IEEE P802.11  
Wireless LANs

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| IEEE 802.11bf - March 2022 Plenary Meeting Minutes | | | | |
| Date: 2022-03-14 | | | | |
| Author(s): | | | | |
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Abstract

Rev 0: This document contains the meeting minutes of IEEE 802.11bf teleconferences held during the March 2022 IEEE 802.11 Plenary meeting.

**Tuesday, March 8, 2022, 9:00-11:00 am (ET)**

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/22/11-22-0221-02-00bf-tgbf-meeting-agenda-2022-03-plenary.pptx>

1. Call the meeting to order
2. Patent policy and logistics
3. Approve TGbf meeting minutes
4. TGbf Timeline
5. Call for contribution
6. Teleconference Times
7. Presentation of submissions
8. Motions (67-81)
9. Any other business?
10. Recess
11. The chair, Tony Xiao Han, calls the meeting to order at 9:00am (about 125 persons are on the call after 10 minutes of the meeting).
12. The chair goes through “Meeting Protocol, Attendance, Voting &Documentation Status” (slide 4), “Registration for the March 802 electronic plenary session” (slide 5), “Participants have a duty to inform the IEEE” (slide 7), and “Ways to inform IEEE” (slide 8).

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 9), “Patent related information” (slide 10), “ IEEE SA Copyright Policy” (slides 11 and 12), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 13), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 14), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 15), and “Required notices” (slide 16).

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

The chair asks if there is any objection to approve the agenda by unanimous consent. No objection from the group so the agenda is approved.

1. **Motion: Approve TGbf meeting minutes:** Move to approve TGbf minutes of meetings and teleconferences from January 2022 meeting to today:
   * **January Interim:** [**https://mentor.ieee.org/802.11/dcn/22/11-22-0191-01-00bf-ieee-802-11bf-january-2022-interim-meeting-minutes.docx**](https://mentor.ieee.org/802.11/dcn/22/11-22-0191-01-00bf-ieee-802-11bf-january-2022-interim-meeting-minutes.docx)
   * **Teleconferences February - March: https://**[**mentor.ieee.org/802.11/dcn/22/11-22-0345-06-00bf-teleconference-minutes-february-march-2022.docx**](https://mentor.ieee.org/802.11/dcn/22/11-22-0345-06-00bf-teleconference-minutes-february-march-2022.docx)

**Move:** Leif Wilhelmsson

**Second:** Sang Kim

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

1. The Chair presents the TGbf Timeline (slide 22).
2. The Chair presents slide 23 and slide 24, Call for contributions.
3. The Chair presents the teleconference times, (slide 25).
4. Presentation of submissions:

**11-22/0240r3, “DMG Sensing Capabilities element”, Assaf Kasher (Qualcomm):**

Some minor typos identified.

Q: Maximum Doppler and Doppler resolution depends on the measurement set-up?

A: These are reporting capabilities. I realize this have not been explained well enough.

Tony asks about future plans. Correct the typos and upload a revised version.

1. Motions

**Motion 67:** Move to add the following to the TGbf SFD:

* Enhance the sensing procedure initiated by an AP to optionally allow sensing responder to sensing responder NDP measurement.

**Move:** Sang Kim

**Second:** Solomon Trainin

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

**Note：**

* Related document 22/ 0312r2
* SP Result: 26Y/ 2N/ 10A

**Motion 68:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0172r3 PDT Sensing Measurement Instance: General

**Move:** Cheng Chen

**Second:** Oscar Au

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

**Note：**

* Related document 22/0172r3
* SP Result: 26Y/ 0N/ 7A

**Motion 69:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0174r3 PDT Non-TB Sensing Measurement Instance

**Move:** Cheng Chen

**Second:** Oscar Au

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

**Note：**

* Related document 22/0174r3
* SP Result: 25Y/ 0N/ 10A

**Motion 70:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0233r3: Proposed Draft Text for MLME

**Move:** Claudio da Silva

**Second:** Cheng Chen

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

**Note：**

* Related document 22/0233r3
* SP Result: 30Y/ 0N/ 5A

**Motion 71:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0079r2: Proposed Draft Text for SENS Procedure Overview

**Move:** Claudio da Silva

**Second:** Rajat Pushkarna

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

**Note：**

* Related document 22/0079r2
* SP Result: 31Y/ 0N/ 2A

**Motion 72:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0235r5 Proposed Draft Text for Sensing Measurement Report frame (excl. format)

**Move:** Claudio da Silva

**Second:** Alecsander Eitan

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

**Note：**

* Related document 22/0235r5
* SP Result: 28Y/ 0N/ 8A

**Motion 73:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0134r4 PDT Threshold-based Sensing Procedure

**Move:** Mengshi Hu

**Second:** Jinsoo Choi

**Preliminary Result:** Y/N/A: 51/5/24, Motion passes

A request was made to record the voting. The result of this is shown below.

