IEEE P802.11  
Wireless LANs

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| IEEE 802.11ba Task Group Meeting Minutes for January 2019 Meeting, St Louis, Mo, USA | | | | |
| Date: 2019-01-21 | | | | |
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Abstract

Rev 0: Meeting Minutes for the IEEE 802.11ba TG sessions held in St. Louis, Mo, USA, January 13-18, 2019.

**Monday, January 14 2019, 1:30-3:30 pm**

**Meeting Agenda:**

The meeting agenda is shown below, and published in the agenda document:

<https://mentor.ieee.org/802.11/dcn/18/11-18-2109-02-00ba-2019-january-tgba-agenda.pptx>

* Call meeting to order
* Call for submissions
* Review agenda and approval
* IEEE 802 and 802.11 IPR Policy and procedure
* Participation in IEEE 802 Meetings
* **Motion**: November 2018 meeting (doc: IEEE 802.11-18/2068r1) and teleconference minutes (doc: IEEE 802.11-18/2088r4) approval
* Presentations on comment resolution
* Recess

**Chair Minyoung Park (Intel) calls the meeting to order at 1.30 pm.** (about35 persons in the room.)

Minyoung presents the slide about Meeting protocol (slide 4).

Minyoung reminds about recording attendance and goes through slide 6 “Attendance, Voting & Document Status”.

Minyoung presents the schedule for the week (slide 7) and the logistics of the ad-hoc meetings (slide 8).

Minyoung presents the slide “Main agenda items for the week”. The main agenda items are shown below.

* Complete comment resolution of TGba D1.0 letter ballot
* Review TG timeline

Minyoung goes through the list of submissions. 43 submissions received as of January 12. In case there is a need to prioritize, it is proposed to prioritize the contributions with the largest number of CIDs.

Minyoung asks if there is any submission is missing. No response.

Minyoung goes through the agenda (slide 15) and asks if there are any questions or comments.

It is proposed to handle PHY in the joint sessions.

**Motion to approve the agenda**

**Move:** Eunsung Park

**Second:** Stuart Kerry

Motion passed by unanimous consent.

Minyoung goes through the slides “Participants have a duty to inform the IEEE” (slide 17) and “Ways to inform IEEE” (slide 18).

Minyoung makes a Call for Potentially Essential Patents. No potentially essential patents reported and no questions asked.

Minyoung goes through “Other Guidelines for IEEE WG meetings” (slide 19) and “Patent-related information” (slide 20).

Minyoung reads through “Participation in IEEE 802 Meetings” (slide 21), and encourages people to read through the references on slides 22-24.

Minyoung goes through the Summary from November 2018 Meeting and Teleconference Calls, shown below.

* Worked on comment resolution
  + Resolved 582 comments (46%)
* Reviewed TG timeline
* Agenda: doc:11-18/1717r10
* Teleconference calls
  + Reviewed comment resolutions
  + Resolved ~100 comments

**Motion:** Approve TGba minutes of November 2018 meeting [doc: IEEE 802.11-18/2068r1] and teleconference calls [doc: IEEE 802.11-18/2088r4]

**Move:** Yunsong Yang

**Second:** Eunsung Park

Motion passed by unanimous consent.

**Presentations:**

**11-19/0021r1 “Comment resolutions for Clause 4”, Minyoung Park (Intel)**: The following 35 CIDs are discussed

* 1, 56, 57, 218, 349, 354, 487, 488, 489, 490,
* 491, 493, , 583, 584, , 631, , 753, 772,
* 775, , , 868, 870, 941, 946, 1081, 1084, 1107,
* 418, 58, 59, 585, 609, , 1086, 1087, 1088, 410
* 587

CID 1: Question/Comment(Q): I agree with the argument that it is a capability, but it also puts some limits on what 11ba can do. It would not allow e.g. the PCR is in 5 GHz, while the WUR is in 2.4 GHz.

Answer (A): The idea is to not get stuck on too much architectural work and simplify this. This can be changed in the future.

CID 56: No comment.

CID 57: Q: You deleted unprotected,

A: Yes, if we don’t call it protected, it is implicitly unprotected.

Q; Note that the group address includes broadcast.

A: OK, I will update this in r2.

CID 218: No comment

CID 349: No comment

CID 354: No comment

CID 487: Q: It is good not to reference another CID in the proposed resolution

A: OK.

CID 488: No comment

CID 489: No comment

CID 490: Q: minor typo: change “is” to “are” in the first sentence of the proposed resolution.

CID 491: No comment

CID 493: No comment

CID 583: No comment

CID 584: No comment

CID 631: Q: I believe there are also other reasons to reject, e.g. “On the continuation of WUR moves across BSS transitions, it assumes the STA is in the Active mode when the BSS transition is complete therefore the non-AP STA can setup another WIR mode with the new AP”.

CID 753: No comment

CID 772: Q: Propose to reuse the resolution for #56

Q: You did not remove WUR and PCR

A: Po-Kai is addressing this for the entire document. It will be discussed in a separate contribution.

CID 775: No comment

CID 868: Q: Proposed to remover the reference to CID 489.

CID 870: No comment

CID 941: No comment

CID 946: No comment

CID 1081: No comment

CID 1084: No comment

CID 1107: No comment

CID 418: No comment

CID 58: Q: How about adding a reference to 31.5 after duty cycle operation?

A: Agree

CID 59: No comment

CID 585: The reference to another CID is removed

CID 609: No comment

CID 1086: Reference to CID 58 removed

CID 1087: No comment

CID 1088: No comment

CID 410: No comment

CID 587: No comment

Q: You said you moved some CIDs to another document, when will these be discussed?  
A: Correct, they relate to HDR/LDR and will be covered later this week.

11-19/0021r2 including the CIDs below is ready for motion.

* 1, 56, 57, 218, 349, 354, 487, 488, 489, 490,
* 491, 493, , 583, 584, , 631, , 753, 772,
* 775, , , 868, 870, 941, 946, 1081, 1084, 1107,
* 418, 58, 59, 585, 609, , 1086, 1087, 1088, 410
* 587

**11-19/0029r0 “11ba D1.1 MAC Comment Resolution for Miscellaneous Topic Part II”, Po-Kai Huang (Intel):**

The following CIDs are discussed: 52, 345, 425, 424, 346, 481, 508, 55, 869, 473

CID 424: Q: Is it necessary to restrict an AP as done in the definition?

A: This is done because these are the ones having the preamble which is needed for coexistence reasons.

Q: So this is not really future proof, taking EHT as an example?

A: I don’t think there is a way to make things future proof in good way.

The reference in the definition of WUR non-AP is removed.

Q: For the non-AP STA, I don’t think it is necessary to define what it is NOT capable of doing.

CID 346: No comment

CID 52: No comment

**Meeting recessed at 3.30pm**

**Monday, January 14 2019, 4:00-6:00 pm**

**TGba PHY ad-hoc Meeting**

Ad-hoc Group Chair: Eunsung Park (LGE)

Ad-hoc Secretary: Leif Wilhelmsson (Ericsson)

**The ad-hoc Chair Eunsung Park (LGE) calls the meeting to order at 4.00 pm. (5 persons in the room).**

**Presentations:**

**11-19/0014r1 “TGba D1.0 Comment Resolutions for Sec. 32.2.4 and 32.8.2 (WUR Preamble)”, Rui Cau (Marvell):** The contribution discusses CID**s** 189, 195, 226, 264, 304, 305, 446, 925, 987, 1205, 1206, 1212

CID 189: No comment

CID 1205: No comment

CID 226: No comment

CID 1206: No comment

CID 195: No comment

CID 264: No comment

CID 304: No comment

CID 305: No comment

CID 446: No comment

CID 925: No comment

CID 987: No comment

CID 1212: No comment

Rui goes through the proposed new text in some detail. The new text uses less references and is more self-contained. Some minor editions are made and an updated revision of the documents is thus needed for the motion.

