo in the title "IEEE Standard for Low Rate Wireless Networks” the published standard uses “Low-Rate“.
- ➢ Response – This has been changed in the PAR Draft to “…Low-Rate…”.

CSD

- No comments.

Draft P802.15.6a (1)

Amendment: Dependable Human and Vehicle Body Area Networks,

PAR

- General – We believe the two topics should not be in a single project because the environmental, regulatory, and other concerns are so different. The scope of the project does not fit within the scope of the standard.

➢ Response – The PAR of 15.6 Std Wireless BAN is not constrained to humans. The project amendment, 15.6a, intends to extend 15.6 Std WBAN with a vehicle BAN, while supporting higher dependability to human BAN. Therefore, the scope of the project fits the scope of 15.6 Std within one project.

A target use case is a human wearing a BAN sitting in a vehicle or standing nearby a vehicle, communicating with a VBAN. Due to the nature of the wireless medium, both human BAN and vehicle BAN must comply with adequate performance in the shared environment and regulations for human and vehicle safe usage.

Draft P802.15.6a (2)

- General – We struggled to understand the scope of this PAR! Is our understanding correct that this project is to permit use of 802.15.6 BANs within the automotive environment? This is the only conclusion we could come to that made sense to the comment ad hoc. If not, then we would ask IEEE 802.3 to direct its Chair to oppose this project.

➢ Response – 15.6a aims to extend the operation of 15.6 WBAN to a vehicle. The scope of Std 802.15.6 is not constrained to humans. A BAN can be constructed around a vehicle (VBAN). In particular, we target the use case of a HBAN with higher dependability operating in a vehicle or nearby a vehicle, which supports a VBAN.

Obviously, the HBAN and VBAN may be designed separately, but that is not the intention. Due to the nature of the wireless medium, when a HBAN is in a vehicle or nearby a vehicle and such vehicle supports a VBAN, both share the same environment, frequency band, potential interference, etc. Hence, the idea is to design one 15.6a network that supports both HBAN and VBAN, such that when they operate close to each other, we can control how they operate.

Draft P802.15.6a (3)

- 3.1 — Why does the WG name not agree with what is listed on http://ieee802.org? Did the WG change its name without approval of the EC, or is the EC page wrong? (The draft PAR WG name does agree with the WG name in myProject.)
- ➢ Response – The 802.15 WG Chair will contact the 802 EC Secretary w.r.t. updating the multiple places still using the old WG name and to update it with the new WG name - “Wireless Specialty Networks”.
- 5.4 — The mix of text for medical and auto is very awkward and deserves a better change than the new second paragraph. Perhaps: "Additionally this standard provides enhanced dependability that is required for some medical use cases. This includes remote medical healthcare, therapy and other monitoring that can enhance quality of life (QoL) in various population segments.”
- ➢ Response – Thank you for the feedback; we have revised the text.

Draft P802.15.6a (4)

CSD: https://mentor.ieee.org/802.15/dcn/21/15-21-0260-02-006a-ieee-802-15-6a-csd-draft.docx

- General – If contrary to our assumption, the project is to specify two different networks (human body versus auto), and honest CSD responses were given, the responses for auto and human body would be entirely disjoint and would not fit within a single project.

➢ Response – The project intends to specify one extension of 15.6 WBAN with 2 use cases HBAN and VBAN sharing the same wireless medium in a vehicle or nearby a vehicle. Your assumption of 2 disjoint wireless networks is incorrect.

We consider the case when a HBAN coordinator talks to another VBAN coordinator as this is a target use case. An example use case is about a senior car driver, monitoring health (HBAN) and safety for preventing car incidents (VBAN). That is what we mean by "interact". A HBAN coordinator can communicate with a VBAN coordinator as they are part of the same 15.6a design.

Draft P802.15.6a (5)

- 1.2.1, a — "IEEE 802.15.6-2012" should be "IEEE Std 802.15.6-2012".
  - Response – Accepted.
- 1.2.1, a – Second paragraph "Enhancement to" should be "The enhancement of".
  - Response – Accepted.
- 1.2.4, a — "IEEE 802.15.6-2012" should be "IEEE Std 802.15.6-2012".
  - Response – Accepted.
- 1.2.4, a – Second paragraph "Enhancement to" should be "The enhancement of".
  - Response – Accepted.