**Result\*:** 1.Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

22/0134r4 PDT Threshold-based Sensing Procedure

A.Yes 51/164 ( 31%)

B.No 5/164 ( 3%)

C.Abstain 24/164 ( 15%)

未回答 84/164 ( 51%)

A B C

----------------------------------------------------------------

[V] Cheng Chen, Intel | X | | |

[NV] Shuang Fan, ZTE | | | |

[A] Matthew Chappell | | | |

[V] Sang Kim LGE | X | | |

[V] Timothy Jeffries - Futurewei | | | |

[V] Enrico Rantala Zeku | X | | |

Claudio da Silva, Meta | X | | |

[V] Ali Raissinia Qualcomm | X | | |

[V] Khashayar Mirfakhraei-Zeku | X | | |

[PV] Vamsi Amalladinne, Qualcomm | | | |

Francois THOUMY | | | |

[V] Naveen Kakani, Qualcomm | X | | |

[V] Dave Barr MaxLinear | | | |

[V] Debashis Dash Apple | | | X |

Dignus-Jan Moelker | | | X |

[V] Trivikram Gangur, Infineon | | | |

[V] Steve Shellhammer (Qualcomm) | X | | |

[V] Bibhu Mohanty, Qualcomm | X | | |

[V] Dibakar Das Intel | X | | |

[V] Julia Shuling Feng MediaTek | | X | |

[V] Noel Stott Keysight Technologies | | | X |

[V] Jim Petranovich; Viasat | | | X |

[V] Kapil Rai, Qualcomm | X | | |

[V] VK Jones Qualcomm Inc | | | |

[V] Youhan Kim, Qualcomm | X | | |

[V] Prabodh Varshney Nokia | X | | |

[V] Lisa Ward - Rohde & Schwarz | | | |

[V] Paul Cheng MediaTek | | | |

[PV] Takuhiro Sato, Sharp | | | |

[V] Dongguk Lim, LGE | X | | |

[V] Rajat Pushkarna Panasonic | | | X |

[V] Chaoming Luo OPPO | X | | |

[V] James Chiang, MediaTek | | | |

[V] Bo Xiao, ZTE | | | |

[V] Kazuto Yano ATR | X | | |

[V] Lei Huang OPPO | | | |

[V] Yuki Yoshikawa, canon | | | X |

[V] SunHee Baek LGE | | | |

[A] Yapu Li, OPPO | | | |

[V]XIANDONG DONG XIAOMI | | | |

[V] Insun Jang LGE | X | | |

[V] Rui Du Huawei | X | | |

[V] Eunsung Park LGE | | | |

[V] Mengshi Hu Huawei | X | | |

[V] Pei Zhou, OPPO | | | |

[V] Steve TS Yang Mediatek | | | |

[PV] Wonjung Kim, LG Uplus | | | |

jie chen | | | |

[V] Jeongki Kim Ofinno | | | |

[v]Hiraku OKADA | | | |

[V] Jia Jia, Huawei | X | | |

[V] Jinsoo Choi LG | X | | |

[V] Sunghyun Hwang, ETRI | | | |

[A]Ostrovsky Hsu Xiaomi | | | |

[V] Ming Gan Huawei | X | | |

[NV] Naren, Huawei | | | |

[V] Tomoko Adachi Toshiba | X | | |

[V] B Hari Ram NXP | | | |

[A] Ning Gao, OPPO | | | |

[PV] Hsin-De Lin Mediatek, Inc. | | | |

[V] Fumihide Goto, DENSO | | | X |

[V] Yoshihisa Kondo ATR | | | X |

[V] Bo Gong Huawei | X | | |

[V]HanGyu Cho\_LGE | | | X |

[V] Jun Minotani, Panasonic | | | |

[V] Der-Zheng Liu, Realtek | X | | |

[V] Jonghun Han Samsung | | | |

[V] Yoshio Urabe, Panasonic | | | |

[A] Lei Zhou, H3C | | | |

[V] Chien-Fang Hsu [Frank], Mediatek | | | |

[V] Seungho Choo Senscomm Semiconductor Co., Ltd. | X | | |

[V] Jiayin Zhang Huawei | | | |

[NV]Renlong Zhou,ZTE | | | |

[V] Rojan Chitrakar Panasonic | | | X |

[V] Yingqing Li Huawei | | | |

[N] Mitsuyoshi Yukawa Canon | | | |

[V] Jinyoung Chun, LG | X | | |

[PV]Ayush, Infineon | | | |

[V] Osama Aboul-Magd Huawei Technologies | X | | |

[V] Junghoon Suh Huawei | X | | |

[V] Chris Beg [Cognitive Systems] | | | X |

[V] Zinan Lin InterDigital | | X | |

[A] Kazi Huq, Ofinno | | | |

[V] Pu Perry Wang, MERL | | | |

[PV] Kiseon Ryu, Ofinno | | | X |

[V] Jung Hoon Suh Huawei | | | |

[PV] Leonardo Lanante, Ofinno | | | |

