IEEE P802.11  
Wireless LANs

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| TGbe July 2022 Plenary Minutes | | | | |
| Date: 2022-07-11 | | | | |
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|  |  |  |  |  |

Abstract

This document contains the minutes for the July 2022 IEEE 802.11 TGbe plenary sessions.

Revision history:

* Rev0: First version of the document.
* Rev1: added the minutes for the July 12 AM1 TGbe joint session and references for the MAC/PHY ad hoc sessions.
* Rev2: added the minutes for the July 13 AM1 TGbe joint session and references for the MAC/PHY ad hoc sessions.
* Rev3: added the minutes for the July 14 AM1 and AM2 TGbe joint sessions.
* Rev4: added the references for the MAC/PHY ad hoc sessions.
* Rev5: Typo corrected, motion data added.

Abbreviations:

* C: Comment.

# Monday, July 11, MAC/PHY AM1 (08:00-10:00)

Separate meetings for MAC and PHY ad-hoc groups:

* MAC: https://mentor.ieee.org/802.11/dcn/22/11-22-1067-01-00be-minutes-for-tgbe-mac-ad-hoc-sessions-in-july-2022-plenary.docx
* PHY: https://mentor.ieee.org/802.11/dcn/22/11-22-1104-00-00be-minutes-802-11be-phy-ad-hoc-july-plenary.docx

# Monday, July 11, Joint PM1 (13:30-15:30)

1. The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order at 13:30 ET. The Chair notifies the attendees that the agenda is in [11-22-0862r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-02-00be-tgbe-july-2022-meeting-agenda.pptx).
   1. Matthew Fischer (Broadcom) is serving as acting secretary in the absence of a permanent secretary
   2. Note that this is a hybrid meeting, with some participants in person and some participating online through a webex session
2. IEEE-SA Policies and Procedure

The chair reviews the IEEE-SA Patent Policy:

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. Speak up now and respond to this Call for Potentially Essential Patents. **Nobody speaks/writes up**.

1. The chair goes through Other guidelines for IEEE WG meetings, Patent-related information, Participation in IEEE 802 Meetings, and Copyright. The Chair asks that it be minuted that the **Copyright Policy** was presented.
2. Chair provides an attendance reminder:

3.1. Please record your attendance during the session by using the IMAT system:

* + 1. login to imat
    2. select “802 Plenary Mixed-Mode Session – July 2022”
    3. select “SC/LM/WG802.11 Attendance” entry
    4. click “TGbe <MAC/PHY/Joint> session that you are attending
  1. If you are unable to record your attendance contact the Chair Alfred Asterjadhi for assistance

1. Agenda:
   1. Chair reviews proposed agenda found in [11-22-0862r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-02-00be-tgbe-july-2022-meeting-agenda.pptx)
   2. Discussion:
      1. None
   3. Agenda approved with unanimous consent.
2. Announcements:
   1. None
3. Confirm a new secretary, Jason Yuchen Guo (Huawei)
   1. [11-22-1038r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1038-00-00be-tgbe-motions-list-part-3.pptx) under the section July 11, the document contains a motion:

**Move to confirm Jason Yuchen Guo as TGbe Secretary**

Move: Rubayet Shafin (Samsung) Second: Xioafei Wang (Interdigital)

Discussion:

* + 1. Objection, request for the affiliations of the mover and seconder
    2. Objection resolved, through announcement of the affiliations

Result: Approved with unanimous consent.

1. Editor’s report [11-22-0972r3](https://mentor.ieee.org/802.11/dcn/22/11-22-0972-03-00be-tgbe-editor-s-report-on-lb266.ppt)
   1. Editor reviews contents of the editor’s report document [11-22-0972r3](https://mentor.ieee.org/802.11/dcn/22/11-22-0972-03-00be-tgbe-editor-s-report-on-lb266.ppt)
   2. No questions for the editor
2. CR Submissions:
   1. [11-22-0992r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0992-00-00be-lb266-cr-for-9-3-1-22-1.docx) LB266 CR for 9.3.1.22.1 Yanjun Sun (Qualcomm)
      1. Yanjun Sun (Qualcomm) presents the material in the document

C: 11be draft subclause refers to clause 26, so there I no need to have a referenc to subclause 26

C: second CID, some trigger frames have responses which are not TB PPDU

C: CID 10798 – concerned about the modified sentence preventing some behaviour that would be allowed by R2

C: CID 11492 two senetences are not exactly the same, non-AP EHT STA vs baseline only features implemented

**SP1**: Do you agree to resolve the following CIDs listed in 1-22/0992r0 and incorporate the text changes in the latest TGbe draft?

* 10798, 10724, 10976

Discussion: none

Result: No objection

* 1. [11-22-0993r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0993-00-00be-lb266-cr-for-9-3-1-22-3.docx) LB266 CR for 9.3.1.22.3 Yanjun Sun (Qualcomm)
     1. Yanjun Sun (Qualcomm) presents the material in the document

C: within the note, where is the behaviour of an AP restricted as stated?

C: there is no explicit definition of this, but the value of 4095 makes the field become a padding field

C: table 9-51 last entry should be 4095 not 4094

C: 4095 cannot be marked as reserved, because reserved has a different meaning, it can be used in the future, but 4095 cannot be used in the future, it has meaning today

C: CID 10375, cannot add the note text without some normative description of the behavior

**SP2**: Do you agree to resolve the following CIDs listed in 1-22/0993r0 and incorporate the text changes in the latest TGbe draft?

