IEEE P802.11  
Wireless LANs

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| TGbe July Sept Teleconference Minutes | | | | |
| Date: 2022-07-28 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jason Yuchen Guo | Huawei |  |  | guoyuchen@huawei.com |
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|  |  |  |  |  |

Abstract

This document contains the minutes for the IEEE 802.11 TGbe teleconferences from July to September 2022.

Revision history:

* Rev0: Add the minutes from July 27 to August 17.
* Rev1: Add the minutes from August 24 to August 25.
* Rev2: Add the attendee list for the joint call in August 24.
* Rev3: Add the minutes for the followup meetings
* Rev4: Add the minutes for the followup meetings
* Rev5: Include the full motion text in the minutes.

Abbreviations:

* C: Comment.

# 1st Conf. Call: July 27 (10:00–12:00 ET)–JOINT

* The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order.
* IEEE 802 and 802.11 IPR policy and procedure
  + 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**.

* + Copyright Policy: Participants are advised that
    - 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;
    - 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

**Copyright Policy was presented.**

* + **Patent, Participation, Copyright and policy related subclause:** Please refer to Patent And Procedures
* Attendance reminder.
  + Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
  + Please record your attendance during the conference call by using the IMAT system:
    - 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 “<Joint TGbe > conference call that you are attending.
  + If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Jason Y. Guo ([guoyuchen@huawei.com](mailto:guoyuchen@huawei.com)) and Alfred Asterjadhi ([asterjadhi@gmail.com](mailto:asterjadhi@gmail.com))
  + Please ensure that the following information is listed correctly when joining the call:
    - "[voter status] First Name Last Name (Affiliation)"
  + Attendee List

|  |  |  |  |
| --- | --- | --- | --- |
| **Breakout** | **Timestamp** | **Name** | **Affiliation** |
| TGbe (Joint) | 7/27 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Baek, SunHee | LG ELECTRONICS |
| TGbe (Joint) | 7/27 | Bahn, Christy | IEEE STAFF |
| TGbe (Joint) | 7/27 | Bankov, Dmitry | IITP RAS |
| TGbe (Joint) | 7/27 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (Joint) | 7/27 | Carney, William | Sony Group Corporation |
| TGbe (Joint) | 7/27 | Chemrov, Kirill | IITP RAS |
| TGbe (Joint) | 7/27 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (Joint) | 7/27 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (Joint) | 7/27 | Chng, Shi Baw | BAWMAN LLC |
| TGbe (Joint) | 7/27 | Choi, Jinsoo | LG ELECTRONICS |
| TGbe (Joint) | 7/27 | CHUN, JINYOUNG | LG ELECTRONICS |
| TGbe (Joint) | 7/27 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (Joint) | 7/27 | Erkucuk, Serhat | Ofinno |
| TGbe (Joint) | 7/27 | Fang, Yonggang | Mediatek |
| TGbe (Joint) | 7/27 | Fischer, Matthew | Broadcom Corporation |
| TGbe (Joint) | 7/27 | Gee, Thomas | Qorvo |
| TGbe (Joint) | 7/27 | Gu, Xiangxin | Unisoc |
| TGbe (Joint) | 7/27 | GUIGNARD, Romain | Canon Research Centre France |
| TGbe (Joint) | 7/27 | Haider, Muhammad Kumail | Facebook |
| TGbe (Joint) | 7/27 | Handte, Thomas | Sony Corporation |
| TGbe (Joint) | 7/27 | Hart, Brian | Cisco Systems, Inc. |
| TGbe (Joint) | 7/27 | Hervieu, Lili | Cable Television Laboratories Inc. (CableLabs) |
| TGbe (Joint) | 7/27 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Hu, Chunyu | Facebook |
| TGbe (Joint) | 7/27 | Huang, Lei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 7/27 | Huq, Kazi Mohammed Saidul | Ofinno |
| TGbe (Joint) | 7/27 | Inohiza, Hirohiko | Canon |
| TGbe (Joint) | 7/27 | Kandala, Srinivas | SAMSUNG |
| TGbe (Joint) | 7/27 | Kim, Yongho | Korea National University of Transportation |
| TGbe (Joint) | 7/27 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| TGbe (Joint) | 7/27 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 7/27 | Ko, Geonjung | WILUS Inc. |
| TGbe (Joint) | 7/27 | Lanante, Leonardo | Ofinno |
| TGbe (Joint) | 7/27 | Levy, Joseph | InterDigital, Inc. |
| TGbe (Joint) | 7/27 | Li, Yapu | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 7/27 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (Joint) | 7/27 | Lu, kaiying | MediaTek Inc. |
| TGbe (Joint) | 7/27 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 7/27 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 7/27 | Mehrnoush, Morteza | Facebook |
| TGbe (Joint) | 7/27 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 7/27 | Moon, Juseong | Korea National University of Transportation |
| TGbe (Joint) | 7/27 | Naik, Gaurang | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Ng, Boon Loong | Samsung Research America |
| TGbe (Joint) | 7/27 | Ozbakis, Basak | VESTEL |
| TGbe (Joint) | 7/27 | Park, Sungjin | Senscomm |
| TGbe (Joint) | 7/27 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (Joint) | 7/27 | Pushkarna, Rajat | Panasonic Asia Pacific Pte Ltd. |
| TGbe (Joint) | 7/27 | Quan, Yingqiao | Unisoc |
| TGbe (Joint) | 7/27 | Ratnam, Vishnu | Samsung Research America |
| TGbe (Joint) | 7/27 | Redlich, Oded | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 7/27 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (Joint) | 7/27 | Schelstraete, Sigurd | MaxLinear |
| TGbe (Joint) | 7/27 | Sevin, Julien | Canon Research Centre France |
| TGbe (Joint) | 7/27 | Shilo, Shimi | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 7/27 | Song, Hao | Intel Corporation |
| TGbe (Joint) | 7/27 | Tsodik, Genadiy | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 7/27 | Varshney, Prabodh | Nokia |
| TGbe (Joint) | 7/27 | Verenzuela, Daniel | Sony Corporation |
| TGbe (Joint) | 7/27 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (Joint) | 7/27 | Wang, Qi | Apple, Inc. |
| TGbe (Joint) | 7/27 | Wei, Dong | NXP Semiconductors |
| TGbe (Joint) | 7/27 | Wentink, Menzo | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Wu, Kanke | Qualcomm Incorporated |
| TGbe (Joint) | 7/27 | Wullert, John | Peraton Labs |
| TGbe (Joint) | 7/27 | Xu, Fangxin | Longsailing Semiconductor |
| TGbe (Joint) | 7/27 | Yamada, Ryota | SHARP CORPORATION |
| TGbe (Joint) | 7/27 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (Joint) | 7/27 | Yee, James | MediaTek Inc. |
| TGbe (Joint) | 7/27 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (Joint) | 7/27 | Zhang, Jiayi | Ofinno |
| TGbe (Joint) | 7/27 | Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

