IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 802.11ba  Teleconference Minutes October 2019 | | | | |
| Date: 19-08-26 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Leif Wilhelmsson | Ericsson AB |  | +46 706 216956 | leif.r.wilhelmsson@ericsson.com |
| Yunsong Yang | Self |  |  |  |

Abstract

This document contains minutes from TG 802.11ba teleconference in October 2019.

Rev 0: Minutes for TG 802.11ba teleconference on 21st of Oct. 2019.

Rev 1: Minutes for TG 802.11ba teleconference on 31st of Oct. 2019.

Rev 2: Minutes for TG 802.11ba teleconference on 4th of Nov. 2019.

**Teleconference on Monday, Oct 21, 2019, 10:00 –12:00 am (ET)**

**Agenda:**

1. Call meeting to order  
2. Agenda setting  
3. Patent policy (link at the end of the email)  
4. Attendance: send email to the chair or secretary ([leif.r.wilhelmsson@ericsson.com](mailto:leif.r.wilhelmsson@ericsson.com))  
5. LB243 result review (Minyoung Park)

6. Comment classification and assignment (Po-Kai Huang)

             a. <https://mentor.ieee.org/802.11/dcn/19/11-19-1773-00-00ba-comment-classification-for-draft-4-0.pptx>

             b. <https://mentor.ieee.org/802.11/dcn/19/11-19-1770-01-00ba-comments-on-tgba-d4-0.xlsx>

7. Adjourn

Teleconferences are subject to applicable policies and procedures, see below.

•       IEEE Code of Ethics  
–       <https://www.ieee.org/about/corporate/governance/p7-8.html>    
•       IEEE Standards Association (IEEE-SA) Affiliation FAQ  
–       <https://standards.ieee.org/faqs/affiliation.html>  
•       Antitrust and Competition Policy  
–       <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/antitrust.pdf>  
•       IEEE-SA Patent Policy  
–       <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>    
–       <https://standards.ieee.org/about/sasb/patcom/>  
 •       IEEE 802 Working Group Policies &Procedures (29 Jul 2016)  
–       [http://www.ieee802.org/PNP/approved/IEEE\_802\_WG\_PandP\_v19.pdf](https://protect2.fireeye.com/v1/url?k=5048dd64-0c9cd76d-50489dff-86740465fc08-7537903cac7caa59&q=1&e=60f25a16-70a3-46ba-876a-57bd6dc685af&u=http%3A%2F%2Fwww.ieee802.org%2FPNP%2Fapproved%2FIEEE_802_WG_PandP_v19.pdf)  
•       IEEE 802 LMSC Chair's Guidelines (Approved 13 Jul 2018)  
–       <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0120-27-0PNP-ieee-802-lmsc-chairs-guidelines.pdf>  
•       Participation in IEEE 802 Meetings  
–       <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>  
•       IEEE 802.11 WG OM: (Approved 10 Nov 2017)  
–       <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-22-0000-802-11-operations-manual.docx>

1. **Chair Minyoung Park (Intel) calls the meeting to order at 10:12 am (ET).**
2. Minyoung goes through the proposed agenda and asks it there are any questions or additional items that should be added. No questions asked so the proposed agenda will be used.
3. Minyoung reminds about the IEEE patent policy and directs people to the links provided in the call in case of questions about the IEEE 802 and 802.11 Policy and Procedure.
4. Minyoung reminds about attendance.
5. Minyoung goes through the LB results. 100 technical comments received. Approval rate close to 90 %.
6. Presentation:

**11-19/1773r0, “Comment Classification for Draft 4.0”, Po-kai Huang (Intel):**

Po-Kai explains that the same approach as used for the earlier comments resolutions will be adopted, i.e., the comments are categorized and a person is assigned to be Point of Contact (PoC) for each category. The following updates are done to the document:

* Yunsong is added to the category “protected WUR Frames”
* Xiaofei agrees to take the category “Definition”
* Vinod agrees to take the category “PHY interface”

There is a comment by Brian Hart, requesting a Matlab model as a reference. Nobody signs up for this and it will be discussed further at the f2f. It is a rather big thing to add at this late stage so care has to be taken

No further question related to CRs.

