IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Minutes for TGbe MAC Ad-Hoc Teleconferences in November 2022 to January 2023 | | | | |
| Date: 2022-11-30 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jeongki Kim | Ofinno |  |  | [jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com) |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This document contains the meeting minutes for the TGbe MAC ad hoc teleconferences in November 2022 to January 2023.

Revisions:

* Rev0: Added the minute from the MAC ad hoc teleconference held on November 30 2022.
* Rev1: Added the minute from the MAC ad hoc teleconference held on December 1 2022.
* Rev2: Added the minute from the MAC ad hoc teleconference held on December 5 2022.
* Rev3: Added the minute from the MAC ad hoc teleconferences held on December 7 and 15 2022.
* Rev4: Added the minute from the MAC ad hoc teleconferences held on December 19 2022.
* Rev5: Added the minute from the MAC ad hoc teleconferences held on December 21 2022.
* Rev6: Added the minute from the MAC ad hoc teleconferences held on January 5, 2023.

### 30 Novemver 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r0. The agenda was approved.

Attendance

|  |  |
| --- | --- |
| Name | Affiliation |
| Aboulmagd, Osama | Huawei Technologies Co., Ltd |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Au, Kwok Shum | Huawei Technologies Co., Ltd |
| Baek, SunHee | LG ELECTRONICS |
| Bahn, Christy | IEEE STAFF |
| baron, stephane | Canon Research Centre France |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Coffey, John | Realtek Semiconductor Corp. |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Erkucuk, Serhat | Ofinno |
| Fan, Shuang | ZTE Corporation |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| Gupta, Binita | Meta Platforms, Inc. |
| Hervieu, Lili | Cable Television Laboratories Inc. (CableLabs) |
| Ho, Duncan | Qualcomm Incorporated |
| Huang, Po-Kai | Intel |
| Jang, Insun | LG ELECTRONICS |
| Kakani, Naveen | Qualcomm Incorporated |
| Kim, Sanghyun | WILUS Inc |
| Kim, Youhan | Qualcomm Technologies, Inc. |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Ko, Geonjung | WILUS Inc. |
| Koundourakis, Michail | Samsung Cambridge Solution Centre |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Lorgeoux, Mikael | Canon Research Centre France |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, kaiying | MediaTek Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| McCann, Stephen | Huawei Technologies Co., Ltd |
| Naik, Gaurang | Qualcomm Incorporated |
| Nezou, Patrice | Canon Research Centre France |
| Ng, Boon Loong | Samsung Research America |
| Palayur, Saju | Maxlinear Inc |
| Pandey, Sheetal | ON Semiconductor |
| Park, Minyoung | Intel |
| Park, Sungjin | Senscomm |
| Patil, Abhishek | Qualcomm Incorporated |
| Petrick, Albert | InterDigital, Inc. |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Sato, Takuhiro | SHARP CORPORATION |
| Shafin, Rubayet | Samsung Research America |
| Shu, Tongxin | Huawei Technologies Co., Ltd |
| Tsujimaru, Yuki | Canon Inc. |
| Van Zelst, Allert | Qualcomm Incorporated |
| VIGER, Pascal | Canon Research Centre France |
| Wang, Qi | Apple, Inc. |
| Xia, Qing | Sony Corporation |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Zhou, Lei | H3C Technologies Co., Limited |

**Submissions**

1. [1881r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1881-03-00be-lb266-cr-for-leftover-cids.docx) CR for Leftover CIDs Ming Gan [1C-SP 10’]

13873, 12588

Discussion:

C: more than two is for MLO. What is the non-MLO?

C: One or more TWT mean how many TWT elements are included?

A: It depends on the number of links.

C: In TWT parameter ranges is set to 1, two elements are present.

A: I don’t touch that part.

SP: Do you support to accept the resolution in 11-22/1881r4 for the following CIDs?

13873, 12588

No objection

1. [1796r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1796-00-00be-lb266-resolution-for-comments-related-to-multi-link-tdls.docx) Res. for comments rel. to Multi-Link TDLS Abhishek Patil [10C 15’]

Discussion:

C: Why do you bring the multi-link TDLS direct link setup? I don’t think it works well. What about channel access rules for NSTR pair?

C: update the sentence related to inclusion of per-STA profile to exclude the link where the frame is sent

C: Direction is ok. But the details should be updated. For scenario where the number of links being considered for TDLS discover/setup are greater than those with the intermediate AP (MLD)

C: link ID of TDLS is based on the affilicated AP? if non-AP MLD has 3 links, but AP MLD only has 2 links, how to set up 3 links for TDLS? no link ID on the third link..

C: based on the current spec, we can't set up the three links in the scenario you described.

C: As 2 MLD non-APs are associated to same AP MLD, the TDLS can use Link IDs of AP MLD. I think the links are limited to overall number of Links of AP MLD.

1. 1887 Qi Wang

Discussion:

C: I’m ok with the resolution. But might be confusing. A1 is not group addressed. DA is group addressed.

SP: Do you support to accept the resolution in 11-22/1887r0 for the following CIDs?

11377, 11378, 12089, 13120, 13121

No objection

1. [1756r5](https://mentor.ieee.org/802.11/dcn/22/11-22-1756-05-00be-lb266-cr-cl35-emlsr-part4.docx) CR CL35 EMLSR part4 Minyoung Park [2C SP 10’]

Discussion:

C: 13005, I have a concern on it. I dont agree what’s shown in the figure. The spec text does not match the figure.

A: After the sucessful transission, the first sentence happens but not rest. I think the current text exactly matches what I drawed.

