IEEE P802.11  
Wireless LANs

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| Minutes for TGbe MAC Ad-Hoc teleconferences in March to May 2023 | | | | |
| Date: 2023-03-27 | | | | |
| Author(s): | | | | |
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| Liwen Chu | NXP |  |  |  |
|  |  |  |  |  |

Abstract

This document contains the meeting minutes for the TGbe MAC ad hoc teleconferences in March to May 2023.

Revisions:

* Rev0: Added the minute from the MAC ad hoc teleconference held on March 27.
* Rev1: Added the minute from the MAC ad hoc teleconference held on March 29.
* Rev2: Added the minute from the MAC ad hoc teleconference held on April 6.
* Rev3: Added the minute from the MAC ad hoc teleconference held on April 10.
* Rev4: Added the minute from the MAC ad hoc teleconference held on April 12.
* Rev5: Added the minute from the MAC ad hoc teleconference held on April 20.
* Rev6: Added the minute from the MAC ad hoc teleconference held on April 24.
* Rev7: Added the minute from the MAC ad hoc teleconference held on April 26.
* Rev8: Added the minute from the MAC ad hoc teleconference held on May 4.
* Rev9: Added the attendance on May 4.

### March 27, 2023 (19:00 – 21:00 ET) (TGbe MAC ad hoc)

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))

|  |  |
| --- | --- |
| Name | Affiliation |
| Adachi, Tomoko | TOSHIBA Corporation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| Baek, SunHee | LG ELECTRONICS |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| CHUN, JINYOUNG | LG ELECTRONICS |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Fan, Shuang | Sanechips Technology Co., Ltd. |
| Fischer, Matthew | Broadcom Corporation |
| Gu, Xiangxin | Unisoc |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Hamilton, Mark | Ruckus/CommScope |
| Ho, Duncan | Qualcomm Incorporated |
| Jang, Insun | LG ELECTRONICS |
| Kim, Geon Hwan | LG ELECTRONICS |
| Kim, Sanghyun | WILUS Inc |
| Kim, Youhan | Qualcomm Technologies, Inc. |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Kuo, Chih-Chun | MediaTek Inc. |
| Lanante, Leonardo | Ofinno |
| Li, Weiyi | Spreadtrum |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Nayak, Peshal | Samsung Research America |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Ryu, Kiseon | NXP Semiconductors |
| Seo, Sangho | Broadcom Corporation |
| Shafin, Rubayet | Samsung Research America |
| Sun, Bo | Sanechips |
| Wang, Qi | Apple, Inc. |
| Wullert, John | Peraton Labs |
| Xia, Qing | Sony Corporation |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Yoon, Yelin | LG ELECTRONICS |
| Zhao, Yue | Huawei Technologies Co., Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r2. The agenda was approved.

**Submissions**

1. [501r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0501-00-00be-lb271-cr-for-35-3-7-1-7-part-i.docx) lb271-cr-for-35.3.7.1.7-Part-I Jason Y. Guo [14C]

SP: Do you support to accept the resolution in 11-23/501r3 for the following CIDs?

15524 15526 15599 15823 15847 16009 16010 16112 16503 1650516507 17828 17944 18142

No objection

1. [308r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0308-00-00be-lb271-cr-35-4-2.docx) LB271 CR 35.4.2 Liwen Chu [6C]

SP: Do you support to accept the resolution in 11-23/308r1 for the following CIDs?

15889, 17004, 17005, 15125, 15419, 15602

No objection

1. [357r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0357-00-00be-lb271-cids-on-twt.docx) LB271 CIDs on TWT Rubayet Shafin [1C]

C: who transmit the ack frame? Any STA of non-AP MLD or other? Can you clarify it?

A: Yes, any STA. Will do

C: what does the deleted schedule mean for non-AP MLD? Instead of deleted, why not use like STA cannot use the link some like that?

A: This does not mean the schedule is suspended. I can make them better languages

C: You mentioned this is power saving. What’s the assumption of link disabled? Is it power saving?

A: Power saving is just one of motivation. DFS reason or regulatory reason. There is already the link disablement in the spec.

C: Before link 1 disabled, link 2 and link 3 are active?

A: Yes.

C: You assumed that 3 links are active and only 1 link is disabled?

C: Can you defer this SP?

A: Sure.

SP is deferred

1. [363r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0363-00-00be-cr-for-lb271-cids-part2.docx) CR for LB271 CIDs – Part2 Rubayet Shafin [5C]

C: what about one of the other links rather than one of the links?

SP: Do you support to accept the resolution in 11-23/363r2 for the following CIDs?

16576, 15111, 15650, 15891, 17906

No objection

1. [443r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0443-00-00be-lb271-cr-for-35-5-2-3-3.docx) CR for 35.5.2.3.3 Jason Y. Guo [5C]

C: You can add one more cross reference(35.5.2.3.1) in clause 9 for more clarification like general in 35. Current is not enough.

C: add Note please use ”filed” or ”subfiled’ based on the editor guideline.

SP: Do you support to accept the resolution in 11-23/443r1 for the following CIDs?

15247 15252 17027 17028 17235

No objection

1. [457r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0457-00-00be-lb271-cr-for-9-2-4-7-1-trs-control-field.docx) CR for 9.2.4.7.1 TRS Control field Jason Y. Guo [8C]

Some discussion on hardware capability

C: Change HE PPDU to the specific PPDU

SP: Do you support to accept the resolution in 11-23/457r2 for the following CIDs?

17306 17381 17382 17383 17384 17385 17386 18052

No objection

The teleconference was adjourned at 20:50 ET.