Minyoung describes the current status of 11ba relative to the other TGs. We cannot go to Sponsor Ballot before 11ax. 802.11ay is currently waiting for 11ax. It is believed that 11az may need another year so we need to change the order of 11az and 11ba not to significantly delay 11ba.

1. **The meeting is adjourned at 10.55am.**

**List of Attendees:**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Minyoung Park | Intel |
| 2 | Leif Wilhelmsson | Ericsson |
| 3 | Po-Kai Huang | Intel |
| 4 | Vinod Kristem | Intel |
| 5 | Yunsong Yang | Self |
| 6 | Xiaofei Wang | Interdigital |
| 7 | Rojan Chitrakar | Panasonic |
| 8 | Steve Shellhammer | Qualcomm |

**Teleconference on Thursday, Oct 31, 2019, 5:00 – 6:30 pm (ET)**

**Agenda:**

1. Call meeting to order  
2. Agenda setting  
3. Patent policy (link at the end of the email)  
4. Attendance: send email to the chair or secretary ([leif.r.wilhelmsson@ericsson.com](mailto:leif.r.wilhelmsson@ericsson.com))

5. Presentations

1) 19/1792r0 CR for WUR Beacon and Synchronization (Po-Kai Huang, Intel Corp.)  
2) 19/1793r0 WUR Duty Cycle  (Po-Kai Huang, Intel Corp.)   
3) 19/1794r0 CR for WUR Wake-up Operation  (Po-Kai Huang, Intel Corp.)   
4) 19/1795r0 WUR Power Management  (Po-Kai Huang, Intel Corp.)   
5) 19/1797r0 CR for Miscellaneous CIDs  (Po-Kai Huang, Intel Corp.)

6. Adjourn

Teleconferences are subject to applicable policies and procedures, see below.

•       IEEE Code of Ethics  
–       <https://www.ieee.org/about/corporate/governance/p7-8.html>    
•       IEEE Standards Association (IEEE-SA) Affiliation FAQ  
–       <https://standards.ieee.org/faqs/affiliation.html>  
•       Antitrust and Competition Policy  
–       <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/antitrust.pdf>  
•       IEEE-SA Patent Policy  
–       <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>    
–       <https://standards.ieee.org/about/sasb/patcom/>  
 •       IEEE 802 Working Group Policies &Procedures (29 Jul 2016)  
–       [http://www.ieee802.org/PNP/approved/IEEE\_802\_WG\_PandP\_v19.pdf](https://protect2.fireeye.com/v1/url?k=59843c10-050ef76f-59847c8b-86717581b0b5-e875940898a93730&q=1&e=51ebf66c-edfc-471f-a0e9-89105a1975c1&u=http%3A%2F%2Fwww.ieee802.org%2FPNP%2Fapproved%2FIEEE_802_WG_PandP_v19.pdf)  
•       IEEE 802 LMSC Chair's Guidelines (Approved 13 Jul 2018)  
–       <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0120-27-0PNP-ieee-802-lmsc-chairs-guidelines.pdf>  
•       Participation in IEEE 802 Meetings  
–       <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>  
•       IEEE 802.11 WG OM: (Approved 10 Nov 2017)  
–       <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-22-0000-802-11-operations-manual.docx>

1. **Chair Minyoung Park (Intel) calls the meeting to order at 5:02 am (ET).**

Leif Wilhelmsson has informed the Chair he cannot be on the call and Yunsong Yang agrees to be acting secretary.

1. Minyoung goes through the proposed agenda and asks it there are any questions or additional items that should be added. No questions asked so the proposed agenda will be used.
2. Minyoung reminds about the IEEE patent policy.
3. Minyoung reminds about recording attendance.
4. Presentations:

**11-19/1792r0, “11ba D4.0 MAC Comment Resolution for WUR Beacon and Synchronization”, Po-Kai Huang (Intel):**

CID 4040: No discussion.

CID 4069: No discussion.

Document 11-19/1792r0 is ready for motion.

**11-19/1793r1, “11ba D4.0 MAC Comment Resolution for WUR Duty Cycle”, Po-Kai Huang (Intel):**

CID 4018: Changed “The period” to “A period” in the definition.

The document is revised to r2.

Document 11-19/1793r2 is ready for motion.