C: Entering EMLSR mode. The spec currently matches the draws.

C: In ax, after receiving TWT element, STA may enter the doze state immediately. I don’t think we need this optimization. Immediate means next txop.

A: Do you want to remove the immediately still?

C: Do you mean that in link 0, after timeout interval, the link is disabled?

C: you can not have power save mode change that happens at different time as the change from MLSR to eMLSR mode. those have to be aligned.

SP is deferred.

1. [1768r6](https://mentor.ieee.org/802.11/dcn/22/11-22-1768-06-00be-lb266-cr-for-subclause-35-3-16-8-1.docx) CR for subclause 35.3.16.8.1 Ming Gan [1C SP 10’]

10036,

C: I cannot see green text clearly. It’s ok.

SP: Do you support to accept the resolution in 11-22/1768r6 for the following CIDs?

10036

No objection

1. [1766r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1766-03-00be-lb266-cr-for-various-cids.docx) CR for various CIDs Ming Gan [1C SP 10’]

13128 for PBAC MLD.

SP: Do you support to accept the resolution in 11-22/1766r3 for the following CIDs?

13128

No objection

1. [1747r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1747-04-00be-lb266-cr-for-subclause-35-3-15.docx) CR for subclause 35.3.15 Ming Gan [3C SP 10’]

C: Is this similar to baseline operation?

A: This is non-AP MLD.

C: AP MLD intends to transmit? AP affiliated with AP MLD . schedules for the transmission in next paragraph.\

C: This is transmission for DS?

A: This is TO DS equal to 1 and From DS equal to 0.

C: You can just mention the group addressed Data frame.

SP: Do you support to accept the resolution in 11-22/1747r5 for the following CIDs?

11752 13517 12111

No objection

1. [1418r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1418-01-00be-lb266-cr-of-nstr-capability-update.docx) cr of nstr capability update Yunbo Li [6C 15’]

Discussion:

C: What is the purpose of this confirmation message?

A: Once this message is received by AP MLD, the AP may not schedule the transmission. So, I described the NSTR timeout. It’s similar to EMLSR.

C: I think EMLSR is different from NSTR case

C: You have a strong opinion on timeout? Capability related update?

A: One way is STA MLD responds confirmation frame.

C: We can remove the timeout. the initial frame exchange was modeled similar to another one that had a timeout. we can simplify this one by getting rid of the timeout.

1. [1774r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1774-01-00be-lb266-cr-for-misc-cids.docx) CR for Misc. CIDs Rubayet Shafin [6C 15’]

Not finish presenting

The teleconference was adjourned at 12:00 ET.

### 1 December 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r1. The agenda was approved.

Attendance

|  |  |
| --- | --- |
| Name | Affiliation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Baek, SunHee | LG ELECTRONICS |
| baron, stephane | Canon Research Centre France |
| Bredewoud, Albert | Broadcom Corporation |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Coffey, John | Realtek Semiconductor Corp. |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Fan, Shuang | ZTE Corporation |
| Fang, Yonggang | Mediatek |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| GUIGNARD, Romain | Canon Research Centre France |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Hu, Chunyu | Facebook |
| Huang, Po-Kai | Intel |
| Jang, Insun | LG ELECTRONICS |
| Kain, Carl | USDoT; Noblis, Inc. |
| Kakani, Naveen | Qualcomm Incorporated |
| Kim, Jeongki | Ofinno |
| Kim, Sang Gook | LG ELECTRONICS |
| Kim, Sanghyun | WILUS Inc |
| Kim, Youhan | Qualcomm Technologies, Inc. |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Ko, Geonjung | WILUS Inc. |
| Koundourakis, Michail | Samsung Cambridge Solution Centre |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Lorgeoux, Mikael | Canon Research Centre France |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Max, Sebastian | Ericsson AB |
| McCann, Stephen | Huawei Technologies Co., Ltd |
| Naik, Gaurang | Qualcomm Technologies, Inc |
| Nezou, Patrice | Canon Research Centre France |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Pandey, Sheetal | ON Semiconductor |
| Park, Sungjin | Senscomm |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Ryu, Kiseon | NXP Semiconductors |
| Shafin, Rubayet | Samsung Research America |
| Shirakawa, Atsushi | SHARP CORPORATION |
| Taori, Rakesh | Infineon Technologies |
| VIGER, Pascal | Canon Research Centre France |
| Wang, Chao Chun | MediaTek Inc. |
| Wang, Qi | Apple, Inc. |
| Wentink, Menzo | Qualcomm Incorporated |
| Wullert, John | Peraton Labs |
| Xia, Qing | Sony Corporation |
| Yang, Jay | Nokia |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Zhou, Lei | H3C Technologies Co., Limited |

**Submissions**

1. [1846r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1846-04-00be-cr-for-nstrmobileap-part3.docx) CR for NSTRMobileAP part3 Kaiying Lu [4C SP 10’]

Discussion:

C: how do you control the same PPDU length of response frames by the AP MLD in case of multiple frame exchanges in a TXOP?

A: There is description for ending time alignment for NSTR case.

C: Why do you limit the mode 2?

A: In mode 2, STA can transmit to peer STA. It may increase complexity.

SP: Do you support to accept the resolution in 11-22/1846r4 for the following CIDs?

14036, 14037, 14073

No objection

1. [1833r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1833-01-00be-lb266-cr-for-35-3-7-1-3.docx) CR for 35.3.7.1.3 Yongho Seok [2C SP 10’]

SP: Do you support to accept the resolution in 11-22/1833r1 for the following CIDs?