### March 29, 2023 (10:00 – 12:00 ET) (TGbe MAC ad hoc)

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 10:02 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.
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|  |  |
| --- | --- |
| Name | Affiliation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| baron, stephane | Canon Research Centre France |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Chng, Shi Baw | BAWMAN LLC |
| CHUN, JINYOUNG | LG ELECTRONICS |
| Coffey, John | Realtek Semiconductor Corp. |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| Gupta, Binita | Meta Platforms, Inc. |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Ho, Duncan | Qualcomm Incorporated |
| Huang, Po-Kai | Intel |
| Huq, Kazi Mohammed Saidul | Ofinno |
| Jang, Insun | LG ELECTRONICS |
| Kim, Geon Hwan | LG ELECTRONICS |
| Kim, Yongho | Korea National University of Transportation |
| Kim, Youhan | Qualcomm Technologies, Inc. |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Klein, Arik | Huawei Technologies Co., Ltd |
| Koundourakis, Michail | Samsung Cambridge Solution Centre |
| Kuo, Chih-Chun | MediaTek Inc. |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Li, Weiyi | Spreadtrum |
| Lin, Zinan | 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 |
| Nayak, Peshal | Samsung Research America |
| Ng, Boon Loong | Samsung Research America |
| Palayur, Saju | Maxlinear Inc |
| Park, Sungjin | Senscomm |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Ryu, Kiseon | NXP Semiconductors |
| Shirakawa, Atsushi | SHARP CORPORATION |
| Sun, Bo | Sanechips |
| Wang, Qi | Apple, Inc. |
| 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 |
| Yoon, Yelin | LG ELECTRONICS |
| Zhang, Jiayi | Ofinno |
| Zhao, Yue | Huawei Technologies Co., Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r3. The agenda was approved.

**Submissions**

1. [354r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0354-02-00be-cr-for-some-clauses-in-9-4.docx) CR for Some Clauses in 9.4 Po-Kai Huang [3C-SP]

C: you may want to remove the duplication one in clause 9 and clause 35.

C: The resolution for CID 17538 creates instances where the same rule is duplicated in clause 9.4.2.26 and subclauses of 35.3. Either in the current round (preferred) or the next round, the TG should review the text in these subclauses to identify and address the duplication. (e.g., ‘If an AP MLD supports Proxy ARP service, then all affiliated APs of the AP MLD shall set the Proxy ARP field to 1 in their Extended Capabilities elements.’)

SP: Do you support to accept the resolution in 11-23/354r3the following CIDs?

17538, 15928, 16435

No objection

1. [335r4](https://mentor.ieee.org/802.11/dcn/23/11-23-0335-03-00be-cr-for-4-5-3-and-11-3.docx) CR for 4.5.3 and 11.3 Po-Kai Huang [1C-SP]

SP: Do you support to accept the resolution in 11-23/335r4 for the following CIDs?

18067

No objection

1. [323r4](https://mentor.ieee.org/802.11/dcn/23/11-23-0323-04-00be-cr-for-35-3-5.docx) CR for 35.3.5 Po-Kai Huang [1C-SP]

C: What’s the functionalities in the paragraph?

A: services like TWT, BA. I’m ok with change to services.

C: suggestion: “NOTE – A certain functionality that applies between a non-AP STA and its associated AP (where either or both are not affiliated with an MLD) will also apply, unless otherwise specified, to a non-AP STA and its associated AP where both are affiliated with their respective MLDs and the MLDs have performed ML setup.”

C: does the term "service" capture rules and requirements?

C: having a couple days of reflector discussions might help on this item.

A: This is almost done. I also reflect abhi’s comments.

C: Do we have definition of service?

A: Yeah we have security services, BSS services, etc. 4.5 Overview of the services.

SP: Do you support to accept the resolution in 11-23/323r5 for the following CIDs?

17892

No objection

1. [310r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0310-00-00be-lb271-cr-35-3-18-part-1.docx) LB271 CR 35.3.18 part 1 Liwen Chu [14C]

C: eMLMR->EMLMR

C:

C: what is the initial frame exchanges?

A: initial frame exchange cover initial frame and response.

C: what is a frame exchange? Any further frame exchange except initial frame exchange?

C: Can you clarify the initial frame exchange in the below paragraph( third line)? We don’t have the definition of it.

16936 is deferred.

C: only initiated by AP affiliated with AP MLD? What about non-AP MLD? The text is confused.

16383, 16935, 16623, 15418 are deferred.

SP: Do you support to accept the resolution in 11-23/310r2 for the following CIDs?

~~16383, 16935, 15623,~~ 16558, 15624, ~~16936~~, 17865, ~~15418,~~ 15648, 16937,

15625, 16938, 15829, 16939

No objection

1. [340r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0340-03-00be-lb271-cr-cl35-emlsr.docx) LB 271 CR CL35 EMLSR Minyoung Park [35C ]

C: I had another suggestion on the text. We can add the text ”The AP MLD and non-AP MLD shall follow the parameters in the most recent EML OMN frame exchange between the AP MLD and the non-AP MLD”.

A: This is enabling and disabling related text. We can add the related text in the next document. Is it ok? I have a comment on your suggested text. It’s hard to add it now.

C: ok, i want to hear other options.

C: either applied to whole paragraph or part after and?

A: Whole text?

C: what is the SigExt for time out interval?

A: It is Brian’s comment from REVme. It covers both case (ext and none)

C: regarding d), why are we adding this rule?

A: we had discussion at the last round by Gaurang. We can have more offline discussion with this CID if you want.

C: For the last paragraph, you can add ”whichever comes first”

C: d) , change from shall to should.

A: We will have more offline discussion on d).

A: I want to SP for enabling and disabling except 17877,

C: do you defer the single link as well?

A: yes, (s) related CID will be deferred.

A: 15655 diagram related is deferred.

SP: Do you support to accept the resolution in 11-23/340r5 for the following CIDs?

15075 15077 15563 15645 16055 ~~16676~~ 16675 16555 16469 15109 16917 15562 15591 15884 16259 15590 15592 16554 16918 16232 15483 15112 16616 16919 15885 15080 16056 15076 16260 16556 16920 16921 16557 16617 15078 16470 18059

No objection

NOTE: changes related to ”(S)” for multiple links are not part of the SP.

1. [545r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0545-00-00be-lb271-clause-6-and-clause-10-resolutions.docx) lb271-clause-6-and-clause-10-resolutions Stephen McCann [3C]

SP: Do you support to accept the resolution in 11-23/545r0 for the following CIDs?

16233, 16251, 16252

No objection

The teleconference was adjourned at 11:57 ET.

