IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IEEE 802.11bf – Teleconference Minutes May - July 2023 | | | | |
| Date: 2023-05-30 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Leif Wilhelmsson | Ericsson AB | Mobilvägen 1, 22632 Lund, Sweden | +46-706-216956 | [leif.r.wilhelmsson@ericsson.com](mailto:leif.r.wilhelmsson@ericsson.com) |

Abstract

This document contains minutes for the TG 802.11bf teleconferences in May-July 2023.

Rev 0: Minutes for TG 802.11bf teleconference on the 23rd of May 2023.

Rev 1: Minutes for TG 802.11bf teleconference on the 25th of May 2023 and List of Attendees for the 23rd and 25th of May added.

Rev 2: Minutes for TG 802.11bf teleconference on the 30th of May 2023 added.

### Tuesday, May 23, 2023, 10:00am - 12:00pm (ET)

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/23/11-23-0909-01-00bf-tgbf-meeting-agenda-2023-05-part-2.pptx>

1. Call the meeting to order
2. Patent policy and logistics
3. TGbf Timeline
4. Call for contribution
5. Teleconference Times
6. Presentation of submissions
7. Any other business
8. Adjourn
9. The chair, Tony Han, calls the meeting to order at 10:00 am ET (30 persons are on the call after 15 minutes of the meeting).
10. The chair goes through “Meeting Protocol, Attendance, Voting & Documentation Status” (slide 4), “Participants have a duty to inform the IEEE” (slide 6), and “Ways to inform IEEE” (slide 7).

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

The chair goes through “Other Guideline for IEEE WG meetings” (slide 8), “Patent related information” (slide 9), “ IEEE SA Copyright Policy” (slides 10 and 11), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 12), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 13), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 14), and “Required notices” (slide 15).

The chair goes through the agenda (slide 16) and asks if there are any question on the agenda. Dong Wei asks if the group would allow his presentation to be presented earlier as he wants obtain feedback today to be able to do more work offline. As a consequence, his presentation is moved up to be presented second.

The chair asks if there is any objection to approve the updated agenda. No response from the group. As a result, the agenda is approved.

1. –
2. -
3. The chair presents the telco Teleconference Times (slide 20). There is a comment that for the f2f, we should take into account who is calling in when scheduling the different presentations. Claudio gives an update that D1.1 is ready and will soon be distributed.
4. Presentation of submission:

**11-23/0777r1, “CR for setup parameters related CIDs”, Dibakar Das (Intel):**

This document proposes resolution to following CIDs relative to 11bf draft 1.0:

2285 1111 1112 1113 1114 1317 1118 1694 1494 2273 2188 1954 2022 1695 1547 1696 1648 2060 2144 1813 2279 1366 1033 1798 1084 1552 1554 2274 1553 1087 2276 2190 2277 2275 1091 1529 1709 1088 1528 1530 1090 2193 1098 1100 1711 1099 1710 2194 1115 1714 1347 2195 1432 1109 2243 2244 1110 1040 1564 1955 1720 1539

CID 2285: No discussion.

CID 1111: No discussion.  
CID 1112: No discussion.

CID 1113: No discussion.

CID 1114: No discussion.

CID 1317: No discussion.

CID 1118: No discussion.

CID 1694: No discussion.

CID 1494: No discussion.

CID 2273: Some discussion leading to that the proposed resolution is slightly updated. The CID is removed from the document to allow for more offline discussion.

CID 2188: No discussion.

CID 1954: No discussion.

CID 2022: No discussion.

CID 1695: No discussion.

CID 1547: No discussion.

CID 1696: No discussion.

CID 1648: No discussion.

CID 2060: No discussion.

CID 2144: No discussion.

CID 1813: Some clarifying discussion.

CID 2279: No discussion.

CID 1366: No discussion.

CID 1033: No discussion.

CID 1798: Question from Dibakar if someone is working on this text in D1.0. After some discussion it is reassigned to Dongguk.

CID 1084: No discussion.

CID 1552: No discussion.

CID 1554: No discussion.

CID 2274: No discussion.

CID 1553: No discussion.

CID 1087: No discussion.

CID 2276: No discussion.

CID 2190: No discussion.

CID 2277: No discussion.

CID 2275: No discussion.

CID 1091: No discussion.

CID 1529: No discussion.

CID 1709: No discussion.

CID 1088: No discussion.

CID 1528: No discussion.

CID 1530: No discussion.

CID 1090: No discussion.

CID 2193: No discussion.

CID 1098: No discussion.

CID 1100: No discussion.

CID 1711: No discussion.

