IEEE P802.11  
Wireless LANs

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| TGbe September to November 2021 teleconference minutes | | | | |
| Date: 2021-09-29 | | | | |
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|  |  |  |  |  |

Abstract

This document contains the minutes for September to November 2021 TGbe teleconferences.

Revisions:

* Rev0: First revision of the document.

# 5th Conf. Call: Sept 22 (10:00–12:00 ET)

Only MAC.

* MAC: <https://mentor.ieee.org/802.11/dcn/21/11-21-1574-03-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-sept-to-nov-2021.docx>

# 6th Conf. Call: Sept 23 (10:00–12:00 ET)

Only MAC.

* MAC: <https://mentor.ieee.org/802.11/dcn/21/11-21-1574-03-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-sept-to-nov-2021.docx>

# 7th Conf. Call: Sept 27 (19:00–21:00 ET)

Split PHY and MAC:

* PHY: <https://mentor.ieee.org/802.11/dcn/21/11-21-1594-01-00be-minutes-of-802-11be-phy-ad-hoc-meetings-september-to-november-2021.docx>
* MAC: <https://mentor.ieee.org/802.11/dcn/21/11-21-1574-03-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-sept-to-nov-2021.docx>

# 8th Conf. Call: Sept 29 (10:00–12:00 ET)

1. The Chair, Alfred Asterjadhi (Qualcomm) calls the meeting to order at 10:02 ET.
2. IEEE 802 and 802.11 IPR policy and procedure
   1. Patent Policy: Ways to inform IEEE:

* Cause an LOA to be submitted to the IEEE-SA ([patcom@ieee.org](mailto:patcom@ieee.org)); or
* Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
* Speak up now and respond to this Call for Potentially Essential Patents
* If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair. **Nobody speaks/writes up.**

1. The Chair goes through the **Copyright Policy**: Participants are advised that
   1. IEEE SA’s copyright policy is described in [Clause 7](https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7) of the IEEE SA Standards Board Bylaws and [Clause 6.1](https://standards.ieee.org/about/policies/opman/sect6.html) of the IEEE SA Standards Board Operations Manual;
   2. Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy
2. **Patent, Participation, Copyright and policy related subclause:** The Chair goes through the *Patent And Procedures* section in [1478r11](https://mentor.ieee.org/802.11/dcn/21/11-21-1478-11-00be-sept-nov-tgbe-teleconference-agenda.docx).
3. Attendance reminder.
   1. Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
   2. Please record your attendance during the conference call by using the IMAT system:
      1. 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
   3. If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Dennis Sundman ([dennis.sundman@ericsson.com](mailto:dennis.sundman@ericsson.com)) and Alfred Asterjadhi ([aasterja@qti.qualcomm.com](mailto:aasterja@qti.qualcomm.com))
   4. Please ensure that the following information is listed correctly when joining the call:
      1. "[voter status] First Name Last Name (Affiliation)"
4. Announcements:
   1. Next week is IEEE 802.11be vacation.
5. Agenda.
   1. Added two technical submissions: MAC CRs.
   2. Agenda approved with unanimous consent.
6. Technical Submissions**: CRs**
   1. [**1488r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1488-00-00be-cr-trigger-frame-eht-user-info-field-9-3-1-22-1-2-2.docx) **CR Trigger Frame EHT User Info Field Yanjun Sun [30C 30’]**

Yanjun goes through the CRs. Some live updates in the group. Discussions mainly regarding the use of term “Any” in some specification tables.

SP: Do you agree to resolve the following CIDs listed in [1488r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1488-01-00be-cr-trigger-frame-eht-user-info-field-9-3-1-22-1-2-2.docx) and incorporate the text changes into the latest TGbe draft?

* 8074, 7391, 5204, 7688, 7689, 4506, 7029, 4880, 4882, 7908, 7030, 4582, 7354, 7032, 7031, 7027, 7033, 5797, 7034, 5798, 7402, 7353, 4326, 4325, 7897, 5796, 7026, 7907, 7904, 4881

Result: Straw poll supported with no objection from the group.

* 1. [**1592r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1592-00-00be-cr-trigger-frame-padding.docx) **CR Trigger frame padding Yanjun Sun [1C 15’]**

Yanjun goes through the CRs. Some comments from the group regarding the CR. Also some live updates. Further updates to be made offline.