* Announcements:
  + The chair announces that the Draft P802.11be\_D2.1 is available in the member’s area.
* TGbe editor’s report: [[972r](https://mentor.ieee.org/802.11/dcn/22/11-22-0972-05-00be-tgbe-editor-s-report-on-lb266.ppt)6](https://mentor.ieee.org/802.11/dcn/22/11-22-0972-06-00be-tgbe-editor-s-report-on-lb266.ppt)
  + Discussions
    - C: you also mentioned CID 14114, is it some other CID?
    - A: it is a typo, it should be 14113
* TGbe chair’s status:
  + **CR progress tracking:** 1) Monthly Status, 2) Overall Status, 3) Top 20 Assignees
  + **Tasks for POCs (in particular the POCs for MAC/Joint in Top 20):** Send an e-mail with a plan on the comment resolution phases. Something along these lines:
    - **Phase 1:** I have a total of ***X*** CIDs, of which I plan to resolve ***Y*** CIDs during the July to Sept Conf calls, ***Z*** CIDs during the September Ad-Hoc and ***W*** CIDs during the September F2F. Hopefully the sum of the last set of variables is ***X***.
    - **Phase 2: (FYI, i.e., no need for now, since it is a task for after Sept F2F)** I have a total of ***X*** CIDs, of which I plan to resolve ***Y*** CIDs during the Sept to Nov Conf calls, ***Z*** CIDs during the November Ad-Hoc (if scheduled) and ***W*** CIDs during the November F2F. The sum of the last set of variables is ***X***.
  + **Guidelines:** Updated item 10 in [11-20/984r14](https://mentor.ieee.org/802.11/dcn/20/11-20-0984-14-00be-tgbe-teleconference-guidelines.docx)
* Agenda
  + Technical Submissions**: CRs**
    - [1177r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1177-00-00be-lb266-cr-for-35-2-2.docx) LB266 CR for 35.2.2 Yanjun Sun [15C]
    - [1090r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1090-00-00be-lb266-cr-for-section-9-3-1-19-part2.doc) LB266 CR for Section 9.3.1.19 - part2 Genadiy Tsodik [5C]
    - [1165r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1165-00-00be-lb266-cr-document-resolving-comments-related-to-annex-b.docx) CR doc. resolving comms rel. to Annex-B Rajat Pushkarna [5C]
    - [1124r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1124-01-00be-lb266-cr-for-9-3-1-22-misc.docx) LB266 CR for 9.3.1.22 MISC Yanjun Sun [3C]
    - [1120r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1120-00-00be-lb266-cr-for-cids-of-4-3-16a.docx) CR for CIDs of 4.3.16a Yanyi Ding [2C]
    - [1194r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1194-00-00be-lb266-cr-for-9-4-1-70.docx) LB266 CR for 9.4.1.70 Jinyoung Chun [11C]
    - [1131r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1131-00-00be-lb266-cr-on-9-4-1-71.docx) LB266 CR on 9.4.1.71 Jinyoung Chun [6C]
  + Discussion
    - Revision changes
  + Agenda approved with unanimous consent
* Technical Submissions**: CR**
  + [1177r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1177-00-00be-lb266-cr-for-35-2-2.docx) LB266 CR for 35.2.2 Yanjun Sun

C: the case of BW<320MHz is missing, we need to add this case in this paragraph

C: have a different comment on the punctured part, go offline discussion

C: for 13886, how about HT PPDU, could it be used to carry the MU-RTS?

C: we only need to care about the MU PPDU, just exclude them

C: we don't have VHT MU PPDU, maybe we can use VHT PPDU addressed to multiple users

C: we have VHT PPDU in the baseline

C: why do we mention VHT MU PPDU and HE MU PPDU here, should be defined in other places

C: double negative is confusing, what kind of PPDU can carry the MU-RTS

C: for EHT device, can they use VHT PPDU to carry the MU-RTS? Since EHT device is broader than the HE device.

**SP1:** Do you agree to resolve the following CIDs listed in [11-22/1177r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1177-01-00be-lb266-cr-for-35-2-2.docx) and incorporate the text changes into the latest TGbe draft?

         11130, 11095, ~~13885~~, 13886, 11096, 12508, 12509, 13887, 13847, 13976, 13888, 10995, 13319, 13977, 10922

Discussion: None.

Result: No objection.

* + [1090r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1090-00-00be-lb266-cr-for-section-9-3-1-19-part2.doc) LB266 CR for Section 9.3.1.19 - part2 Genadiy Tsodik

C: Can you show the exact text in the spec?

C: why do you remove the text "the RA is broadcast"?

C: I like to keep the original sentence because the STA will check whether the RA is broadcast

C: Would the text in the chat box work for everybody? Use the RA field rather than the number of user info fields

**SP2:** Do you agree to resolve the following CIDs listed in [11-22/1090r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1090-02-00be-lb266-cr-for-section-9-3-1-19-part2.doc) and incorporate the text changes into the latest TGbe draft?

         11624, 11625, 11626, 11627, 11896

SP scheduled for next Joint call (on 1090r2), pending offline discussions.

* + [1165r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1165-00-00be-lb266-cr-document-resolving-comments-related-to-annex-b.docx) CR doc. resolving comms rel. to Annex-B Rajat Pushkarna

C: For EHT compressed beamforming, is it mandatory for EHT APs?

C: I think it should be optional for AP, should be mandatory for non-AP STAs

C: if it is optional for AP, then there should be a acapability bit for it, it seems that we don't

C: we have the capability bit of beamformer

C: Does AP support to be a beamformee? Don't see it in HE.

**SP3:** Do you agree to resolve the following CIDs listed in [11-22/1165r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1165-03-00be-lb266-cr-document-resolving-comments-related-to-annex-b.docx) and incorporate the text changes into the latest TGbe draft?

         11839, 11840, 11841, 11846, 13532

Discussion: None.

Result: No objection.

* + [1124r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1124-01-00be-lb266-cr-for-9-3-1-22-misc.docx) LB266 CR for 9.3.1.22 MISC Yanjun Sun

C: we should also add a reference of 35.5.2.2.3 after 26.5.2.2.3 in the frame format subclause

**SP4:** Do you agree to resolve the following CIDs listed in [11-22/1124r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1124-03-00be-lb266-cr-for-9-3-1-22-misc.docx) and incorporate the text changes into the latest TGbe draft?

