IEEE P802.11 Wireless LANs

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| PAR Minutes – July 2021 | | | | |
| Date: 2021-07-22 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Michael Montemurro | Huawei | Toronto, ON, CANADA |  | [montemurro.michael@gmail.com](mailto:montemurro.michael@gmail.com) |

Abstract

This document contains the minutes of the PAR Standing Committee session that was held by teleconference in July 2021.

# Monday July 12, 13:30-15:30

### Jon Rosdahl, Qualcomm – Chair

### Michael Montemurro, Huawei Technologies Co., Ltd – Vice-Chair

Attendance: 32

1. Meeting called to order at 13:37
2. Following the same process as for March. We will provide comments on the PARs submitted for the July 2021 plenary.
3. Agenda Review – approved as document 11-21/964r0 - <https://mentor.ieee.org/802.11/dcn/21/11-21-0964-00-0PAR-par-review-sc-meeting-agenda-and-comment-slides-july-2021-electronic-plenary.pptx>
   * Agenda is approved unanimously.
4. Motion to approve minutes from March PAR SC meetings:

MOTION: **Move to approve the minutes from March 2021 in document 11-21/0359r0:** [**https://mentor.ieee.org/802.11/dcn/21/11-21-0359-00-0PAR-par-minutes-march-2021-session.docx**](https://mentor.ieee.org/802.11/dcn/21/11-21-0359-00-0PAR-par-minutes-march-2021-session.docx).

Mover: Michael Montemurro

Second: Stuart Kerry

Result: Unanimous. **Motion** **Passes.**

1. PAR and CSD comments are captured in 11-21/964r1

* **802.1Qcw - Amendment: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing,** [**PAR Extension**](https://www.ieee802.org/1/files/public/docs2021/cw-PAR-extension-0521-v01.pdf)**and**[**CSD**](https://www.ieee802.org/1/files/public/docs2017/cw-draft-CSD-0517-v02.pdf)
* PAR:
  + No comments.
* CSD:
  + - * No comments.
    - **802.1Qcj - Amendment: Automatic Attachment to Provider Backbone Bridging (PBB) services,**[**PAR Extension**](https://www.ieee802.org/1/files/public/docs2021/cj-PAR-extension-0521-v01.pdf)**and**[**CSD**](https://www.ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-csd-0315-v01.pptx)
* PAR:
  + No comments.
* CSD:
  + No comments.
    - **802.1 - Industry Connetions: Nendica,**[**ICAID**](https://mentor.ieee.org/802.1/dcn/21/1-21-0011-05-ICne-draft-nendica-icaid-renewal.docx)
* ICAID:
  + The TBD should be filled in before progressing:

“the [month TBD] 2021 publication by IEEE of “Intelligent Lossless Data Center Networks. [link update TDB]””.