### April 6, 2023 (10:00 – 12:00 ET) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

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Attendances (IMAT)

|  |  |
| --- | --- |
| Name | Affiliation |
| Ajami, Abdel Karim | Qualcomm Technologies, Inc |
| 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. |
| Chng, Shi Baw | BAWMAN LLC |
| CHUN, JINYOUNG | LG ELECTRONICS |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Fan, Shuang | Sanechips Technology Co., Ltd. |
| Fang, Yonggang | Mediatek |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| Gupta, Binita | Meta Platforms, Inc. |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Handte, Thomas | Sony Corporation |
| Huang, Po-Kai | Intel |
| Kim, Geon Hwan | LG ELECTRONICS |
| Kim, Youhan | Qualcomm Technologies, Inc. |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Li, Weiyi | Spreadtrum |
| Lim, Dong Guk | LG ELECTRONICS |
| Lorgeoux, Mikael | Canon Research Centre France |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Ma, Yongsen | SAMSUNG ELECTRONICS |
| McCann, Stephen | Huawei Technologies Co., Ltd |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Nayak, Peshal | Samsung Research America |
| Ng, Boon Loong | Samsung Research America |
| Ouchi, Masatomo | Canon |
| Park, Minyoung | Intel |
| Park, Sungjin | Senscomm |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Petrick, Albert | InterDigital, Inc. |
| 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 |
| Sun, Bo | Sanechips |
| Wang, Chao Chun | MediaTek Inc. |
| Wang, Qi | Apple, Inc. |
| Wullert, John | Peraton Labs |
| Yang, Jay | Nokia |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Yoon, Kangjin | Meta Platforms Inc. |
| Yoon, Yelin | LG ELECTRONICS |
| Zhao, Yue | Huawei Technologies Co., Ltd |
| Zhou, Lei | H3C Technologies Co., Limited |

1. The Chair asked whether there is comment about agenda in 11-23/0509r5. The agenda was approved.

**Submissions**

1. [437r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0437-00-00be-lb271-cr-cl35-emlsr-part2.docx) LB 271 CR CL35 EMLSR - part 2 Minyoung Park [37C -16GT]

C: What is the motivation of this operation on 15658? What is the challenge of MU-RTS TXS trigger?

A: Addtional types of Trigger frame may be transmitted by implementation.

C: I don’t need to call out this restriction. I don’t see the challenge of it.

A: Both are two different frame between MU-RTS Trigger frame and MU-RTS TXS Trigger frame.

The indicated CID and related CIDs were deferred

C: How about the EMLMR?

A: It can be discussed in EMLMR section.

C: What’s the limitation or reason of one spatial stream? STA or AP?

A: This is STA side’s constraints.

C: For Disabled link and listening mode, we may need listening on the disabled link? The spec allows that the STA transmits a few frame on disabled link.

A: This is when a link among EMLSR link set is disabled

C: ok

C: You can use different document 307 to address the CID 15564 instead of rejected.

C:

SP: Do you support to accept the resolution in 11-23/437r3 for the following CIDs?

16923 16924 16927 15886 16929 16930 16931 17857 16926 1502616680 16620 16679 16621 16932 15105 1692518058 15622 15230 15618 15730 16922 1562115061 15451 15611 16933 16934

No objection

1. [387r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0387-00-00be-lb271-cr-for-subclause-35-3-12-6.docx) LB271 CR for subclause 35.3.12.6 Ming Gan [8C-6GT]

C: What if the maximum value of beacon intervals of the link corresponding to the removal link? If link is removed and other STA joins, then they will understand differently.

A: This depends on the STA’s request links.

C: We can restructure a sentence.

C: Same comment as Vishnu. When the AP remove the link, the Listen Interval does not change? Can you add the note for clarification? Like If the link is removed, the Listen Interval will remain.

A: Ok, I will do later.

SP: Do you support to accept the resolution in 11-23/387r1 for the following CIDs?

16828 15056 16603 16604 17962 16605 16606

No objection

1. [504r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0504-00-00be-lb271-cr-cl35-mlti-part1.docx) cr cl35 mlti part1 Minyoung Park [26C -11GT]

C: Is there any case that there is only ML TI element without TIM?

A: TIM is always in beacon.

C: is TIM optional when there is no buffered traffic?

A: TIM element can indicate DTIM.

C: I perfer to keep the link ID offset.

C: The original text works already with the smallest ID value. How does it work without this text?

A: It starts from 0.

C:Before deleting, how does it work?

C: we have different option on this.

A: Do you want to defer this?

C: Yes, thanks

C: If we decide to keep the 'should', then the text needs to be fixed: It should be the Max (Highest link ID - Lowest Link ID) for each indicated non-AP MLD.

A: Ok, I will defer the 16824 related to that.

C: What does it mean the last text that you added on the last CID? That text is the same meaning as the previous text for default mapping.

A: I will defer this.

SP: Do you support to accept the resolution in 11-23/504r1 for the following CIDs?

15083 16040 15544 16528 16529 17745 15091 17740 15376 17741 16531 17292 1826715545 16532 16533 16534

No objection

1. 541r0 CR for 35.3.14 Po-Kai Huang [24C]
2. [546r5](https://mentor.ieee.org/802.11/dcn/23/11-23-0546-00-00be-lb271-clause-35-3-16-8-3-resolutions.docx) lb271-clause-35-3-16-8-3-resolutions Stephen McCann [4C-3GT]

SP: Do you support to accept the resolution in 11-23/546r5 for the following CIDs?

16228,16213, 16214, 16229, 16230 and 16254.

No objection

1. [552r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0552-00-00be-cr-for-some-clauses-in-10-and-11.docx) CR for Some Clauses in 10 and 11 Po-Kai Huang [8C]

16687 is deferred after discussion.

Not finished.

The teleconference was adjourned at 12:00 ET.

### April 10, 2023 (19:00 – 21:00 ET) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

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   * 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))

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| Fischer, Matthew | Broadcom Corporation |
| Gu, Xiangxin | Unisoc |
| Gupta, Binita | Meta Platforms, Inc. |
| Hamilton, Mark | Ruckus/CommScope |
| Kim, Geon Hwan | LG ELECTRONICS |
| Kuo, Chih-Chun | MediaTek Inc. |
| Li, Weiyi | Spreadtrum |
| Lim, Dong Guk | LG ELECTRONICS |
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| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Ma, Yongsen | SAMSUNG ELECTRONICS |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Ng, Boon Loong | Samsung Research America |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Petrick, Albert | InterDigital, Inc. |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Ryu, Kiseon | NXP Semiconductors |
| Sato, Takuhiro | SHARP CORPORATION |
| Shafin, Rubayet | Samsung Research America |
| Wang, Qi | Apple, Inc. |
| Wullert, John | Peraton Labs |
| Xia, Qing | Sony Corporation |
| Yamada, Ryota | SHARP CORPORATION |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yee, James | MediaTek Inc. |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Yoon, Yelin | LG ELECTRONICS |
| Zhao, Yue | Huawei Technologies Co., Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r7. The agenda was approved.