* 12345

Discussion: none

Result: No objection

* 1. [11-22-0999r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0999-00-00be-lb266-cr-for-9-3-1-22-2.docx) LB266 CR for 9.3.1.22.2 Yanjun Sun (Qualcomm)
     1. Yanjun Sun (Qualcomm) presents the material in the document

**SP3**: Do you agree to resolve the following CIDs listed in 1-22/0999r0 and incorporate the text changes in the latest TGbe draft?

* 11493, 10960, 10949, 10950, 10961, 11996, 10963, 10962, 11997

Discussion: none

Result: No objection

* 1. [11-22-1016r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1016-00-00be-cr-for-table-35-7.docx) CR for Table 35-7 Po-kai Huang (Intel)
     1. Po-kai Huang (Intel) presents the material in the document

C: some were reserved and now explicitly set to 0

C: correct, they are not actually reserved

C: request for deferral of SP

* 1. [11-22-1887r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1887-01-00be-conditional-str.pptx) Conditional SR Evgeny Khorov (IITP RAS)
     1. Evgeny presents the material in the document

C: throughput graph slide 6, achieved only by modifying the MCS? Or are there other parameters that are modified?

C: rate selection includes more than just MCS, e.g. number of spatial streams

C: how do you make the devices transmit with the interference present?

C: ran continuous traffic on one link, up on one side, down on other

C: for which scnearios will this provide enhanced throughput? With the interference present, you are operating with two reduced MCS links, why not just operate one link at a higher MCS?

**SP2**: Do you agree to resolve CID 13212 by developing Conditional STR signalling tha allows MLDs to indicate thst STR is possible with reduced MCS?

Discussion: none

Result: 40Y 63N 57A

* 1. No presentation volunteers to fit into the remaining time

1. Recess at 15:22 ET

# Monday, July 11, MAC/PHY PM2 (16:00-18:00)

The PHY ad-hoc meeting is canceled.

For MAC ad-hoc group:

* MAC: https://mentor.ieee.org/802.11/dcn/22/11-22-1067-01-00be-minutes-for-tgbe-mac-ad-hoc-sessions-in-july-2022-plenary.docx

# Tuesday, July 12, Joint AM1 (08:00-10:00)

1. The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order at 08:00 ET. The Chair notifies the attendees that the agenda is in [11-22-0862r4](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-04-00be-tgbe-july-2022-meeting-agenda.pptx).
   1. Note that this is a hybrid meeting, with some participants in person and some participating online through a webex session
2. IEEE-SA Policies and Procedure

The chair reviews the IEEE-SA Patent Policy:

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. Speak up now and respond to this Call for Potentially Essential Patents. **Nobody speaks/writes up**.

1. The chair goes through Other guidelines for IEEE WG meetings, Patent-related information, Participation in IEEE 802 Meetings, and Copyright. The Chair asks that it be minuted that the **Copyright Policy was presented**.
2. Chair provides an attendance reminder:

4.1. Please record your attendance during the session by using the IMAT system:

* + 1. login to imat
    2. select “802 Plenary Mixed-Mode Session – July 2022”
    3. select “SC/LM/WG802.11 Attendance” entry
    4. click the corresponding session that you are attending
  1. If you are unable to record your attendance contact the Chair Alfred Asterjadhi for assistance

1. Agenda:
   1. Chair reviews proposed agenda found in [11-22-0862r4](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-04-00be-tgbe-july-2022-meeting-agenda.pptx)

[1016r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1016-00-00be-cr-for-table-35-7.docx) CR for Table 35-7 Po-Kai Huang [4C 15’]

[1000r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1000-00-00be-lb266-cr-for-9-3-1-22-4.docx) LB266 CR for 9.3.1.22.4 Yanjun Sun [2C 10’]

[1001r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1001-00-00be-lb266-cr-for-9-3-1-22-5.docx) LB266 CR for 9.3.1.22.5 Yanjun Sun [9C 15’]

[1042r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1042-00-00be-lb266-caluse3-2-cids-part-1.doc) LB266-Caluse3.2-CIDs-part-1 Ross Jian Yu [6C 15’]

[887r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0887-02-00be-enhancements-for-massive-tsn.pptx) Enhancements for massive TSN Evgeny Khorov [1C 20’]

* 1. Discussion:
     1. None
  2. Agenda approved with unanimous consent.

1. Announcements:
   1. None
2. CR Submissions:
   1. [11-22-1016r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1016-00-00be-cr-for-table-35-7.docx) CR for Table 35-7 Po-Kai Huang (Intel)
      1. Po-Kai Huang (Intel) presents the material in the document

C: according to 11ax spec, B1-B3 are reserved for 2.4GHz, do you need to mention they shall be set to 0?

C: something is wrong with the table of parsing

C: support this proposal, it's necessary because 11ax already says that they shall be set to 0, reasonable to have this clarification

**SP1**: Do you agree to resolve the following CIDs listed in 11-22/1016r0 and incorporate the text changes in the latest TGbe draft?

* 11057, 12012, 12874, 13448

Discussion: none

Result: No objection

* 1. [11-22-1000r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1000-01-00be-lb266-cr-for-9-3-1-22-4.docx) LB266 CR for 9.3.1.22.4 Yanjun Sun (Qualcomm)
     1. Yanjun Sun (Qualcomm) presents the material in the document

C: it's better for the PHY group to decide whether we need 16ss or not, then we can handle this CID

C: suggest to add dot11EHTBaseLineFeaturesImplementedOnly as the condition

**SP2**: Do you agree to resolve the following CIDs listed in 1-22/1000r1 and incorporate the text changes in the latest TGbe draft?

* 13547, 10801

Discussion: none

Result: No objection

* 1. [11-22-1001r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1001-00-00be-lb266-cr-for-9-3-1-22-5.docx) LB266 CR for 9.3.1.22.5 Yanjun Sun (Qualcomm)
     1. Yanjun Sun (Qualcomm) presents the material in the document

C: if the resolution is accepted, then no instruction is provided to the editor.

