IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IEEE 802.11bf – Teleconference Minutes August - September 2023 | | | | |
| Date: 2023-09-09 | | | | |
| 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 August-September 2023.

Rev 0: Minutes for TG 802.11bf teleconference on the 31st of August 2023.

Rev 1: Minutes for TG 802.11bf teleconference on the 5th of September 2023 added.

Rev 2: List of attendees for the 31st of and the 5th of September 2023 added.

### Thursday, August 31, 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/23/11-23-1436-01-00bf-tgbf-meeting-agenda-2023-08-09.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 (29 persons are on the call after 30 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. No response from the group.

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

1. The chair goes through the timeline (slide 17)
2. The chair goes call for contribution (slide 18)
3. The chair presents the telco Teleconference Times (slides 19 and 20). There is one more teleconference before the f2f meeting and 5 sessions are scheduled for the f2f.

Discussion about a potential ad-hoc f2f before the November meeting to be able to generate D3.0 out of the f2f meeting.

Q (Qusestion/Comment): I believe it is more efficient to have teleconferences. I also believe target November may be a bit of a rush.

Q: I think it is OK to target January instead. Also, I believe we should not normalize having an ad-hoc.

Q: I also speak against, basically for the same reasons that already have been mentioned.

The chair explains that he has talked to people off-line and basically received the same message. The chair explains that we will formally take the decision about the ad-hoc next week. Even if we do not have an ad-hoc, the chair suggests that we should still target the November meeting for generating D3.0.

1. Presentation of submission:

The technical editor goes through the comment assignments. All except 49 comments have been assigned. Going through the 49 comments, all of them get assigned.

**11-23/1446r0, “Enabling fully functional 320 MHz sensing”, Cheng Chen (Intel):** 320MHz sampling is currently only allowed for a limited number of set-ups, e.g. Non-TB sensing and SR2SR sensing are not supported. The proposal is to take advantage of the development in 11bk and allow for 320MHz sensing also for the remaining modes.

Q: Does 11bk support puncturing?

A: I believe this is still pending.

Q: This is basically my question. We are currently supporting all kind of puncturing.

A: I see your concern, but I believe it is OK.

Q: I don’t understand the argument about complexity on page 8.

A: It is related to that otherwise we may in the future have to develop yet another waveform.

Q: With respect to the SP, this change is only for 320 MHz?

A: Yes. Everything below and equal to 160 MHz is HE.

Q: Since 11bk is not adopted, it would mean we don’t know what puncturing patterns will be supported if I understand it correctly.

A: All puncturing patters should be supported. The question for 11bk is just whether some of the puncturing patterns will be mandatory or optional.

Q: I believe this is a PHY change and need to be discussed some more.

A: No, I don’t agree with this.

**Straw Poll:** Do you agree with the following?

11bf shall adopt the following changes with respect to 320 MHz sensing:

* + 1. Replace the current 320 MHz EHT NDP used in NDPA sounding phase in TB sensing measurement exchange with the 320 MHz EHT Ranging NDP defined in 11bk.
  + 2. Extend the TF sounding phase in TB sensing measurement exchange and Non-TB sensing measurement exchange to 320 MHz with the use of 320 MHz EHT TB Ranging NDP and EHT Ranging NDP defined in 11bk.

**Result:** Y/N/A: 12/5/7

**11-23/1455r0, “LB276 Comment Resolutions for MISC category”, Ali Raissinia (Qualcomm):** This document proposes CR resolutions for some of the MISC category based on D2.0

CIDs 3128, 3144, 3151, 3211, 3212: No discussion.

CID 3280: No discussion.

CID 3281: No discussion.

CIDs 3372 and 3388: No discussion.

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

Result: The SP is unanimously supported.

**11-23/1457r0, “Updated Sensing NDP Frame Format”, Ali Raissinia (Qualcomm):**

This document proposes changing the NDPA frame format for TB sensing measurement exchange and its relevant text based on D2.0 to align its behavior to be backwards compatible to 11az TB sequence. The identified issue is the result of AP being an initiator in sensing whereas AP in 11az is a responder hence couple of parameters were included in different subfields within the STA Info field.

Some clarifying discussion.

1. 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 | 8/31 | Beg, Chris | Cognitive Systems Corp. |
| TGbf | 8/31 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbf | 8/31 | da Silva, Claudio | Meta Platforms; PWC, LLC |
| TGbf | 8/31 | Dong, Xiandong | Xiaomi Inc. |
| TGbf | 8/31 | Eitan, Alecsander | Qualcomm Technologies, Inc. |
| TGbf | 8/31 | feng, Shuling | MediaTek Inc. |
| TGbf | 8/31 | Gao, Ning | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbf | 8/31 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbf | 8/31 | Kim, Sang Gook | LG ELECTRONICS |
| TGbf | 8/31 | Lim, Dong Guk | LG ELECTRONICS |
| TGbf | 8/31 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbf | 8/31 | narengerile, narengerile | Huawei Technologies Co., Ltd |
| TGbf | 8/31 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbf | 8/31 | Schweizer, Benedikt | Apple Inc. |
| TGbf | 8/31 | Shirakawa, Atsushi | SHARP CORPORATION |
| TGbf | 8/31 | Tang, Zhuqing | Huawei Technologies Co., Ltd |
| TGbf | 8/31 | Wei, Dong | NXP Semiconductors |
| TGbf | 8/31 | Wilhelmsson, Leif | Ericsson AB |

### Tuesday, September 5, 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/23/11-23-1436-02-00bf-tgbf-meeting-agenda-2023-08-09.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 (24 persons are on the call after 30 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 by unanimous consent. No response from the group. As a result, the agenda is approved.