**Submissions**

1. [541r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0541-02-00be-cr-for-35-3-14.docx) CR for 35.3.14 Po-Kai Huang [24C]

C: You mention only one link. But the bitmap can indicate multiple links.

A: There is the related text in the spec already. I already explained history. Multiple indications is not allowed in R1. R2 does not make sense now.

C: Link bitmap can set to multiple bits. We can remove the related text. What is the issue to set more than one bit in the bitmap in terms of technologies?

A: we eventually go with this. Shall requirement already is in the spec.

C: you mention link id bitmap in individual TWT. Broadcast TWT is still on going. It is applied to individual and broadcast.

A: If you don’t have the description, you can descripe it.

C: can you defer this ? I did not review it. 18238.

A: This is almost editorial. Ok.

18238 is deferred.

C: This text is only for BTM? Or Need to apply in the spec?

C: BTM request frame is transmitted in broadcast manner? Do you agree?

A: The comment does not mention that issue. You can submit the comment on it if you want.

C: For exception, you want the protected fine timing frame here.

A: I have public action one here.

SP: Do you support to accept the resolution in 11-23/541r4 for the following CIDs?

16843, 15551, 15552, 16047, 15379, 15410, 16841, 16842, 16543, 16544, 16545, 15546, 16832, 17330,

No objection

1. [547r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0547-01-00be-cr-for-3-2-and-some-clauses-in-35.docx) CR for 3.2 and Some clauses in 35 Po-Kai Huang [18C]

C: Mobile AP is basically simplified AP. Not need to change the geolocation.

A: This is for mobile AP definition.

C: Why not go with the definition suggested by the commenter

C: 17974, you’re not include any reference for rejection reason.

A: EHT follows the baseline styles in 4.3.16a. I don’t want to add the reference.

C: 15003, what is DA here? Why do you need the exception? You agree partially.

C: could you assign the 15140 to me? There are multiple comments on 15140.

C: singly is used differently in baseline spec.

The related CID is deferred

SP: Do you support to accept the resolution in 11-23/547r3 for the following CIDs?

15288, 15289, , 16715, 17951, ~~17974,~~ 15003, 16751, 16752, 15543, 16527, 16821, 18164, 16831, 17295, 15279,

No objection

1. [552r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0552-01-00be-cr-for-some-clauses-in-10-and-11.docx) CR for Some Clauses in 10 and 11 Po-Kai Huang [8C]

C: there is no modification instead of insertion of broadcast TWT element.

A: I’m fine with insertion only.

C: I wonder where we need m1.

A: do you need to transfer or defer this?

C: I can take it.

SP: Do you support to accept the resolution in 11-23/552r3 for the following CIDs?

17326, 17327, 16687, 16686, , 18244, 16253, 15141

No objection

The teleconference was adjourned at 21:00 ET.

### April 12, 2023 (10:00 – 12:00 ET) (TGbe MAC ad hoc)

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 10:02 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.
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| Bredewoud, Albert | Broadcom Corporation |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Chng, Baw | BAWMAN LLC |
| CHUN, JINYOUNG | LG ELECTRONICS |
| Coffey, John | Realtek Semiconductor Corp. |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Erkucuk, Serhat | Ofinno |
| Fan, Shuang | Sanechips Technology Co., Ltd. |
| Fang, Yonggang | Mediatek |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Gu, Xiangxin | Unisoc |
| GUIGNARD, Romain | Canon Research Centre France |
| Handte, Thomas | Sony Corporation |
| Ho, Duncan | Qualcomm Incorporated |
| Hsu, Ostrovsky | Xiaomi Communications Co., Ltd. |
| Huang, Po-Kai | Intel |
| Huq, Kazi Mohammed Saidul | Ofinno |
| Jang, Insun | LG ELECTRONICS |
| Kim, Geon Hwan | LG ELECTRONICS |
| Kim, Jeongki | Ofinno |
| Kim, Sang Gook | LG ELECTRONICS |
| Kipness, Michael | IEEE Standards Association (IEEE SA) |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Koundourakis, Michail | Samsung Cambridge Solution Centre |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Levy, Joseph | InterDigital, Inc. |
| Li, Weiyi | Spreadtrum |
| Lim, Dong Guk | LG ELECTRONICS |
| Lu, kaiying | MediaTek Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| McCann, Stephen | Huawei Technologies Co., Ltd |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Nayak, Peshal | Samsung Research America |
| Ng, Boon Loong | Samsung Research America |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Park, Minyoung | Intel |
| Patil, Abhishek | Qualcomm Incorporated |
| Patwardhan, Gaurav | Hewlett Packard Enterprise |
| Petrick, Albert | InterDigital, Inc. |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Ryu, Kiseon | NXP Semiconductors |
| Seo, Sangho | Broadcom Corporation |
| Taori, Rakesh | Infineon Technologies |
| Wang, Chao Chun | MediaTek Inc. |
| Wentink, Menzo | Qualcomm Technologies, Inc |
| Wullert, John | Peraton Labs |
| Xia, Qing | Sony Corporation |
| Yamada, Ryota | SHARP CORPORATION |
| Yang, Jay | Nokia |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yee, James | MediaTek Inc. |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Zhao, Yue | Huawei Technologies Co., Ltd |
| Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r10. The agenda was approved.

**Submissions**

1. [588r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0588-00-00be-lb271-cr-for-cids-in-35-3-7-1-1.docx) CR for CIDs in 35.3.7.1.1 Laurent Cariou [35C]

C: 17331, we don’t use ” thanks to”. Use ”using” instead of it.

C: Update Tgbe editor part with Draft version.

C: 16275, we already have ML probing mechanism for gethering the elements. Why do we need to have the exceptions? We can have more discussion.

A: Let me defer this CID.

C: I’m in favor of the resolution on the same CID.

C: Can we defer this 15404 and related CIDs?

A: Ok, 16484, 17333, 15404 are defered.

C: Can BAR be sent on any enabled links ? It may be related to local soreboard. It should be controlled as control frame or data frame? Need more discussion.

A: Ok, 17332 is deferred.

C: rejection reason need to be updated.

C: Draft3 has some error. We have to roll back to D3. Your response is not correct. We have to keep this feature optional instead of removing.

18128, 17239 are defered

15018 is deferred.

C: Minor. Note1, you can remove also there. The first part is not related to power state.

A: There is etc. in the first part.

18130 is deferred

C: The reference of UL MU operation can be changed based on 11be spec instead of 11ax.