**SP3**: Do you agree to resolve the following CIDs listed in 1-22/1001r0 and incorporate the text changes in the latest TGbe draft?

* 11998,10981,11495,11496,13048,10959,12353,11497,11498

Discussion: none

Result: No objection

* 1. [11-22-1042r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1042-01-00be-lb266-caluse3-2-cids-part-1.doc) CR for Table 35-7 Ross Jian Yu (Huawei)
     1. Ross Jian Yu (Huawei) presents the material in the document

C: need to remove the underline becuase it's from baseline. We don’t have any underline in the baseline text.

C: “,” and “or” should be underlined

C: what's the context of this definition for lentency sensitive traffic? Do we use it anywhere in the spec?

C: change “imlementation specific” to “application specific”

C: does the STA decide it's latency sensitive traffic?

C: suggest delete the phrase of latency sensitive traffic

Two CIDs (11819, 12456) are deferred after the discussion

**SP4**: Do you agree to resolve the following CIDs listed in 11-22/1042r1 and incorporate the text changes in the latest TGbe draft?

* 11169, 11174, 11817, 11818

Discussion: none

Result: No objection

* 1. [11-22-887r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0887-02-00be-enhancements-for-massive-tsn.pptx) Enhancements for massive TSN Evgeny Khorov (IITP RAS)
     1. Evgeny presents the material in the document

C: slide 4, you mentioned that 5G can not achieve 1ms, can you explain more?

C: need comparism with UL OFDMA and rTWT, seems to work already

C: why do you believe DL OFDMA is not important?

C: if aggregating, then same MCS needs to be same

C: do you consider it to be in wifi 8?

**SP5**: Do you agree that the support of Industrial TSN Applications for multiple STAs shall be provided by

opt1: Further TGbe activities

opt2: More Discussion within WNG

opt3: Need more info

opt4: Abstain

Discussion: none

Result:

opt1: 21

opt2: 82

opt3: 32

opt4: 26

* 1. The chair asked through the WebEx chat window if anyone is ready to present any document in the remaining time, Yunbo Li (Huawei) asked for presenting 11-22/1048r0. The chair asked if there is any objection of changing the agenda by adding document 11-22/1048r0. **No objection.**
  2. [11-22-1048r](https://mentor.ieee.org/802.11/dcn/22/11-22-1048-00-00be-lb266-cr-320mhz-indication-in-non-ht-duplicated-frame.docx)0 LB266 CR 320MHz indication in non-HT duplicated frame Yunbo Li (Huawei)
     1. Yunbo Li (Huawei) presents the material in the document

C: I have a problem regarding the language.”or an EHT STA that is a STA 6G without 320 MHz bandwidth support to a VHT AP…” what does that mean?

C: for CID 12248, do you think non-HT duplicate PPDU format makes more sense?

C: seems editorial: not removing non-HT, but adding PPDU.

C: why does the STA need to know the BW is 320MHz when it does not support 320MHz?

Three CIDs (12249 13718 14096) are deferred after the discussion

**SP6**: Do you agree to resolve the following CIDs listed in 11-22/1048r0 and incorporate the text changes in the latest TGbe draft?

* 10127 12248

Discussion: none

Result: No objection

* 1. Ross Jian Yu (Huawei) asked for presenting 11-22/1092r0. The chair asked if there is any objection of changing the agenda by adding document 11-22/1092r0. **No objection.**
  2. [11-22-1092r](https://mentor.ieee.org/802.11/dcn/22/11-22-1092-00-00be-cr-on-cid-11819.doc)0 CR on CID 11819 Ross Jian Yu (Huawei)
     1. Ross presents the material in the document

**SP7**: Do you agree to resolve the following CIDs listed in 11-22/1092r0 and incorporate the text changes in the latest TGbe draft?

11819

Discussion: none

Result: No objection

1. Recess at 09:55 ET

# Tuesday, July 12, MAC/PHY PM1 (13:30-15:30)

Separate meetings for MAC and PHY ad-hoc groups:

* MAC: https://mentor.ieee.org/802.11/dcn/22/11-22-1067-02-00be-minutes-for-tgbe-mac-ad-hoc-sessions-in-july-2022-plenary.docx
* PHY: https://mentor.ieee.org/802.11/dcn/22/11-22-1104-00-00be-minutes-802-11be-phy-ad-hoc-july-plenary.docx

# Tuesday, July 12, MAC/PHY PM2 (16:00-18:00)

Separate meetings for MAC and PHY ad-hoc groups:

* MAC: https://mentor.ieee.org/802.11/dcn/22/11-22-1067-02-00be-minutes-for-tgbe-mac-ad-hoc-sessions-in-july-2022-plenary.docx
* PHY: https://mentor.ieee.org/802.11/dcn/22/11-22-1104-00-00be-minutes-802-11be-phy-ad-hoc-july-plenary.docx

# Wednesday, July 13, Joint AM1 (08:00-10:00)

1. The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order at 08:00 ET. The Chair notifies the attendees that the agenda is in [11-22-0862r7](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-07-00be-tgbe-july-2022-meeting-agenda.pptx).
   1. Note that this is a hybrid meeting, with some participants in person and some participating online through a webex session
2. Chair provides an attendance reminder:

2.1 Please record your attendance during the session by using the IMAT system:

* + 1. login to imat
    2. select “802 Plenary Mixed-Mode Session – July 2022”
    3. select “SC/LM/WG802.11 Attendance” entry
    4. click the corresponding session that you are attending

2.2 If you are unable to record your attendance contact the Chair Alfred Asterjadhi for assistance

1. IEEE-SA Policies and Procedure

The chair reviews the IEEE-SA Patent Policy:

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. Speak up now and respond to this Call for Potentially Essential Patents. **Nobody speaks/writes up**.