12170, 12171

No objection

1. [1417r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1417-01-00be-lb266-cr-for-35-3-16-2.docx) CR for 35.3.16.2 Yunbo Li [1C SP 10’]

SP: Do you support to accept the resolution in 11-22/1417r2 for the following CID?

10364

No objection

1. [1744r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1744-02-00be-lb266-cr-for-miscellaneous-cids.docx) CR for Miscellaneous CIDs Yunbo Li [1C SP 10’]

SP: Do you support to accept the resolution in 11-22/1744r2 for the following CIDs?

11838

No objection

1. [1793r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1793-03-00be-nstr-mobile-ap-miscellaneous-cids.docx) NSTR Mobile AP Miscellaneous CIDs Morteza Mehrnoush [8C SP 10’]

SP: Do you support to accept the resolution in 11-22/1793r4 for the following CIDs?

10032, 12331, 10658, 11646, 13853, 13074, 14034, 14004

No objection

1. [1774r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1774-01-00be-lb266-cr-for-misc-cids.docx) CR for Misc. CIDs Rubayet Shafin [6C Q&A 10’]

Discussion:

C: Broadcast TWT scheduler is not MLD level but link level. You need to mention separate schedule instead of single schedule. What if the link bitmap present is set to 0?

C: Why these element and indication needed?

A: This is to reduce the latency because STA can transmit using multiple links at the same time.

C: Why do you limit to use the same broadcast ID? Why don’t you have different ID?

C: Broadcast ID is link level.

C: This is used that AP sliently schedules the aligned TWT SP? That is, there is no request from non-AP MLD.

C: If there is no this information, each STA should decode each TWT information and check whether each TWT is aligned? Right?

SP: Do you support to accept the resolution in 11-22/1774r3 for the following CIDs?

11111, 11117, 12461

No objection

1. [1733r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1733-00-00be-cr-for-13-part-ii.docx) CR for 13 part II Po-Kai Huang [2C 10’]

C: Page 4, what is the target AP address?

A: the MAC address of the FTR. I should not remove MAC address.

C: MLD MAC address for MLD. You may miss the MLD address there.

C: Do we need to say when it’s not included.

SP: Do you support to accept the resolution in 11-22/1733r1 for the following CIDs?

12784, 12405, 10295, 12108

No objection

1. [1789r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1789-00-00be-lb266-cr-for-remaining-cids-in-35-3-19-3.docx) CR for remaining CIDs in 35.3.19.3 Sanghyun Kim [3C 10’]

C: Generally I have several comments on most of texts. First, I don’t think the first paragraph is needed.

A: There is text that next beacon frame on the new channel is not related to the TBTT. The baseline spec does not say all the Aps shall transmit the beacon frame immediately on the new channel except the ...

C: In clause 9, channel switch annoucement element, the description of the channel switch rsays that when the channel switch count is set to 1, the subsequent beacon which have been switch count equal to 0 that beacon would have been generated on the new channel.

A: There is no restriction the next beacon frame is exactly transmitted on the nextTBTT

C:Second statement. You already have note. Primary and non-primary links have to be switched or changed. They do simultaneously channel switch. I think it’s reduandant.

A: The currently note 2 is just a note. There is no details. Note 2 says may perform channel switch simultaneously. In my understanding, simultaneously being is not clear.

C: I think group agreed we should go with the note. That’s why we already have that.

1. [1743r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1743-00-00be-lb266-cr-for-emlmr-supported-mcs-and-nss-set-related-cids.docx) CR for EMLMR Supp. MCS And NSS Set related CID Yousi Lin [4C 10’]

C: you changed for which to when. Original intention is which link was made. But you changed to time.

The teleconference was adjourned at 12:00 ET.

### 5 December 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 19:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r3. The agenda was approved.

Attendance

|  |  |
| --- | --- |
| Name | Affiliation |
| Adachi, Tomoko | TOSHIBA Corporation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Baek, SunHee | LG ELECTRONICS |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Das, Subir | Peraton Labs |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Erkucuk, Serhat | Ofinno |
| Fan, Shuang | ZTE Corporation |
| Fang, Yonggang | Mediatek |
| Fischer, Matthew | Broadcom Corporation |
| Gu, Xiangxin | Unisoc |
| Ho, Duncan | Qualcomm Incorporated |
| Hotchkiss, Ron | IEEE STAFF |
| Huq, Kazi Mohammed Saidul | Ofinno |
| Inohiza, Hirohiko | Canon |
| Jang, Insun | LG ELECTRONICS |
| Kakani, Naveen | Qualcomm Incorporated |
| Kim, Jeongki | Ofinno |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Lanante, Leonardo | Ofinno |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Mukkapati, Lakshmi Narayana | Wi-Fi Alliance |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Park, Minyoung | Intel |
| Patil, Abhishek | Qualcomm Incorporated |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Ryu, Kiseon | NXP Semiconductors |
| Sato, Takuhiro | SHARP CORPORATION |
| Shafin, Rubayet | Samsung Research America |
| VIGER, Pascal | Canon Research Centre France |
| Wang, Qi | Apple, Inc. |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yee, James | MediaTek Inc. |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

**Submissions**

1. [1260r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1260-02-00be-cr-for-5-1-5-1-architecture-part-2.docx) CR for 5.1.5.1 Architecture (Part 2) Duncan Ho [SP-14C 10’]

Discussion:

SP: Do you support to accept the resolution in 11-22/1260r2 for the following CIDs?