Document 11-19/0014r2, containing the CIDs below, is ready for motion.

CIDs: 189, 195, 226, 264, 304, 305, 446, 925, 987, 1205, 1206, 1212

**11-19/0015r1 “TGba D1.0 Comment Resolutions for Sec. 32.2.10 (WUR FDMA PPDU Padding)”, Rui Cau (Marvell):** The contribution discusses CID**s** 200, 268, 678, 679, 838

CID 200: No comment

CID 268: No comment

CID 678: No comment

CID 679: No comment

CID 838: No comment

Document 11-19/0015r2, containing the CIDs below, is ready for motion.

CIDs: 200, 268, 678, 679, 838

Of the people in the room, none has a contribution to present. It appears most people are attending the EHT session. The meeting is therefore recessed.

**Ad-hoc meeting recessed at 5.07 pm.**

**Monday, January 14 2019, 4:00-6:00 pm**

**TGba MAC Ad-hoc Meeting**

Ad-hoc Group Chair: Minyoung PARK (Samsung)

Ad-hoc Secretary: Yunsong YANG (Huawei)

1. Called to order at 16:00 local time by Minyoung Park.
2. Attendance: 12.
3. Approval of agenda (11-18-2109r2 is on the server and r3 is shown on the screen)

* No comments or questions.
* Agenda (r3) is approved unanimously.

1. Review patent policy and guidelines
   * No items identified.
2. Comment resolution

**11-19-0012-00-00ba-lb235-cr-subclause-9-4-2-273 (Yongho Seok, MediaTek)**

* Contains proposed resolutions to CIDs: 696, 575, 697, 876, 1014, 993, 364, 777, 576, 455, 995, 1102, 710, 711, 781, 1018, 517, 604, and 605.
* CID 696: reviewed and OK.
* CID 575: commented on the removal of the cross reference of CIDs from CID 575 through 993. The reference of CID 697 will be removed from CIDs 575, 876, 1014, and 993.
* CID 364: added that 160 MHz isn’t supported for WUR FDMA.
* CIDs 777, 576, 455, 995, 1102, 710, and 711: reviewed and are OK.
* CID 781: replace the cross reference of CID 1018 to the exact changes.
* CID 1018: reviewed and OK.
* CID 517: Xiaofei’s doc. 11-19-0036r1 proposes different language for the AP side. The Editor need to ensure that the right text is implemented.
  + Discussed if need to change WUR Primary Channel to WUR Beacon Channel.
  + The conclusion is to keep the terminology as is for now. Will discuss the terminology at TGba level again, and do a global change, if so decided at the TGba level.
* CIDs 604 and 605: reviewed and are OK.
* Will be uploaded as r1.
* There is no objection to set the document to ready for motion.

**11-19-0013-00-00ba-lb235-cr-subclause-31-9 (Yongho Seok, MediaTek)**

* Contains proposed resolutions to CIDs: 1029, 469, 146, 577, 1030, 361, 362, 858, 171, 485, 580, 94, 147, 1031, 815, 1032, 1033, 574, 470, 148, 172, 173, 174, 175, 859, 149, 1034, and 428.
* CID 1029: Added that the commenter failed to identify a technical issue.
* CIDs 469, 146, 577, 1030, 361, and 362: reviewed and are OK.
* CID 858: Changed to Revised. Removed “or greater than”.
* CIDs 171, 485, 580: reviewed and are OK.
* CID 94: made editorial changes in the Editor’s instruction.
* CID 147: made editorial changes in the text.
* CIDs 1031 and 815: reviewed and are OK.
* CID 1032: Kept as revised. Change the deposition field.
* CIDs 1033, 574, 470: reviewed and are OK.
* CID 148: changed the reason for rejection.
* CIDs 172, 173, 174, 175, 859, 149, 1034, and 428: reviewed and are OK.
* Will be uploaded as r1.
* There is no objection to set the document to ready for motion.

**11-19-0031-01-00ba-crs-for-mac-misc-cids (Rojan Chitrakar, Panasonic)**

* Contains proposed resolutions to CIDs 591, 616, 754, 796, 862, 940, 947, 1161, 26, 60, 63, 95, 237, 283, 420, 422, 427, 495, 590, 639, and 1078.
* CIDs 591, 616, and 754: reviewed and are OK.
* CID 796: revised the reason for rejection to explain why not non-AP STA.
* CIDs 862, 940, 947, 1161, 26, and 60: reviewed and are OK.
* CID 63: Stopped here due to out of time.

1. Recessed at 18:00 local time.

**Tuesday, January 15 2019, 8:00-10:00 am**

**TGba PHY ad-hoc Meeting**

Ad-hoc Group Chair: Steve Shellhammer (Qualcomm)

Ad-hoc Secretary: Leif Wilhelmsson (Ericsson)

**Ad-hoc chair Steve Shellhammer (Qualcomm) calls the meeting to order at 8.05 (About 10 persons in the room)**

Steve reminds about taking attendance.

**Presentations:**

**11-19/0050r0 “Comment Resolutions on Clause 32.2.3.4 (Symbol Randomizer)” Junghoon Suh (Huawei):**  The following CIDs are discussed in this contribution: 155, 225, 297, 298, 299, 300, 321, 323, 444, 499

CID 155: After discussion in the group, the preliminary resolution “Revise” was changed to “Reject”

CID 225: No comment

CID 297: The comment is related to whether a symbol randomizer is/may be used to remove spectral lines. The resolution is updated.

CID 298: Updated to be aligned with the resolution of CID 194 by Miguel Lopez.

CID 299: No comment

CID 300: No comment.

CID 321: Resolution updated after discussion.

CID 323: No comment.

CID 444: No comment.

CID 499: Resolution changed from revise to reject.

11-19/0050r1 containing the CIDs above will be ready for motion.

**11-19/0051r0 “Comment Resolutions on Clause 32.2.4.7 (Construction of the WUR-Data for a single 20 MHz channel)”,** **Junghoon Suh (Huawei):** The following CIDs are discussed in this contribution: 186, 301, 656, 957, 958, 960, 1055.

CID 186: No comment.

CID 301: The rejection can also be made on procedural grounds.

CID 656: No comment.

CID 957: No comment.

CID 958: No comment.

CID 960: No comment.

CID 1055: No comment.

11-19/0051r1 containing the CIDs above will be ready for motion.

**11-19/0052r0 “Comment Resolutions on Clause 32.2.4.8 (Construction of the WUR-Sync and WUR-Data for the FDMA transmission)”, Junghoon Suh (Huawei):** The following CIDs are discussed in this contribution: 187, 257, 921, 922, 961, 1056

CID 187: No comment.

CID 257: No comment.

CID 921: The resolution slightly updated based on the discussion

CID 922: No comment.

CID 961: No comment.

CID 1056: No comment.

11-19/0052r1 containing the CIDs above will be ready for motion.

**11-19/0066r2 “CR for Mathematical description of signals Part 2”, Miguel Lopez (Ericsson):** The following CIDs are discussed in this contribution: 157, 158, 194, 212, 258, 259, 260, 263, 318, 566, 665, 977, 1061

CID 157: No comment.

CID 158: No comment.

CID 194: No comment.

CID 212: No comment.

CID 258: No comment.

CID 259: No comment.

CID 260: No comment.

CID 263: No comment.

CID 318: No comment.

CID 566: No comment.

CID 665: Postponed.