1. The chair goes through Other guidelines for IEEE WG meetings, Patent-related information, Participation in IEEE 802 Meetings, and Copyright. The Chair asks that it be minuted that the **Copyright Policy was presented**.
2. Agenda:
   1. Chair reviews proposed agenda found in [11-22-0862r7](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-07-00be-tgbe-july-2022-meeting-agenda.pptx)

[1002r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1002-00-00be-lb266-cr-for-9-3-1-22-9.docx) LB266 CR for 9.3.1.22.9 Yanjun Sun [11C]

[1062r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1062-00-00be-lb266-cr-for-section-9-3-1-19-part1.doc) LB266 CR for Section 9.3.1.19 - part1 Genadiy Tsodik  [5C]

[1113r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1113-00-00be-lb266-cr-for-cids-related-to-35-11.docx) LB266 CR for CIDs related to 35.11 Laurent Cariou [4C]

* 1. Discussion:
     1. Yanjun Sun asked to add 11-22-1001r1
  2. Agenda approved with unanimous consent.

1. Announcements:
   1. None
2. CR Submissions:
   1. [11-22-1002r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1002-00-00be-lb266-cr-for-9-3-1-22-9.docx) CR for Table 35-7 Yanjun Sun (Qualcomm)
      1. Yanjun Sun (Qualcomm) presents the material in the document

C: for CID 11999, the commenter has some concern on the rejection reason. Emphasize the behaviour on the transmitter side.

C: given we have the B54 to differentiate the HE variant and EHT variant, maybe we don’t need to define additional rules here.

**SP1**: Do you agree to resolve the following CIDs listed in 11-22/1002r1 and incorporate the text changes in the latest TGbe draft?

* 12493,10982,13865,12757,12758,11500,11502,11501,11503,11999,11499

Discussion: none

Result: No objection

* 1. [11-22-1062r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1062-00-00be-lb266-cr-for-section-9-3-1-19-part1.doc) LB266 CR for Section 9.3.1.19 - part1 Genadiy Tsodik (Huawei)
     1. Genadiy Tsodik (Huawei) presents the material in the document

C: in draft 2.0, the VHT/HE are already striked out.

C: for CID 11993, suggest add the reference of 10.37.5.2, 26.7 and 35.7.

**SP2**: Do you agree to resolve the following CIDs listed in 1-22/1062r1 and incorporate the text changes in the latest TGbe draft?

* 10790, 10971, 11623, 11890, 11993

Discussion: none

Result: No objection

* 1. [11-22-1113r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1113-00-00be-lb266-cr-for-cids-related-to-35-11.docx) LB266 CR for CIDs related to 35.11 Laurent Cariou (Intel)
     1. Laurent Cariou (Intel) presents the material in the document

C: there can be more than one subchannel

C: suggest: change “the preamble is sent” to “the preamble is present”

C: change “subchannels” to “subchannel(s)”

C: suggest: add “at least one of the subchannels”

C: add a note to explain the nonpunctured 20MHz subchannel.

C: there are clear definition of nonpunctured 20MHz subchannel in the baseline.

The chair asked all audience to raise up hands if we need to add a note to explain the nonpunctured 20MHz subchannel. One hand from Zinan is seen.

**SP3**: Do you agree to resolve the following CIDs listed in 1-22/1113r1 and incorporate the text changes in the latest TGbe draft?

* 12277 13832 11673 11921

Discussion: none

Result: No objection

* 1. [11-22-1001r](https://mentor.ieee.org/802.11/dcn/22/11-22-1001-01-00be-lb266-cr-for-9-3-1-22-5.docx)1 LB266 CR for 9.3.1.22.5 Yanjun Sun (Qualcomm)
     1. Yanjun Sun (Qualcomm) presents the material in the document

**SP4**: Do you agree to resolve the following CIDs listed in 11-22/1001r1 and incorporate the text changes in the latest TGbe draft?

* 11495, 11498

Discussion: none

Result: No objection

* 1. The chair aksed if there’s any contribution that is ready for presentation. Ming requested through WebEx that he has one. Po-Kai requested in the meeting room.
  2. [11-22-1047r](https://mentor.ieee.org/802.11/dcn/22/11-22-1047-00-00be-lb266-cr-for-subclause-9-3-3-8.docx)0 LB266 CR for subclause 9.3.3.8 Ming Gan (Huawei)
     1. Ming Gan (Huawei) presents the material in the document

C: some suggestion on the text of the Resolution collum is provided.

C: For CID 13457, do we have definition of EHT AP MLD? If no, delete “EHT”

**SP5**: Do you agree to resolve the following CIDs listed in 11-22/1047r1 and incorporate the text changes in the latest TGbe draft?

* 11118 12053 13314 11863 12231 13457

Discussion: none

Result: No objection

* 1. [11-22-1053r](https://mentor.ieee.org/802.11/dcn/22/11-22-1053-00-00be-cr-for-9-4-2-1.docx)0 CR for 9.4.2.1 Po-Kai Huang (Intel)
     1. Po-Kai Huang (Intel) presents the material in the document

**SP6**: Do you agree to resolve the following CIDs listed in 11-22/1053r0 and incorporate the text changes in the latest TGbe draft?

* 10543, 13748, 12960

Discussion: none

Result: No objection

* 1. [11-22-1009r](https://mentor.ieee.org/802.11/dcn/22/11-22-1009-02-00be-cr-for-35-3-13.docx)2 CR for 35.3.13 Po-Kai Huang (Intel)
     1. Po-Kai Huang (Intel) presents the material in the document

**SP7**: Do you agree to resolve the following CIDs listed in 11-22/1009r2 and incorporate the text changes in the latest TGbe draft?