10279, 10342, 10343, 10344, 10446, 10447, 10528, 10898, 12087, 12282, 12364, 12950, 13045

No objection

1. [1669r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1669-02-00be-lb266-cr-for-35-2-3.docx) CR for 35.2.3 SunHee Baek [SP-1C 10’]

Discussion:

C: How many user field is in EHT MU PPDU? What if EHT AP transmits EHT MU PPDU addressed to one STA and it’s Intra-BSS PPDU?

C: In HE PPDU, HE STA transmits HE SU PPDU for p2p case while EHT STA transmits EHT MU PPDU for that.

C: what is the purpose of classifying? Why do you emphisize it? HE does not use classifying

A: we added the more than one STA.

C: We already have EHT SU transmission in 2.3.2. We can rephrase it accordingly.

SP: Do you support to accept the resolution in 11-22/1669r3 for the following CID?

14097

No objection

1. [2033r1](https://mentor.ieee.org/802.11/dcn/22/11-22-2033-01-00be-cr-for-miscellaneous-cids-ii.docx) CR for Miscellaneous CIDs II Po-Kai Huang [10C 20’]

Discussion:

14101 is deferred after the discussion

C: split window

C: I have similar opinion on ”correct content”.

C: OCV or OCI, subbullet on resolution should be discussed

A: I just copied from the referred document.

C: I sent you how to resolve this. I prepared it and I will send you updated version.

10212 is deferred

SP: Do you support to accept the resolution in 11-22/2033r1 for the following CIDs?

10068, 11072, 11073, 11939, 13601

No objection

1. [1900r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1900-00-00be-lb266-cr-for-remaining-cids.docx) CR for remaining CIDs Ming Gan [6C 15’]

Discussion:

C: In the baseline, if AP transmits DTIM beacon, the AP shall transmit group addressed frames after DTIM. What if rTWT is overlapped with it?

A: We can resolve it at next round

C: subclause is wrong. Annex might be better for this example. We can place it there.

A: we, maybe in Yunbo CR, already had the discussion whether we move all examples figures in 35 to annex. We can fix the subclause and can move them to annex at next round or later.

C: In EMLSR, STA in active mode can receive group addressed frame.

C: we can change just via DS

A: It’s related to group addressed MMPDU. Where is the group addressed management frame?

C: That seems like new requirement.

A: Fine with changing to via

SP: Do you support to accept the resolution in 11-22/1900r2 for the following CIDs?

12713 13387 13666 13390 12817 10325

No objection

1. [2045r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2045-00-00be-lb266-cr-misc-part2.docx) CR misc. part 2 Minyoung Park [6C 20’]

C: I have a similar proposal. You have a different type.

A: What is the status of it? I can work with you.

C: Similar comment. We need to define a unified format for covering all cases.

C: MLPM bit can be comfined with PM bit?

A: I don’t want to touch the PM bit operation. If you use PM bit, then all PS state should be changed all together.

C: I will provide some comments once this passed

C: This should be optional

C: We can discuss it in UHR

A: I’m open to it.

C: Where is the original text of 72us? You just added the reference.

SP: Do you support to accept the resolution in 11-22/2045r0 for the following CIDs?

12886, 13400, 13674, 13703

No objection

1. [1683r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1683-01-00be-lb-266-cr-for-capability-update-notification.docx) CR for Capability Update Notification Frank Hsu [1C 15’]

C: The capabilities are decided by association generally. Need to think about comprehensive parameters. Which parameters can be changed except. This point is a little bit late.

SP is deferred.

1. [1771r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1771-00-00be-lb266-cr-for-9-6-35-8.docx) CR for 9.6.35.8 SunHee Baek [1C 10’]

C: Acknowledging may be confusing with control leve ack. Just AP responds the frame. Instead of acknowledging it, we can rephrase it to “indicate that the AP MLD is ready to serve the non-AP MLD in the updated EML operation”.

C: Your text covers the disable of EML operation?

A: Yes.

C: Do we need to change subclaue 35? I think it would be better to align.

C: Maybe "... an AP affiliated with an AP MLD as a response to the received EML Operating Mode ... "

SP: Do you support to accept the resolution in 11-22/1771r1 for the following CID?

12610

No objection

The teleconference was adjourned at 21:00 ET.

### 7 December 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r4. The agenda was approved.

Attendance

|  |  |
| --- | --- |
| Name | Affiliation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Akhmetov, Dmitry | Intel |
| Baek, SunHee | LG ELECTRONICS |
| baron, stephane | Canon Research Centre France |
| Bredewoud, Albert | Broadcom Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Erkucuk, Serhat | Ofinno |
| Fan, Shuang | ZTE Corporation |
| Fang, Yonggang | Mediatek |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| GUIGNARD, Romain | Canon Research Centre France |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Handte, Thomas | Sony Corporation |
| Ho, Duncan | Qualcomm Incorporated |
| Huang, Po-Kai | Intel |
| Jang, Insun | LG ELECTRONICS |
| Kakani, Naveen | Qualcomm Incorporated |
| Kipness, Michael | IEEE Standards Association (IEEE SA) |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Ko, Geonjung | WILUS Inc. |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Lorgeoux, Mikael | Canon Research Centre France |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, kaiying | MediaTek Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| MAO, ZHI | Huawei Technologies Co., Ltd |
| Max, Sebastian | Ericsson AB |
| Nezou, Patrice | Canon Research Centre France |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Pandey, Sheetal | ON Semiconductor |
| Patil, Abhishek | Qualcomm Incorporated |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Ryu, Kiseon | NXP Semiconductors |
| Sato, Takuhiro | SHARP CORPORATION |
| Sevin, Julien | Canon Research Centre France |
| Shafin, Rubayet | Samsung Research America |
| Wang, Chao Chun | MediaTek Inc. |
| Wullert, John | Peraton Labs |
| Xia, Qing | Sony Corporation |
| Xu, Fangxin | Longsailing Semiconductor |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Yu, Jian | Huawei Technologies Co., Ltd |
| Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

**Submissions**

1. [1743r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1743-03-00be-lb266-cr-for-emlmr-supported-mcs-and-nss-set-related-cids.docx) CR for EMLMR Sup. MCS And NSS Set related CIDs Yousi Lin [SP-4C 10’]

SP: Do you support to accept the resolution in 11-22/1743r3 for the following CIDs?