* + - **802.3de - Amendment: Enhancements to the MAC Merge function and the Time Synchronization Service Interface (TSSI) to include Point-to-Point 10 Mb/s Single Pair Ethernet,**[**PAR**](https://mentor.ieee.org/802-ec/dcn/21/ec-21-0113-01-00EC-ieee-p802-3de-draft-par-responses.pdf)**and**[**CSD**](https://mentor.ieee.org/802-ec/dcn/21/ec-21-0112-00-00EC-ieee-p802-3de-draft-csd-responses.pdf)
* PAR:
  + Please add in 8.1 an explanation for the “MAC Merge function”. We understand that it is a normative name of a function. From the WebEx chat window: “(Sec 2.1) While ‘MAC’ (Medium Access Control) is an acronym, the term 'MAC Merge' in the title is the proper name of a function within IEEE Std 802.3 and the term used in the title of the candidate clause for amendment, Clause 99, "MAC Merge sublayer.""  Using it as a proper name, not expanded, improves clarity and the ability of the reader of the PAR to find the appropriate clause in IEEE 802.3 which is being modified, as named above. The proposed project would consider amendments to Clause 99 specification for this function in IEEE Std 802.3 to support 10 Mb/s single-pair Ethernet point-to-point PHYs.”
* CSD:
  + 4: In Technical Feasibility (page 7), change “MACMERGE” to “MAC Merge”.
    - **802.15.13 Standard:Multi-Gigabit per Second Optical Wireless Communications (OWC), with Ranges up to 200 meters, for both stationary and mobile devices,**[**PAR Extension**](https://mentor.ieee.org/802.15/dcn/21/15-21-0267-01-0000-par-extension-request-for-p802-15-13.docx)**and**[**CSD**](https://mentor.ieee.org/802-ec/dcn/17/ec-17-0073-00-ACSD-802-15-13.docx)
* PAR:
  + 2: Change “completeIEEE-SA” to “complete IEEE-SA”.
  + General: While the extension request does not open the PAR to be modified, the PAR extension form does normally include the PAR being extended. Please use the IEEE-SA form for the PAR Extension.
* CSD:
  + The title does not match the PAR Extension request. 802.15.13 vs 802.15.11? The CSD should be updated to have the correct number and title. “with ranges up to 200 meters, for both stationary and mobile devices”
    - **802.15.4-2020/Cor1 Corrigendum 1:Correction of errors preventing backward compatibility,**[**PAR Modification**](https://mentor.ieee.org/802.15/dcn/21/15-21-0270-04-Cor2-tg4-2020-cor1-par-modification-draft.docx)
* PAR:
  + Please confirm that the proper Corrigendum form is used. We see that the header for the submitted document says COR2. The changebars in 8.1 talks about the error getting Cor2 approved, but this really is Cor1. This document is not a PAR modification request, even though the link was presented as a PAR modification. If the intent is to be a PAR Modification, please use the proper PAR Modification form, if this a new corrigendum, please use the correct PAR form.
    - **802.15.4ab Amendment: Enhanced Ultra Wide-Band (UWB) Physical Layers (PHYs) and Associated MAC Enhancements,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0126-02-nuwb-p802-15-4ab-par-draft-from-myproject.pdf)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0047-05-nuwb-draft-csd-ng-uwb.docx)
* PAR:
  + 2.1 Spell out MAC in the title.
  + 5.2b “interference mitigation techniquest to support higher density and higher traffic use cases;” and “support improved link budget and/or reduced air-time” – Higher relative to what? Please reword to reduce ambiguity.
  + 8.1: The explanatory note does not have a cross-reference 5.2.b In general change the scope statement to be less ambiguous.
* CSD:
  + Title: The CSD title needs to be the same as the PAR. 802.15.4 (4z) UWB.
  + Last Edited: The CSD says it was “Last edited 31 August 2020 , but the document is 15-21/47r5. “
  + Broad Market Potential:
  + f) This does not seem to be the proper title of an 802.15 standard. “802.15.4 (4z) UWB “
  + g) “UWB based on 802.15.4z “ as 802.15.4z is an amendment, on the 802.15 website, we found it in multiple places. It also seems to be “ranging techniques”. This is confusing as to what this is trying to show in this section.
  + The Broad Market Potential statement needs to be cleaned up to address the confusion of if the potential being described is for the new project, or the “4z” project.
    - **802.15.6a Amendment: Dependable Human and Vehicle Body Area Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0259-03-006a-ieee-802-15-6a-par-draft.pdf)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0260-02-006a-ieee-802-15-6a-csd-draft.docx)
* PAR:
  + The original 802.15.6a standard was focused on medical applications and this amendment seems to be extended to address other applications.
  + 5.2b: expand acronym: intra-BAN.
  + As 802.15.6 is already defined as a Body Area Network, why does the standard need a Vehicle Body Area enhancement? Doesn’t Body Area Network already encompass all locations such as home/vehicle? Does his refer to a network around the vehicle itself?
  + 8.1: The first two explanatory notes are not cross-referenced to earlier PAR sections.
  + 8.1: The “5.4 Purpose” note: Phrasese seem left over from crafting 5.4 and are not complete thoughts, but fragments. Suggest removal.