[V] Jerome Henry [Cisco] | | | |

[V] Ebubekir Memisoglu IMU; VESTEL | | | X |

[V] Leif Wilhelmsson Ericsson | X | | |

[V] Mehmet Ali Aygul; Vestel | X | | |

[NV] Serhat Erkucuk, Ofinno | | | |

[V] Sebastian Max Ericsson | | | |

Zeeshan Haider | | | |

[V] Assaf Kasher Qualcomm | X | | |

[A] Patrice Desmoulin, Orange | | | |

[V] Edward Harrison, Anritsu | | | |

[V] Ezer Melzer, Huawei | X | | |

[V] Charlie Pettersson Ericsson | | | |

[V] Andreas Bluschke, Signify | | | |

[V] Alexander Tolpin, Intel | | | |

[V] Ankit Sethi NXP | | | |

[V] Rocco Di Taranto Ericsson | | | |

[A] Oren Kedem MaxLinear | | | |

[V] Solomon Trainin, Qualcomm | X | | |

[V] Miguel Lopez Ericsson | | | |

[V] Massinissa Lalam, Sagemcom | | | |

[V] Nancy Lee, Signify | | | |

[V] Matthias Wendt, Signify | | | |

[V] Klimakov Andrey Huawei | | | |

[V] Michael Grigat DT | X | | |

[V] Patrice NEZOU, Canon | | | |

[V] Mickael LORGEOUX Canon | | | |

[V] Stephane Baron Canon | | | X |

[V] Paul Unterhuber DLR | | X | |

[V] Brice LeHouerou Canon | | | X |

[NV] Vlado Handziski [R3 Solutions] | | | |

[V] Geert Awater, Qualcomm | X | | |

[V] Julien SEVIN, Canon | | | |

[V] Paul Fletcher, Samsung | | | |

[V] Daniel Verenzuela Sony | | | X |

[V] Alecsander Eitan Qualcomm | X | | |

[V] Mor Reich, Huawei | X | | |

[V] Allert van Zelst, Qualcomm | X | | |

[V] Stephen McCann, Huawei | X | | |

[V] Shimi Shilo Huawei | X | | |

[V] Max Stepanov, Intel | | | X |

[V] Richard Van Nee Qualcomm | | | |

[V] Naftali Chayat, Vayyar Imaging | | | |

[V] Thomas Handte Sony | | | X |

[A] Satyanarayana Katla IDCC | | | |

[V] Athanasios Stavridis, Ericsson | | | |

[V] Naotaka Sato, Sony Group Corporation | | | |

[V] Lei Wang Futurewei | X | | |

[V] Ruochen Zeng, Apple | | | X |

[V] Chao-Chun Wang MediaTek | | | |

[V] Oscar Au OW | X | | |

[V] James Yee, MediaTek | | | X |

[V] Jon Rosdahl - Qualcomm | | | |

[V] Karim Nassiri Toussi | | | |

[V] Erik Lindskog Samsung | | | |

[V] Christian Berger NXP | | | X |

peiying zhu | X | | |

[V] Yan Xin Huawei | X | | |

[V] Mike Montemurro Huawei | X | | |

Anirud Sahoo NIST | | | |

[V] Mahmoud Kamel InterDigital | | X | |

[A] Jiayi Zhang, Ofinno | | | |

[V] Dong Wei, NXP | | | X |

[V] Hassan Omar Huawei | X | | |

[V] Ray Yang, InterDigital | | X | |

[V] Hanqing Lou InterDigital | | | X |

[V] Ross Jian Yu Huawei | X | | |

[V] Xiangxin Gu, Unisoc | | | X |

[V]Tsung-han Tsai KevinMediatek | | | |

[V] Ramya Thota , Infineon | | | |

[V] Harry Hao Wang Tencent | | | |

[V] Chenchen Liu Huawei | X | | |

Yunbo Li Huawei | X | | |

[V] Liuming Lu OPPO | | | |

[A] Eason chang, Mediatek | | | |

[A]Rajeshwari Satrasala NXP | | | |

[V] Chenhe Ji Huawei | | | |

Ian Sherlock | X | | |

**Note：**

* \* Amended result accounts for removal of X votes of non-voting members.
* Related document 22/0134r4
* SP Result: 35Y/ 6N/ 9A

Based on some comments document 22/0229 is updated to revision 7.

**Motion 74:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0229r7 PDT for Sensing Measurement Setup

**Move:** Insun Jang

**Second:** Dongguk Lim

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

**Note：**

* Related document 22/0229r6
* SP Result: 22Y/ 0N/ 15A