1. Technical Submissions:
   1. [**1046r3**](https://mentor.ieee.org/802.11/dcn/21/11-21-1046-03-00be-multi-ap-twt-information-sharing.pptx) **Multi-AP: TWT Information Sharing Ahmed Ibrahim [20’]**

Summary: The authors propose that APs may collaborate in setting the restricted TWT to protect certain type of traffic.

Discussion:

C: We have many types of transmissions, is that taken into consideration in this proposal?

C: This is a high level contribution and we are not restricting the types of transmissions.

C: What is the motivation here? We want more protection to the restricted TWT? What is the OBSS AP going to do with this information?

A: One motivation is to add more protection to the restricted TWT.

C: But you can only control the DL right?

Discussion not finished. The chair asks to follow up the discussion offline.

1. AoB:
   1. Those of you who are on AT&T, that’s because there is a group of MS e-mail providers that have blacklisted our IEEE servers. The emails will thus not be delivered until we have resolved it.
2. The Chair wishes everyone a nice holiday next week. Adjourned at 12:01 ET.

# 9th Conf. Call: Sept 30 (10:00–12:00 ET)

Only MAC.

* MAC: <https://mentor.ieee.org/802.11/dcn/21/11-21-1574-03-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-sept-to-nov-2021.docx>

# 10th Conf. Call: Sept 27 (10:00–12:00 ET)

Split PHY and MAC:

* PHY: <https://mentor.ieee.org/802.11/dcn/21/11-21-1594-01-00be-minutes-of-802-11be-phy-ad-hoc-meetings-september-to-november-2021.docx>
* MAC: <https://mentor.ieee.org/802.11/dcn/21/11-21-1574-03-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-sept-to-nov-2021.docx>

# 11th Conf. Call: Oct 13 (10:00–12:00 ET)

1. The Chair, Alfred Asterjadhi (Qualcomm) calls the meeting to order at 10:02 ET.
2. IEEE 802 and 802.11 IPR policy and procedure
   1. Patent Policy: Ways to inform IEEE:

* Cause an LOA to be submitted to the IEEE-SA ([patcom@ieee.org](mailto:patcom@ieee.org)); or
* Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
* Speak up now and respond to this Call for Potentially Essential Patents
* If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair. **Nobody speaks/writes up.**

1. The Chair goes through the **Copyright Policy**: Participants are advised that
   1. IEEE SA’s copyright policy is described in [Clause 7](https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7) of the IEEE SA Standards Board Bylaws and [Clause 6.1](https://standards.ieee.org/about/policies/opman/sect6.html) of the IEEE SA Standards Board Operations Manual;
   2. Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy
2. **Patent, Participation, Copyright and policy related subclause:** The Chair goes through the *Patent And Procedures* section in [1478r16](https://mentor.ieee.org/802.11/dcn/21/11-21-1478-16-00be-sept-nov-tgbe-teleconference-agenda.docx).
3. Attendance reminder.
   1. Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
   2. Please record your attendance during the conference call by using the IMAT system:
      1. 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
   3. If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Dennis Sundman ([dennis.sundman@ericsson.com](mailto:dennis.sundman@ericsson.com)) and Alfred Asterjadhi ([aasterja@qti.qualcomm.com](mailto:aasterja@qti.qualcomm.com))
   4. Please ensure that the following information is listed correctly when joining the call:
      1. "[voter status] First Name Last Name (Affiliation)"
4. Agenda.
   1. The Motion document is rev46.
   2. 1218 is updated to r1.
   3. Agenda approved with unanimous consent.
5. Motions: [1982r46](https://mentor.ieee.org/802.11/dcn/20/11-20-1982-46-00be-tgbe-motions-list-for-teleconferences-part-2.pptx)
   1. **Motion 254 (PHY-1)**

Move to approve resolutions to the CIDs:

* 7242, 5490, 7398, 8133 in [1266r3](https://mentor.ieee.org/802.11/dcn/21/11-21-1266-03-00be-cc36-cr-for-coding.docx) *[4 CIDs]*
* 7253, 7254 in [1267r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1267-01-00be-cc36-cr-for-packet-extension.docx) *[2 CIDs]*

and incorporate the text changes into the latest TGbe draft.