**The ad-hoc meeting is recessed at 10.00 am.**

**Tuesday, January 15 2019, 8:00-10:00 am**

**TGba MAC ad-hoc Meeting**

1. Called to order at 8:03 local time by Minyoung Park.
2. Attendance: 13.
3. Approval of agenda (11-18-2109r3 is on the server and shown on the screen)

* No changes, comments or questions.
* Agenda (r3) is approved.

1. Review patent policy and guidelines
   * No items identified.
2. Presentation

**Continuation of 11-19-0031-02-00ba-crs-for-mac-misc-cids (Rojan Chitrakar, Panasonic)**

* CID 63: changed, in the text, “WUR STA” to “WUR non-AP STA”.
* CID 95: reviewed and OK.
* CID 237: discussed what the best way is. Decided to keep it as is.
* CID 283: reviewed and OK.
* CID 420: reviewed and OK.
* CID 422: reviewed and OK.
* CID 427: reviewed and OK.
* CID 495: reviewed and OK.
* CID 590: Added clarification in the deposition field that the intention is to follow the existing rules.
* CID 639: reviewed and OK.
* CID 1078: Changed the resolution to Rejected. The comment fails to identify a technical issue. Changes due to CID 1078 is deleted. No impact on CID 427.
* Will be uploaded as r3.
* There is no objection to set the document to ready for motion.

**11-19-0026-00-00ba-comment-resolution-on-cid-1068 (Lei Huang, Panasonic)**

* Contains proposed resolutions to CID 1068.
* CID 1068: reviewed and OK.
* There is no objection to set the document to ready for motion.

**11-18-2143-01-00ba-comment-resolutions-on-wur-mode-element-part-4 (Suhwook, LGE)**

* Contains proposed resolutions to CIDs 121, 122, 449, 567, 570, 633, 727, 888, 1028, 1243, and 1244.
* CIDs 121, 122, 449, 567, and 570: reviewed and are OK.
* CID 633: Changed to Rejected. Added reason for rejection.
* CIDs 727 and 888: reviewed and are OK.
* CID 1028: change, in the text, the values 0 to “Accept”.
* CID 1243: Questioned on how the Dialogue Token value is chosen in the unsolicited response. Response: can be any value. No change to the resolution.
* CID 1244: reviewed and OK.
* Will be uploaded as r2.
* There is no objection to set the document to ready for motion.

**11-19-0047-00-00ba-cr-on-wur-capability-element-part-2 (Suhwook, LGE)**

* Contains resolutions to CIDs 69, 70, 166, 368, 514, 879, 1016, 1101, 1230, and 1231.
* CID 69: reviewed and OK.
* CID 70:
  + Removed the Vendor Specific Support bit.
  + Removed the Wide band PPDU support bit.
  + VL WUR frame support: merge non-AP STA and AP into one.
  + Protected Support: merge non-AP STA and AP into one.
  + Stopped here due to out of time.

1. Recessed at 10:04 local time.

**Tuesday, January 15 2019, 10:30 am -12:30 pm**

**Meeting Agenda:**

The meeting agenda is shown below, and published in the agenda document:

<https://mentor.ieee.org/802.11/dcn/18/11-18-2109-03-00ba-2019-january-tgba-agenda.pptx>

* + Call meeting to order
  + IEEE 802 and 802.11 IPR Policy and procedure
  + Presentations on comment resolutions, Recess

**Chair Minyoung Park (Intel) calls the meeting to order at 10.30 am.** (about20 persons in the room.)

Minyoung makes a Call for Potentially Essential Patents. No potentially essential patents reported and no questions asked.

**Presentations:**

**11-19/0029r0, “11ba D1.1 MAC Comment Resolution for Miscellaneous Topic Part II”, Po-Kai Huang (Intel):** Po-Kai continues the presentation from Monday PM1 session.

CID 52: cont. from Monday session. No comment.

CID 345: No comment.

CID 425: No comment.

CID 55: No comment.

CID 508: No comment.

CID 474: No comment.

CID 869: No comment.

CID 473: No comment.

CID 481**:** No comment.

11-19/0029r1 including CIDs52, 345, 425, 424, 346, 481, 508, 55, 869, 473, 474 will be ready for motion.

*Noted: 474 is missing in the abstract of the document.*

**Q:** Now when you have removed PCR in this section, do you plan to remove this reference everywhere?

**A:** Yes.

**11-19/0022r0 “Comment resolutions for Clause 6”, Minyoung Park (Intel):** The following CIDs are discussed in this contribution:340, 503, 586, 636, 770, 1009

CID 340, 503, 586, 636, 770, 1009: No comments during the presentations of the CIDs

After the CIDs were presented, the following comments were made:

Q: We need to also add a WUR Operation element to the primitive parameters.

**Q:** In 6.3.118.5.1 You may also have an unsolicited response.

**A:** Agree, I will update to reflect this.

11-19/0022r1 including the CIDs above will be ready for motion.

**11-18/0024r0 “Comment resolutions for Annex B PICS”, Minyoung Park (Intel):**

The following CIDs are discussed: 2, 239, 307, 312, 344, 504, 601, 769, 872, 914, 1006, 1143

CID 2, 239, 307, 312, 344, 504, 601, 769, 872, 914, 1006, 1143: No comments.

**Q:** You reference a capability element, should we instead reference the whole clause?

**A:** Basically, I am just following how thing are usually done.

HDR is stated as optional. This is not really agreed but will be covered in a separate resolution this is marked separately.

11-18/0024r1 including the CIDs above will be ready for motion.

**11-19/0023r1 “Comment resolutions for WUR HDR and LDR”, Minyoung Park (Intel):** The following CIDs are discussed in this contribution: 509, 629, 640, 689, 741, 831, 819, 821, 822, 220, 243, 820, 709

CID 509: No comment.

CID 629: The reason for rejection is slightly updated.

CID 640: Resolution is the same as for 629 and thus updated accordingly.

CID 689: **Q:** I believe if we remove HDR it will never be put back again.

**A:** If a vendor believes it is a valuable feature, I believe it will be implemented.

**Q:** The syncword is still basically using HDR

**A:** The syncword can be generated once and stored in memory.

**Straw Poll:** Do you support to make HDR to be optional on the WUR AP side?

**Y/N/A:** 4/5/9

Because of the result of the Straw Poll and that the proposed resolutions for the remaining CIDs are not aligned with this result, Minyoung will revise the proposed resolutions.

11-19/0023r2, containing the CIDs 509,629, and 640, will be ready for motion.

**11-19/0025r0 “Comment resolutions for Miscellaneous CIDs”, Minyoung Park (Intel):** The following CIDs are discussed in this contribution: 613,1149

CID 613: Q: I accept the resolution for now, but will check and may come back.

CID 1149: No comment.

11-19/0025r1 including the CIDs above will be ready for motion.

**11-19/0066r2 “CR for Mathematical description of signals Part 2”, Miguel Lopez (Ericsson):**

This is a continuation of the presentation in Tuesday AM1.

CID 977: Based on some discussion the resolution is slightly updated to better explain why additional information was not added.

CID 1061: No comment.

*Note: CID 665 is still not discussed.*

**11-19/0067r0 “Discussion concerning MC-OOK and CIDs 212 and 665”, Miguel Lopez (Ericsson):** The presentation gives some more background to the proposed resolutions for 212 and 665. Miguel

**Straw Poll:** Do you agree to update the .11ba draft D1.1 as proposed in slide 5?

**Q:** I believe there is a definition that is sufficient.

**Q:** I support this, and I have complementary resolution.

**Q:** Is this mandatory or optional?

**A:** Mandatory. But this is not really about how the signal is generated but what it looks like.

**Recess at 12.33pm.**

**Tuesday, January 15 2019, 1:30-3:30 pm**

**TGba PHY ad-hoc Meeting**

Ad-hoc Group Chair: Steve Shellhammer (Qualcomm)

Ad-hoc Secretary: Leif Wilhelmsson (Ericsson)

**Ad-hoc chair Steve Shellhammer (Qualcomm) calls the meeting to order at 1.30 (About 15 persons in the room)**

**Presentations:**

**11-19/0068r1 “CRs on symbol design in Section 32”, Dennis Sundman (Ericsson)**

This contribution proposes comment resolutions for the CIDs: 185, 255, 303, 306, 440, 441, 442, 443, 767, 1045, 1046, 1047, 1049, 1153, 1199.