**Motion 75:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* + 22/0243r6 PDT DMG Sensing procedure

**Move: Solomon Trainin**

**Second: Assaf Kasher**

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

**Note：**

* Related document 22/0243r6
* SP Result: unanimous consent

**Motion 76:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* + **22/0181r1 pdt-sensing-session-setup**

**Move: Chaoming Luo**

**Second: Mike Montemurro**

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

**Note：**

* Related document 22/0181r1
* SP Result: unanimous consent

**Motion 77:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0182r0 pdt-sensing-session-termination

Move: Chaoming Luo

Second: Pei Zhou

Result: Motion passed by unanimous consent.

**Note：**

* Related document 22/0182r0
* SP Result: unanimous consent

**Motion 78:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0173r5 PDT TB Sensing Measurement Instance

**Move:** Cheng Chen

**Second:** Rajat Pushkarna

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

**Note：**

* Related document 22/0173r5
* SP Result: unanimous consent

**Q:** With respect to Motion 79, I suggest to defer it.

**Motion 79:** Move to add the following to the TGbf SFD:

* The STA info field in sensing NDPA includes the following information.
  + AID11 (11bits)
  + I2R NDP NSTS (3bits)
  + R2I NDP NSTS (3bits)

**Move:** Dongguk Lim

**Second:** Jinsoo Choi

**Preliminary Result:** Y/ N/ A: 27/30/23, Motion fails

**Result\*:**

**Note：**

* \* Amended result accounts for removal of X votes of non-voting members.
* Related document 22/ 0338r1
* SP Result: 22Y/ 6N/ 9A

**Motion 80:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0126r5 Proposed Draft Text for Sensing measurement setup termination

**Move:** Pei Zhou

**Second:** Chaoming Luo

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

**Note：**

* Related document 22/0126r5
* SP Result: unanimous consent

**Motion 81:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0223r5 pdt-sbp-frames

**Move:** Chaoming Luo

**Second:** Pei Zhou

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

**Note：**

* \* Amended result accounts for removal of X votes of non-voting members.
* Related document 22/0223r4
* SP Result: 23Y/ 2N/ 15A

Presentation of submissions, cont’d:

**11-22/0295r3, “DMG Measurement Setup frames”, Assaf Kasher (Qualcomm):** This document presents draft text for a The DMG part of the Sensing Measurement setup frame.

Based on feedback from the group, Assaf will update the document to revision 4.

1. The Chair asks if there is any other business. No response from the group.
2. The meeting is recessed without objection at 11.00 am (ET).

**Wednesday, March 9, 2022, 10:00pm-0:00 am (ET)**

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/22/11-22-0221-03-00bf-tgbf-meeting-agenda-2022-03-plenary.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. Recess
9. The chair, Tony Xiao Han, calls the meeting to order at 10:00pm (about 85 persons are on the call after 10 minutes of the meeting).
10. The chair goes through “Meeting Protocol, Attendance, Voting &Documentation Status” (slide 4), “Registration for the March 802 electronic plenary session” (slide 5), “Participants have a duty to inform the IEEE” (slide 7), and “Ways to inform IEEE” (slide 8).