         11491, 10975, 10375

Discussion: None.

Result: No objection.

Note: R4 will include the reference to the 35 related subclause to pertaining subclause in 9.

* + [1120r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1120-00-00be-lb266-cr-for-cids-of-4-3-16a.docx) CR for CIDs of 4.3.16a Yanyi Ding

C: for the last CID 13216, we all know that in D2.0, the max number of SS is 8, but now it is a new round, people may bring new discussion regarding the SS > 8, here it seems that you disable that possibility

C: defer this CID for now

C: are you not good with the resolution text?

C: at least we need some discussion

C: Rui is not here, he wants to have more discussion for his CID

C: there are other comments talking about 16 spatial streams, better discuss together

**SP5:** Do you agree to resolve the following CIDs listed in [11-22/1120r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1120-00-00be-lb266-cr-for-cids-of-4-3-16a.docx) and incorporate the text changes into the latest TGbe draft?

         10965~~, 13216~~

SP scheduled for next Joint call, pending offline discussions.

* + [1194r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1194-00-00be-lb266-cr-for-9-4-1-70.docx) LB266 CR for 9.4.1.70 Jinyoung Chun

C: Prefer that we don't change the format

C: Regarding changing the partial BW info, there's no objection to keep the same format

C: have some offline discussion regarding this point

Due to time limit, this document will be rescheduled to the next joint call.

* Adjourned at 12:00

# 2nd Conf. Call: July 28 (10:00–12:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-01-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 3rd Conf. Call: August 01 (19:00–21:00 ET)–PHY

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1238-00-00be-minutes-for-tgbe-phy-ad-hoc-cc-july-to-sept-2022.docx

# 3rd Conf. Call: August 01 (19:00–21:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-01-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 4th Conf. Call: August 03 (10:00–12:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-05-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 5th Conf. Call: August 10 (10:00–12:00 ET)–JOINT

* The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order.
* IEEE 802 and 802.11 IPR policy and procedure
  + 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**.

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    - 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

**Copyright Policy was presented.**

* + **Patent, Participation, Copyright and policy related subclause:** Please refer to Patent And Procedures
* Attendance reminder.
  + Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
  + Please record your attendance during the conference call by using the IMAT system:
    - 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 “<Joint TGbe > conference call that you are attending.
  + If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Jason Y. Guo ([guoyuchen@huawei.com](mailto:guoyuchen@huawei.com)) and Alfred Asterjadhi ([asterjadhi@gmail.com](mailto:asterjadhi@gmail.com))
  + Please ensure that the following information is listed correctly when joining the call:
    - "[voter status] First Name Last Name (Affiliation)"
  + Attendee List

|  |  |  |  |
| --- | --- | --- | --- |
| **Breakout** | **Timestamp** | **Name** | **Affiliation** |
| TGbe (Joint) | 8/10 | Aboulmagd, Osama | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGbe (Joint) | 8/10 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (Joint) | 8/10 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Baek, SunHee | LG ELECTRONICS |
| TGbe (Joint) | 8/10 | Bahn, Christy | IEEE STAFF |
| TGbe (Joint) | 8/10 | Baykas, Tuncer | Ofinno |
| TGbe (Joint) | 8/10 | Cao, Rui | NXP Semiconductors |
| TGbe (Joint) | 8/10 | Carney, William | Sony Group Corporation |
| TGbe (Joint) | 8/10 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (Joint) | 8/10 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (Joint) | 8/10 | Chng, Shi Baw | BAWMAN LLC |
| TGbe (Joint) | 8/10 | CHUN, JINYOUNG | LG ELECTRONICS |
| TGbe (Joint) | 8/10 | Chung, Chulho | SAMSUNG |
| TGbe (Joint) | 8/10 | Coffey, John | Realtek Semiconductor Corp. |
| TGbe (Joint) | 8/10 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (Joint) | 8/10 | Erkucuk, Serhat | Ofinno |
| TGbe (Joint) | 8/10 | Fan, Shuang | ZTE Corporation |
| TGbe (Joint) | 8/10 | Fischer, Matthew | Broadcom Corporation |
| TGbe (Joint) | 8/10 | Fujimori, Yuki | Canon Research Centre France |
| TGbe (Joint) | 8/10 | Gu, Xiangxin | Unisoc |
| TGbe (Joint) | 8/10 | Guo, Yuchen | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Hart, Brian | Cisco Systems, Inc. |
| TGbe (Joint) | 8/10 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (Joint) | 8/10 | Hsieh, Hung-Tao | MediaTek Inc. |
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| TGbe (Joint) | 8/10 | Huang, Lei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 8/10 | Huang, Po-Kai | Intel |
| TGbe (Joint) | 8/10 | Huq, Kazi Mohammed Saidul | Ofinno |
| TGbe (Joint) | 8/10 | Jang, Insun | LG ELECTRONICS |
| TGbe (Joint) | 8/10 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (Joint) | 8/10 | Kim, Sanghyun | WILUS Inc |
| TGbe (Joint) | 8/10 | Kim, Yongho | Korea National University of Transportation |
| TGbe (Joint) | 8/10 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (Joint) | 8/10 | Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| TGbe (Joint) | 8/10 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Ko, Geonjung | WILUS Inc. |
| TGbe (Joint) | 8/10 | Koundourakis, Michail | Samsung Cambridge Solution Centre |
| TGbe (Joint) | 8/10 | Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| TGbe (Joint) | 8/10 | Lanante, Leonardo | Ofinno |
| TGbe (Joint) | 8/10 | Levy, Joseph | InterDigital, Inc. |
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| TGbe (Joint) | 8/10 | Lu, kaiying | MediaTek Inc. |
| TGbe (Joint) | 8/10 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 8/10 | Max, Sebastian | Ericsson AB |
| TGbe (Joint) | 8/10 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Moon, Juseong | Korea National University of Transportation |
| TGbe (Joint) | 8/10 | Nayak, Peshal | Samsung Research America |
| TGbe (Joint) | 8/10 | Nezou, Patrice | Canon Research Centre France |
| TGbe (Joint) | 8/10 | Ng, Boon Loong | Samsung Research America |
| TGbe (Joint) | 8/10 | Ouchi, Masatomo | Canon |
| TGbe (Joint) | 8/10 | Palayur, Saju | Maxlinear Inc |
| TGbe (Joint) | 8/10 | Park, Sungjin | Senscomm |
| TGbe (Joint) | 8/10 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (Joint) | 8/10 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (Joint) | 8/10 | Petrick, Albert | InterDigital, Inc. |
| TGbe (Joint) | 8/10 | Quan, Yingqiao | Unisoc |
| TGbe (Joint) | 8/10 | Ratnam, Vishnu | Samsung Research America |
| TGbe (Joint) | 8/10 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| TGbe (Joint) | 8/10 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (Joint) | 8/10 | Sato, Takuhiro | SHARP CORPORATION |
| TGbe (Joint) | 8/10 | Shafin, Rubayet | Samsung Research America |
| TGbe (Joint) | 8/10 | Song, Hao | Intel Corporation |
| TGbe (Joint) | 8/10 | Stanley, Dorothy | Hewlett Packard Enterprise |
| TGbe (Joint) | 8/10 | SUH, JUNG HOON | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Sun, Bo | ZTE Corporation |
| TGbe (Joint) | 8/10 | Sun, Yanjun | Qualcomm Incorporated |
| TGbe (Joint) | 8/10 | Taori, Rakesh | Infineon Technologies |
| TGbe (Joint) | 8/10 | Tsodik, Genadiy | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/10 | Varshney, Prabodh | Nokia |
| TGbe (Joint) | 8/10 | Verenzuela, Daniel | Sony Corporation |
| TGbe (Joint) | 8/10 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (Joint) | 8/10 | Wang, Lei | Futurewei Technologies |
| TGbe (Joint) | 8/10 | Wang, Qi | Apple, Inc. |
| TGbe (Joint) | 8/10 | Wei, Dong | NXP Semiconductors |
| TGbe (Joint) | 8/10 | Wullert, John | Peraton Labs |
| TGbe (Joint) | 8/10 | YANG, RUI | InterDigital, Inc. |
| TGbe (Joint) | 8/10 | Yang, Steve TS | MediaTek Inc. |
| TGbe (Joint) | 8/10 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (Joint) | 8/10 | Yee, James | MediaTek Inc. |
| TGbe (Joint) | 8/10 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (Joint) | 8/10 | Zhang, Jiayi | Ofinno |
| TGbe (Joint) | 8/10 | Zhou, Lei | H3C Technologies Co., Limited |