10369 10509 11383

No Objection

1. [1377r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1377-04-00be-cr-duplication-transmission-over-ml-for-low-latency-traffic.docx) CR-dup-TX-over-ml-for-low-latency-traffic Xiangxin Gu [SP-5C 10’]

SP: Do you support to accept the resolution in 11-22/1377r4 for the following CIDs?

10083

8Y, 35N, 26A

1. [1517r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1517-01-00be-lb266-cr-on-unicast-link-recommendation.docx) cr-on-unicast-link-recommedation Guogang Huang [6C 20’]

SP: Do you support to accept the resolution in 11-22/1517r2 for the following CIDs?

12413, 12809, 13919 10386, 12158, 10572

SP deferred

1. [1736r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1736-00-00be-cr-for-13-part-iii.docx) CR for 13 part III Po-Kai Huang [2C 15’]

SP: Do you support to accept the resolution in 11-22/1736r3 for the following CIDs?

12782, 12109, 10296

No Objection

1. [1864r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1864-00-00be-epcs-mld-and-eht-sta.docx) EPCS - MLD and EHT STA John Wullert [3C 10’]

SP: Do you support to accept the resolution in 11-22/1864r0 for the following CIDs?

10355, 11601

No Objection

1. [1765r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1765-00-00be-cr-for-cid-13284.docx) CR-for-CID 13284 Yan Li [1C 10’]

SP: Do you support to accept the resolution in 11-22/1765r1 for the following CID?

Note: the name “DeleteTimer” is expected to be updated later based on the other contribution.

13284

No Objection

1. [1898r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1898-00-00be-lb-266-cr-for-emlsr-misc-2.docx) CR for EMLSR Misc 2 Frank Hsu [1C 10’]

SP: Do you support to accept the resolution in 11-22/1898r0 for the following CIDs?

SP deferred

1. [1973r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1973-00-00be-cr-for-cid14099.docx) CR for CID14099 Li-Hsiang Sun [1C 10’]

SP: Do you support to accept the resolution in 11-22/1973r1 for the following CIDs?

14099

No Objection

### 15 December 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r8. The agenda was approved.

Attendance

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 12/15 | Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| TGbe (MAC) | 12/15 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 12/15 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 12/15 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 12/15 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 12/15 | Chng, Shi Baw | BAWMAN LLC |
| TGbe (MAC) | 12/15 | Das, Subir | Peraton Labs |
| TGbe (MAC) | 12/15 | Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 12/15 | Fan, Shuang | ZTE Corporation |
| TGbe (MAC) | 12/15 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 12/15 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 12/15 | Fujimori, Yuki | Canon Research Centre France |
| TGbe (MAC) | 12/15 | Haider, Muhammad Kumail | Meta Platforms Inc. |
| TGbe (MAC) | 12/15 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 12/15 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 12/15 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 12/15 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 12/15 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 12/15 | Kim, Youhan | Qualcomm Technologies, Inc. |
| TGbe (MAC) | 12/15 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 12/15 | Ko, Geonjung | WILUS Inc. |
| TGbe (MAC) | 12/15 | Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| TGbe (MAC) | 12/15 | Liu, Der-Zheng | Realtek Semiconductor Corp. |
| TGbe (MAC) | 12/15 | Lorgeoux, Mikael | Canon Research Centre France |
| TGbe (MAC) | 12/15 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 12/15 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 12/15 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 12/15 | Monajemi, Pooya | Cisco Systems, Inc. |
| TGbe (MAC) | 12/15 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 12/15 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 12/15 | Pandey, Sheetal | ON Semiconductor |
| TGbe (MAC) | 12/15 | Park, Minyoung | Intel |
| TGbe (MAC) | 12/15 | Park, Sungjin | Senscomm |
| TGbe (MAC) | 12/15 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 12/15 | Petrick, Albert | InterDigital, Inc. |
| TGbe (MAC) | 12/15 | Quan, Yingqiao | Unisoc |
| TGbe (MAC) | 12/15 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 12/15 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 12/15 | Shirakawa, Atsushi | SHARP CORPORATION |
| TGbe (MAC) | 12/15 | Sosack, Robert | Molex Incorporated |
| TGbe (MAC) | 12/15 | Sun, Bo | Sanechips |
| TGbe (MAC) | 12/15 | Taori, Rakesh | Infineon Technologies |
| TGbe (MAC) | 12/15 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (MAC) | 12/15 | Xu, Fangxin | Longsailing Semiconductor |
| TGbe (MAC) | 12/15 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 12/15 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 12/15 | Yoon, Yelin | LG ELECTRONICS |
| TGbe (MAC) | 12/15 | Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

**Submissions**

1. [1848r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1848-02-00be-lb266-cr-misc.docx) LB266 CR Misc Minyoung Park [1C-SP 10’]

C: If STA switch back to listening operation, then AP needs to transmit MU-RTS frame to the STA?