CID 1099: Some clarifying discussion.

CID 1710: No discussion.

CID 2194: No discussion.

CID 1115: No discussion.

CID 1714: No discussion.

CID 1347: No discussion.

CID 2195: No discussion.

CID 1432: No discussion.

CID 1109: Some clarifying discussion and the resolution is updated.

CID 2243: No discussion.

CID 2244: No discussion.

CID 1110: After discussion with the group the CID is rejected.

CID 1040: No discussion.

CID 1564: No discussion.

CID 1955: The CID is deferred.

CID 1720: No discussion.

CID 1539: No discussion.

Since two CIDs need more offline discussion, Dibakar defers the SP.

**11-23/0882r0, “LB272 CR on capability of sensing measurement reporting”, Dong Wei (NXP):** This document aims to resolve the following ten LB272 CIDs related to the capability of sensing measurement reporting: 1056, 1929, 1930, 1986, 2015, 2052, 2146, 2149, 2155, and 2176.

Dong gives an overview of the 10 CIDs.

Q: We discussed this in the January f2f and agreed that measurement report is mandatory. If this now is to be reverted, we must discuss the implications.

The chair suggests that he can allocate some time in one of the calls next week to discuss this further.

1. The chair asks if there is any other business. No response from the group.
2. The meeting is adjourned without objection at 12:01pm.

**List of Attendees:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbf | 5/23 | Beg, Chris | Cognitive Systems Corp. |
| TGbf | 5/23 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbf | 5/23 | da Silva, Claudio | Meta Platforms; PWC, LLC |
| TGbf | 5/23 | feng, Shuling | MediaTek Inc. |
| TGbf | 5/23 | Kain, Carl | USDOT; Noblis |
| TGbf | 5/23 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbf | 5/23 | Kim, Sang Gook | LG ELECTRONICS |
| TGbf | 5/23 | Lim, Dong Guk | LG ELECTRONICS |
| TGbf | 5/23 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbf | 5/23 | Luo, Yuanqiu | Futurewei Technologies |
| TGbf | 5/23 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbf | 5/23 | Minayi Jalil, Amir | Aerial Technologies |
| TGbf | 5/23 | narengerile, narengerile | Huawei Technologies Co., Ltd |
| TGbf | 5/23 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbf | 5/23 | Sahoo, Anirudha | National Institute of Standards and Technology |
| TGbf | 5/23 | Sand, Stephan | German Aerospace Center (DLR) |
| TGbf | 5/23 | SUH, JUNG HOON | Huawei Technologies Co., Ltd |
| TGbf | 5/23 | Tang, Zhuqing | Huawei Technologies Co., Ltd |
| TGbf | 5/23 | Tsai, Tsung-Han | MediaTek Inc. |
| TGbf | 5/23 | Wang, Pu | Mitsubishi Electric Research Labs (MERL) |
| TGbf | 5/23 | Wei, Dong | NXP Semiconductors |
| TGbf | 5/23 | Wilhelmsson, Leif | Ericsson AB |
| TGbf | 5/23 | Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

### Thursday, May 25, 2023, 11:00pm - 01:00am (ET)

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/23/11-23-0909-02-00bf-tgbf-meeting-agenda-2023-05-part-2.pptx>

1. Call the meeting to order
2. Patent policy and logistics
3. TGbf Timeline
4. Call for contribution
5. Teleconference Times
6. Presentation of submissions
7. Any other business
8. Adjourn
9. The chair, Tony Han, calls the meeting to order at 11:00 pm ET (25 persons are on the call after 15 minutes of the meeting).
10. The chair goes through “Meeting Protocol, Attendance, Voting & Documentation Status” (slide 4), “Participants have a duty to inform the IEEE” (slide 6), and “Ways to inform IEEE” (slide 7).

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

The chair goes through “Other Guideline for IEEE WG meetings” (slide 8), “Patent related information” (slide 9), “ IEEE SA Copyright Policy” (slides 10 and 11), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 12), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 13), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 14), and “Required notices” (slide 15).

The chair goes through the agenda (slide 17) and asks if there are any question on the agenda. No response from the group.

The chair asks if there is any objection to approve the updated agenda. No response from the group. As a result, the agenda is approved.