* Chair will post the PAR/SC output to the 802 WG reflector and submit the result to the EC.

1. The next teleconference is scheduled for Monday July 19 – 13:30 ET.
2. Adjourn at 13:31

# Tuesday July 13, 13:30-15:30

### Jon Rosdahl, Qualcomm – Chair

### Michael Montemurro, Huawei Technologies Co., Ltd – Vice-Chair

Attendance: 13

1. Meeting called to order at 13:33
2. Agenda Review – approved as document 11-21/964r1 - <https://mentor.ieee.org/802.11/dcn/21/11-21-0964-00-0PAR-par-review-sc-meeting-agenda-and-comment-slides-july-2021-electronic-plenary.pptx>
   * Agenda is approved unanimously.
3. PAR and CSD comments are captured in 11-21/964r2
   * + **802.15.6a Amendment: Dependable Human and Vehicle Body Area Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0259-03-006a-ieee-802-15-6a-par-draft.pdf)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0260-02-006a-ieee-802-15-6a-csd-draft.docx)

* CSD:
  + Title page of the CSD: The Description and Abstract indicates that this document is a PAR.
  + Revision history needs to be checked. History shows R2 was posted on May 18.
  + General: Change “enhancements to” to “enhancements by” throughout document
  + Broad sets of Applicability: “higher dependability” relative to what? Expand or explain.
  + General: Expand acronyms on first use: “BAN”, “UWB”, “HBAN”, and “VBAN”
  + Economic feasiblility:
    - d) change “802.15.6 UWB technology” to “IEEE 802.15.6 UWB technology”
    - d) suggest change to “UWB technology incurs a very small energy consumption cost as compared to IEEE 802.15.4 devices. “ but add some clarification or explanation of what “very small” means.
    - **802.15.14 Standard: Ad-Hoc Impulse Radio Ultra Wideband Wireless Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0274-04-0014-sg14-ns-uwb-par-working-draft.docx)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0278-04-0014-sg14-draft-csd-for-ns-uwb.docx)
* PAR:
  + 2.1 – Title – “Ad Hoc” is only in the title, it is not used as a qualifier elsewhere in the PAR (Scope/purpose/need or explanation.)
  + Suggest remove “Ad Hoc” or change to “Impulse Radio Ultra Wideband Wireless Ad Hoc Networks”.
  + (Note that one definition of Ad Hoc Network is “A wireless ad hoc network or mobile ad hoc network is a decentralized type of wireless network. The network is ad hoc because it does not rely on a pre-existing infrastructure.”)
  + If you leave Ad Hoc in the title, it may well be that your network description elsewhere needs an “Ad Hoc” added.
  + 5.5 Need : “ad-hoc impulse radio ultra wideband functionality”
  + Should this be “Ad Hoc” as in the title?
  + Should this more correctly be “impulse radio ultra wideband Ad Hoc network functionality”?
  + 5.6 – Stakeholders seems overly broad – suggest to make it more specific.
  + 7.1.1 – “Low?Rate Wireless Networks” change to “Low Rate Wireless Networks””
  + 8.1 First 2 paragraphs should be moved to the 5.5 Need section.
  + 8.1 In the 2nd paragraph we suggested moving to 5.5 change “new standard will improve“ to “new standard (802.15.14) improves”
  + PAR General – as this is the PAR for 802.15.14, we don’t see how the reference to 802.15.15 is needed to be included (or it needs to be more explicitly noted in the Need) (remove reference in 7.1 and 8.1. (not similar scope)).
  + PAR 5.2a Scope statement may be better to be replaced with the statement from the CSD “Broad market potential“ – suggested Scope replacement:
  + This standard defines the physical layer (PHY) and data link layer capabilities to support impulse radio ultra wideband features and capabilities, including real time precision ranging capability that is accurate to within a few centimeters. PHYs are defined for devices operating in a variety of regulatory domains.
* CSD:
  + Title changes suggested for PAR should be reflected in the CSD.
  + Broad Market Potential – b) delete “recently”
  + Compatibility: a) and b) - Change “64-bit MAC addresses” should be “Extended Unique Identifier – 64 (EUI-64)”