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 9), “Patent related information” (slide 10), “ IEEE SA Copyright Policy” (slides 11 and 12), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 13), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 14), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 15), and “Required notices” (slide 16).

The chair goes through the agenda (slide 19) and asks if there are any questions or comments on the agenda. No response from the group.

The chair asks if there is any objection to approve the agenda by unanimous consent. No objection from the group so the agenda is approved.

1. The Chair presents the TGbf Timeline (slide 22). The Chair gives a heads-up that he may want to discuss the deadline for contributions to pass motions in a coming meeting.
2. The Chair presents slide 23 and slide 24, Call for contributions.
3. The Chair presents the teleconference times, (slide 25).
4. Presentation of submissions:

**11-22/0241r5, “DMG Measurement Setup frames” Assaf Kasher (Qualcomm):** Assaf goes through the document and shows the changes that have been made compared to revision 3.

Q: In Fig 5, what are the angles relative to?

A: We can add this later, but it is discussed in document 240.

Based on some feedback from the group, the text is slightly updated. Revision 6 is uploaded to Mentor.

**PDT Straw Poll:** Do you support including the text proposed in the following document into the IEEE802.11bf draft amendment?

* 22/0241r6: PDT DMG Passive Sensing

**Result:** Y/N/A: 24/10/16

**11-22/0240r4, “DMG Sensing Capability element”, Assaf Kasher (Qualcomm):** Assaf goes through the document and shows the changes that have been made compared to revision 3.

Q: You have defined the beamwidth. How is the beamwidth used in sensing?

A: If you know the direction of the beam, it may be useful to know e.g. if the beam is narrow or wide.

Based on some feedback from the group, the text needs to be updated and therefore the SP is deferred.

**11-22/0295r4, “DMG Measurement Setup frames”, Assaf Kasher (Qualcomm):** Revision 3 of this document was presented in the latest session, and Assaf goes through the updates that have been made.

**11-22/0234r5, “Proposed Text for the SBP Procedure”, Claudio da Silva (Meta):** This document includes proposed draft text for the SBP topic as defined in TGbf’s SFD.

Q: Why do we specify 10 ms instead of a parameter?

A: We need to have a timeout, and this value has been used also elsewhere. We can change it, but I believe this is a reasonable value.

Q: Within these 10 ms, does the AP have to check e.g. if there are non-AP STAs available for sensing?

A: Yes. But how this is done is implementation dependent.

Q: I believe Motion 64 already covers what you have written in one of the nodes.

**11-22/0251r3, “DMG Sensing Report IE”, Alecsander Eitan (Qualcomm):** Alecsander Goes through the updates compared to the previous revision.

Q: The chair asks about the next plans for this contribution.

A: I will make the proposed changes and try to run a SP next time.

1. The Chair asks if there is any other business. No response from the group.
2. The meeting is recessed without objection at 11.56 pm (ET).

**Friday, March 11, 2022, 9:00am-11:00am (ET)**

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/22/11-22-0221-04-00bf-tgbf-meeting-agenda-2022-03-plenary.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. Recess
9. The chair, Tony Xiao Han, calls the meeting to order at 9:00am (about 110 persons are on the call after 10 minutes of the meeting).
10. The chair goes through “Meeting Protocol, Attendance, Voting &Documentation Status” (slide 4), “Registration for the March 802 electronic plenary session” (slide 5), “Participants have a duty to inform the IEEE” (slide 7), and “Ways to inform IEEE” (slide 8).

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 9), “Patent related information” (slide 10), “ IEEE SA Copyright Policy” (slides 11 and 12), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 13), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 14), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 15), and “Required notices” (slide 16).

The chair goes through the agenda (slide 20) and asks if there are any questions or comments on the agenda. No response from the group.

The chair asks if there is any objection to approve the agenda by unanimous consent. No objection from the group so the agenda is approved.