C: two paragraphs are repetitions. You can harmonize them to one.

Two CIDs are removed 15020, 18132.

17296 is deferred.

15053, what is the editor instruction?

SP: Do you support to accept the resolution in 11-23/558r2 for the following CIDs?

17331 15052 16486 17334 18129 16487 15522 17942 15132 16003 17943 15135 17335 16696 18131 15637 17824 15597 16488 16489

No objection

1. [590r0](https://qualcomm-my.sharepoint.com/personal/aasterja_qti_qualcomm_com/Documents/Desktop/Qgenesis/IEEE_TGbe_Chair/2023_Mar_May_Telcos/v) LB271 CR for CIDs in 35.3.7.1.x Laurent Cariou [22C]

C: Advertised TID-to-link mapping is overriding the current TID-to-link mapping? Is that captured?

A: Yes, everything should be coverd.

C: Please rewording the rejection reason on 18260.

A: Ok, I will defer 18260.

C: 17826, instead of immediately, as soon as practical. At the end of text.

C: Multiple link based transition may not be impossible immediately based on the management frame level.

C: It’s not clear what operating on? Non-AP STA or Non-AP MLD?

A: Non-AP STA. I can add ”that is”.

C: operating on or corresponding to?

A: No longer operating for disabled link.

C: I don’t see the non-AP STA is corresponding to the disable.

C: corresponds to

17361 is deferred

C: More data is mapped to data frame or management frame?

A: Both.

C: We can defer it.

C: 17336, after advertised TID-to-link mapping, what if STA negotiates TID-to-link mapping? Can we defer?

A: Ok

C: 16006, can you defer this?

A: Ok

SP: Do you support to accept the resolution in 11-23/590r2 for the following CIDs?

15820 18137 18138 18139 16496 16497 17826 17339 18140 15455 16007 16498 15598 15678 16499 17360 16008 16500

No objection

The teleconference was adjourned at 12:00 ET.

### April 20, 2023 (10:00 – 12:00 ET) (TGbe MAC ad hoc)

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 10:02 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.
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| Carney, William | Sony Group Corporation |
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| Choi, Jinsoo | LG ELECTRONICS |
| CHUN, JINYOUNG | LG ELECTRONICS |
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| Handte, Thomas | Sony Corporation |
| Ho, Duncan | Qualcomm Incorporated |
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| Huang, Po-Kai | Intel |
| Jang, Insun | LG ELECTRONICS |
| Kim, Geon Hwan | LG ELECTRONICS |
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| Li, Weiyi | Spreadtrum |
| Lu, kaiying | MediaTek Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Luo, Yuanqiu | Futurewei Technologies |
| McCann, Stephen | Huawei Technologies Co., Ltd |
| Ng, Boon Loong | Samsung Research America |
| Palayur, Saju | Maxlinear Inc |
| Park, Minyoung | Intel |
| Park, Sungjin | Senscomm |
| Patil, Abhishek | Qualcomm Incorporated |
| Qi, Yue | Samsung Research America |
| 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 |
| Wang, Chao Chun | MediaTek Inc. |
| Wang, Qi | Apple, Inc. |
| Wullert, John | Peraton Labs |
| Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| Yoon, Yelin | LG ELECTRONICS |
| Zhao, Yue | Huawei Technologies Co., Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r14. The agenda was approved.

**Submissions**

1. [590r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0590-03-00be-lb271-cr-for-cids-in-35-3-7-1-x.docx) LB271 CR for CIDs in 35.3.7.1.x Laurent Cariou [22C-SP]

SP: Do you support to accept the resolution in 11-23/590r3 for the following CID?

18139

No objection

1. [513r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0513-00-00be-lb271-cr-for-subclause-35-3-4-4.docx) CR for subclause 35.3.4.4 Ming Gan [11C-8GT]

C: confusing in the text what "unless" applies to

15975is deferred

SP: Do you support to accept the resolution in 11-23/513r1 for the following CIDs?

16374 16184 17822 16088 15172 16185 16375 16787 16376 15856

No objection

1. [593r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0593-00-00be-lb271-cr-for-clause-35-3-7-3-2-part-1.docx) LB271 CR for Clause 35.3.7.3.2 - Part 1 Arik Klein [10C-5GT]

C: first line of #16017: each of the APs affiliated with "AN" AP MLD (add the word "an")

C: you have to differentiate disassociation from MLD from . You should keep the Link Removal Imminent subfield.

A: If the BSS Termination Included subfield is set to 0, the subfield should not be considered.

C: the TBTT Information field of what AP? Who transmit the frame?

A: any of the APs affiliated with the AP MLD that corresponds to the AP affiliated with the AP MLD that is operating on the disabled link

Ok, I will have offline discussion. 16510 is differed.

18249 is deferred

C: 18154, why do we need to include the Neighbor report?

A: This is optional.

C: provide a BSS transition ..

C: operating on the disable link. Will or the past?

A: to become disabled is ok?

C: Ok, the previous text.

18154 is deferred.

16020 is deferred.

SP: Do you support to accept the resolution in 11-23/593r2 for the following CIDs?

15601, 16017, 16018, 16019,18152, 18153

No objection

1. [562r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0562-00-00be-lb271-cr-for-subclause-35-3-10.docx) CR for subclause 35.3.10 Ming Gan [30C-17GT]

C: 16030, I will give you reference for rejection reason.

C: please defer 16027, 16031, 16664, 16447, 18250

C: TID to link mapping related critical update flag.18250, we already have the critical update flag set to 1 for TID-to-link mapping is advertised by AP MLD. We need to add the reference. You’re deferring the CID?

SP: Do you support to accept the resolution in 11-23/562r2 for the following CIDs?

15004 16028 16029 16194 17290 16195 16030 16032 16033 16515 16516 16517 16518 17895 16519 17896 16808 17289 17836 17291 17832 16814 17897 16034 18262

No objection

1. [579r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0579-00-00be-lb271-cr-for-subclause-35-3-16-8-3.docx) CR for subclause 35.3.16.8.3 Ming Gan [13C-4GT]

C: when non-AP STA needs assistance in transmitting UL frame. UL data frame

C: we had debated this multiple times.

A: we can have more discussion. 15559, 18202, 15707, 16196, 17844, 16339

C: UL data frame is too restricted. Management frame.

A: Ok just UL frame.

C: I don’t agree with change shall to should. Recommendation is good.

A: There is the capability and there is condition for frame exchange.

C: typically should is fine. Should always cover all cases.