CID 185: No comment.

CID 255: Resolution changed from Accept to Reject. 160 MHz is not supported.

CID 303: No comment.

CID 306: The proposed added text is slightly modified based on some discussion in the group.

CID 440, 441,442,443: No comment

CID 767:Q: Is this a definition or an example?

A: As it is right not it is a description. We have still not agreed in the group whether this should be considered to be a definition.

CID 1045,1046,1047,1049,1153,1199: No discussion.

The decision for CID 767 will be made after presentation of 11-19/0067.

**11-18/1976r1 “Comment resolution on BPSK-Mark”, Minyoung Park (Intel):**

This submission proposes resolutions for comments of TGba Draft D1.0 with the following CIDs:

920, 269, 270, 271, 272, 222, 245, 246, 247, 248, 249, 252, 273, 275, 256

All CIDs are rejected. No comment on any of the CIDs.

11-18/1976r1, containing the CIDs above, is ready for motion.

**11-19/0053r1 “**PHY Comment resolution for Clause 32**” Minyoung Park (Intel)**

This submission proposes resolutions for comments of TGba Draft D1.0 with the following CIDs:

548, 549, 949, 950, 182, 934, 1193, 742, 935, 952, 953, 954, 955, 766, 768, 919, 1044, 1048, 1195, 1196, 1197, 223, 253, 743, 745, 1050, 1198, 1200, 224, 254, 561, 744, 746, 956, 1051, 1201, 1202, 1052, 1053, 1203, 1204, 562, 658, 659, 660, 661, 662, 963, 445, 750, 966, 975, 976

CID: 743: **Q:** I don’t agree with this resolution.

Based on discussion in the group, CIDs 743, 744,745, and 746 are deferred and will not part of the motion.

All other CIDs are presented with not comments received.

11-19/0053r2, including the CIDs above except 743,744,745, and 746, will be ready for motion.

**11-19/139r1 “Comment Resolutions for TXVECTOR and RXVECTOR”, Bo Sun (ZTE)**

This contribution proposes comment resolutions for the CIDs: 181, 221, 832, 871, 1040, 1150, 1152, 1220 and 1224.

CID 181: No discussion.

CID 832: No discussion.

CID 871: No discussion.

CID 1040: No discussion.

**Recess at 3.30 pm.**

**Tuesday, January 15 2019, 1:30-3:30 pm**

**TGba MAC ad-hoc Meeting**

1. Called to order at 13:32 local time by Minyoung Park.
2. Attendance: 35.
3. Approval of agenda (11-18-2109r4 is shown on the screen)

* No comments or questions.
* Agenda (r4) is approved unanimously.

1. Review patent policy and guidelines
   * No items identified.
2. Comment Resolution

**Continuation of 11-19-0047-01-00ba-cr-on-wur-capability-element-part-2 (Suhwook, LGE)**

* CID 70: besides removed those bits per discussion in the previous session, also use one statement for some capabilities for both the AP and non-AP STA.
* CID 166: reviewed and OK.
* CID 368: Changed the resolution from Revised to Rejected, since the current text is the opposite of what the commenter has suggested. Added the reason for rejection.
* CID 514: Changed the word “revised” to “defined” in the deposition field. Also removed the reference to CID 368.
* CIDs 879, 1016, 1101, 1230, and 1231 are reviewed and are OK.
* Will be uploaded as r2.
* There is no objection to set the document to ready for motion.

*Yunsong Yang chairs the meeting for the remainder of this session as Minyoung needs to make presentation in TGba PHY Ad-hoc group.*

*Rojan Chitrakar (Panasonic) volunteers to keep the meeting minutes.*

**11-18-1835-03-00ba-mac-cr-9-10-3-x (Alfred, Qualcomm)**

* Contains resolutions to CIDs 32, 87, 88, 292, 387, 392, 394, 395, 396, 720, 850, 884, 885, 1171, and 1239.
* This revision only updates for CID 1171, as the other CIDs have been reviewed in the teleconference.
* No discussion or questions.
* No objection to set to ready for motion.

**11-18-2129-00-00ba-mac-cr-9-10-1-2-part-2 (Alfred, Qualcomm)**

* Reviewed two CIDs: 1116 and 1236.
* No question or comments
* No objection to set to ready for motion.

**11-18-2130-03-00ba-mac-cr-9-10-3-2-part-2 (Alfred, Qualcomm)**

* Contained resolutions to CIDs 31, 89, 92, 100, 102, 309, 401, 525, 526, 717, 718, 719, 721, 788, 790, 851, 882, 883, 1074, 1122, 1169, 1170, 1240, and 1075.
* CIDs 31, 89, 92, 100, and 102: reviewed and no changes.
* CID 882: removed the last instruction to Editor as it contradicts to the Note before it.
* CID 883: reviewed and no changes.
* CID 1074: change “proposal” to “conclusion”.
* CIDs 1122, 1169, 1170, 1240, and 1075: reviewed and no changes.
* Will be uploaded as r4.
* No objection to set to ready for motion.

**11-18-2131-01-00ba-mac-cr-miscellaneous-part-1 (Alfred, Qualcomm)**

* Contains resolutions to CIDs 1024, 1227, 285, 337, 370, 382, 707, 708, 714, 996, and 1184.
* For CID 708, the resolution conflicts with similar CR in 11-19-00047r2. Alfred to check with Suhwook and come back if required.
* CID 1184: it was commented that something similar may already have been addressed in D1.1.
* Will be uploaded as r2. But wait until the issue with doc. 11-19-0047r2 is resolved before making it ready for motion.

**11-18-2162-03-00ba-mac-cr-identifiers (Alfred, Qualcomm)**

* Contains resolutions to CIDs 91, 98, 99, 397, 399, 620, 622, 825, 826, 827, 854, 863, 1126, and 131.
* There were questions regarding the ID in WUR Beacon frames and WUR Discovery frames when the dot11MultiBSSIDImplemented is true. Alfred confirmed that the ID field in WUR Beacon frames and WUR Discovery frames is always set to the Transmitter ID.
* There is discussion regarding CID 1126 on the need to specify the method for selecting WUR ID for a non–AP STA. Alfred mentions that a specific method is used to avoid collision with OBSS.
* All other CIDs are reviewed and are OK.
* Alfred will come back with r4.

**11-18-1873-03-00ba-cr-for-wur-frame-format (Woojin, WILUS)**

* Contains resolutions to CIDs 97, 398, 400, 496, 527, 617, 618, 722, 797, 798, 799, 1176, 1177, 1178, and 1179.
* It is commented that the to-be-incorporated document versions for many CIDs are incorrect (r2 instead of r3). So, will update the document to r4 and reference to r4.
* CID 496: Added that the computation is also done by the non-AP STA.
* Regarding CID 799, it was mentioned that D1.1 already has a statement that addresses the case of reallocation of WUR ID so the issue that the commenter is raising may not happen. However, Woojin thinks that collision may still happen due to OBSS.
* Woojin will comeback after offline discussion on CID 799.