A: This is sounding procedure. I don’t think MU-RTS can be inserted within the procedure.

SP: Do you support to accept the resolution in 11-22/1848r2 for the following CID?

14115

No Objection

1. [1838r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1838-01-00be-lb266-cr-for-ml-reconfiguration-clause-35-3-6-part-2.docx) CR for ML Reconfiguration clause 35.3.6 part 2 Binita Gupta [15C 25’]

C: AP removal in first comment group, default is all TID mapped to all link, mode 1 is all TIDs mapped to subset of links. How does the link removal operation operate?

C: I think you need to change enabled links to setup link. Enabled links means some TIDs are mapped to some links but mapped to other links.

C: 10022, I agree with action. We already have the spec text related to this operation. Why do we need to have separate texts?

A: Which clause are you talking about?

( At the TBTT indicated by the value of the Delete Timer subfield in transmitted Reconfiguration Multi-Link elements, an associated non-AP MLD shall consider the link corresponding to the removed AP nonexistent, and the SME of the affiliated (#11041)non-AP STA associated with the removed affiliated AP shall delete any information maintained for that link.)

C: I prefer to defer the CID 10022.

C: Note for link ID, that belong to implementation.

C: Operation for new status codes can be achieved by existing code.

C: 11636 notes can be covered by the current text. Why do you want to add? EMLMR is not same as EMLSR.

No discussion on second part.

SP deferred

1. [1920r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1920-00-00be-lb266-cr-for-msd-timer-reset.docx) CR for MSD timer reset Geonjung Ko [3C 20’]

C: concern is this exception is complicated procedure or logic. The receiver should check the frame types.

C: I don’t have issue RTS resets the timer.

A: STA always checks the frame types. I put the separate text to show. Virtual CS can be checked.

C: I’m fine with this resolution

C: This is non-primary link

SP is deferred

1. [1966r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1966-01-00be-cr-for-tid-to-link-mapping-advertisement.docx) CR for TID to Link Mapping Advertisement Pooya Monajemi [3C 15’]

C: Page8, broadcast memberhip temination, instead of terminated and deleted., use torn down.

C: I don’t think we need to add this precondition.

C: For All Updates Included, we don't couple the setting with the Co-located subfield. Why we need to add this condition for the Disabled link subfield?

A: for All Updates, if the reporting AP doesn't have the latest info it will set it to 0, and nothing is broken. if we set the disabled link indicator to 0 it means that we know that the link is enabled

1. [1775r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1775-02-00be-lb266-cr-for-9-4-2-164.docx) CR for 9.4.2.164 SunHee Baek [1C 10’]

SP: Do you support to accept the resolution in 11-22/1775r2 for the following CID?

12070

No Objection

1. [1825r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1825-00-00be-cr-for-multiple-bssid-index-adjustment.docx) cr for multiple bssid index adjustment Pooya Monajemi [1C 10’]

C: how to deal the legacy STA?

C: what's the point remove a logical AP? not benfit?

1. [1876r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1876-00-00be-lb266-cr-for-mlo-sta-statistics.docx) lb266-for-MLO-STA-statistics Jay Yang [2C 10’]

Unfinished

The teleconference was adjourned at 21:00 ET.

### 19 December 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 19:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r8. The agenda was approved.

Attendance

|  |  |
| --- | --- |
| Name | Affiliation |
| Adachi, Tomoko | TOSHIBA Corporation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Baek, SunHee | LG ELECTRONICS |
| Carney, William | Sony Group Corporation |
| Fang, Yonggang | Mediatek |
| Fischer, Matthew | Broadcom Corporation |
| Gu, Xiangxin | Unisoc |
| Gupta, Binita | Meta Platforms, Inc. |
| Ho, Duncan | Qualcomm Incorporated |
| Huang, Po-Kai | Intel |
| Inohiza, Hirohiko | Canon |
| Jang, Insun | LG ELECTRONICS |
| Kakani, Naveen | Qualcomm Incorporated |
| Kim, Youhan | Qualcomm Technologies, Inc. |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Kneckt, Jarkko | Apple, Inc. |
| Lanante, Leonardo | Ofinno |
| Levy, Joseph | InterDigital, Inc. |
| Lim, Dong Guk | LG ELECTRONICS |
| Lorgeoux, Mikael | Canon Research Centre France |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, kaiying | MediaTek Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Nam, Junyoung | Qualcomm Incorporated |
| Nayak, Peshal | Samsung Research America |
| Pandey, Sheetal | ON Semiconductor |
| Park, Minyoung | Intel |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Ryu, Kiseon | NXP Semiconductors |
| Shirakawa, Atsushi | SHARP CORPORATION |
| Tian, Bin | Qualcomm Incorporated |
| Wang, Qi | Apple, Inc. |
| Wu, Kanke | Qualcomm Incorporated |
| Wullert, John | Peraton Labs |
| Yang, Jay | Nokia |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yee, James | MediaTek Inc. |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |

**Submissions**

1. [2108r1](https://mentor.ieee.org/802.11/dcn/22/11-22-2108-01-00be-cr-for-misc-cids.docx) CR for misc CIDs Xiaofei Wang [9C 15’]

C: This is important in forward compatibility point of view. I understand your comment. I prefer this text.

C: If we remove this, we need to define new field in the future.

A: I can defer this.

C: Ok, and the last sentence is also critical operation by STA.

C: That should be normative if you move.

11547 and 11548 deferred

C: You’d better refer D2.0 instead of D2.3 in the resolution (13712)

SP: Do you support to accept the resolution in 11-22/2108r2 for the following CIDs?