  + Distinct Identity – It was stated in the PAR that the Impulse Radio UWB technology is in 802.15.4 already and that it is being extracted. This would indicate a duplicate location. This statement should be changed to include this subtlety.
    - **802.15.15 Standard: Ad-Hoc Low-Rate Wireless Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0265-03-0015-sg15-ns-nb-par-working-draft.docx)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0301-00-0015-sg15-draft-csd-for-ns-nb.docx)
* PAR:
  + 2.1 – Title – “Ad Hoc” is only in the title, it is not used as a qualifier elsewhere in the PAR (Scope/purpose/need or explanation.)
  + Suggest remove “Ad Hoc” or change to “Low-Rate Wireless Ad Hoc Networks”.
  + (Note that one definition of Ad Hoc Network is “A wireless ad hoc network or mobile ad hoc network is a decentralized type of wireless network. The network is ad hoc because it does not rely on a pre-existing infrastructure.”)
  + If you leave Ad Hoc in the title, it may well be that your network description elsewhere needs an “Ad Hoc” added.
  + While 802.15.4 may have been able to use “Low-Rate” in its title, the convention requirement is that when Low or High is used a range is to be included. (i.e., below 10 Mb/s).
  + Change: “adhoc low data rate wireless connectivity with fixed,” to “low data rate wireless Ad Hoc Network connectivity with fixed,”
  + Change: “PHYs are defined for devices operating in a variety of regulatory domains.” to “Multiple PHYs are defined to support a variety of frequency bands”
  + 5.4 Purpose:
  + Delete “Multiple PHYs are defined to support a variety of frequency bands” as it is not needed here.
  + 8.1 First 2 paragraphs should be moved to the 5.5 Need section.
  + 8.1 In the 2nd paragraph we suggested moving to 5.5 change “new standard will improve“ to “new standard (802.15.15) improves”
* CSD:
  + However the existing Title of the PAR and the CSD do not currently match. Title of the CSD should be updated to match any changes to the PAR.
  + General comment: “ad-hoc wireless networks” is also seen as “wireless Ad Hoc networks” or “adhoc wireless networks” etc. For both the PAR and CSD this should be made consistent.
  + Compatibility a) and b): Change “64-bit MAC addresses” should be “Extended Unique Identifier – 64 (EUI-64)”
  + Distinct Identity – It was stated in the PAR that the Low Data Rate Network technology is in 802.15.4 already and that it is being extracted. This would indicate a duplicate location. This statement should be changed to include this subtlety. There sieems to be a disconnect on this when this is a “Low Data Rate Network” or a “Low Data Rate Adhoc Network”. Try to make consistent.
  + Technical Feasibility – the statement “this standard consolidates this proven technology.” seems at odds with the extraction statement elsewhere in the PAR and CSD. Is this consolidating or extracting?
* Chair will post the PAR/SC output (document 11-21/964r3) to the 802 EC reflector and submit the result to the EC.

1. The next teleconference is scheduled for Thursday July 22 – 13:30 ET.
2. Adjourn at 15:26

# Thursday July 22, 13:30-15:30

### Jon Rosdahl, Qualcomm – Chair

### Michael Montemurro, Huawei Technologies Co., Ltd – Vice-Chair

Attendance: 4

1. Meeting called to order at 13:31
2. Agenda Review – approved as document 11-21/964r4
3. Continue with the approved PAR SC agenda
4. Summary of responses received and are summarized in 11-21/964r4
   * + **802.3de - Amendment: Enhancements to the MAC Merge function and the Time Synchronization Service Interface (TSSI) to include Point-to-Point 10 Mb/s Single Pair Ethernet,**[**PAR**](https://mentor.ieee.org/802-ec/dcn/21/ec-21-0113-01-00EC-ieee-p802-3de-draft-par-responses.pdf)**and**[**CSD**](https://mentor.ieee.org/802-ec/dcn/21/ec-21-0112-00-00EC-ieee-p802-3de-draft-csd-responses.pdf)
   * No comments
     + **802.1 - Industry Connetions: Nendica,**[**ICAID**](https://mentor.ieee.org/802.1/dcn/21/1-21-0011-05-ICne-draft-nendica-icaid-renewal.docx)