1. The Chair presents the TGbf Timeline (slide 22). The chair wants to discuss the timeline for D0.1.
   * A remark is made that we also can vote in teleconferences and suggests postponing the release to early April.
   * Another opinion is to release a “pre-version” of D0.1 to allow the group to review before the official release of D0.1.
   * Claudio informs the group that there is already such a draft as everything that has been motioned have been included.
   * Tony explains that he will consider the suggestions and make a proposal next time.
2. The Chair presents slide 23 and slide 24, Call for contributions.
3. The Chair presents the teleconference times, (slide 25).
4. Presentation of submissions:

**PDT Straw Poll:** Do you support including the text proposed in the following document into the IEEE802.11bf draft amendment?

* 22/0234r6: PDT for SBP Procedure

**Result:** Supported by unanimous consent.

**11-22/0381r1, “TX power Control and Reporting”, Christian Berger (NXP):** Summary

Q: Is channel reciprocity usually accepted in IEEE 802.11?

A: Yes.

Q: Maybe it is sufficient to just indicate a change, rather than the exact value?

A: Yes, that is a (suboptimal) alternative. This is what I also tried to indicate on page 4.

**Straw Poll:** Do you support to include the following into SFD:

A sensing transmitter shall report Tx Power level of Sensing NDPs to sensing receivers.

**Result:** Y/N/A: 24/12/29

**11-22/0328r2, “Discussion on Threshold-based Sensing”, Rui Yang (Interdigital):**

Q: It is still unclear to me what it means that something should be based on a non-mandatory metric.

Q: If there would be multiple reference metrics, should that be signaled?

A: It should be selected by the application as illustrated on page 5.

**Straw Poll:** Do you agree that TGbf should define the “CSI variation” in Motion 18 based on at least one reference metric in the threshold-based reporting phase?

**Note:**

* The computation of the CSI variation should be based on this reference metric and the computing method is implementation dependent.
* The reference metric will be informative.

**Result:** Y/N/A: 9/26/25

**PDT Straw Poll:** Do you support including the text proposed in the following document into the IEEE802.11bf draft amendment?

* 22/0251r4: PDT for DMG Sensing Report IE

**Result:** Supported by unanimous consent.

**11-21/1934r4, “Discussion on Session Setup”, Chaoming Luo (OPPO):**

Q: I have another contribution that is somewhat related in that it may impact what is the preferred approach. I believe it would be good if we therefore can defer this SP.

A: I am OK with deferring it.

Q: I agree that we need to discuss security aspects a bit further.

**Straw Poll 1:** Which option do you prefer for sensing capability exchange?

* O1: A two-way Sensing Capability Information frame exchange as shown in slide 7.
* O2: A RIN frame as shown in slide 8 and 9.
* O1/O2/A

The chair asks about the next plans. Chaoming would like that people send him comments and he will defer the SP until Mike has presented.

Run out of time.

1. The Chair asks if there is any other business. No response from the group.
2. The meeting is recessed without objection at 11.03 am (ET).

**Monday, March 14, 2022, 9:00am-11:00am (ET)**

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/22/11-22-0221-05-00bf-tgbf-meeting-agenda-2022-03-plenary.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. Motion (82-83)
8. Any other business?
9. Adjourn
10. The chair, Tony Xiao Han, calls the meeting to order at 9:00am (about 40 persons are on the call after a few minutes of the meeting).
11. The chair goes through “Meeting Protocol, Attendance, Voting &Documentation Status” (slide 4), “Registration for the March 802 electronic plenary session” (slide 5), “Participants have a duty to inform the IEEE” (slide 7), and “Ways to inform IEEE” (slide 8).

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 9), “Patent related information” (slide 10), “ IEEE SA Copyright Policy” (slides 11 and 12), “Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct” (slide 13), “Participants in the IEEE-SA “individual process” shall act independently of others, including employers”(slide 14), and “IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints” (slide 15), and “Required notices” (slide 16).

The chair goes through the agenda (slide 21) and asks if there are any questions or comments on the agenda. Mike requests to defer his presentation as he has to join 11be shortly.

The chair asks if there is any objection to approve the agenda by unanimous consent. No objection from the group so the agenda is approved.

1. The Chair presents the TGbf Timeline (slide 22) and an updated one (slide 23). The key points in the update is that a D0.01 version will be generated after the March Plenary meeting and that D0.1 is targeted around April 22.

Q: I support the suggestion, which basically gives us two more weeks to finalize D0.1.

Q: If a new technical motion is accepted, is it possible to start a new PDT?