* 11873

Discussion: none

Result: No objection

* 1. [11-22-1045r](https://mentor.ieee.org/802.11/dcn/22/11-22-1045-00-00be-lb266-cr-for-subclause-35-3-12-6.docx)0 LB266 CR for subclause 35.3.12.6 Ming Gan (Huawei)
     1. Ming Gan (Huawei) presents the material in the document

C: The commenter is saying the Listen Interval field has two subfields, could you double check? After checking, only the S1G format has two subfields, which is not applicable to EHT.

C: for CID 10913, the commenter asked for transfer of this CID.

C: the commenter asked for deleting the space between “AP/non-AP STA” and “1/2”

C: the yellow part of the instruction to the editor refers to a different subclause.

C: the Beacon interval of Link 1 is too big.

C: the commenter asked to defer CIDs 12072, 10729

4 CIDs (13860, 10913, 12072, 10729) are deferred after the discussion

**SP8**: Do you agree to resolve the following CIDs listed in 11-22/1045r1 and incorporate the text changes in the latest TGbe draft?

* 10650 10878 10879 10880 12644 13797 13798

Discussion: none

Result: No objection

1. Recess at 09:59 ET

# Wednesday, July 13, MAC/PHY PM2 (16:00-18:00)

The PHY ad-hoc meeting is canceled.

For MAC ad-hoc group:

* MAC: https://mentor.ieee.org/802.11/dcn/22/11-22-1067-02-00be-minutes-for-tgbe-mac-ad-hoc-sessions-in-july-2022-plenary.docx

# Thursday, July 14, Joint AM1 (08:00-10:00)

1. The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order at 08:00 ET. The Chair notifies the attendees that the agenda is in [11-22-0862r](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-10-00be-tgbe-july-2022-meeting-agenda.pptx)10.
   1. Note that this is a hybrid meeting, with some participants in person and some participating online through a webex session
2. Chair provides an attendance reminder:

2.1 Please record your attendance during the session by using the IMAT system:

* 1. login to imat
  2. select “802 Plenary Mixed-Mode Session – July 2022”
  3. select “SC/LM/WG802.11 Attendance” entry
  4. click the corresponding session that you are attending

2.2 If you are unable to record your attendance contact the Chair Alfred Asterjadhi for assistance

1. IEEE-SA Policies and Procedure

The chair reviews the IEEE-SA Patent Policy:

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. Speak up now and respond to this Call for Potentially Essential Patents. **Nobody speaks/writes up**.

1. The chair goes through Other guidelines for IEEE WG meetings, Patent-related information, Participation in IEEE 802 Meetings, and Copyright. The Chair asks that it be minuted that the **Copyright Policy was presented**.
2. Agenda:
   1. Chair reviews proposed agenda found in [11-22-0862r](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-10-00be-tgbe-july-2022-meeting-agenda.pptx)10
      1. 1007r0 LB266: CR for MBSSID operation with MLO Abhishek Patil [7C SP]
      2. 1012r2 CRs for 11be D2.0 Probe Request ML element CIDs Rojan Chitrakar [1C SP]
      3. 1110r0 LB266 CR for 35.7.3 Jinyoung Chun [4C]
      4. 1111r0 LB266 CR for 9.4.1.72 and 9.4.1.73 Jinyoung Chun [5C]
      5. 1118r0 lb266-cr-for-35-2-1-1 Kaiying Lu [6C]
      6. 1018r0 LB266: CR for Basic Multi-Link element - part 1 Gaurang Naik [30C]
      7. 1098r0 LB266 CR for misc CIDs related to r-TWT Chunyu Hu [31C]
   2. Discussion:

Ming requsted to add 1045r2

* 1. Agenda approved with unanimous consent.

1. Announcements:
2. None
3. CR Submissions:
4. [11-22-1007r](https://mentor.ieee.org/802.11/dcn/22/11-22-1007-03-00be-lb266-cr-for-mbssid-operation-with-mlo.docx)3 LB266: CR for MBSSID operation with MLO Abhishek Patil (Qualcomm)
   * 1. Abhishek Patil (Qualcomm) presents the material in the document

**SP1**: Do you agree to resolve the following CIDs listed in 11-22/1007r3 and incorporate the text changes in the latest TGbe draft?

* 13624 13515 12260 12261 12788 10668 10669

Discussion: none

Result: No objection

1. 11-22-1045r2 LB266 CR for subclause 35.3.12.6 Ming Gan (Huawei)
   * 1. Ming Gan (Huawei) presents the material in the document

C: could you explain why 300 is changed to 250?

C: could you do a quick search to see whether there are other occurences of 300?

**SP2**: Do you agree to resolve the following CIDs listed in 1-22/1045r3 and incorporate the text changes in the latest TGbe draft?

* 12072 10729 13860

Discussion: none

Result: No objection

1. 11-22-1110r0 LB266 CR for 35.7.3 Jinyoung Chun (LG)
   * 1. Jinyoung Chun (LG) presents the material in the document

**SP3**: Do you agree to resolve the following CIDs listed in 1-22/1110r0 and incorporate the text changes in the latest TGbe draft?

* 11672, 12536, 12543, and 12544

Discussion: none

Result: No objection

1. The chair asked if there’s any objection of switching the order of 11-22-1110r0 and 11-22-1012r0. No objection.
   1. 11-22-1012r2 CRs for 11be D2.0 Probe Request ML element CIDs Rojan Chitrakar (Panasonic)
      1. Rojan Chitrakar (Panasonic) presents the material in the document

**SP4**: Do you agree to resolve the following CIDs listed in 1-22/1012r2 and incorporate the text changes in the latest TGbe draft?