1. Recessed at 15:31 local time.

**Tuesday, January 15 2019, 4:00- 6:00 pm**

**Meeting Agenda:**

The meeting agenda is shown below, and published in the agenda document:

<https://mentor.ieee.org/802.11/dcn/18/11-18-2109-05-00ba-2019-january-tgba-agenda.pptx>

* Call meeting to order
* IEEE 802 and 802.11 IPR Policy and procedure
* Presentations on comment resolutions, Recess

**Chair Minyoung Park (Intel) calls the meeting to order at 4.00 pm. (about 25 persons in the room.)**

Minyoung makes a Call for Potentially Essential Patents. No potentially essential patents reported and no questions asked.

Minyoung reminds about recording attendance.

**Presentations:**

**11-19/0067r0, “Discussion concerning MC-OOK and CIDs 212 and 665”, Miguel Lopez (Ericsson);** This is a continuation of the presentation in AM2.

**Straw Poll:** Do you agree to update the .11ba draft D1.1 as proposed in slide 5?

**Y/N/A:** 7/4/2

Based on the result of the SP, 11-19/0066r will be updated to r3 and ready for motion.

**11-18/1917r0 “CR for WUR frame format (part 2)”, Woojin Ahn (WILUS):**

This submission proposes resolutions for comments related to TGba D1.0 with the following CIDs (6 CIDs): 36, 103, 402, 623, 855, 1065

CID 36: No discussion.

CID 103:

Q: Why did you change from “may” to “shall”?

Q: I believe “may” makes sense.

A: We had similar resolutions earlier where we used “shall”.

Based on the discussion the resolution proposes may in 31.2a

CID 402: No discussion.

After some discussion CIDs 103, 623, 855, 1065 are discarded from the document

11-18/1917r1, containing CIDs 36 and 402, will be ready for motion.

**11-19/0046r0, “CR for CID 1066” Woojin Ahn (WILUS):**

Q: We have been working on a related CID in the PHY group.

A: I have reviewed this, and I think the solution was that the MAC can issue a command as described here.

Q: I am concerned with that you are mandating the behavior of the receiver. There are several ways to do this.

Based on the discussion, “shall” is replaced by “may”.

11-19/0046r1 containing CID 1066 will be ready for motion.

**11-19/0073r3 “Comment Resolutions on Various PHY Comments” Steve Shellhammer (Qualcomm):** The document provides comment resolutions for CID 156, 177, 178, 179, 180, 408, 409, 930, 931, 1036, 1042, 1043, 1213, and 1252.

CID 156: No comment.

CID 1036: Q: It says shall use multicarrier, why is the term “shall” added?

Based on the discussion, the resolution is changed from “accept” to “revise”

CID 177: No discussion.

CID 178: Based on discussion the resolution is changed from “accept” to “reject”

CID 179: Q: We may want to add that receiving at different channels is not simultaneously

Q: I believe this relates to FDMA. Can we add a reference to FDMA?

The proposed resolution is updated based on the discussion in the group.

CID 180: No discussion.

CID 408: After some discussion, the term “Manchester encoding” is changed to “WUR encoding”

CID 409: No discussion.

CID 930: No discussion.

CID 931: Long discussion about what MC-OOK should denote. Based on this discussion, CID 931 is removed from the document.

CID 1036 No discussion.

CID 1042, 1043: Changed to accept.

CID 1213: No discussion.

CID 1252: No discussion.

11-19/0073r4, containing the CIDs above will be ready for motion.

**Recess at 6.02pm**

**Wednesday, January 16 2019, 4:00-6:00 pm**

**TGba PHY ad-hoc Meeting**

Ad-hoc Group Chair: Steve Shellhammer (Qualcomm)

Ad-hoc Secretary: Leif Wilhelmsson (Ericsson)

**Ad-hoc chair Steve Shellhammer (Qualcomm) calls the meeting to order at 4.00 pm (9 persons in the room)**

**Presentations:**

**11-19/0139r1 “Comment Resolutions for TXVECTOR and RXVECTOR” Bo Sun (ZTE):** This is a continuation from Tuesday PM1 session.

CID 1150: The reason for rejection is updated. The proposed resolution “reject” remains.

CID 1152 No discussion.

CID 1220 No discussion.

CID 1224 No discussion.

CID 221: Q: I believe this change already has been resolved. In 11-19/0053r2, CID 952

Based on this comment, the resolution is changed and the editor is referred to this resolution.

11-18/139r2, containing the CIDs above, will be ready for motion.

**11-19/0068r3 “CRs on symbol design in Section 32”, Dennis Sundman (Ericsson):** The contribution is presented by Leif Wilhelmsson on behalf of Dennis. Revision 1 of the contribution has been presented already, but r3 has been updated with new text related to CID 767. Only this new text is presented.

CID 767: No discussion.

11-19/0068r3 containing CIDs185, 255, 303, 306, 440, 441, 442, 443, 767, 1045, 1046, 1047, 1049, 1153, 1199 is ready for motion.

**11-19/0064r1 “Comment resolutions for subclause 31.1, 32.1, 32.2, 32.3, 32.4”, Minyoung Park (Intel)**: The document provides comment resolutions for CIDs

* 96, 152, 153, 210, 241, 250, 251, 242, 244, 319,
* 320, 322, 411, 833, 933, 650, 653, 657, 680, 681,
* 764, 834, 924, 274, 276, 277, 867

CID 96: No discussion.

CID 152: No discussion.

CID 153: No discussion.

CID 210: Q: I don’t think it is clear as it is.

A: It is similar to how it has been done in other amendments.

As a result the resolution is changed from reject to accept.

CID 241: No discussion.

CID 250: No discussion.

CID 251: No discussion.

CID 242: No discussion.

CID 244: No discussion.

CID 319: No discussion.

CID 320: Some discussion about whether the resolution implies that things become mandatory.

Minyoung states that the terms “is” and “are” are descriptive language and not normative.

CID 322: No discussion.

CID 411: Resolution changed from “rejected” to “revised”.

CID 833: No discussion.

CID 933: No discussion.

CID 650: No discussion.

CID 653: No discussion.

CID 657: No discussion.

CID 680: No discussion.

CID 681: No discussion.

CID 764: No discussion.

CID 834: No discussion.

CID 924: No discussion.

CID 274: No discussion.

CID 276: No discussion.

CID 277: No discussion.

CID 867: No discussion.

11-19/0064r2 containing the CIDs above is ready for motion.

Discussion on whether the resolutions in 11-18/1862r1 actually was correct. Minyoung’s view is that the text that was removed did not really match the comments, and this is why Minyoung has a CID where text is proposed to be added back. This will be discussed in the TG session.

**The PHY ad-hoc meeting is adjourned at 5.40 pm.**

**Wednesday, January 16 2019, 4:00-6:00 pm**

**TGba MAC ad-hoc Meeting**

*Yunsong Yang chairs this session as Minyoung needs to make presentation in TGba PHY Ad-hoc group.*

*Rojan Chitrakar (Panasonic) volunteers to keep the meeting minutes.*

1. Called to order at 16:01 local time by Yunsong Yang.
2. Attendance: 10.
3. Approval of agenda (11-18-2109r6 is on the server and shown on the screen)

* No comments or questions.
* Agenda (r6) is approved unanimously.