C:

SP: Do you support to accept the resolution in 11-23/579r3 for the following CIDs?

18336 16914 18054 18053 18055 18056

No objection

1. [540r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0540-02-00be-cr-for-qmf.docx) CR for QMF Po-Kai Huang [4C]

Presented and some discussions. No straw poll.

The teleconference was adjourned at 12:00 ET.

### April 24, 2023 (19:00 – 21:00 ET) (TGbe MAC ad hoc)

Chairman: Alfred Asterjadhi (Qualcomm)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. Alfred is the Chair on today call on behalf of Liwen.
2. The Chair (Alfred) calls the meeting to order at 19:00 ET. The Chair introduces himself and the Secretary.
3. 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.
4. The Chair goes through the IEEE copyright policy.
5. The Chair recommends using IMAT for recording the attendance.
   * Please record your attendance during the conference call by using the IMAT system:
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| Hu, Chunyu | Facebook |
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| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Park, Minyoung | Intel |
| Ratnam, Vishnu | Samsung Research America |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Ryu, Kiseon | NXP Semiconductors |
| Shirakawa, Atsushi | SHARP CORPORATION |
| Wullert, John | Peraton Labs |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Zhao, Yue | Huawei Technologies Co., Ltd |
| Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r17. The agenda was modified. The agenda was approved.

**Submissions**

1. [605r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0605-01-00be-cr-for-medium-sync-related-cids.docx) CR for Medium Sync related CID Dibakar Das [25C]

C: Otherwise is not equal to unless. I prefer the original one. Need more time.

A: I can also do rejection.

C: I’m fine with the rejection. But if you change it, need more time.

C: How about removing just event? Transmission might be ok.

C: transmission duration is less than. And transmission duration is greater than..

C: There is similar text in the following paragraph. Longer -> larger (16897)

16395 is deferred

C: 15879, original text (capable) is more accurate than ”want”.

A: If it is capable, the STA shall perform..

C: It does not have the capability by the modified change.

C: Instead of wants to, In order for a STA capable of obtaining a TXOP

C: is capable of and intends to...

C: MIB variable is straightforward.

C: you can use may instead of shall

15879 is deferred

C: It’s the number of RTS instead of TXOP.

C: how about "shall not attempt to initiate a TXOP more than dot11MSDTXOPMAX times since start of the timer" ?

Dibakar will update the related MIB variable later for alignment with this change.

C: 16909, shall is better.

16909 is deferred

C: 605r2 in the resolution column.

In 16901, the proposed text is not same as the resolved text. Should be revised.

SP: Do you support to accept the resolution in 11-23/605r2 for the following CIDs?

* 16903 18315 17854 16414 16897 16896 16898 16901 16902 16319 ~~16395~~ 16396 ~~15879 17898 15066~~ 18263 16904 15093 15557 16905 15558 16906 16907 15616 ~~16909~~

No objection

1. [604r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0604-01-00be-cr-for-tx-related-cids.docx) CR for TX related CIDs Dibakar Das [25C]

C: Please change to an or the as appropriate depending on the context of that sentence in the resolution.

C: The User Info field of the frame contains the signaling for resource allocation duration.

C: any or both?

C: Is it possible that STA 1 transmits a Trigger to STA 2?

16672 is deferred.

C: I don’t any information of the Note. Same as the previous paragraph.

A: There is the duration/ID field.

C: But same. You can reject.

C: Reject. No further changes are required.

17798 is deferred

Not finished.

1. [634r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0634-00-00be-lb271-cr-for-cid17989.pptx) LB271-cr-for-cid17989 Vishnu Ratnam [1C]

C: It’s performed after association. This is more flexible option. We chose the simpler EMLMR operation perviously. You can have a discussion in next version rather than 11be.

C: Do you think this can be included in EMLSR?

A: It’s not excluded

**SP1:** Do you agree to support reconfigurable non-AP MLD operation in 802.11be.

* Yes 14
* No 16
* Abstain 11
* No answer 21

C: It’s premature for option 1, 2, 3.

The teleconference was adjourned at 21:00 ET.

### April 26, 2023 (10:00 – 12:00 ET) (TGbe MAC ad hoc)

Chairman: Alfred Asterjadhi (Qualcomm)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. Alfred is the Chair on today call on behalf of Liwen.
2. The Chair (Alfred) calls the meeting to order at 10:00 ET. The Chair introduces himself and the Secretary.
3. 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.
4. The Chair goes through the IEEE copyright policy.
5. 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))

|  |  |
| --- | --- |
| Name | Affiliation |
| Aboulmagd, Osama | Huawei Technologies Co., Ltd |
| Au, Kwok Shum | Huawei Technologies Co., Ltd |
| Baek, SunHee | LG ELECTRONICS |
| Bahn, Christy | IEEE STAFF |
| Bredewoud, Albert | Broadcom Corporation |
| Carney, William | Sony Group Corporation |
| CHENG, yajun | Xiaomi Communications Co., Ltd. |
| Chiang, James | MediaTek Inc. |
| Chng, Baw | BAWMAN LLC |
| Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| Erkucuk, Serhat | Ofinno |
| Fan, Shuang | Sanechips Technology Co., Ltd. |
| Fischer, Matthew | Broadcom Corporation |
| Fujimori, Yuki | Canon Research Centre France |
| Guo, Yuchen | Huawei Technologies Co., Ltd |
| Haider, Muhammad Kumail | Meta Platforms Inc. |
| Ho, Duncan | Qualcomm Incorporated |
| Hu, Chunyu | Facebook |
| Huang, Po-Kai | Intel |
| Kim, Geon Hwan | LG ELECTRONICS |
| Kim, Sang Gook | LG ELECTRONICS |
| Kim, Sanghyun | WILUS Inc |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Koundourakis, Michail | Samsung Cambridge Solution Centre |
| Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| Li, Weiyi | Spreadtrum |
| Lim, Dong Guk | LG ELECTRONICS |
| Lou, Hanqing | InterDigital, Inc. |
| Lu, kaiying | MediaTek Inc. |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| Ma, Yongsen | SAMSUNG ELECTRONICS |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Nayak, Peshal | Samsung Research America |
| Ng, Boon Loong | Samsung Research America |
| Ouchi, Masatomo | Canon |
| Palayur, Saju | Maxlinear Inc |
| Park, Minyoung | Intel |
| Park, Sungjin | Senscomm |
| Patil, Abhishek | Qualcomm Incorporated |
| Qi, Yue | Samsung Research America |
| Quan, Yingqiao | Unisoc |
| Ratnam, Vishnu | Samsung Research America |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Ryu, Kiseon | NXP Semiconductors |
| Sato, Takuhiro | SHARP CORPORATION |
| Sun, Bo | Sanechips |
| Wang, Chao Chun | MediaTek Inc. |
| Wang, Qi | Apple, Inc. |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| Yee, James | MediaTek Inc. |
| Yoon, Yelin | LG ELECTRONICS |
| Zhang, Jiayi | Ofinno |
| Zhao, Yue | Huawei Technologies Co., Ltd |
| Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

1. The Chair asked whether there is comment about agenda in 11-23/0509r18. The agenda was approved.

**Submissions**

1. [604r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0604-01-00be-cr-for-tx-related-cids.docx) CR for TX related CIDs Dibakar Das [25C-Cont.]