* **Announcements:**
  + TGbe D2.1.1 will be posted soon in the members’ area
* Status, Updates, Plans:
  + **Updated LB266 Statistics** (as of August 09): Link
  + **Ad-hoc plan for November 2022**
    - IEEE802.11 plenary scheduled in November 13-18, Bangkok, Thailand
    - Proposal: Hold a 2-day (MAC) ad-hoc in the same hotel as the plenary
      * Between Friday and Saturday, 10-12 November 2022
        + Will be hybrid/mixed mode.
      * SP: Do you support to hold a MAC ad-hoc (hybrid) between September and November 2022?
        + Result: 35Y/26N/25A
      * Which option do you prefer:
        + Bangkok (11-12 November) (57)
        + Other location (e.g., bay area, dates TBD) (28)
        + No answer (46)
      * Logistics question: How many members plan to attend in person?
        + Result: 28(+1)Y/51N/11A
  + **Reviewing CRs of documents in Fast Track:**
    - Observations:
      * Docs are generally being reviewed offline from members of TTT, shared in the reflector, discussed on the calls.
      * Several comments in documents in fast track are straightforward (e.g., accepted, or revised inline with the comment/existing draft).
      * However, going over the CID content within the CID table takes time during the conf calls.
        + C: need to have more discussion in the email reflector if we go this way
    - Propose (target CRs in fast-track MAC/Joint [not all (best effort task]):
      * Chairs preliminary review docs and identify CIDs expected to be straightforward and tag them (e.g., 12345 in CID column).
        + Shares with vice chairs, MAC chairs, etc
        + These docs shall be posted to the reflector to seek feedback.
        + Draft changes to be shown in the document itself (including accepted comments)
      * Chair (or Author) uploads a revision where CIDs are tagged to mentor (at least 48 hours in advance w.r.t. scheduled call).
      * Members can then review these tagged CIDs offline and eventually identify if any of these CIDs needs to be untagged
      * During the presentation, the author goes only over the proposed changes to the draft for the tagged CIDs (i.e., no need to read the comment, proposed change, proposed resolution etc).
  + **Reminder**: Provide plan for deferred CIDs within 2 weeks (refer to guidelines):
    - 1) Run SP, or 2) Quarantine (in which case rejection reasons are needed)
* Agenda
  + Technical Submissions**: CRs**
    - [1190r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1190-01-00be-cr-for-cids-in-35-7-2-part-i.docx) CR for CIDs in 35.7.2 Part I Zinan Lin [28C]
  + Motions**:** [1038r5](https://mentor.ieee.org/802.11/dcn/22/11-22-1038-05-00be-tgbe-motions-list-part-3.pptx) (during 2nd hour)
  + SP on 16 SS support (request from PHY ad-hoc): [Result: 22Y, 4N, 5A]
    - Do you agree that 802.11be shall not define operation with more than 8 spatial streams and that the format of all subfields related to spatial streams shall remain unchanged (i.e. no changing the number of bits)?
  + Technical Submissions: CRs (some CIDs depend on above SP)
    - [1222r](https://mentor.ieee.org/802.11/dcn/22/11-22-1222-01-00be-cr-for-5-1-5-1-architecture.docx)1 CR for 5.1.5.1 Architecture Duncan Ho [36C]
    - [1090r](https://mentor.ieee.org/802.11/dcn/22/11-22-1090-02-00be-lb266-cr-for-section-9-3-1-19-part2.doc)3 LB266 CR for Section 9.3.1.19 - part2 Genadiy Tsodik [5C SP]
    - [1131r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1131-00-00be-lb266-cr-on-9-4-1-71.docx) LB266 CR on 9.4.1.71 Jinyoung Chun [6C]
    - [1120r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1120-00-00be-lb266-cr-for-cids-of-4-3-16a.docx) CR for CIDs of 4.3.16a Yanyi Ding [2C SP]
    - [1194r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1194-01-00be-lb266-cr-for-9-4-1-70.docx) LB266 CR for 9.4.1.70 Jinyoung Chun [11C SP]
    - [1231r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1231-00-00be-cr-for-om-part-ii.docx) CR for OM Part II Po-Kai Huang [12C]
  + Discussion
    - Genadiy requsts to present as the first one, no objection
    - 1120r0 deferred
    - Revision changes
    - Motions moved above
  + Agenda approved with unanimous consent
* Technical Submissions**: CR**
  + [1090r](https://mentor.ieee.org/802.11/dcn/22/11-22-1090-02-00be-lb266-cr-for-section-9-3-1-19-part2.doc)3 LB266 CR for Section 9.3.1.19 - part2 Genadiy Tsodik

C: The NOTE should be at the end of the table.

C: VHT/HE/EHT should have different interpretation. In EHT BSS, 2007 is not applicable for HE NDPA.