Draft P802.15.6a (6)

- 1.2.4, a – It is not clear what is meant by “interact”, does this mean that the body area network of a passenger would bridge into the vehicle body network? Or, is the interaction only referring to radio interference?
- ➢ Response – We consider the case when a HBAN coordinator talks to another VBAN coordinator as this is a target use case. An example use case is about a senior car driver, monitoring health (HBAN) and safety for preventing car incidents (VBAN). That is what we mean by “interact”. A HBAN coordinator can communicate with a VBAN coordinator as they are part of the same 15.6a design.
- 1.2.4, b – Our participants that have attended some of your meetings do not see planned participation from individuals affiliated with automotive OEMs and suppliers – please provide.
- ➢ Response – Tier 1: Denso, Bosch, Mahle. Tier 2: Infineon, NXP, Qorvo. Car manufacturer: Nissan, VW, Ford.

Draft P802.15.4ab

Amendment: Enhanced Ultra Wide-Band (UWB) Physical Layers (PHYs) and Associated MAC Enhancements

PAR

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➢ Response – The 802.15 WG Chair will contact the 802 EC Secretary w.r.t. updating the multiple places still using the old WG name and to update it with the new WG name - "Wireless Specialty Networks".

CSD

- Compatibility, b — The response from 802.1 should be included even though it is largely predictable.

➢ Response – The review and response is not required if the proposed standard is an amendment or revision to an existing standard for which it has been previously determined that compliance with the above IEEE 802 standards is not possible. The CSD was updated to include the above statement.

P802.15.4-2020/Cor1 Modification

Corrigendum 1 Modification: Correction of errors preventing backward compatibility

PAR Modification

- General — This appears to be a markup to the Corrigendum PAR. It is expected the pdf from myProject is used for 802 preview.

➢ Response – 802.15 WG Chair will provide the PDF from myProject.

Draft P802.1Qcw Extension

Amendment Extension: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing

PAR

- 2 — Please clarify to which project (P802.1Qcw or P802.1Q) the sentences apply to help eliminate confusion.
- 2 – "P802.1Q-Rev" may be an 802.1 internal reference, but the revision project is "P802.1Q".
- ➢ Response – "Finishing P802.1Qcw is gated by the ongoing P802.1Q revision project of the base standard. The last P802.1Qcw Working Group recirculation ballot completed on March 31, 2021. Actions to complete include initiating a P802.1Qcw WG recirculation ballot in mid-2021 and then conducting the Standards Association Ballot. Even though submittal to RevCom is anticipated for March 2022, a two-year extension is being requested in case more time is needed to complete the project.

CSD

- No comments.

Draft P802.1Qcj Extension

Amendment Extension: Automatic Attachment to Provider Backbone Bridging (PBB) services

PAR

- 2 — Please clarify to which project the sentences apply (P802.1Qcj or P802.1Q) to help eliminate confusion.
- 2 – "P802.1Q-Rev" may be an 802.1 internal reference, but the revision project is "P802.1Q".

➢ Response – "The progress of P802.1Qcj has been delayed by change of Editor two times and a change in the current Editor's affiliation. Furthermore, finishing P802.1Qcj is gated by the ongoing P802.1Q revision project of the base standard. The most recent P802.1Qcj Working Group ballot completed on March 26, 2021. Actions to complete include initiating a new P802.1Qcj Working Group ballot in mid-2021 (as the ballot did not pass), holding discussion (which may take nine months) and then conducting Standards Association Ballot in mid-2022."

CSD

- No comments.

Draft P802.15.13 Extension

New Standard Extension: Multi-Gigabit per Second Optical Wireless Communications (OWC)

PAR and CSD

- No comment.

802.1 Nendica

IEEE 802 Network Enhancements for the Next Decade Industry Connections Activity (Nendica)

ICAID renewal

- No comment.