C: there are related several CIDs. How to ignore NAV? My concern is mode 1. STA can return in mode1.

A: Do we have any explicit signaling to return?

C: They are same issues.

A: What is the relationship with mode 1? Any conflict?

C: If there are comments on mode 1, we will discuss it.

C: Who is resolving the mode 1 related CID?

16117 17798 15668 are deferred.

16724 is deferred.

15665, 15666, 15667 are deferred.

C: NAV is set is more clear.

16207 is deferred.

15964, 17261 are deferred.

SP: Do you support to accept the resolution in 11-23/605r2 for the following CIDs?

* 16727, 16732, 17961, 18318, ~~16672,~~ 15963, 17806, 18304, 17797, ~~17798,~~ 15937, 15938, 15939, 15048, 17809, ~~16117~~, 16653, 16722, 16724, ~~16725,~~ 17811, ~~15665,~~ ~~15666, 15667,~~ 15810, ~~15668, 16207,~~ 15006, ~~15964,~~ 16728, 18247~~, 17261~~

No objection

1. [560r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0560-00-00be-lb271-cr-for-35-3-16-2-2.docx) LB271 CR for 35.3.16.2.2 Frank Hsu [21C-12GT]

C: 15475, in rejection reason, Why would the AP be not allowed to deny a change from a STA? How much more time AP need?

A: I will defer this.

C: 16049, it seems like enabled adding new link. Could you defer this?

A: Ok

C: 17870, reconfiguration element does not bring any confusion. Why the reconfiguration req/resp frame makes confusion? Reconfiguration frame is broader framework. Multi-link operation update is hard to me. Please defer.

A: Ok, I will defer.

C: Rejection reason of 16444 is not correct.

16444 is deferred.

C: 17874? You’re missing field or subfiled in the modification.

A: Ok,

SP: Do you support to accept the resolution in 11-23/560r2 for the following CIDs?

* 15416, ~~15475,~~ 15874, 16048, ~~16049,~~ 16050, 16051, 16052, 16053, ~~16444,~~ 16450, 16867, 16868, 16869, 16872, 16874, 16875, ~~17870,~~ 17873, 17874, 17324

No objection

1. [300r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0300-00-00be-lb271-cids-assigned-to-abhi-part-2.docx) CIDs assigned to Abhi - Part 2 Abhishek Patil [10C-4GT]

C: 16379, regarding the active scanning procedure, do we need to add the reference?

C: Is there any limited contents in Basic Multi-link element? Common info?

C:

SP: Do you support to accept the resolution in 11-23/300r1 for the following CIDs?

* 17484, 17671, 17760, ~~16379,~~ 15976, 15398, 15980, 16967, 15447, 15448

No objection

1. [568r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0568-00-00be-lb271-cids-assigned-to-abhi-part-3.docx) CIDs assigned to Abhi - Part 3 Abhishek Patil [1C]

C: It would be good to have .. How does the member find the related normative text? Please give me more time to review.

A: Ok.

C: I’m modifying the related text in my CR document. How can I apply this?

C: You don’t need to have exact subclause. I need also more time.

SP deferred

1. [608r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0608-00-00be-cr-for-txs-related-cids-part-2.docx) CR for TXS related CIDs part 2 Dibakar Das [2C]

C: What is the additional benefit of new bit? STA does not want to use MU EDCA?

C: It make the procedure complexer, if we define disable.

SP deferred

The teleconference was adjourned at 12:00 ET.

### May 04, 2023 (10:00 – 12:00 ET) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex.

**Introduction**

1. The Chair (Liwen) calls the meeting to order at 10:02 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))

Breakout Timestamp Name Affiliation

TGbe (MAC) 5/4 Ajami, Abdel Karim Qualcomm Technologies, Inc

TGbe (MAC) 5/4 Baek, SunHee LG ELECTRONICS

TGbe (MAC) 5/4 Bahn, Christy IEEE STAFF

TGbe (MAC) 5/4 Bredewoud, Albert Broadcom Corporation

TGbe (MAC) 5/4 Carney, William Sony Group Corporation

TGbe (MAC) 5/4 Chng, Baw BAWMAN LLC

TGbe (MAC) 5/4 Das, Subir Peraton Labs

TGbe (MAC) 5/4 Dong, Xiandong Xiaomi Communications Co., Ltd.

TGbe (MAC) 5/4 Erkucuk, Serhat Ofinno

TGbe (MAC) 5/4 Fan, Shuang Sanechips Technology Co., Ltd.

TGbe (MAC) 5/4 Fischer, Matthew Broadcom Corporation

TGbe (MAC) 5/4 Fujimori, Yuki Canon Research Centre France

TGbe (MAC) 5/4 Gu, Xiangxin Unisoc

TGbe (MAC) 5/4 Haider, Muhammad Kumail Meta Platforms Inc.

TGbe (MAC) 5/4 Handte, Thomas Sony Corporation

TGbe (MAC) 5/4 Ho, Duncan Qualcomm Incorporated

TGbe (MAC) 5/4 Hu, Chunyu Facebook

TGbe (MAC) 5/4 Huang, Po-Kai Intel

TGbe (MAC) 5/4 Kim, Geon Hwan LG ELECTRONICS

TGbe (MAC) 5/4 Kim, Jeongki Ofinno

TGbe (MAC) 5/4 Kim, Sang Gook LG ELECTRONICS

TGbe (MAC) 5/4 Kim, Sanghyun WILUS Inc

TGbe (MAC) 5/4 Klein, Arik Huawei Technologies Co., Ltd

TGbe (MAC) 5/4 Kuo, Chih-Chun MediaTek Inc.