* No comments.
  + - **802.15.13 Standard:Multi-Gigabit per Second Optical Wireless Communications (OWC), with Ranges up to 200 meters, for both stationary and mobile devices,**[**PAR Extension**](https://mentor.ieee.org/802.15/dcn/21/15-21-0267-01-0000-par-extension-request-for-p802-15-13.docx)**and**[**CSD**](https://mentor.ieee.org/802-ec/dcn/17/ec-17-0073-00-ACSD-802-15-13.docx)
* While there is no requirement to update the CSD, If the PAR has modified, the CSD should change as well.
  + - **802.15.4-2020/Cor1 Corrigendum 1:Correction of errors preventing backward compatibility,**[**PAR Modification**](https://mentor.ieee.org/802.15/dcn/21/15-21-0270-04-Cor2-tg4-2020-cor1-par-modification-draft.docx)
  + While the response is agreeable, the link to the new CSD or PAR is not provided We are still not sure if this is a PAR Modication or a PAR Corrigendum. There is a difference.
    - **802.15.4ab Amendment: Enhanced Ultra Wide-Band (UWB) Physical Layers (PHYs) and Associated MAC Enhancements,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0126-02-nuwb-p802-15-4ab-par-draft-from-myproject.pdf)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0047-05-nuwb-draft-csd-ng-uwb.docx)
* PAR
* Agree with the proposed changes, but the links to the PAR and CSD were not updated in the slide title. It would have been good to include a link to the updated PAR and CSD.
* CSD
* No additional comments.
  + - **802.15.6a Amendment: Dependable Human and Vehicle Body Area Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0259-03-006a-ieee-802-15-6a-par-draft.pdf)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0260-02-006a-ieee-802-15-6a-csd-draft.docx)
* PAR:
* Agree with the proposed changes, but the links to the PAR and CSD were not updated in the slide title. It would have been good to include a link to the updated PAR and CSD.
* CSD:
* No additional comments.
  + - **802.15.14 Standard: Ad-Hoc Impulse Radio Ultra Wideband Wireless Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0274-04-0014-sg14-ns-uwb-par-working-draft.docx)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0278-04-0014-sg14-draft-csd-for-ns-uwb.docx)
* PAR:
* Agree with the proposed changes, but the links to the PAR and CSD were not updated in the slide title. It would have been good to include a link to the updated PAR and CSD.
* CSD:
  + No additional comments.
    - **802.15.15 Standard: Ad-Hoc Low-Rate Wireless Networks,**[**PAR**](https://mentor.ieee.org/802.15/dcn/21/15-21-0265-03-0015-sg15-ns-nb-par-working-draft.docx)**and**[**CSD**](https://mentor.ieee.org/802.15/dcn/21/15-21-0301-00-0015-sg15-draft-csd-for-ns-nb.docx)
* PAR:
* Agree with the proposed changes, but the links to the PAR and CSD were not updated in the slide title. It would have been good to include a link to the updated PAR and CSD.
* Your response indicates that you changed the Title to “Wireless AD Hoc networks”. We believe hat it should be “Wireless Ad-hoc Networks”
* CSD:
  + No additional comments.

1. Approval of PAR Review SC report

**MOTION:**

**Move to accept 11-21/964r4 as the report from PAR Review SC for the July 2021 plenary.**

**Moved: Stuart Kerry**

**2nd: Michael Montemurro**

**Results: 3 – Yes; 0 – No; 0 – Abstain. Motion Passes.**

1. Adjourn at 14.25