1. The chair goes through the timeline (slide 18)
2. The chair goes call for contribution (slide 19)
3. The chair presents the telco Teleconference Times (slides 20 and 21). With respect to the f2f, Claudio announces that he will not attend in person.

The chair goes through the planned teleconferences after the f2f and asks if there are any comments. No response from the group.

The chair also announces that he intends to request 8 slots for the November f2f as we hopefully will be targeting to generate D3.0 out of that meeting.

Based on the feedback from the group, the chair proposes that we should not have an ad-hoc meeting before the November f2f. No comment from the group.

Claudio gives a status update.

1. Presentation of submission:

**11-23/1455r1, “LB276 Comment Resolutions for MISC category”, Alireza Raissinia (Qualcomm):** This document proposes comment resolutions for CIDs 3128, 3144, 3151, 3211, 3212, 3280, 3281, 3372, 3388, and 3376 for the MISC category based on D2.0.

CID 3376 has been added compared to r0, which was presented in the last teleconference.

CID 3376: No discussion.

**Straw Poll**: Do you agree with proposed resolutions in this document?

**Result:** Unanimously supported.

**11-23/1457r1, “Updated Sensing NDP Frame Format”, Ali Raissinia (Qualcomm):**

This document proposes changing the NDPA frame format for TB sensing measurement exchange and its relevant text based on D2.0 to align its behavior to be backwards compatible to 11az TB sequence. The identified issue is the result of AP being an initiator in sensing whereas AP in 11az is a responder hence couple of parameters were included in different subfields within the STA Info field.

Since the document has been significantly updated, Ali wants to defer the SP in order to allow people to review it.

11-23/1456r1, “LB276 Comment Resolutions for Sensing NDPA Frame Format”, Ali Raissinia (Qualcomm): This document proposes comment resolutions for CIDs 3194, 3245, 3246, 3247, 3248, 3284, 3285, 3286, 3287, 3288, 3289, 3290, 3392, 3527, 3528, 3529, 3531, 3414, and 3469 for NDPA Frame Format based on D2.0.

CID 3194: No discussion.

CID 3245: The resolution is changed to reject.

CID 3246: No discussion.

CID 3247: No discussion.

CID 3248: Changed to accepted.

CID 3284: No discussion.

CID 3285: No discussion.

CID 3286: No discussion.

CID 3287: No discussion.

CID 3288: No discussion.

CID 3289: The text is slightly updated based on feedback from the group. The resolution is still revise.

CID 3290: The proposed resolution is slightly updated. The resolution is still revise.

CID 3392: Some clarifying discussion.

CID 3527: No discussion.

CID 3528: The resolution is changed to revised. Mahmoud also identifies that he has some CIDs that are related and suggests to transfer these to Ali.

CID 3529: No discussion.

CID 3531: No discussion.

CID 3414: No discussion.

CID 3469: There is a request to defer this CID and discuss further off-line. Ali is OK with this.

The SP is deferred.

**11-23/1463r1, “LB276 Comment Resolutions for Reporting category”, Ali Raissinia (Qualcomm):** This document proposes comment resolutions for CIDs 3148, 3149, and 3179 for the Reporting category based on D2.0.

CID 3148: No discussion.

CID 3149: No discussion.

CID 3179: No discussion.

**Straw Poll**: Do you agree with proposed resolutions in rev 2 of this document?

**Result:** Unanimously supported.

1. Any other business. No response from the group.
2. The meeting is adjourned without objection at 12:00pm.

**List of Attendees:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbf | 9/5 | Beg, Chris | Cognitive Systems Corp. |
| TGbf | 9/5 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbf | 9/5 | da Silva, Claudio | Meta Platforms; PWC, LLC |
| TGbf | 9/5 | Dong, Xiandong | Xiaomi Inc. |
| TGbf | 9/5 | feng, Shuling | MediaTek Inc. |
| TGbf | 9/5 | Gao, Ning | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbf | 9/5 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbf | 9/5 | Kim, Sang Gook | LG ELECTRONICS |
| TGbf | 9/5 | narengerile, narengerile | Huawei Technologies Co., Ltd |
| TGbf | 9/5 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbf | 9/5 | Sand, Stephan | German Aerospace Center (DLR) |
| TGbf | 9/5 | Schweizer, Benedikt | Apple Inc. |
| TGbf | 9/5 | Wei, Dong | NXP Semiconductors |
| TGbf | 9/5 | Wilhelmsson, Leif | Ericsson AB |
| TGbf | 9/5 | Yano, Kazuto | Advanced TelecommunicationsResearch Institute International (ATR) |