1. Review patent policy and guidelines
   * No items identified.
2. Comment resolution

**19-133/r1 CR for MAC Comment Resolution for Miscellaneous Topic Po-Kai Huang/Intel**

* Contains proposed resolutions for the following CIDs: 476, 1019, 53, 353, 81, 82, 83, 375, 376, 880, 1106, 1109, 125, 984, 1071, 1076, 1137, 118, 515, 62, 65, 76, 1027, 110, and 111.
* CIDs 476, 1019, 53, 353, 81, 82, 83, 375, and 376: reviewed and are OK.
* CID 880: there was a question about using reserved for Dialog token and whether it is enough to state that receiver can ignore the field. Po-kai mention that TWT also uses reserved and it should be fine. Keep the resolution as is.
* CID 1106: reviewed and is OK.
* CID 1109: Changed to not removing the WUR Operation element. The issue has already been addressed in D1.1 and no further changes needed.
* CIDs 125, 984, and 1071: reviewed and are OK.
* CID 1076: added the clause number of the quoted baseline text.
* CID 1137: reviewed and is OK.
* CID 118: there was question if piggybacking the WUR mode negotiation during Association is possible without knowing AP’s WUR capabilities or before completing any necessary upper layer negotiations. Po-kai replied that STA can know the capabilities before association. Also STA need not transition to WUR mode immediately after Association. No change to the resolution.
* CIDs 515, 65, 76, and 1027: reviewed and are OK.
* CID 110: changed, in the text, “an” to “any”. There is questions whether on duration should be On Duration? Po-kai replies that is the convention. Po-kai will also change to lowercase in the Figure.
* CID 111: there was comment whether the term frame should be removed from “request frame” and “response frame”. Changed these two sentences to notes.
* CID 62: Changed the reason for rejection, as the correct term is “robust” management frame, which may be protected or unprotected. Thus, no new frame is needed.
* Will be uploaded as r2.
* There is no objection to set the document to ready for motion.

**11-18-0054r0 MAC Comment Resolution for Miscellaneous Topic Part III Po-Kai Huang/Intel**

* Contains proposed resolutions for CIDs: 423, 602, and 684.
* Reviewed all three CIDs.
* No questions or comments.
* There is no objection to set the document to ready for motion.

**11-19/0011r1, lb235-cr-subclause-3\_2, Yongho Seok (MediaTek)**

* Contains proposed resolutions for CIDs 54, 771, 279, 475, 578, 875, 477, 478, 505, 479, 506, 480, 507, 579, and 683.
* CIDs 54 and 771: reviewed and are OK.
* CID 279: There is discussion regarding `WUR channel definition and whether the text should be added to clarify the relationship between various WUR Channels. It was agreed to do this in the next LB.
* CID 475: reviewed and is OK.
* CID 578: fixed a typo.
* CID 875: deleted redundant “be”.
* CIDs 477, 478, 505, 479, 506, 480, 507, 579 and 683: reviewed and are OK.
* Will be uploaded as r2.
* There is no objection to set the document to ready for motion.

**11-19-0033-00-00ba-lb235-cr-coexistence-assurance, Yongho Seok (MediaTek)**

* CID 1254: there is question why the resolution is Revised and not Rejected. Yongho mentions he agrees with the comment. There is a change in the coexistence document due to this comment. So, it’s a Revised, but no change is needed in the 11ba draft.
* Given the MAC ad-hoc doesn’t have the authority to approve the coexistence document, Yongho will present 19/33r0 again in TGba.

**11-18/1873r4, CR for WUR frame format, Woojin Ahn, WILUS**

* CID 799: Kept as Revised. Added text to emphasize that the WUID collision within a BSS will not happen therefore the suggested WUID reallocation procedure is not needed, and collision across OBSS is mitigated by the embedded BSSID in the CRC calculation.
* Will be uploaded as r5.
* There is no objection to set the document to ready for motion.

**11-18/1917r1, CR for WUR frame format (part 2), Woojin Ahn, WILUS**

* CID 623: confirmed that “shall” is changed to “may”.
* There is no objection to set the document to ready for motion.

1. Adjourned at 18:03 local time without objection.

**Thursday, January 17 2019, 4:00-6:00 pm**

**Meeting Agenda:**

The ad-hoc meeting agenda is shown below, and published in the agenda document: <https://mentor.ieee.org/802.11/dcn/18/11-18-2109-09-00ba-2019-january-tgba-agenda.pptx>

* + Call meeting to order
  + IEEE 802 and 802.11 IPR Policy and procedure
  + Review CIDs related to TGba coexistence assurance doc and review the revised doc:11-18/1069r1
  + **Motion: TGba coexistence assurance doc.**
  + **Motions: Comment resolutions**
  + **Motion: 802.11 WG letter ballot**
  + TG timeline discussion
  + Goal for March 2019 F2F meeting
  + Teleconference call schedule
  + Presentations,
  + Adjourn

**Chair Minyoung Park (Intel) calls the meeting to order at 4.00 pm.** (about17 persons in the room.)

Minyoung reminds about recording attendance.

Minyoung makes a Call for Potentially Essential Patents. No potentially essential patents reported and no questions asked.

Minyoung goes through the agenda and asks if there are any questions on the agenda. Xiaofei requests to present one or more of his presentations before the TG Motion on rejecting all open CIDs.

The chair rejects this request based on that there are more than 50 motions to run to be able to go for a WG Letter Ballot after this meeting.

Xaiofei then inquired whether resolutions for CIDs can be presented before running the motion to reject all unsolved CIDs in order for the proposed resolutions be implemented in Draft 2.0. The Chair rejected this.

The proposed agenda is approved.

**Motions:**

The complete set of motions for this meeting can also be found in document 11-18/2109r10.

*Note: During the session some of the motions were found to be duplicated and therefore removed. For this reason some motion numbers are absent in the list.*

**11-19/0033r0 “LB235 CR Coexistence Assurance”, Yongho Seok (Mediatek)**

The document has been presented in the MAC ad-hoc and is just briefly repeated for the group before running the corresponding motion. As a result of the CR, the coexistence assurance document 11-18/1069 is updated.

**Motion #0:** Move to accept the comment resolution in [11-19/33r0] for CIDs listed below:

- CIDs: 3, 1254

**Move:** Yongho Seok

**Second:**Yunsong Yang

**Result:** Motion passed by unanimous consent.

**Motion - Coexistence Assurance Document**

Move to adopt 11-18/1069r1 as the coexistence assurance document for 802.11ba amendment.

**Move:** Yongho Seok

**Second:** Yunsong Yang

**Y/N/A:** 14/0/0

**Motion #1:** Move to accept the comment resolution in [11-18/1965r6] for CIDs listed below:

- CIDs: 22, 25, 40, 41, 42, 43, 208, 231, 502, 1221, 1253, 207, 209, 824, 23, 823

**Move:** Po-Kai Huang

**Second:**Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #2:** Move to accept the comment resolution in [11-18/1966r4] for CIDs listed below:

- CIDs: 206, 229, 230, 501, 752, 969, 970, 971, 1216, 1217, 1218, 1219, 972, 973

**Move:** Po-Kai Huang

**Second:**Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #3 :** Move to accept the comment resolution in [11-18/1931r1] for CIDs listed below:

- CIDs: 373, 782, 937, 938

**Move:** Xiaofei Wang

**Second:**Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #4:** Move to accept the comment resolution in [11-18/2107r1] for CIDs listed below:

- CIDs: 11, 51, 66, 119, 120, 447, 448, 461, 537, 538, 726, 728, 776, 1182, 1183, 1245

**Move:** Suhwook Kim

**Second:**Jeongki Kim

**Result:** Motion passed by unanimous consent.

**Motion #6: Move to accept the comment resolution in [11-18/1937r1] for CIDs listed below:**

- CIDs: 792, 68, 72, 73, 365, 699, 703, 877, 985, 994, 1000, 1092, 535, 115, 169, 1156, 529,530, 531, 532, 856, 857, 534, 44, 533, 724, 112, 405, 1131, 113,406, 114, 116, 342, 343, 429, 603, 725, 887, 1241, 1001, 1002, 1130

**Move:** Po-Kai Huang

**Second:**Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #7:** Move to accept the comment resolution in [11-18/2164r0] for CIDs listed below:

- CIDs: 1003,1004, and 1005

**Move:** Jeongki Kim

**Second:**Suhwook Kim

**Result:** Motion passed by unanimous consent.

**Motion #8:** Move to accept the comment resolution in [11-18/2148r2] for CIDs listed below:

- CIDs: 642, 852, and 702

**Move:** Lei Huang

**Second:**Xiaofei Wang

**Result:** Motion passed by unanimous consent.

**Motion #10:** Move to accept the comment resolution in [11-19/21r2] for CIDs listed below:

- CIDs: 1, 56, 57, 218, 349, 354, 487, 488, 489, 490, 491, 493, 583, 584, 631, 753, 772, 775, 868, 870, 941, 946, 1081, 1084, 1107, 418, 58, 59, 585, 609, 1086, 1087, 1088, 410, 587

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #11:** Move to accept the comment resolution in [11-19/22r1] for CIDs listed below:

- CIDs: 340, 503, 586, 636, 770, 1009

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Q:** Suggested that the editor when implement the CRs write the name as one word not as two with a space in between.