C: Even it’s applicable for HE NDPA, there are other rules to make sure that the AP will not use AID 2007

C: Applicable (subject to 35.16.1)

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1090r4 and incorporate the text changes into the latest TGbe draft?

        11624, 11625, 11626, 11627, 11896

Discussion: None.

Result: No objection.

* + Motions**:** [1038r5](https://mentor.ieee.org/802.11/dcn/22/11-22-1038-05-00be-tgbe-motions-list-part-3.pptx) (during 2nd hour)

**Motion 415 (Joint-ERRATA)**

**Move to approve resolutions to the CIDs:**

* + 10985, ~~11050,~~ 11952, 13728, 12231, 13457 in [11-22/1047r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1113-01-00be-lb266-cr-for-cids-related-to-35-11.docx) *[5 CIDs]*

**and incorporate the text changes into the latest TGbe draft.**

**Move: Edward Au Second: Ming Gan**

**Discussion: None.**

**Result: Approved with unanimous consent.**

Note: CR for these CIDs obtained majority support during the SP phase, however the CID list that was included in the motion was incorrect. Removed 11050 since it was approved in 11-22/1019r2.

**Motion 416 (Joint)**

**Move to approve resolutions to the CIDs:**

* + 12053, 13314 in [11-22/1046r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1046-01-00be-lb266-cr-for-subclause-9-4-2-199.docx) *[2 CIDs]*
  + 13605, 13345, 13891, 13606, 13607, 13608, 13344, 13611, 12511, 10605, 11771 in [11-22/1125r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1125-03-00be-lb266-cr-for-figure-35-3.docx) *[11 CIDs]*
  + 11130, 11095, 13886, 11096, 12508, 12509, 13887, 13847, 13976, 13888, 10995, 13319, 13977, 10922 in [11-22/1177r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1177-01-00be-lb266-cr-for-35-2-2.docx) *[14 CIDs]*
  + 11839, 11840, 11841, 11846, 13532 in [11-22/1165r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1165-03-00be-lb266-cr-document-resolving-comments-related-to-annex-b.docx) *[5 CIDs]*
  + 11491, 10975, 10375 in [11-22/1124r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1124-04-00be-lb266-cr-for-9-3-1-22-misc.docx) *[3 CIDs]*

**and incorporate the text changes into the latest TGbe draft.**

**Move: Stephen McCann Second: Ross Jian Yu**

**Discussion: None.**

**Result: Approved with unanimous consent.**

**Move to approve resolutions to the CIDs:**

* + 10002, 10414, 11418, 13270, 10018, 11731, 13268, 13324, 13507, 11561, 13786, 13983, 10084, 10106, 10232, 11417, 11563, 10314, 10315, 14022, 11737, 10316, 12616, 11419, 14061, 13269, 11733, 13271, 11732, 10485, 10728, 11734, 11947, 13897, 13898, 13896, 13520, 11180, 11178 in [11-22/1054r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1054-02-00be-cr-for-35-3-5-1-part-i.docx) *[39 CIDs]*
  + 10211, 10992, 11528, 12077, 12611, 12612, 12613, 12974, 13530, 13711 in [11-22/1171r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1171-00-00be-cr-for-misc-cids.docx) *[10 CIDs]*

**and incorporate the text changes into the latest TGbe draft.**

**Move: Mike Montemurro Second: Po-Kai Huang**

**Discussion: None.**

**Result: Approved with unanimous consent.**

**Motion 418 (Withdrawal)**

**Move to approve “Rejected” resolutions to the CIDs:**

* 11078

**With the following rejection reason: “The commenter has withdrawn the comment”.**

**Move: Xiaofei Wang Second: Mike Montemurro**

**Discussion: None.**

**Result: Approved with unanimous consent.**

* + SP on 16 SS support (request from PHY ad-hoc): [Result: 22Y, 4N, 5A]
    - Do you agree that 802.11be shall not define operation with more than 8 spatial streams and that the format of all subfields related to spatial streams shall remain unchanged (i.e. no changing the number of bits)?
      * Discussions:
        + C: what’s the technical reason for not supporting 16SS?
        + A: the spec is quite stable now, it’s late to support 16SS for now, and it’s a good candidate for the next generation
      * Result: 51Y/12N/26A
  + [1190r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1190-01-00be-cr-for-cids-in-35-7-2-part-i.docx) CR for CIDs in 35.7.2 Part I Zinan Lin

C: there are a lot of places using the “NDPA bandwidth”, do we need a global change for it?

C: in the first occurrence of NDPA of bandwidth XXX, add a note to say that the NDPA of bandwidth XXX means the PPDU bandwidth XXX that carries the NDPA.

C: The global change may be the best way forward.

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1190r3 and incorporate the text changes into the latest TGbe draft?

         10814, ~~11660~~, 11661, 11662, 12008, 12539, 12561, 12686, 12687, 13950, 11276, ~~12553~~, 12554, 12558, 12559, 12560, 12562, 13951, 11277, 11664, 11665, 11666, 11667, 12542, 12555, 12557, 12563, 12564

Discussion: None.

Result: No objection.

* Adjourned at 11:59

# 6th Conf. Call: August 11 (10:00–12:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-05-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 7th Conf. Call: August 15 (19:00–21:00 ET)–PHY

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1238-01-00be-minutes-for-tgbe-phy-ad-hoc-cc-july-to-sept-2022.docx

# 7th Conf. Call: August 15 (19:00–21:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-05-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 8th Conf. Call: August 17 (10:00–12:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-05-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 9th Conf. Call: August 24 (10:00–12:00 ET)–JOINT

* The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order
* IEEE 802 and 802.11 IPR policy and procedure
  + **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**.