* 11128

Discussion: none

Result: No objection

* 1. 11-22-1111r0 LB266 CR for 9.4.1.72 and 9.4.1.73 Jinyoung Chun (LG)
     1. Jinyoung Chun (LG) presents the material in the document

C: We don’t follow draft P802.11ax as baseline since it’s already in draft P802.11me.

C: for CID 12123, change the resolution to accepted.

C: do a quick search for spatial time stream

C: for CID 11688, keep the name as spatial stream to align with other parts

C: slightly prefer space time stream, it’s from the table from baseline

**SP5**: Do you agree to resolve the following CIDs listed in 1-22/1111r1 and incorporate the text changes in the latest TGbe draft?

* 12122, 11688, 12123, 12124, and 12545

Discussion: none

Result: No objection

* 1. 11-22-1118r0 lb266-cr-for-35-2-1-1 Kaiying Lu (Mediatek)
     1. Kaiying Lu (Mediatek) presents the material in the document

C: are you saying the only place of using 320MHz BW signalling is the RTS/CTS?

C: can we get some time to check the MU-RTS and CTS?

C: MU-RTS/CTS, we don’t have this, we need to copy the scramble sequence from the MU-RTS

C: agree that only CTS is mandatory to carry, but other response frame may also carry this signalling.

C: the RTS/CTS is the only one with dynamic BW signalling.

**SP6**: Do you agree to resolve the following CIDs listed in 1-22/1118r0 and incorporate the text changes in the latest TGbe draft?

* – 11015, 11016, 12496, 13768, 13769, 14095

Discussion: none

Result: No objection

* 1. 11-22-1018r0 LB266: CR for Basic Multi-Link element - part 1 Gaurang Naik (Qualcomm)
     1. Gaurang Naik (Qualcomm) presents the material in the document

C: Keep the reference of the subclause TIM Broadcast

C: just say “is reserved”, remove “is set to 0”

C: For the AP MLD type indication, prefer to keeo the original signalling since other reserved bit can be defined for the future.

C: the commenter asked for deferring of CID 11515

C: in the common info, there are some bits that the NSTR mobile AP MLD will never use, did you check that? E.g., the EML capabilities field.

C: defer CID 12740.

C: some typo on the resolution for CID 11126.

4 CIDs (12368, 11515, 13476, 12740) are deferred after the discussion

**SP7**: Do you agree to resolve the following CIDs listed in 1-22/1018r1 and incorporate the text changes in the latest TGbe draft?

* 11387, 11388, 12057, 11389, 11122, 13474, 10099, 13754, 11391, 12059, 12935, 13099, 11393, 13755, 11517, 14113, 13841, 13842, 12221, 11124, 11125, 11126, 11127

Discussion: none

Result: No objection

* 1. 11-22-1098r2 LB266 CR for misc CIDs related to r-TWT Chunyu Hu (Meta)
     1. Chunyu Hu (Meta) presents the material in the document

C: for CID 10687, since we don’t have r-TWT TIDs for TWT, what’s the answer to my question? It’s Yes or No?

C: for CID 13243, for non-trigger enabled r-TWT, how can the first sentence be applied?

1. Recess at 10:00 ET

# Thursday, July 14, Joint AM2 (10:30-12:30)

1. The Chair, Alfred Asterjadhi (Qualcomm), calls the meeting to order at 08:00 ET. The Chair notifies the attendees that the agenda is in [11-22-0862r](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-11-00be-tgbe-july-2022-meeting-agenda.pptx)11.
   1. Note that this is a hybrid meeting, with some participants in person and some participating online through a webex session
2. Chair provides an attendance reminder:

2.1 Please record your attendance during the session by using the IMAT system:

* + 1. login to imat
    2. select “802 Plenary Mixed-Mode Session – July 2022”
    3. select “SC/LM/WG802.11 Attendance” entry
    4. click the corresponding session that you are attending

2.2 If you are unable to record your attendance contact the Chair Alfred Asterjadhi for assistance

1. IEEE-SA Policies and Procedure

The chair reviews the IEEE-SA Patent Policy:

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. Speak up now and respond to this Call for Potentially Essential Patents. **Nobody speaks/writes up**.

1. The chair goes through Other guidelines for IEEE WG meetings, Patent-related information, Participation in IEEE 802 Meetings, and Copyright. The Chair asks that it be minuted that the **Copyright Policy was presented**.
2. Agenda:
   1. Chair reviews proposed agenda found in [11-22-0862r](https://mentor.ieee.org/802.11/dcn/22/11-22-0862-11-00be-tgbe-july-2022-meeting-agenda.pptx)11

[1098r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1098-02-00be-lb266-cr-for-misc-cids-related-to-r-twt.docx) LB266 CR for misc CIDs related to r-TWT Chunyu Hu [31C CTD]

[1026r5](https://mentor.ieee.org/802.11/dcn/22/11-22-1026-05-00be-cr-for-misc-cids-for-35-3-12-4.docx) CR for misc CIDs for 35.3.12.4 Laurent Cariou [6C SP]

**Motions:** 11-22-1038r3

**Goals for September 2022**

**Teleconference Plan**

* 1. Discussion:
     1. Yunbo asked to add two CIDs for SP: 13718 and 14096 in doc 22/1048r1
     2. Abhi asked to present 11-22-1125r2
     3. Minyoung asked to present 11-22-1129
  2. Agenda approved with unanimous consent.