Move: Edward Au Second: Bin Tian

Discussion: No discussion.

Result: Approved with unanimous consent.

* 1. **Motion 255 (MAC-1)**

Move to approve resolutions to the CIDs:

* 6029, 6030, 6679, 6680, 6682, 6683, 6710, 7512, 6308, 6736, 8200, 8201, 8202, 8203, 8242, 8243, 8244, 6377, 6681 in [1360r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1360-02-00be-cc-36-cr-for-35-3-11-and-35-3-12.docx) *[19 CIDs]*
* 8156, 6606, 5799, 8155, 5800, 4164 in [1249r6](https://mentor.ieee.org/802.11/dcn/21/11-21-1249-06-00be-cc36-cr-for-eht-om-part-ii.docx) *[6 CIDs]*
* 6729 in [1421r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1421-01-00be-cc36-cr-for-cid-6729.docx) *[1 CID]*
* 4006, 4290 in [1401r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1401-00-00be-resolution-for-cids-related-to-status-code-field.docx) *[2 CIDs]*
* 4094, 4130, 4131, 4302, 5069, 5229, 5575, 5576, 5577, 5891, 5892, 6115, 6116, 6160, 6161, 6180, 6749, 7020, 7400, 7401, 7403, 7404, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7510, 7562, 7877, 8254, 8255, 8256, 6111, 6113, 4840 in [1425r3](https://mentor.ieee.org/802.11/dcn/21/11-21-1425-03-00be-cc-36-cr-for-4-5-3.docx) *[38 CIDs]*

and incorporate the text changes into the latest TGbe draft.

Move: Ming Gan Second: Po-Kai Huang

Discussion: No discussion.

Result: Approved with unanimous consent.

* 1. **Motion 256 (MAC-2)**

Move to approve resolutions to the CIDs:

* 6715, 6716, 7890 in [1275r5](https://mentor.ieee.org/802.11/dcn/21/11-21-1275-05-00be-cc36-cr-for-d1-0-proxy-arp-cids.docx) *[3 CIDs]*
* 4235, 4837, 5266, 8208, 4754, 5450, 6775, 4414, 6774, 4415, 5104, ~~5105~~, 5168, 5169, 8250, 7781, 4416, 4236, 4727, 4417, 7574, 4728, 7779, 8210, 6321, 5106, 8351, 7783, 7780, 8171, 5941, 6020, 7576, 7573, 4817, 7572, 5745 in [1339r3](https://mentor.ieee.org/802.11/dcn/21/11-21-1339-03-00be-cc36-cr-for-35-3-15-7.docx) *[37 CIDs]*
* 4379, 5212, 5255, 6272, 5298, 6203, 5299, 5301, 5302, 5666, 5674, 5836, 6112, 8222, 6271, 6273, 6274, 6275, 8334, 8335, 8185, 6454, 6276, 8186, 8187, 6452, 6453, 7366, 7386, 7459, 5647 in [1426r5](https://mentor.ieee.org/802.11/dcn/21/11-21-1426-05-00be-cc-36-cr-for-35-3-5-1-and-35-3-5-3.docx) *[31 CIDs]*

and incorporate the text changes into the latest TGbe draft.

Move: Mike Montemurro Second: Po-Kai Huang

Discussion: No discussion.

Result: Approved with unanimous consent.

* 1. **Motion 257 (Joint-1)**

Move to approve resolutions to the CIDs:

* 8074, 7391, 5204, 7688, 7689, 4506, 7029, 4880, 4882, 7908, 7030, 4582, 7354, 7032, 7031, 7027, 7033, 5797, 7034, 5798, 7402, 7353, 4326, 4325, 7897, 5796, 7026, 7907, 7904, 4881 in [1488r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1488-01-00be-cr-trigger-frame-eht-user-info-field-9-3-1-22-1-2-2.docx) *[30 CIDs]*

and incorporate the text changes into the latest TGbe draft.

Move: Yanjun Sun Second: Mike Montemurro

Discussion: No discussion.

Result: Approved with unanimous consent.

1. Technical Submissions**: CRs**
   1. [**1592r1**](https://mentor.ieee.org/802.11/dcn/21/11-21-1592-01-00be-cr-trigger-frame-padding.docx) **CR Trigger frame padding Yanjun Sun [1C SP-10’]**

Yanjun goes through the document. No discussion.