10287 11545 11546 11547 11548 11549 11550 11551 13712

No objection

1. [1898r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1898-01-00be-lb-266-cr-for-emlsr-misc-2.docx) CR for EMLSR Misc 2 Frank Hsu [1C-SP 10’]

C: power saving benefit may be confusion. Need to monitor multiple links. You need to make it clear.

A: It’s decoding initial control frame.

C: We can mention whether one or mor EMLSR link sets is allowed.

C:

SP: Do you support to accept the resolution in 11-22/1898r2 for the following CIDs?

13854

No objection

1. [1480r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1480-00-00be-lb266-cr-for-clause-9.docx) LB266: CR for Clause 9 Gaurang Naik [17C 25’]

C: I have a similar comment and I’m preparing the resolution. We can have further discussion.

C: In first two CIDs, what have TG reached consensus on? Can you remove it.

A: I mean the term for EMLSR and EMLMR.

C: I agree with the commenter. Do you mean if TG agree with the comment?

A: Are you ok with removing reached consensus?

C: Still not clear.

I will defer two CIDs.

13100 and 12936 deferred

C: If you remove the non-AP MLD part, do you mean that non-AP MLD also consider receiving part instead of transmitting part?

A: I will defer the related CIDs.

C: B8-B11 should be kept in the table.

CID 11516 deferred

SP: Do you support to accept the resolution in 11-22/1480r1 for the following CIDs?

13753, 13476, 14113, 11518, 11515, 10558, 12739, 12740, 12058, 12933

No objection

1. [2059r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2059-00-00be-lb266-cr-for-cid-11778-and-12716.docx) LB266 CR for CID 11778 and 12716 Ming Gan [2C 15’]

SP: Do you support to accept the resolution in 11-22/2059r0 for the following CIDs?

11778, 12716

No objection

1. [2045r1](https://mentor.ieee.org/802.11/dcn/22/11-22-2045-01-00be-lb266-cr-misc-part2.docx) CR misc. part 2 Minyoung Park [4C-SP 10’]

C: We can consider this feature in UHR SG

C: This SP is not related to detailed signaling?

A: Just concept. This is not for details.

C: Direction is ok but need more discussion for details.

A: ok.

C: Do you have the capability?

A: Not yet, we can further elaborate it later.

SP1: Do you support the high-level operation of the cross-link power save described in doc 11-22/2045r1?

19y, 26n, 11a

1. [2160r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2160-00-00be-tdls-operation-on-nstr-emlsr-emlmr-links.docx) TDLS op. on NSTR/EMLSR/EMLMR links Morteza Mehrnoush [1C 15’]

C: We had discussed several times for this issue. As well in Abhi’s CR documment. Why do we need to add this for TDLS peer STA operation? It can be implementation.

C:It may be redundant. You can remove these notes.

A: Other people said these notes may be helpful.

C: I understand it may increase the power efficiency. You added all cases in note. We can further discuss this in new TG like UHR SG.

Adjourned at 21:00ET

### 21 December 2022, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r8. The agenda was approved.

**Submissions**

1. [1909r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1909-01-00be-txs-related-cids-part-2.docx) TXS related CIDs part 2 Dibakar Das [30C 30’]

C: In LB CR, we should not mention next generation. You can remove it in rejection reason.

A: Ok.

C: 11834, duration ID, there is duplicated text. You can remove it. The first thing is in the REVme. Revised or Accept.

C: I don’t think not properly transmitted is normal text.

Related text is changed

C: That text is already in the baseline. Do you know why this is added earlier?

SP: Do you support to accept the resolution in 11-22/1909r3 for the following CIDs?

10011 10075 12458 12721 12722 12754 13857 13879 13880 13214 10217 10738 10970 11834 11017 11521 12420 12480 13255 14030 14025 12489 12321

No objection

1. [1890r](https://mentor.ieee.org/802.11/dcn/22/11-22-1890-02-00be-lb266-cr-for-reconfiguration-ml-element.docx)3 CR for Reconfiguration ML element Binita Gupta [14C-SP 10’]

C: First four CIDs group, I agree with the proposed change by commenter.

A: Current spec provides the flexibility with present field.

C: But You did not propose the purpose of it.

C: ML probe request/response already carry the basic ML elements.

C: In this case, we do not need MLD MAC address.

C: You don’t need to add the multi-link Probe Response for 11520. It’s a subset of Probe Response frame.

C: 11042, 11401 are related to first group CIDs. You can change STA MAC address to AP MAC address.

SP: Do you support to accept the resolution in 11-22/1890r3 for the following CIDs?

12604, 13263, 13264

No objection

1. [1504r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1504-00-00be-11be-d2-0-comment-resolution-subclause-35-3-18-part-2.docx) D2.0 comment resolution subclause 35.3.18 part 2 Liwen Chu [24C 30’]

C: more than is better than not less than because not less than contains equal in resolution.

C: In resolution, you need to change each to at least one.

10043 proposed text is changed based on the comments.

10043 is finally deferred.

C: Is it EMLMR Link Bitmap rather than EMLSR?

C: 12167 we can change the rejection reason. Defer.

C: EMLSR negotiation part is under discussion. The figure of this is in the spec already.

C: Error, you can add SIFS in the figure. Do we have a definition of EMLMR STA?

A: Yes, we have.

C: Do we need this figure?

SP: Do you support to accept the resolution in 11-22/1504r2 for the following CIDs?