1. Announcements:
   1. None
2. CR Submissions:
   1. 11-22-1098r3 LB266 CR for misc CIDs related to r-TWT Chunyu Hu (Meta)
      1. Chunyu Hu (Meta) presents the material in the document

C: the commenter requested to defer 10687 because there’s no strong motivation to disallow the transmittion of rTWT TIDs outside of rTWT SPs.

C: for CID 13483, what’s the difference between the proposed change and the revised text? Suggest to make it to be accept.

Some CIDs are deferred after the discussion.

**SP1**: Do you agree to resolve the following CIDs listed in 1-22/1098r4 and incorporate the text changes in the latest TGbe draft?

10191, 10192, 11826, , 12456, 10467, 10468, , 13243, 13483, 11109, 13012, 10894, 12268, 12269, 10892, 13300, 10893, 13023, 11780, 11616, 13018, 10465, 10857, 11110, 11585, 11618, 13101, 13235, 12402, 11023, 12268, 12269

Discussion: none

Result: No objection

* 1. 11-22-1026r6 CR for misc CIDs for 35.3.12.4 Laurent Cariou (Intel)
     1. Laurent Cariou (Intel) presents the material in the document

C: the commenter aksed for the addition of the unicast link recommendation.

C: the commenter asked for the deferral of this set of CID to have a unified version of the unicast and multicast link recommendation

C: for multicast link recommendation, there’s no acknowledgement, not sure how it can work.

**Motion**: Move to approve the resolution to the CIDs listed in 1-22/1026r6 and incorporate the text changes in the latest TGbe draft:

12779 12605 12413 12808 12809 13919 11762

Move: Laurent Cariou Second: Abhishek Patil

Discussion: Some.

Result: 75Y, 46N, 27A (fails)

Calculated Results : 75Y, 46N, 27A, [61%]

Amended Results : 75Y, 46N, 27A, [61%]

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[V] Chris Hansen Covariant Corp. | | | X |