SP: Do you agree to resolve the following CIDs listed in [1592r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1592-01-00be-cr-trigger-frame-padding.docx) and incorporate the text changes into the latest TGbe draft?

* 5544

Discussion: No discussion.

Result: Supported with no objection from the group.

* 1. [**1546r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1546-00-00be-cr-trigger-frame-special-user-info-field.docx) **CR Trigger Frame Special User Info field Yanjun Sun [38C 45’]**

Yanjun goes through the document. Some minor discussion and updates to the document.

SP: Do you agree to resolve the following CIDs listed in [1546r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1546-01-00be-cr-trigger-frame-special-user-info-field.docx) and incorporate the text changes into the latest TGbe draft?

* 6823,6698,7036,7693,4884,7037,7799,8161,4507,7694,7482,5024,7898,6697,7691,
* 7692,4883,5511,7035,8075,7902,4328,7695,8076,8077,4329,5512,5119,4885,4508,
* 7038,7696,5120,7739,5545,4887,4606,4607

Discussion: No discussion.

Result: Supported with no objection from the group.

1. Technical Submissions: PDTs
   1. [**1613r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1613-00-00be-pdt-reference-for-sr.docx) **PDT Reference for SR Zinan Lin [PDT 15’]**

Zinan goes through the document.

SP: Do you agree to incorporate the proposed text changes of [1613r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1613-01-00be-pdt-reference-for-sr.docx) into the latest TGbe draft?

Discussion: No discussion.

Result: Supported with no objection from the group.

1. Technical Submissions:
   1. [**1218r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1218-00-00be-random-access-with-capture.pptx) **Random access with capture Jonas Sedin [25’]**

Summary: The authors propose power control to allow different received powers when using UORA. The idea is that if collisions occur, the stronger power may be correctly received.

Discussion:

C: I have a question regarding the target received power, is your suggestion to go against the recommendation from the AP?

A: Yes.

C: But this received power has been recommended by the AP to be able to decode the other RUs.

C: Here there are different STAs in the uplink, and the oscillators may be different. If we also add this variable power levels we introduce even more imperfectors.

A: In this simulation we do not take this into account, but probably we should look at it. I understand it as quite large power differences should be fine for decoding, but ofc requires more study.

C: In the case where you consider power ramping. Is the intention to benefit users that have previously experienced problems?

A: Yes.

C: If a user transmits, and the transmission fails. Is it possible on the user side to know why he failed? Otherwise, he may just ramp his power and hurting others.

A: I think it is difficult to know why you fail, so that is plausible. But I think increasing power is always beneficial.

C: In the random scheme which distribution of the values have you chosen?

A: Uniformely random.

C: In the random scheme, those with the lower power will be sacrificed.

A: Yes, if you want to cheat you can cheat.

C: How can the AP know it’s a collision so it can update its OCW value?

A: I’m not sure if I misunderstand you, but wouldn’t you have the same problem already in the .11ax.

C: In .11ax we know if there is a collision.

C: There is a power measurement and a powersetting. By reducing the power other failures may occur.

A: Good point.

C: In a real system RSS we usually have a +- 3dB accuracy and due to other accuracies, we have a -6 dB to +6dB accuracy. So I doubt we would see any benefit in a real system.

C: I think UORA is mostly used for STAs very far away. In those cases it is always good to bump up your power to the maximum.

C: The power constraint may cause a big impact on the throughput. So, I would suggest to also look at the throughput in the simulations.

C: We may need some link level simulations to verify that this works. I believe, for example that the 3dB is not sufficient for decoding.

C: Clarification of the figures. Do you know why there is no effect already in 3 users per RU? Do you have any insight? Even with 2 users there should be lots of collisions.

A: I expect that you don’t have any problems with collisions anyhow. But probably we should look more into it. It may be if we zoom into the figures we can see more effects of the collisions. The y-axis is in seconds.

C: Do you also drop the edge users by up to 9 dB?

A: Yes.

C: Hidden node problem may be something to look at when changing TX power.

1. AoB:
   1. The Chair notifies that the Joint next week will be a MAC call.
2. Adjourn at 11:57.