**11-19/1794r0, “11ba D4.0 MAC Comment Resolution for WUR Wake-up Operation”, Po-Kai Huang (Intel):**

CID 4050: Discussed about the meaning of being in the WUR mode and how it is related to the status of the WUR non-AP STA as to when the WUR non-AP STA will be able to receive only WUR PPDUs. More offline discussion is needed. CID 4050 is deferred and removed from the document.

CID 4083: Fixed the typo in “principle” in the resolution.

CID 4132: No discussion.

The document is revised to r1.

Document 11-19/1794r1 (with CIDs 4083 and 4132) is ready for motion.

**11-19/1795r1, “11ba D4.0 MAC Comment Resolution for WUR Power Management”, Po-Kai Huang (Intel):**

CID 4016: Al doesn’t agree with revising the figures in the baseline document. More offline discussion is needed. CID 4016 is deferred and removed from the document.

CID 4029: No discussion.

CID 4041: No discussion.

The document is revised to r2.

Document 11-19/1795r2 (with CIDs 4029 and 4041) is ready for motion.

**11-19/1797r0, “11ba D4.0 MAC Comment Resolution for Miscellaneous”, Po-Kai Huang (Intel):**

CID 4039: No discussion.

CID 4064: No discussion.

CID 4066: No discussion.

Document 11-19/1797r0 is ready for motion.

1. **The meeting is adjourned at 6:06pm.**

**List of Attendees:**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Minyoung Park | Intel |
| 2 | Yunsong Yang | Self |
| 3 | Po-Kai Huang | Intel |
| 4 | Eunsung Park | LGE |
| 5 | Xiaofei Wang | Interdigital |
| 6 | Joseph Levy | Interdigital |
| 7 | Al-Petrick |  |
| 8 | Cheng-Hui Lin |  |

**Teleconference on Monday, Nov. 4, 2019, 11:00pm –1:00 am (ET)**

**Agenda:**

1. Call meeting to order  
2. Agenda setting  
3. Patent policy (link at the end of the email)  
4. Attendance: send email to the chair or secretary ([leif.r.wilhelmsson@ericsson.com](mailto:leif.r.wilhelmsson@ericsson.com))

5. Presentations

1) 11-19-1818r0 Resolutions to LB243 CIDs related to Protected WUR frames (Yunsong Yang)

            2) 11-19-1798   CRs for D4.0 MLME CIDs (Rojan Chitrakar)

            3) 11-19-1799   CRs for D4.0 Protected WUR Frames CIDs (Rojan Chitrakar)

            4) 11-19-1800   CRs for D4.0 WUR Discovery CIDs (Rojan Chitrakar)

            5) 11-19-1821 lb243 mac cr miscellaneous (Alfred Asterjadhi), 6 CIDs

            6) 11-19-1827 LB243 CR for 6 GHz (Minyoung Park)

            7) 11-19-1828 LB243 CR for WUR channel  (Minyoung Park)

           8) 11-19-1829 LB243 CR for 4.3.15b and Annex B  (Minyoung Park)

           9) 11-19-1830 LB243 Misc CIDs  (Minyoung Park)

6. Adjourn

Teleconferences are subject to applicable policies and procedures, see below.

•       IEEE Code of Ethics  
–       <https://www.ieee.org/about/corporate/governance/p7-8.html>    
•       IEEE Standards Association (IEEE-SA) Affiliation FAQ  
–       <https://standards.ieee.org/faqs/affiliation.html>  
•       Antitrust and Competition Policy  
–       <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/antitrust.pdf>  
•       IEEE-SA Patent Policy  
–       <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>    
–       <https://standards.ieee.org/about/sasb/patcom/>  
 •       IEEE 802 Working Group Policies &Procedures (29 Jul 2016)  
–       [http://www.ieee802.org/PNP/approved/IEEE\_802\_WG\_PandP\_v19.pdf](https://protect2.fireeye.com/v1/url?k=5048dd64-0c9cd76d-50489dff-86740465fc08-7537903cac7caa59&q=1&e=60f25a16-70a3-46ba-876a-57bd6dc685af&u=http%3A%2F%2Fwww.ieee802.org%2FPNP%2Fapproved%2FIEEE_802_WG_PandP_v19.pdf)  
•       IEEE 802 LMSC Chair's Guidelines (Approved 13 Jul 2018)  
–       <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0120-27-0PNP-ieee-802-lmsc-chairs-guidelines.pdf>  
•       Participation in IEEE 802 Meetings  
–       <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>  
•       IEEE 802.11 WG OM: (Approved 10 Nov 2017)  
–       <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-22-0000-802-11-operations-manual.docx>