**Motion #12:** Move to accept the comment resolution in [11-19/24r1] for CIDs listed below:

- CIDs: 2, 239, 307, 312, 344, 504, 601, 769, 872, 914, 1006, 1143

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #13:** Move to accept the comment resolution in [11-19/25r1] for CIDs listed below:

- CIDs: 613, 1149

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #14:** Move to accept the comment resolution in [11-18/1976r1] for CIDs listed below:

- CIDs: 920, 269, 270, 271, 272, 222, 245, 246, 247, 248, 249, 252, 273, 275, 256

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #15:** Move to accept the comment resolution in [11-19/53r2] for CIDs listed below:

- CIDs: 548, 549, 949, 950, 182, 934, 1193, 742, 935, 952, 953, 954, 955, 766, 768, 919, 1044,1048, 1195, 1196, 1197, 223, 253, 1050, 1198, 1200, 224, 254, 561, 956, 1051, 1201, 1202, 1052, 1053, 1203, 1204, 562, 658, 659, 660, 661, 662, 963, 445, 750, 966, 975, 976

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #16:** Move to accept the comment resolution in [11-19/64r3] for CIDs listed below:

- CIDs: 96, 152, 153, 210, 241, 250, 251, 242, 244, 319, 322, 411, 833, 933, 650, 653, 657, 680, 681,   
764, 834, 924, 274, 276, 277, 867

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #17:** Move to accept the comment resolution in [11-19/0139r2] for CIDs listed below:

- CIDs: 181, 221, 832, 871, 1040, 1150, 1152, 1220 and 1224

**Move:** Eunsung Park

**Second:** Steve Shellhammer

**Result:** Motion passed by unanimous consent.

**Motion #18:** Move to accept the comment resolution in [11-19/014r3] for CIDs listed below:

- CIDs: 189, 195, 226, 264, 304, 305, 446, 925, 987, 1205, 1206, 1212

**Move:** Rui Cao

**Second:** Eunsung Park

**Result:** Motion passed by unanimous consent.

**Motion #19:** Move to accept the comment resolution in [11-19/015r3 ] for CIDs listed below:

- CIDs: 200, 268, 678, 679, 838

**Move:** Rui Cao

**Second:** Eunsung Park

**Result:** Motion passed by unanimous consent.

**Motion #20:** Move to accept the comment resolution in [11-18/1873r6] for CIDs listed below:

- CIDs: 97, 398, 400, 496, 527, 617, 618, 722, 797, 798, 799, 1176, 1177, 1178, 1179

**Move:** Woojin Ahn

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #21:** Move to accept the comment resolution in [11-18/1917r1 ] for CIDs listed below:

- CIDs: 36, 103, 402, 623, 855, 1065

**Move:** Woojin Ahn

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #22:** Move to accept the comment resolution in [11-19/46r1  ] for CIDs listed below:

- CIDs: 1066

**Move:** Woojin Ahn

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #24:** Move to accept the comment resolution in [11-19/0026r0] for CIDs listed below:

- CIDs: 1068

**Move:** Lei Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #25:** Move to accept the comment resolution in [11-19/0050r1] for CIDs listed below:

- CIDs: 155, 225, 297, 298, 299, 300, 321, 323, 444, 499

**Move:** Junghoon Suh

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #26:** Move to accept the comment resolution in [11-19/0051r1] for CIDs listed below:

- CIDs: 186, 301, 656, 957, 958, 960, 1055

**Move:** Junghoon Suh

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #27:** Move to accept the comment resolution in [11-19/0052r1] for CIDs listed below:

- CIDs: 187, 257, 921, 922, 961, 1056

**Move:** Junghoon Suh

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #28:** Move to accept the comment resolution in [11-18/2136r0] for CIDs listed below:

- CIDs: 607

**Move:** Lei Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #29:** Move to accept the comment resolution in [11-19/0031r3] for CIDs listed below:

- CIDs: 591, 616, 754, 796, 862, 940, 947, 1161, 26, 60, 63, 95, 237, 283, 420, 422, 427, 495, 590, 639, 1078

**Move:** Lei Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #30:** Move to accept the comment resolution in [11-19/0068r3] for CIDs listed below:

- CIDs: 185, 255, 303, 306, 440, 441, 442, 443, 767, 1045, 1046, 1047, 1049, 1153, 1199

**Move:** Leif Wilhelmsson

**Second:** Steve Shellhammer

**Result:** Motion passed by unanimous consent.

**Motion #31:** Move to accept the comment resolution in [11-19/0073r4] for CIDs listed below:

- CIDs: 156, 177, 178, 179, 180, 408, 409, 930, 1036, 1042, 1043, 1213, and 1252

**Move:** Steve Shellhammer

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #32:** Move to accept the comment resolution in [11-19/0047r3] for CIDs listed below:

- CIDs: 69, 70, 166, 368, 514, 879, 1016, 1101, 1230, 1231

**Move:** Suhwook Kim

**Second:** Eunsung Park

**Result:** Motion passed by unanimous consent.

**Motion #33:** Move to accept the comment resolution in [11-18/2143r2] for CIDs listed below:

- CIDs: 121, 122, 449, 567, 570, 633, 727, 888, 1028, 1243, 1244

**Move:** Suhwook Kim

**Second:** Eunsung Park

**Result:** Motion passed by unanimous consent.

**Motion #36:** Move to accept the comment resolution in [11-19/0066r3] for CIDs listed below:

- CIDs: 158, 194, 258, 259, 260, 263, 318, 566, 977, 1061

**Move:** Leif Wilhelmsson

**Second:** Steve Shellhammer

**Result:** Motion passed by unanimous consent.

**Motion #37:** Move to accept the comment resolution in [11-19/0023r2] for CIDs listed below:

- CIDs: 509, 629, 640

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

*Note:**Based on the SP during the presentation of the proposed CRs, a large number of the CIDs have been removed from the document.*

**Motion #39:** Move to accept the comment resolution in [11-19/29r1] for CIDs listed below:

- CIDs: 52, 345, 425, 424, 346, 481, 508, 55, 869, 473, 474

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #40:** Move to accept the comment resolution in [11-19/0054r1] for CIDs listed below:

- CIDs: 423, 602, 684

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #41:** Move to accept the comment resolution in [11-19/133r2] for CIDs listed below:

- CIDs: 476, 1019, 53, 353, 81, 82, 83, 375, 376, 880, 1106, 1109, 125, 984, 1071, 1076, 1137, 118, 515, 62, 65, 76, 1027, 110, 111

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #47:** Move to accept the comment resolution in [11-19/0012r1] for CIDs listed below:

- CIDs: 696, 575, 697, 876, 1014, 993, 364, 777, 576, 455, 995, 1102, 710, 711, 781, 1018, 517, 604, 605