1. -
2. -
3. The chair presents the Teleconference Times (slide 20). Claudio gives an update related to that D1.1 has been made available and encourages the group to check if there are issues or mistakes.
4. Presentation of submission:

**11-23/0777r2, “CR for setup parameters related CIDs”, Dibakar Das (Intel):**

This document proposes resolution to following CIDs relative to 11bf draft 1.0:

2285 1111 1112 1113 1114 1317 1118 1694 1494 2273 2188 1954 2022 1695 1547 1696 1648 2060 2144 1813 2279 1366 1033 1084 1552 1554 2274 1553 1087 2276 2190 2277 2275 1091 1529 1709 1088 1528 1530 1090 2193 1098 1100 1711 1099 1710 2194 1115 1714 1347 2195 1432 1109 2243 2244 1110 1040 1564 1955 1720 1539

CID 2273: The CID has been updated to reject. No discussion.

CID 1955: No discussion.

**Straw Poll:** Do you support the proposed comment resolutions in this document?

**Result:** Unanimously supported.

**11-23/0719r1, “Comment Resolution in LB272 for OST CID (Part 4)”, Anirudha Sahoo (NIST):** This document resolves comments in LB272 with CIDs 1966, 1068, 1969, 1970

CID 1966: No discussion.

CID 1068: No discussion.

CID 1969: Some clarifying discussion.

CID 1970: No discussion.

**Straw Poll:** Do you support the resolution to CIDs 1966, 1068, 1969, 1970 proposed in 11-23/0719r1 and incorporate the changes into TGbf draft D1.0?

**Result:** Unanimously supported.

**11-23/0814r1, “Discussion and proposed Modifications to Annex C”, Claudio da Silva (Meta Platforms):** This submission examines MIB concepts and recommends modifications to Annex C.

Claudio first gives an overview of MIBs before going into the proposed changes and additions.

DMG SBP Procedure: Some clarifying discussion.

DMG Sensing Procedure: The text is slightly updated. No discussion.

SBP Procedure: Some clarifying discussion.

Sensing Procedure: Some discussion and the text is slightly updated.

**11-23/0872r0, “[CR for LB272 NDPA Instance TTT]”, Junghoon Suh (Huawei):**

This submission proposes resolutions for the follwing 19 LB272 CIDs: 1228, 1278, 1279, 1352, 1421, 1433, 1435, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1524, 1541, and 1569. The proposed changes are based on IEEE 802.11bf D1.0 [1].

CID 1228: Some clarifying discussion.

CID 1278: No discussion.

CID 1279: Some clarifying discussion pointing out that there has been a CR to another CID that is related to this. Claudio points out that it has already been addressed in D1.1.

CID 1352: Some clarifying discussion.

CID 1421: Some clarifying discussion.

CID 1433: No discussion.

CID 1435: No discussion.

CIDs 1511, 1512, and 1513: Some clarifying discussion.

CID 1514: No discussion.

CID 1515: No discussion.

CIDs 1516, 1517, and 1518: No discussion.

CID 1519: No discussion.

CID 1524: Some clarifying discussion.

CID 1541: No discussion.

CID 1569: No discussion.

**Straw Poll:** Do you support the proposed comment resolutions in r1 of this document?

**Result:** Unanimously supported.

**11-23/0794r1, “LB272 comments DMG comment 2064 resolution”, Rui Du (Huawei):**

This submission contains the proposed comment resolution for the CID 2064

CID 2064: Run out of time.

1. The chair asks if there is any other business. No response from the group.
2. The meeting is adjourned without objection at 01:02am.

**List of Attendees:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbf | 5/25 | Beg, Chris | Cognitive Systems Corp. |
| TGbf | 5/25 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbf | 5/25 | Dash, Debashis | Apple Inc. |
| TGbf | 5/25 | da Silva, Claudio | Meta Platforms; PWC, LLC |
| TGbf | 5/25 | Du, Rui | Huawei Technologies Co., Ltd |
| TGbf | 5/25 | feng, Shuling | MediaTek Inc. |
| TGbf | 5/25 | Hsu, Ostrovsky | Xiaomi Communications Co., Ltd. |
| TGbf | 5/25 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbf | 5/25 | Kim, Sang Gook | LG ELECTRONICS |
| TGbf | 5/25 | Krebs, Alexander | Apple, Inc. |
| TGbf | 5/25 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbf | 5/25 | narengerile, narengerile | Huawei Technologies Co., Ltd |
| TGbf | 5/25 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbf | 5/25 | Sahoo, Anirudha | National Institute of Standards and Technology |
| TGbf | 5/25 | SUH, JUNG HOON | Huawei Technologies Co., Ltd |
| TGbf | 5/25 | Tang, Zhuqing | Huawei Technologies Co., Ltd |
| TGbf | 5/25 | Wilhelmsson, Leif | Ericsson AB |
| TGbf | 5/25 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbf | 5/25 | Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

### Tuesday, May 30, 2023, 10:00am - 12:00pm (ET)

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/23/11-23-0909-03-00bf-tgbf-meeting-agenda-2023-05-part-2.pptx>

1. Call the meeting to order
2. Patent policy and logistics
3. TGbf Timeline
4. Call for contribution
5. Teleconference Times
6. Presentation of submissions
7. Any other business
8. Adjourn
9. The chair, Tony Han, calls the meeting to order at 10:01 am ET (34 persons are on the call after 1 hour of the meeting).
10. The chair goes through “Meeting Protocol, Attendance, Voting & Documentation Status” (slide 4), “Participants have a duty to inform the IEEE” (slide 6), and “Ways to inform IEEE” (slide 7).