1. **Chair Minyoung Park (Intel) calls the meeting to order at 11:02 pm (ET).**
2. Minyoung goes through the proposed agenda and asks it there are any questions or additional items that should be added. No questions asked so the proposed agenda will be used.
3. Minyoung reminds about the IEEE patent policy and directs people to the links provided in the call in case of questions about the IEEE 802 and 802.11 Policy and Procedure.
4. Minyoung reminds about attendance.
5. Presentation:

**11-19/1818, “Resolutions to LB243 CIDs related to Protected WUR frames” Yunsong Yang (Self):**

This contribution proposes resolutions to resolve 6 LB243 comments (CIDs 4053 to 4058) related to the Protected WUR frames.

CID 4053:

Question/Comment (Q): I still have concerns about the assumptions. For instance, the current definition of “Doze” assumes no reception, still we here allow reception of WUR PPDU. Basically, I believe it is unclear and unnecessarily complex. It seems to me that with the propose resolution we are going back to what we had in D3.0.

A rather lengthy discussion about various things that the commenter believes are not clear and/or do not follow hoe things usually are defined.

After about 55 minutes it is agreed that we likely will not make much more progress in the telco and that is better to try to sort out the issues when we meet next week in the f2f.

CID 4054: Some minor comment related to the motivation of the resolution, but no objection to the proposed resolution as such.

CID 4055: No discussion.

CID 4056: No discussion.

CID 4057: No discussion.

CID 4058: No discussion.

Po-Kai suggests that Rojan becomes responsible for the comments related to security and drives this since Yunsong will not be at the f2f. Rojan agrees to this.

**11-19/1798r1, “Comment Resolutions for D4.0 MLME CIDs”, Rojan Chitrakar (Panasonic):** This submission proposes resolutions of comments received from TGba comment collection (TGba Draft 3.0): CIDs: 4142, 4143, 4144, 4145 (4 CIDs)

CID 4142: No discussion.

CID 4143: No discussion.

CID 4144: No discussion.

CID 4145: No discussion.

Q: The last two changes are not really part of the CR?

A: That is correct.

Q: Then we should probably have a separate motion for these changes since we only motion the CRs.

It is concluded that a separate motion will be prepared for these changes, but no modification of the present document is needed.

Document 11-19/1798r1 is ready for motion.

**11-19/1800r0, “Comment Resolutions for D4.0 WUR Discovery CIDs”, Rojan Chitrakar (Panasonic):** This submission proposes resolutions of comments received from TGba comment collection (TGba Draft 3.0): CIDs: 4074, 4075 (2 CIDs)

CID 4074: Some discussion related to the motivation for the rejection. Suggested to refer to the nominal text, rather than a note. In response it was pointed out that that the resolution has two parts, the first part explaines why WUR Scanning cannot be performed during an active ON Duration, there is normative text that specifies this. The second part explains that WUR scanning may be performed during any other time as explained in the NOTE.

CID 4075: No discussion.

Document 11-19/1800r0 is ready for motion.

**11-19/1799r0, “Comment Resolutions for D4.0 Protected WUR Frames CIDs”, Rojan Chitrakar (Panasonic):** This submission proposes resolutions of comments received from TGba comment collection (TGba Draft 3.0): CIDs: 4067, 4095 (2 CIDs)

CID 4067: The text in the resolution is updated based on some discussion.

Run out of time. CID 4095 will be considered in the f2f.

1. **The meeting is adjourned at 6:06pm.**

**List of Attendees:**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Minyoung Park | Intel |
| 2 | Leif Wilhelmsson | Ericsson |
| 3 | Yunsong Yang | Self |
| 4 | Po-Kai Huang | Intel |
| 5 | Bo Sun | ZTE |
| 6 | Joseph Levy | Interdigital |