A: It will not be included in D0.1

Q: When do you plan to publish D0.01?

A: It is basically ready, we will just see what happens with the two motions today. It will be published within a day or two.

**Straw Poll:** Do you support to update the timeline as suggested on slide 23 in 11-22/0221r6?

**Result:** The SP has unanimous support.

1. The Chair presents slide 24 and slide 25, Call for contributions.
2. The Chair presents the teleconference times, (slide 26).
3. Presentation of submissions:

**11-22/0240r5, “DMG Sensing Capability element”, Assaf Kasher (Qualcomm):** Assaf goes through the document and shows the changes that have been made compared to revision 4 based on feedback recived from the group.

Q: About sensing capability element, you have a bit to indicated DMG multistatic RX- Why not also TX

A: It has been discussed, and the reason was that there was no benefit of including it.

Q: The transmitter is always the initiator and the purpose is to determine what STAs (receivers) have this capability.

**PDT Straw Poll:** Do you support including the text proposed in the following document into the IEEE802.11bf draft amendment?

* 22/0240r5: PDT for DMG Sensing Capability

**Result:** Supported by unanimous consent.

**11-22/0241r7, “DMG Passive Sensing”, Assaf Kasher (Qualcomm):** Assaf goes through the document and shows the changes that have been made based on feedback recived from the group.

**PDT Straw Poll:** Do you support including the text proposed in the following document into the IEEE802.11bf draft amendment?

* 22/0241r7: PDT for Passive Sensing

**Result:** Supported by unanimous consent.

**11-22/0295r5, “DMG Passive Sensing”, Assaf Kasher (Qualcomm):** Assaf goes through the document and shows the changes that have been made based on feedback recived from the group.

**PDT Straw Poll:** Do you support including the text proposed in the following document into the IEEE802.11bf draft amendment?

* 22/0295r5: PDT for DMG Sensing Capability

**Result:** Supported by unanimous consent.

**11-22/0256r1, “TX and RX Timestamping Implementation”, Chris Beg (Cognitive Systems):** There is only a minor update compared to r0.

Q: I agree that Option 1 is the preferred approach.

Q: I also agree. It is simpler and also it is consistent. Can there be an issue that it is the receivers clock when the initiator is the transmitter?

A: I believe your concern is mainly relevant in case of more than one sensing receiver which have different drift. I still think it should be fine.

Q: In my view the initiator may do this anyway. In case on SBP it is needed.

**Straw Poll:** Which of the following options do you prefer:

1. In the Sensing Measurement Report Frame PDT (11-22-0235):
   1. A fixed length Timestamp field is to be added into the ***Measurement Report Element***.
2. In the Sensing Measurement Report Frame PDT (11-22-0235):
   1. An optional Timestamp field is to be added into the ***Measurement Report Element.***
   2. A Timestamp Present subfield is to be added into the ***Report Control Field*** of the Measurement Report Element to indicate the Timestamp presence.
3. Further Discussion on signaling of Timestamp.
4. Abstain

**Result:** a/b/c/d: 7/5/14/7

1. Motions:

**Motion 82:** Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0234r6 Proposed Draft Text for the SBP Procedure

**Move:** Claudio da Silva

**Second:** Rajat Pushkarna

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

**Note：**

* \* Amended result accounts for removal of X votes of non-voting members.
* Related document 22/0234r6
* SP Result: Unanimous consent

**Motion 83:**  Move to include the text proposed in the following document into the IEEE 802.11bf draft amendment:

* 22/0251r4 PDT DMG Sensing Report IE

**Move:** Alecsander Eitan

**Second:** Assaf Kasher

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

**Note：**

* \* Amended result accounts for removal of X votes of non-voting members.
* Related document 22/0251r4
* SP Result: Unanimous consent

Presentation of submission cont’d:

**11-22/0327r0, “DMG Bi Static Sounding and BRP Frame”, Assaf Kasher (Qualcomm):** The presentation is based on Motions 45 and 46 (document 21/1856r1).

The chair asks about next plans. Assaf explains that he will discuss offline and then run a SP next time.

**11-22/0370r0, “PDT-DMG Multi-Static Instance”, Assaf Kasher (Qualcomm):**

1. The Chair asks if there is any other business. No response from the group.
2. The meeting is adjourned without objection at 11.00 am (ET).