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

The chair goes through “Other Guideline for IEEE WG meetings” (slide 8), “Patent related information” (slide 9), “ IEEE SA Copyright Policy” (slides 10 and 11), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 12), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 13), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 14), and “Required notices” (slide 15).

The chair goes through the agenda (slide 18) and asks if there are any question on the agenda. Claudio informs that 814 is not ready for presentation today, but will be ready in the next call.

The chair asks if there is any objection to approve the updated agenda. No response from the group. As a result, the agenda is approved.

1. The chair presents the timeline (slide 20). No discussion.
2. The chair presents Call for contribution (slide 21). No discussion.
3. The chair presents the telco Teleconference Times (slide 22) and gives an update of the D1.0 CR status. Leif informs that all rooms are booked for those who requested this.
4. Presentation of submission:

**11-23/0882r0, “LB272 CR on capability of sensing measurement reporting”, Dong Wei (NXP):** This document aims to resolve the following ten LB272 CIDs related to the capability of sensing measurement reporting: 1056, 1929, 1930, 1986, 2015, 2052, 2146, 2149, 2155, and 2176.

Dong gave an overview of the CRs in an earlier call, but we ran out of time.

Q: If we make this optional, I believe we have made a lot of unnecessary specifying work. I also believe this will lead to a split market, which I believe is not good. I strongly disagree with this approach.

A: I believe we have disagreement on whether downlink sounding is needed. We believe uplink is more efficient.

Q: We discussed this in January, and this is why it is included in D1.0 as mandatory.

Q: I support the proposed change and believe it makes perfect sense. I think should focus on the client side being the initiator.

Q: I don’t agree that we should focus on one specific type of devices being the initiator.

Q: I suggest sending out an email and initiate at discussion.

Q: I have seen many measurements where things look very differently in the two directions, e.g. if there are different chip-sets in the two devices.

Q: I also believe the proposed change would help market adoption.

As a result of the discussion, Dong explains he will not run the SP and instead discuss more offline.

Q: I believe we should try to get feedback from customers. If they are happy to make it optional, making it optional may be OK.

**11-23/0795r0, “LB272 CRs for Clause 3 and CID 1461”, Ray Wang (InterDigital):** This submission present proposed resolutions for the following 15 CIDs: 1337, 1338, 1340, 1462, 1463, 1464, 1465, 1817, 1818, 1819, 1820, 2016, 2293, 2294, 1461

The proposed changes are based on 802.11bf D1.0.

CID 1337: No discussion.

CID 1338: Comment from the editor that the explanation may not be sufficient to convince the commenter and is the commenter may make the same comment for D2.0.

CID 1340: Some clarifying discussion. As a consequence, the CID is deferred.

CID 1462: Some clarifying discussion.

CID 1463: Some clarifying discussion. As a consequence, the CID is deferred.

CID 1464: Some clarifying discussion. As a consequence, the CID is deferred.

CID 1465: Some clarifying discussion. As a consequence, the CID is deferred.

CID 1817: No discussion.

CID 1818: No discussion.

CID 1819: No discussion.

CID 1820: No discussion.

CID 2016: No discussion.

CID 2293: Some discussion from the group that additional reasons for rejection is possible.

CID 2294: No discussion.

CID 1461: After some discussion, the CID is deferred.

**Straw Poll:** Do you agree with the proposed resolutions to the CIDs above excluding 1340, 1463, 1464, 1465, and 1461.

**Result:** Unanimously supported.

**11-23/0794r1, “LB272 comments DMG comment 2064 resolution”, Rui Du (Huawei):**

This submission contains the proposed comment resolution for the CID 2064. Rui started to present in an earlier teleconference but ran out of time.

CID 2064: Some clarifying discussion and also some minor changes are done to the proposed text. As a consequence, the SP is deferred.

1. The chair asks if there is any other business. No response from the group.
2. The meeting is adjourned without objection at 12:00pm.