13708, 10369, 10509, 11465, 12875, 12876, 10162, 13877, 10159, 10160, 10161, 12684, 12452, 12166, 11466,

No objection

Adjourned

### 5 January 2023, (TGbe MAC ad hoc teleconference)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * 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 “TGbe <MAC/PHY/Joint> 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 Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-22/2066r16. The agenda was approved.

Attendance

|  |  |
| --- | --- |
| Name | Affiliation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Baek, SunHee | LG ELECTRONICS |
| Bahn, Christy | IEEE STAFF |
| baron, stephane | Canon Research Centre France |
| Bredewoud, Albert | Broadcom Corporation |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Das, Subir | Peraton Labs |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| GUIGNARD, Romain | Canon Research Centre France |
| Gupta, Binita | Meta Platforms, Inc. |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Handte, Thomas | Sony Corporation |
| Huq, Kazi Mohammed Saidul | Ofinno |
| Inohiza, Hirohiko | Canon |
| Kain, Carl | USDoT; Noblis, Inc. |
| Kakani, Naveen | Qualcomm Incorporated |
| Kim, Jeongki | Ofinno |
| Kim, Sang Gook | LG ELECTRONICS |
| Kim, Sanghyun | WILUS Inc |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Ko, Geonjung | WILUS Inc. |
| Koundourakis, Michail | Samsung Cambridge Solution Centre |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Lanante, Leonardo | Ofinno |
| Levy, Joseph | InterDigital, Inc. |
| Lorgeoux, Mikael | Canon Research Centre France |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| McCann, Stephen | Huawei Technologies Co., Ltd |
| Naik, Gaurang | Qualcomm Technologies, Inc |
| Nayak, Peshal | Samsung Research America |
| Nezou, Patrice | Canon Research Centre France |
| Ng, Boon Loong | Samsung Research America |
| Ouchi, Masatomo | Canon |
| Pandey, Sheetal | Synaptics Inc. |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Petrick, Albert | InterDigital, Inc. |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Raissinia, Alireza | Qualcomm Incorporated |
| Ratnam, Vishnu | Samsung Research America |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Ryu, Kiseon | NXP Semiconductors |
| Seo, Sangho | Broadcom Corporation |
| Shafin, Rubayet | Samsung Research America |
| Sun, Bo | Sanechips |
| Taori, Rakesh | Infineon Technologies |
| Verma, Sindhu | Broadcom Corporation |
| Wang, Chao Chun | MediaTek Inc. |
| Wang, Qi | Apple, Inc. |
| Wullert, John | Peraton Labs |
| Xu, Fangxin | Longsailing Semiconductor |
| Yamada, Ryota | SHARP CORPORATION |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yee, James | MediaTek Inc. |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Zhou, Lei | H3C Technologies Co., Limited |

**Submissions**

1. [1789r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1789-00-00be-lb266-cr-for-remaining-cids-in-35-3-19-3.docx) CR for remaining CIDs in 35.3.19.3 Sanghyun Kim [1C-SP 10’]

Discussion:

C: In the figure, that TBTT on non-primary link is not existing is the reason of this?

C: we don’t need this virtual TBTT concept. The current spec text is clear.

C: There is no interpretation issue.

SP: Do you support to accept the resolution in 11-22/1789r1 for the following CIDs?

13424 13843

No objection

1. [1920r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1920-00-00be-lb266-cr-for-msd-timer-reset.docx) CR for MSD timer reset Geonjung Ko [3C-SP 10’]

Discussion:

C: I know you changed the mandatory suggested text to recommended text.

C: I don’t see any particular value for recommendation. We don’t need to add the particular rule for recommendation.

A: Physical CCA is not enough so, I add this recommendation rule.

C: The previous version looks better to me. How can you solve the problem that the commenter on 12743 mentioned without this rule?

C: its better to not add further filtering. agree with gaurang that we better keep the design simple rather than try to cover all cases.

The present wanted to run SP on 1920r0 because r0 is more preferable than r1.

SP: Do you support to accept the resolution in 11-22/1920r0 for the following CIDs?

12743, 13848, 13955

19Y, 21N, 35A

1. [1876r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1876-01-00be-lb266-cr-for-mlo-sta-statistics.docx) lb266-for-MLO-STA-statistics Jay Yang [2C-Q&A 10’]

Discussion:

C: Why do you want to create another MLD level counts?

A: The baseline is per-link level, MSDU is MLD level.

C: Do you propose new MLD MIB variable? What is the proposal?

A: I want MLD level operation. We may need new MIB variable.

SP is deferred.

1. [1978r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1978-01-00be-lb266-resolution-for-misc-comments.docx) LB266: Resolution for MISC comments Abhishek Patil [11C 20’]

Discussion:

C: I don’t clearly undertand your intention. Instead of the detail texts, you can just refer the related subclauses.

C: In note, reported STA is AP and non-AP STA? So, you mention reported AP in the second sentence?

C: I don’t understand the last line like transmitted by the reported STA. The reporting STA decides Per STA profile.

C: For including complete STA profile in STA Profile for failure case in Status Code. How was useful for STA side?

C: bit 26 to 63 does not have to be same as TSF in element.

11138 , 13863 are

SP: Do you support to accept the resolution in 11-22/1978r5 for the following CIDs?

11844 10578 11953 12418 13428 13959 13272 14053 14062

No objection

1. 1815r2 Xiangxin

Discussion:

C: This is should be ended by AP side. We don’t need additional signaling. You can define this similar to EMLSR proposal by Vishnu.

SP: Do you support to accept the resolution in 11-22/1815r2 for the following CID?

10128

15Y, 28N, 29A

Adjourned at 12:00 ET