* + **Copyright Policy: Participants are advised that**
    - 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;
    - 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

**Copyright Policy was presented.**

* + **Patent, Participation, Copyright and policy related subclause:** Please refer to Patent And Procedures
* Attendance reminder.
  + Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
  + Please record your attendance during the conference call by using the IMAT system:
    - 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 “<Joint TGbe > conference call that you are attending.
  + If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Jason Y. Guo ([guoyuchen@huawei.com](mailto:guoyuchen@huawei.com)) and Alfred Asterjadhi ([asterjadhi@gmail.com](mailto:asterjadhi@gmail.com))
  + Please ensure that the following information is listed correctly when joining the call:
    - "[voter status] First Name Last Name (Affiliation)"
  + Attendee List

|  |  |  |  |
| --- | --- | --- | --- |
| **Breakout** | **Timestamp** | **Name** | **Affiliation** |
| TGbe (Joint) | 8/24 | Aboulmagd, Osama | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/24 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGbe (Joint) | 8/24 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Ansley, Carol | Cox Communications Inc. |
| TGbe (Joint) | 8/24 | Baek, SunHee | LG ELECTRONICS |
| TGbe (Joint) | 8/24 | baron, stephane | Canon Research Centre France |
| TGbe (Joint) | 8/24 | Baykas, Tuncer | Ofinno |
| TGbe (Joint) | 8/24 | Cao, Rui | NXP Semiconductors |
| TGbe (Joint) | 8/24 | Carney, William | Sony Group Corporation |
| TGbe (Joint) | 8/24 | Chen, You-Wei | MediaTek Inc. |
| TGbe (Joint) | 8/24 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (Joint) | 8/24 | CHERIAN, GEORGE | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (Joint) | 8/24 | Chng, Shi Baw | BAWMAN LLC |
| TGbe (Joint) | 8/24 | Choi, Jinsoo | LG ELECTRONICS |
| TGbe (Joint) | 8/24 | CHUN, JINYOUNG | LG ELECTRONICS |
| TGbe (Joint) | 8/24 | Chung, Chulho | SAMSUNG |
| TGbe (Joint) | 8/24 | Das, Subir | Peraton Labs |
| TGbe (Joint) | 8/24 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (Joint) | 8/24 | Erkucuk, Serhat | Ofinno |
| TGbe (Joint) | 8/24 | Fan, Shuang | ZTE Corporation |
| TGbe (Joint) | 8/24 | Fang, Yonggang | Mediatek |
| TGbe (Joint) | 8/24 | Fischer, Matthew | Broadcom Corporation |
| TGbe (Joint) | 8/24 | Fujimori, Yuki | Canon Research Centre France |
| TGbe (Joint) | 8/24 | Gu, Xiangxin | Unisoc |
| TGbe (Joint) | 8/24 | Guo, Yuchen | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/24 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (Joint) | 8/24 | Handte, Thomas | Sony Corporation |
| TGbe (Joint) | 8/24 | Hervieu, Lili | Cable Television Laboratories Inc. (CableLabs) |
| TGbe (Joint) | 8/24 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Hsu, Ostrovsky | Xiaomi Inc. |
| TGbe (Joint) | 8/24 | Hu, Chunyu | Facebook |
| TGbe (Joint) | 8/24 | Huq, Kazi Mohammed Saidul | Ofinno |
| TGbe (Joint) | 8/24 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbe (Joint) | 8/24 | Khorov, Evgeny | IITP RAS |
| TGbe (Joint) | 8/24 | Kim, Sanghyun | WILUS Inc |
| TGbe (Joint) | 8/24 | Kim, Yongho | Korea National University of Transportation |
| TGbe (Joint) | 8/24 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Kipness, Michael | IEEE Standards Association (IEEE-SA) |
| TGbe (Joint) | 8/24 | Ko, Geonjung | WILUS Inc. |
| TGbe (Joint) | 8/24 | Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| TGbe (Joint) | 8/24 | Lanante, Leonardo | Ofinno |
| TGbe (Joint) | 8/24 | Li, Yapu | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 8/24 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (Joint) | 8/24 | Liu, Der-Zheng | Realtek Semiconductor Corp. |
| TGbe (Joint) | 8/24 | Lorgeoux, Mikael | Canon Research Centre France |
| TGbe (Joint) | 8/24 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (Joint) | 8/24 | Lu, kaiying | MediaTek Inc. |
| TGbe (Joint) | 8/24 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (Joint) | 8/24 | Ma, Li | MediaTek Inc. |
| TGbe (Joint) | 8/24 | Moon, Juseong | Korea National University of Transportation |
| TGbe (Joint) | 8/24 | Naik, Gaurang | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Nayak, Peshal | Samsung Research America |
| TGbe (Joint) | 8/24 | Ng, Boon Loong | Samsung Research America |
| TGbe (Joint) | 8/24 | Ouchi, Masatomo | Canon |
| TGbe (Joint) | 8/24 | Ozbakis, Basak | VESTEL |
| TGbe (Joint) | 8/24 | Park, Eunsung | LG ELECTRONICS |
| TGbe (Joint) | 8/24 | Park, Minyoung | Intel |
| TGbe (Joint) | 8/24 | Park, Sungjin | Senscomm |
| TGbe (Joint) | 8/24 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (Joint) | 8/24 | Petrick, Albert | InterDigital, Inc. |
| TGbe (Joint) | 8/24 | Pushkarna, Rajat | Panasonic Asia Pacific Pte Ltd. |
| TGbe (Joint) | 8/24 | Quan, Yingqiao | Unisoc |
| TGbe (Joint) | 8/24 | Ratnam, Vishnu | Samsung Research America |
| TGbe (Joint) | 8/24 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (Joint) | 8/24 | Schelstraete, Sigurd | MaxLinear |
| TGbe (Joint) | 8/24 | Sevin, Julien | Canon Research Centre France |
| TGbe (Joint) | 8/24 | Stanley, Dorothy | Hewlett Packard Enterprise |
| TGbe (Joint) | 8/24 | SUH, JUNG HOON | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/24 | Sun, Yanjun | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Taori, Rakesh | Infineon Technologies |
| TGbe (Joint) | 8/24 | Tsodik, Genadiy | Huawei Technologies Co., Ltd |
| TGbe (Joint) | 8/24 | Verenzuela, Daniel | Sony Corporation |
| TGbe (Joint) | 8/24 | Vermani, Sameer | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (Joint) | 8/24 | Wang, Lei | Futurewei Technologies |
| TGbe (Joint) | 8/24 | Wang, Qi | Apple, Inc. |
| TGbe (Joint) | 8/24 | Wei, Dong | NXP Semiconductors |
| TGbe (Joint) | 8/24 | Wu, Kanke | Qualcomm Incorporated |
| TGbe (Joint) | 8/24 | Wu, Tianyu | Apple, Inc. |
| TGbe (Joint) | 8/24 | Wullert, John | Peraton Labs |
| TGbe (Joint) | 8/24 | Yamada, Ryota | SHARP CORPORATION |
| TGbe (Joint) | 8/24 | Yang, Jay | Nokia |
| TGbe (Joint) | 8/24 | Yang, Steve TS | MediaTek Inc. |
| TGbe (Joint) | 8/24 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (Joint) | 8/24 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (Joint) | 8/24 | Zhang, Jiayi | Ofinno |
| TGbe (Joint) | 8/24 | Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