**Move:** Leif Wilhelmsson

**Second:** Yunsong Yang

**Result:** Motion passed by unanimous consent.

**Motion #48:** Move to accept the comment resolution in [11-19/0013r1] for CIDs listed below:

- CIDs: 1029, 469, 146, 577, 1030, 361, 362, 858, 171, 485, 580, 94, 147, 1031, 815, 1032, 1033, 574, 470, 148, 172, 173, 174, 175, 859, 149, 1034, 428

**Move:** Leif Wilhelmsson

**Second:** Yunsong Yang

**Result:** Motion passed by unanimous consent.

**Motion #49:** Move to accept the comment resolution in [11-19/0011r1] for CIDs listed below:

- CIDs: 54, 771, 279, 475, 578, 875, 477, 478, 505, 479, 506, 480, 507, 579, 683

**Move:** Leif Wilhelmsson

**Second:** Yunsong Yang

**Result:** Motion passed by unanimous consent.

**Motion #43:** Move to accept the comment resolution in [11-18/2129r0] for CIDs listed below:

- CIDs: 1116, 1236

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #44:** Move to accept the comment resolution in [11-18/2130r4] for CIDs listed below:

- CIDs: 31, 89, 92, 100, 102, 309, 401, 525, 526, 717, 718, 719, 721, 788, 790, 851, 882, 883, 1074, 1122, 1169, 1170, 1240, 1075

**Move:** Lei Huang

**Second:** Yunsong Yang

**Result:** Motion passed by unanimous consent.

**Motion #45:** Move to accept the comment resolution in [11-18/2131r2] for CIDs listed below:

- CIDs: 1024, 1227, 285, 337, 370, 382, 707, 708, 714, 996, 1184

**Move:** Po-Kai Huang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #46:** Move to accept the comment resolution in [11-18/2162r4] for CIDs listed below:

- CIDs: 91, 98, 99, 397, 399, 620, 622, 825, 826, 827, 854, 863, 1126, 131

**Move:** Alfred Asterjadhi

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

**Motion #42:** Move to accept the comment resolution in [11-18/1835r3] for CIDs listed below:

- CIDs: 32, 87, 88, 292, 387, 392, 394, 395, 396, 720, 850, 884, 885, 1239

*Note: 1171 removed from the CIDs motioned.*

**Move:** Alfred Asterjadhi

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

Alfred Asterjadhi requests to present 11-18/2145. He believes about 20 of the CIDs in this document have been addressed and would be possible to motion if he gets 10 minutes.

The chair agrees to this and allowes Alfred 20 minutes, until 5.30 pm, in order to have enough time for conducting other TG related businesses.

Xiaofei objectes to this as a similar request by himself was rejected at the beginning of the session.

The chair said that if Alfred does not use all the 20 minutes, Xiaofei will get a chance to present.

**11-18/2145r2 “Comment resolutions for protected WUR frames”, Alfred Asterjadhi (Qualcomm):** This submission proposes resolutions for multiple comments related to TGba D1.0 with the following CIDs (56 CIDs):

* 20, 21, 90, 143, 144, 145, 324, 338, 466, 467,
* 468, 486, 571, 572, 573, 592, 643, 644, 645, 646,
* 682, 759, 760, 806, 807, 808, 809, 812, 813, 814,
* 828, 881, 892, 893, 894, 895, 896, 897, 898, 899,
* 900, 901, 902, 903, 904, 905, 906, 907, 908, 909,
* 1187, 1247, 1248, 1249, 1250, 1251

The CIDs below are considered in this presentation:

CID 20: No comment

CID 21: No comment

CID 338: No comment

CID 466: No comment

CID 467: No comment

CID 486: No comment

CID 572: No comment

CID 644: No comment

CID 645: No comment

CID 760: No comment

CID 806,807,808,809: No comment

CID 812,813,814: No comment

CID 881: No discussion

CID 903, 904: No discussion

CID 905: No discussion

CID 906: Q: I suggest you change the range for the TSF timer

A: Alfred explains why it is selected as it is and no change is made.

CID 907: No comment

CID 1187: No comment

CID 1250: No comment

CID 1251: No comment

11-18/2145r2, with the CIDs considered above, will be ready for motion.

**Motion #50:** Move to accept the comment resolution in [11-18/2145r2] for CIDs listed below:

CIDs:20,21,338,466,467,486,572,644,645,760,806,807,808,809,812,813,814,881,903,904,905,906,

907,1187,1250,1251

**Move:** Alfred Asterjadhi

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent.

The presentation of 11-18/2145r2 and Motion #50 took the allocated 20 minutes, with no time left for Xiaofei to present.

Xiaofei comments that he believes that letting Alfred present 11-18/2145r2 was out of order as according to the agreed agenda presentations should be made after all motions and only in case there was time left. In addition, Xiaofei believes it was unfair as he when the agenda was discussed asked for time for his presentation which was rejected by the Chair.

Minyoung basically agrees that Xiaofei is correct, and will improve on this in the future. Minyoung was not prepared for the request from Alfred and when he realized that it was possible to have another 20-25 CIDs addressed he agreed to this without really considering that it was out of order. In response to that Alfred rather than Xiaofei got the chance to present, Minyoung points out that it had been agreed initially that priority should be given to contribution addressing a large number of CIDs.

After some discussion in the group, the chair grants Xiaofei to present one of his contributions, 11-19/0055r0, although Alfred had used the 20 minutes.

**11-19/0055r0 “Spec Text for CR for CID 1142”, Xiaofei Wang (Interdigital):** This submission proposes resolutions for CID 1142.

CID 1142: No discussion.

11-19/0055r0 including CID 1142 is ready for motion.

**Motion #51:** Move to accept the comment resolution in [11-19/55r0] for CIDs listed below:

- CIDs: 1142

**Move:** Xiaofei Wang

**Second:** Leif Wilhelmsson

**Result:** Motion passed by unanimous consent

Minyoung summarizes the status regarding the CIDs. 1154 of 1254 are resolved, and 100 are still not resolved.

**Motion for unresolved CIDs:** Move to resolve CIDs that have no approved resolution as rejected with a reason read “TGba is unable to reach consensus on a resolution” in the interest of releasing draft 2.0

**Move:** Yunsong Yang

**Second:**Po-Kai Huang

**Y/N/A:** 12/0/4

*Note: Before**“TGba is unable to reach consensus on a resolution” was added to the motion text there was one person speaking against the motion.*

**Motion – WG Letter Ballot:**

* Instruct the editor to generate TGba Draft 2.0, and
* Approve a 30 day Working Group Technical Letter Ballot asking the question “Should TGba Draft 2.0 be forwarded to Sponsor Ballot?”

**Move:** Po-Kai Huang

**Second:** Yunsong Yang

**Result:** Y/N/A: 12/0/3

**TGba Timeline discussion**

The TGba timeline, shown below, is left unchanged.

* **2017**
  + **January**: TGba formation meeting
* **2018**
  + **January**: TGba Draft 0.1
  + **September**: TGba Draft 1.0
  + **November**: Comment resolution on TGba Draft1.0
* **2019:**
  + **January**: TGba Draft 2.0
  + **May**: MDR (mandatory document review)
  + **September**: Formation of sponsor ballot pool
  + **November**: Sponsor ballot
* **2020:**
  + **September**: RevCom

**Goals for March 2019**

* Comment assignment for the received comments on D2.0
* Comment resolutions

**Teleconference Call Schedule:**

Proposed schedule: March 4th, 10:00 ET, 2 hours

**Motion:** Move to approve the teleconference call schedule

**Move:** Po-Kai Huang

**Second:** Xiaofei Wang

**Result:** Motion passed by unanimous consent

**The meeting is adjourned 5.59 pm.**