TGbe (MAC) 5/4 Levy, Joseph InterDigital, Inc.

TGbe (MAC) 5/4 Li, Weiyi Spreadtrum

TGbe (MAC) 5/4 Lim, Dong Guk LG ELECTRONICS

TGbe (MAC) 5/4 Lorgeoux, Mikael Canon Research Centre France

TGbe (MAC) 5/4 Lou, Hanqing InterDigital, Inc.

TGbe (MAC) 5/4 Lu, Liuming Guangdong OPPO Mobile Telecommunications Corp.,Ltd

TGbe (MAC) 5/4 Luo, Yuanqiu Futurewei Technologies

TGbe (MAC) 5/4 Ma, Yongsen SAMSUNG ELECTRONICS

TGbe (MAC) 5/4 Montemurro, Michael Huawei Technologies Co., Ltd

TGbe (MAC) 5/4 Ng, Boon Loong Samsung Research America

TGbe (MAC) 5/4 Palayur, Saju Maxlinear Inc

TGbe (MAC) 5/4 Park, Minyoung Intel

TGbe (MAC) 5/4 Patil, Abhishek Qualcomm Incorporated

TGbe (MAC) 5/4 Qi, Yue Samsung Research America

TGbe (MAC) 5/4 Quan, Yingqiao Unisoc

TGbe (MAC) 5/4 Seo, Sangho Broadcom Corporation

TGbe (MAC) 5/4 Shafin, Rubayet Samsung Research America

TGbe (MAC) 5/4 Sun, Bo Sanechips

TGbe (MAC) 5/4 VIGER, Pascal Canon Research Centre France

TGbe (MAC) 5/4 Wang, Qi Apple, Inc.

TGbe (MAC) 5/4 Wullert, John Peraton Labs

TGbe (MAC) 5/4 Yang, Jay Nokia

TGbe (MAC) 5/4 Yang, Jimmy Moxa Inc.

TGbe (MAC) 5/4 Yee, James MediaTek Inc.

TGbe (MAC) 5/4 Yi, Yongjiang Spreadtrum Communication USA, Inc

TGbe (MAC) 5/4 Yoon, Yelin LG ELECTRONICS

TGbe (MAC) 5/4 Zhang, Jiayi Ofinno

TGbe (MAC) 5/4 Zhao, Yue Huawei Technologies Co., Ltd

TGbe (MAC) 5/4 Zhou, Pei Guangdong OPPO Mobile Telecommunications Corp.,Ltd

1. The Chair asked whether there is comment about agenda in 11-23/0509r20. The agenda was approved.

**Submissions**

1. [547r4](https://mentor.ieee.org/802.11/dcn/23/11-23-0547-04-00be-cr-for-3-2-and-some-clauses-in-35.docx) CR for 3.2 and Some clauses in 35 Po-Kai Huang [3C SP]

SP: Do you support to accept the resolution in 11-23/547r4 for the following CIDs?

15346, 17974, 16747

No objection

1. [540r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0540-03-00be-cr-for-qmf.docx) CR for QMF Po-Kai Huang [4C SP]

C: I’m confusing operation that any non-AP MLD receive legacy QMF policy.

C: You got an actual format

A: For Group address QMP, we did not change, we change the individual QMF plicy such as sequence number space and AC.

C: Management frame can be transmitted on any enabled link. What about this frame?

C: Management frame transmission and TID-to-Link mapping are seperate text.

C: We need to further think about whether QMF has to be handled in 11be or UHR. I want to think about that.

C: Whole EPCS part can be removed.

1. [541r5](https://mentor.ieee.org/802.11/dcn/23/11-23-0541-05-00be-cr-for-35-3-14.docx) CR for 35.3.14 Po-Kai Huang [1C SP]

C: How about ” The BTM frame .. shall be transmitted only on the link..?

A: There is the related text.

C: We don’t need the green text. Broadcast is not retransmitted.

A: I can add individually addressed.

C: We need to clarify the text.

C: Is this just for retransmission? Can we use multi-link traffic indication map?

C: I’m concerning on this individually addressed specific text because of MLO power saving operation.

A: Basically, I’m not changing original part.

1. [643r4](https://mentor.ieee.org/802.11/dcn/23/11-23-0643-01-00be-lb271-cids-assigned-to-abhi-part-4.docx) CIDs assigned to Abhi - Part 4 Abhishek Patil [10C-6GT]

C: Do we have any text of Link ID value 15 indicating the AP not affiliated with the AP MLD? Do we need to remove the first one?

C: Why do we need operating channel and class here?

A: we can have more offline discussion.

C: What is the change of last two CIDs?

C: You can remove ”nor” part in the link ID text.

18269, 15009 are deferred.

SP: Do you support to accept the resolution in 11-23/643r5 for the following CIDs?

18189 16081 16755 16236 16237 16756 16758 18270

No objection

1. [709r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0709-00-00be-proposed-resolutions-to-11be-lb271-cids-on-emlsr-parameter-update.docx) Res. to CIDs on EMLSR Parameter Update Qi Wang [4C-4GT]

SP: Do you support to accept the resolution in 11-23/709r1 for the following CIDs?

17524, 17525, 17526, and 17527

No objection

1. [703r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0703-00-00be-lb271-cr-for-subclauses-9-2-5-2-and-9-6-35-8.docx) CR for subclauses 9.2.5.2 and 9.6.35.8 Yue Zhao [5C-5GT]

C: This is the original REVme text. You may have to change REVme also.

SP: Do you support to accept the resolution in 11-23/703r1 for the following CIDs?

15498 15961 16231 17783 17784

No objection

1. [383r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0383-00-00be-lb271-cr-for-cid-16417-on-35-8-5-1-txop-and-backoff-procedures-rules-for-r-twt-sps.docx) CR for CID 16417 on 35.8.5.1 TXOP and backoff procedures rules for R-TWT SPs Liuming Lu [1C]

C: RTWTSPSTart should be RTWTSPStart

C: If Default value is 0, how can it operate?

C: I think it’s desirable feature.

C: This is quiet similar outcome of quiet interval. What is the difference between them?

A: Quiet interval is for legacy STA while this is R-TWT scheduled STA that is non-member. Quiet interval is longer than the guard time.

C: Why do we need this guide time? Who decide this guide time? AP or STA?

C: It’s a little bit late.

The teleconference was adjourned at 12:00 ET.