[V] Yong Liu Apple | X | | |

[V} Chris Levesque - Qorvo | X | | |

[V] Abdel Karim Ajami, Qualcomm | X | | |

[V] Minyoung Park Intel | X | | |

[V] Dibakar Das, Intel | X | | |

[V] Li-Hsiang Sun, Sony | | | X |

[V] M. Kumail Haider Meta | X | | |

[V] Qi Wang, Apple | X | | |

[V] Rubayet Shafin, Samsung Research America | | | X |

[V] Meriam Rezk Qualcomm | X | | |

[V] Gaurav Patwardhan HPE | X | | |

[V] Peter Ecclesine, Cisco Systems | X | | |

[V] Eason Chen-Yi Chang, Mediatek | X | | |

[V] Yongho Seok MediaTek | X | | |

[V] Gaurang Naik Qualcomm | X | | |

[V] Alice Jialing Li Chen Qualcomm | X | | |

[V] Greg Geonjung Ko WILUS | | | X |

[v] Masatomo OUCHI, Canon | | | X |

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

[V] Ming Gan Huawei | | X | |

[V] Mengshi Hu Huawei | | X | |

[V] Tomoko Adachi Toshiba | | | X |

[V] Yousi Lin Huawei | | X | |

[V] Steven Qi Wang Huawei | | X | |

[V] Hirohiko Inohiza Canon | | | X |

[V] Mao Yang Northwestern Polytechnical University | | X | |

[V] Yuki Tsujimaru Canon | X | | |

Sanghyun Kim WILUS Inc. | X | | |

[V] Ryuichi Hirata, Sony | | | X |

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

[V] Kazuto Yano, ATR | | | X |

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

[V] Insik Jung, LGE | X | | |

[V] Yoshio Urabe, Panasonic | | | X |

[PV] Wayne Wu, Mediatek | X | | |

[V] Insun Jang LGE | X | | |

[V] Zhenguo Du Huawei | | X | |

[V] George Chih-Chun Kuo, Mediatek | X | | |

[V] Hiroyuki Motozuka, Panasonic | X | | |

[V] Akira Kishida NTT | | | X |

[PV] Ronny Peng, MediaTek | X | | |

[V] Zhongjiang Yan Northwestern Polytechnical University | | X | |

[V] Bo Li Northwestern Polytechnical University | | X | |

[V] Hongjia Su Huawei | | X | |

[V] Vishnu V Ratnam, Samsung Research America | | | X |

[V] Al Petrick InterDigital | | X | |

[V] Peshal Nayak, Samsung Research America | | | X |

[V] Liwen Chu [NXP] | | | X |

[V] George Cherian Qualcomm | X | | |

[V] Sang Kim LGE | X | | |

[V]XIANDONG DONG-XIAOMI | | X | |

[V] Jason Yuchen Guo Huawei | | X | |

[V]Guogang Huang Huawei | | X | |

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

[V]Chenchen Liu Huawei | | X | |

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

[V] Bruce HaoHua Kang, MediaTek | X | | |

[V] Yunbo Li Huawei | | X | |

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

[V] Ankit Sethi NXP | | X | |

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

[V] Seungho Choo Senscomm | | | X |

[V] Bo Sun, ZTE | X | | |

Wei Lin Huawei | | X | |

[V] Liuming Lu OPPO | X | | |

[V] Trivikram Gangur, Infineon | | X | |

[V] Lan Peng Huawei | | X | |

[V] Girish Madpuwar Broadcom | X | | |

[V] Dmitry Bankov, IITP RAS | | X | |

[V] Pascal Viger, Canon | X | | |

[V] Stephane Baron Canon | X | | |

[V] Kirill Chemrov IITP RAS | | X | |

[V] Dror Regev Huawei | | | X |

[V] Shimi Shilo Huawei | | X | |

[V] Alexander Tolpin, Intel | X | | |

[V] Oded Redlich Huawei | | X | |

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

[V] Rajat Pushkarna Panasonic | X | | |

[V] B Hari Ram NXP | | X | |

[V] Kiran - CY/IFX | | X | |

[V] Duncan Ho Qualcomm | X | | |

[V] Boon Loong Ng Samsung Research America | X | | |

[V] Allan Jones - Activision | X | | |

[V] Jianwei Bei NXP | | X | |

[V] Srinivas Kandala Samsung | X | | |

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

[V] Leonardo Lanante, Ofinno | | X | |

[V] Serhat Erkucuk, Ofinno | X | | |

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

Taori Rakesh CYSC CSS ICW ENG SYS | | X | |

[V] Takuhiro Sato, Sharp | X | | |

[V] Kiseon Ryu NXP | | X | |

[V] SunHee Baek, LGE | X | | |

[V] Pooya Monajemi - Cisco | X | | |

[V] Genadiy Tsodik Huawei | | | X |

[V] Eugene Baik, Qualcomm | X | | |

[V] Hanqing Lou InterDigital | | X | |

[V] Kazi Huq, Ofinno | | | X |

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

[V] Xiaofei Wang InterDigital | | X | |

[V] Laurent Cariou, Intel | X | | |

[V] Huizhao Wang onsemi | X | | |

An Nguyen [V] | | X | |

[V] Binita Gupta, Meta | X | | |

[V] Rojan Chitrakar Panasonic | | | X |

[V] Aiguo Yan -Zeku | | | X |

[V] Leo Montreuil, Broadcom | X | | |

[V] kiwin PALM [BRCM] | X | | |

[V] Jinsoo Choi LG | X | | |

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

[V]Manish Kumar -NXP | | X | |

[V] Junghoon Suh Huawei | | X | |

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

[V] Abhishek Patil Qualcomm | X | | |

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

[V] Atsushi Shirakawa, Sharp | X | | |

[V] John Wullert, Peraton Labs | | X | |

[V] Yujin Noh Senscomm | X | | |

[V] Subir Perspecta Labs | | X | |

[V] Yan Xin Huawei | | X | |

[V] Rui Cao, NXP | | X | |

[V] Stephen Orr, Cisco | X | | |

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

[V] Prabodh Varshney Nokia | X | | |

[V] Jeongki Kim Ofinno | | | X |

[V] Hongyuan Zhang NXP | | X | |

[V] Juan Carlos Zuniga, Cisco | X | | |

Yonggang Fang | X | | |

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

Jarkko Kneckt | X | | |

[V] Andrew Myles | X | | |

[V] Richard Van Nee Qualcomm | X | | |

[V] Yan Zhang [NXP] | | X | |

[V] Robert Sosack Molex | | | X |

[V] Sigurd Schelstraete MaxLinear | X | | |

Kaiying Lu | X | | |

[V] Yanjun Sun Qualcomm | X | | |

[V] Po-Kai Huang Intel | X | | |

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

[V] Massinissa Lalam, Sagemcom | X | | |

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

[V] Bin Tian Qualcomm | X | | |

[V] Arik Klein Huawei | X | | |

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

[V] Sebastian Max Ericsson | X | | |

[V] Frank Suraci DHS | | | X |

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

* 1. 11-22-1048r1 LB266 CR for misc CIDs related to r-TWT Yunbo Li (Huawei)
     1. Yunbo Li (Huawei) presents the material in the document

C: just to confirm, if the STA does not support 320MHz, the STA still needs to recognize the RX part.

C: it was fixed last time.

C: is condition C removed? A: condition C is not related with this proposal.

C: B7 should be in the RXVECTOR, is that correct? A: yes.

CIDs 13718 and 14096 are moved to the motion list

* 1. Motions: [1038r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1038-02-00be-tgbe-motions-list-part-3.pptx)

Minutes of the discussion of this motion document can be found in: <https://mentor.ieee.org/802.11/dcn/22/11-22-1038-04-00be-tgbe-motions-list-part-3.pptx>

* 1. 11-22-1125r2 LB266: CR for Figure 35-3 Abhishek Patil (Qualcomm)
     1. Abhishek Patil (Qualcomm) presents the material in the document

**SP**: Do you agree to resolve the following CIDs listed in 1-22/1125r2 and incorporate the text changes in the latest TGbe draft?

13624 13515 12260 12261 12788 10668 10605 10669

Discussion: none

Result: No objection

Some discussions later:

Abhishek Patil (Qualcomm) claimed that the CIDs listed on the top of doc 1125r2 are different from the CIDs that are presented and resolved.

The correct CID list should be: 13605 13345 13891 13606 13607 13608 13344 13611 12511 10605 11771

A new SP was run to cover the correct list of CIDs:

**SP**: Do you agree to resolve the following CIDs listed in 1-22/1125r3 and incorporate the text changes in the latest TGbe draft?

13605 13345 13891 13606 13607 13608 13344 13611 12511 10605 11771

Discussion: none

Result: No objection

* 1. Ming asked to add 11-22-1046r0 to the agenda. The chair asked if there is any objection to add this document to the agenda. No objection.
  2. 11-22-1046r0 LB266 CR for subclause 9.4.2.199 Ming Gan (Huawei)
     1. Ming Gan (Huawei) presents the material in the document

C: for the CID 12053, could you further explain the rejection reason? Multi-Link Link Information element also works.

C: editorial suggestions. Add “that” after “indicates”.

1 CID (11863) is deferred after the discussion

**SP**: Do you agree to resolve the following CIDs listed in 1-22/1046r1 and incorporate the text changes in the latest TGbe draft?

12053 13314

Discussion: none

Result: No objection

1. Adjourn at 12:28 ET