* **Announcements:**
  + None
* Agenda
  + Technical Submissions**: Fast Track CRs**
    - [1120r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1120-01-00be-lb266-cr-for-cids-of-4-3-16a.docx) CR for CIDs of 4.3.16a Yanyi Ding [2C SP 5’]
    - [1194r](https://mentor.ieee.org/802.11/dcn/22/11-22-1194-02-00be-lb266-cr-for-9-4-1-70.docx)2 LB266 CR for 9.4.1.70 Jinyoung Chun [11C SP 5’]
    - [1231r](https://mentor.ieee.org/802.11/dcn/22/11-22-1231-03-00be-cr-for-om-part-ii.docx)3 CR for OM Part II Po-Kai Huang [12C-12GT 10’]
    - [1222r](https://mentor.ieee.org/802.11/dcn/22/11-22-1222-02-00be-cr-for-5-1-5-1-architecture.docx)2 CR for 5.1.5.1 Architecture Duncan Ho [34C-30GT 20’]
    - [1308r](https://mentor.ieee.org/802.11/dcn/22/11-22-1308-03-00be-cr-for-clause-6-3-part-1.docx)3 CR for clause 6.3 part 1 Yan Li [9C-7GT 10’]
  + Motions**:** [1038r6](https://mentor.ieee.org/802.11/dcn/22/11-22-1038-06-00be-tgbe-motions-list-part-3.pptx) (during 2nd hour)
  + Technical Submissions**: CRs**
    - [1131r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1131-01-00be-lb266-cr-on-9-4-1-71.docx) LB266 CR on 9.4.1.71 Jinyoung Chun [6C-6GT 10’]
    - [1270r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1270-01-00be-cr-for-power-boost-factor-cids.docx) CR for Power Boost Factor CIDs Hanqing Lou [5C-5GT 10’]
    - [1311r](https://mentor.ieee.org/802.11/dcn/22/11-22-1311-02-00be-cr-for-clause-6-3-part-2.docx)2 CR for clause 6.3 part 2 Yan Li [8C-7GT 10’]
    - [1312r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1312-02-00be-cr-for-clause-6-3-part-3.docx) CR for clause 6.3 part 3 Yan Li [10C-2GT 10’]
  + Discussion
    - Revision changes
    - Switch order of the first and the second contribution
  + Agenda approved with unanimous consent
* Technical Submissions**: CR**
  + [1194r](https://mentor.ieee.org/802.11/dcn/22/11-22-1194-02-00be-lb266-cr-for-9-4-1-70.docx)2 LB266 CR for 9.4.1.70 Jinyoung Chun

C: suggest include the SP result that we had run regarding this topic to the resolution.

C: for the last CID (12594), what’s the reason for making the change?

C: in MIMO control, the information is expressed from the beamformee’s perspective

C: the current text is clear enough

C: prefer to defer this CID

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1194r2 and incorporate the text changes into the latest TGbe draft?

        10804, 10805, 10806, 12000, 12212, 12213, 12214, 12298, 12299, 12593, ~~12594~~

Discussion: None.

Result: No objection.

* + [1120r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1120-01-00be-lb266-cr-for-cids-of-4-3-16a.docx) CR for CIDs of 4.3.16a Yanyi Ding

C: it is mandatory for 20 MHz operating STA to support wider bandwidith PPDU in 11be, it is just optional to support some size of RU

C: prefer to defer CID 10965 for offline discussion

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1120r2 and incorporate the text changes into the latest TGbe draft?

        ~~10965,~~ 13216

Discussion: None.

Result: No objection.

* + [1231r](https://mentor.ieee.org/802.11/dcn/22/11-22-1231-03-00be-cr-for-om-part-ii.docx)3 CR for OM Part II Po-Kai Huang

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1231r3 and incorporate the text changes into the latest TGbe draft?

        12118, 12119, 10789, 10817, 10818, 12046, 13539, 13561, 13722, 13465, 13466, 11829

Discussion: None.

Result: No objection.

* + [1222r](https://mentor.ieee.org/802.11/dcn/22/11-22-1222-02-00be-cr-for-5-1-5-1-architecture.docx)2 CR for 5.1.5.1 Architecture Duncan Ho

C: according to the definition of the affiliated AP, it seems that the affiliated AP only has the lower MAC function, but in the figure 5-2b, the affiliated AP has higher MAC function

C: the definition does not say the affiliated AP only has lower MAC, I think this figure is fine. The affiliated APs need to handle the legacy STAs anyway, they need to have higher MAC function.

C: The term association is fine, it’s consistent with the current D2.0.

C: Let’s discuss more regarding the definition of the affiliated APs.

C: It seems that the sequence number space of group addressed MSDU is maintained at the MLD level

C: Regarding the SN assignment of the group addressed MSDU, do we need to mention that the encryption is done at the affiliated AP side

C: On CID 10445, one or more links is not correct for the merging function, we can change it to “two or more links”

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1222r3 and incorporate the text changes into the latest TGbe draft?

        10197, 10277, 10278, 10441, 10443, 10444, 10445, 10527, 10774, 11168, 12041, 12225, 12226, 12227, 12259, 12307, 12308, 12309, 12310, 12311, 12312, 12313, 12314, 12315, 12316, 12944, 12945, 12946, 12947, 12948, 12949, 13293, 13294, 13295

Discussion: None.

Result: No objection.

* + [1308r](https://mentor.ieee.org/802.11/dcn/22/11-22-1308-03-00be-cr-for-clause-6-3-part-1.docx)3 CR for clause 6.3 part 1 Yan Li

C: Typo on multi.

C: Add the DCN in the resolution.

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1308r4 and incorporate the text changes into the latest TGbe draft?

        10198, 10199, 10200, 10201, 10202, 10451, 10886, 10887, 11793

Discussion: None.

Result: No objection.

* + Motions**:** [1038r7](https://mentor.ieee.org/802.11/dcn/22/11-22-1038-07-00be-tgbe-motions-list-part-3.pptx)

**Motion 419 (MAC)**

**Move to approve resolutions to the CIDs:**

* + 10153, 12598, 12599, 13050, 12959, 11382, 11384 in [11-22/1129r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1129-01-00be-lb266-cr-cl9-emlsr.docx) *[7 CIDs]*
  + 12410, 12733, 12850, 12852, 12855, ~~11595, 11654, 13079,~~ 11756, 12470, 10508, 13583, 13809, 10102, 11757, 13408, 14076, 12672 in [11-22/1181r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1181-01-00be-lb266-cr-cl35-emlsr-part1.docx) *[15 CIDs]*
  + 10472, 11796, 11797, 10259, 11620, 10260, 10885, 10700, 11799, 12694, 11621, 11800, 10381, 11801, 11622, 10261, 11802, 10263, 11804, 10265, 10382, 10081, 11794, 10266, 12698, 10477, 10478 in [11-22/1179r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1179-02-00be-resolution-of-cids-in-clauses-35-17-1-and-35-17-2-lb-266.docx) *[27 CIDs]*
  + 11404, 10595, 13686, 11710, 12323, 11323, 13351, 12934, 10417, ~~10244, 12635,~~ 12636, ~~10006, 10085, 10418,~~ 12362, ~~13691,~~ 13692, ~~13791, 11440, 13375, 10871, 10420, 11441,~~ 13792, 10419 in [11-22/1159r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1159-01-00be-lb266-cr-for-clause-35-3.docx) *[14 CIDs]*
  + 12432, 13745, 12233, 12878, 11847, 13482, 10207, 10925, 10208, 13492, 10209, 13493, 10210, 11795 in [11-22/1180r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1180-02-00be-resolution-of-cids-in-clauses-9-4-2-313-2-and-9-6-35-related-to-epcs-lb266.docx) *[14 CIDs]*

**and incorporate the text changes into the latest TGbe draft.**

**Move: John Wullert Second: Subir Das**

**Discussion: None.**

**Result: Approved with unanimous consent.**

Note: These are comment resolution documents that obtained ≥ 75% support during the straw poll phase. CID 13583 was accidentally missed from the CID list when the SP was run. It has the same proposed resolution as CID 10508 which was included in the SP list. CIDs 11595 to 13079 were removed as classified as deferred in the document but incorrectly listed in the SP that was ran in the MAC ad-hoc call. 10244 to 11441 were requested to be deferred.

**Motion 420 (MAC)**

**Move to approve resolutions to the CIDs:**

* + 10234, 11739, 11188, 11608, 11738, 13275 in [11-22/1174r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1174-00-00be-cr-for-35-3-5-3.docx) [6 CIDs]
  + 11420, 11562, 12995, 14021, 11735 in [11-22/1054r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1054-03-00be-cr-for-35-3-5-1-part-i.docx) [5 CIDs]
  + 11443, 10881, 10005, 10783, 11264, 11755, 12216, 12360, 13556, 13999, 10129, 10503, 10358, 13334, 10502, 10504, 10506, 10505, 11135, 11576, 12273, 12327, 12419, 12423, 12659 in [11-22/1239r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1239-02-00be-lb266-cr-for-35-3-16-4.docx) [25 CIDs]

**and incorporate the text changes into the latest TGbe draft.**

**Move: Po-Kai Huang Second: Ming Gan**

**Discussion: None.**

**Result: Approved with unanimous consent.**

**Motion 421 (PHY)**

**Move to approve resolutions to the CIDs:**

* 12154 in [11-22/1148r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1148-00-00be-cr-on-cid12154.docx) *[1 CID]*
* 10746, 10747, 10748, 11694, 12848, 13568, 13569 in [11-22/1086r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1086-02-00be-lb266-cr-in-36-3-12-8-2.doc) *[7 CIDs]*
* 10840, 11297, 12028, 12151, 12207, 12297 in [11-22/1163r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1163-00-00be-11be-lb266-cr-for-clause-36-3-14-packet-extension.docx) *[6 CIDs]*
* 12138, 12139, 12140 in [11-22/1169r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1169-00-00be-lb266-cr-on-cid-12138-12139-12140.docx) *[3 CIDs]*
* 10742, 10829, 12130, 12148, 12149, 13952, 13953 in [11-22/1164r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1164-04-00be-11be-lb266-cr-for-clause-36-3-11-mathematical-description-of-signals.docx) *[7 CIDs]*
* 10000, 10177, 10180, 10749, 10831, 10939, 11287, 11359, 11360, 11361, 11695, 11969, 11970, 12189, 12190, 12191, 12203, 12868, 13570, 13571, 13572, 13573 in [11-22/1130r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1130-02-00be-lb266-cr-in-36-3-12-8-3.doc) *[22 CIDs]*

**and incorporate the text changes into the latest TGbe draft.**

**Move: Bin Tian Second: Ross Jian Yu**

**Discussion: None.**

**Result: Approved with unanimous consent.**

**Motion 422 (Joint)**

**Move to approve resolutions to the CIDs:**

* 11624, 11625, 11626, 11627, 11896 in [11-22/1090r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1090-04-00be-lb266-cr-for-section-9-3-1-19-part2.doc) [5 CIDs]
* 10814, 11661, 11662, 12008, 12539, 12561, 12686, 12687, 13950, 11276, 12554, 12558, 12559, 12560, 12562, 13951, 11277, 11664, 11665, 11666, 11667, 12542, 12555, 12557, 12563, 12564 in [11-22/1190r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1190-03-00be-cr-for-cids-in-35-7-2-part-i.docx) [26 CIDs]

**and incorporate the text changes into the latest TGbe draft.**

**Move: Zinan Lin Second: Mahmoud Kamel**

**Discussion: None.**

**Result: Approved with unanimous consent.**

* + [1131r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1131-01-00be-lb266-cr-on-9-4-1-71.docx) LB266 CR on 9.4.1.71 Jinyoung Chun

C: 3rd row of the last paragraph, add “frequency” before “subblock”

**SP:** Do you agree to resolve the following CIDs listed in 11-22/1131r2 and incorporate the text changes into the latest TGbe draft?

        11628, 11687, 12365, 12595, 12596, 12597

Discussion: None.

Result: No objection.

* + [1270r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1270-01-00be-cr-for-power-boost-factor-cids.docx) CR for Power Boost Factor CIDs Hanqing Lou

C: for non-OFDMA transmission, the power boost factor shall always be 1.

C: for non-OFDMA MU MIMO transmission, the power boost factor should not be implementation specific. I think we can set it to 1 in this case.

C: Merge the non-OFDMA MU MIMO transmission with the paragraph of the EHT sounding NDP PPDU.

C: Better to keep them as two separate sentences.

* Adjourned at 12:00

# 10th Conf. Call: August 25 (10:00–12:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-06-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 11th Conf. Call: August 29 (19:00–21:00 ET)–PHY

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1238-02-00be-minutes-for-tgbe-phy-ad-hoc-cc-july-to-sept-2022.docx

# 11th Conf. Call: August 29 (19:00–21:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-07-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# 12th Conf. Call: August 31 (10:00–12:00 ET)–MAC

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1229-07-00be-minutes-for-tgbe-mac-ad-hoc-teleconferences-in-july-to-september-2022.docx

# TGbe September 2022 MAC ad-hoc

Please refer to the following link for the minutes

* https://mentor.ieee.org/802.11/dcn/22/11-22-1572-00-00be-minutes-for-tgbe-mac-ad-hoc-meeting-in-september-7-9-2022.docx