IEEE P802.11
Wireless LANs

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| Minutes for TGbe MAC Ad-Hoc teleconferences in September and November 2023 |
| Date: 2023-05-31 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Liwen Chu | NXP |  |  |  |
| Jeongki Kim | Ofinno |  |  |  |
|  |  |  |  |  |

Abstract

This document contains the meeting minutes for the TGbe MAC ad hoc teleconferences held in September 2023 and November 2023.

Revisions:

* Rev0:
	+ Added the minutes from the telephone conferences held on September 25,
* Rev1:
	+ Added the minutes from the telephone conferences held on September 27,
* Rev2:
	+ Added the minutes from the telephone conferences held on October 09,
* Rev3:
	+ Added the minutes from the telephone conferences held on October 11,
* Rev4:
	+ Added the minutes from the telephone conferences held on October 19,
* Rev5:
	+ Added the minutes from the telephone conferences held on October 23,
* Rev6:
	+ Added the minutes from the telephone conferences held on October 25,
* Rev7:
	+ Added the minutes from the telephone conferences held on November 02,
* Rev8:
	+ Added the missing attendance,

**Monday 25 September 2023, 07:00pm – 09:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 07:01pm EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
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. 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)

**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/25 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/25 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 9/25 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 9/25 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 9/25 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 9/25 | Das, Subir | Peraton Labs |
| TGbe (MAC) | 9/25 | Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 9/25 | Erkucuk, Serhat | Ofinno |
| TGbe (MAC) | 9/25 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 9/25 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 9/25 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 9/25 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 9/25 | Hamilton, Mark | Ruckus/CommScope |
| TGbe (MAC) | 9/25 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 9/25 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 9/25 | Kipness, Michael | IEEE Standards Association (IEEE SA) |
| TGbe (MAC) | 9/25 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 9/25 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 9/25 | Lorgeoux, Mikael | Canon Research Centre France |
| TGbe (MAC) | 9/25 | Lu, kaiying | MediaTek Inc. |
| TGbe (MAC) | 9/25 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/25 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/25 | Naik, Gaurang | Qualcomm Technologies, Inc |
| TGbe (MAC) | 9/25 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 9/25 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/25 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 9/25 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 9/25 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 9/25 | Sato, Takuhiro | SHARP CORPORATION |
| TGbe (MAC) | 9/25 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 9/25 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/25 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/25 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 9/25 | Yoon, Yelin | LG ELECTRONICS |
| TGbe (MAC) | 9/25 | Zhang, Maolin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/25 | Zhao, Yue | Huawei Technologies Co., Ltd |

1. The Chair reminds that the agenda can be found in 11-23/1656r1. The Chair asks for the comments about the agenda. No comments are received. The proposed agenda is approved.
* Technical Submissions:
	1. [1658r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1658-00-00be-lb275-cr-emlsr-part1.docx) lb275-cr-emlsr-part1 Minyoung Park 40 CIDs

Discussion:

C: CID 19586. The specific power manamgent mode change have no significent gain. Do not agree with the resolution.

A: the behavior of automatically being in active mode is in the draft for a long time. Don’t want to change the behavior in the current draft.

C: 19575. Please defer the CID.

A: ok.

C: 19838. Don’t understand the resolution. The text should mention that it is transmitted by the AP.

A: it is clear through subclause 9.4.2.312.2. Will defer it.

C: 19595. Without the requriement of ICF, the performance can be improved.

A: what you proposed is a new method. Don’t want to introduce the new method at this stage.

C: 19595. it is a corner case that the OBSS uses the channel.

A: Why is it a corner case? The legacy AP/STA doesn’t understand R-TWT.

C: ok.

C: 19577. How about the other EMLSR link that doesn’t receive the intial control frame?

A: the spec doesn’t anything. The other link can save power without listening the medium.

C: 19839. Please defer this. We discuss this multiple times. Have some concern.

A: ok.

C: 19658. The satement ”this is invalid comment” is not correct. This statement should be removed since the propsoed change is clear. This needs more time for the discussion.

A: will defer it.

C: similar comment.

C: 20087. The resolution is not clear. ”How to do the link switch” is not clear. Please defer the CID.

A: it is upto non-AP MLD to decide the link switch. Will defer it per the request.

C: 19659. There are some offline discusison currently.

A: will defer it.

C: 19401. What you proposed is applied to both modes. The behavior may not need to be applied to mode 1. Another observation is that non-AP MLD can release its allocated time. The exception for such time release should be mentioned.

A: will defer it.

C: 19835. Do we have two MIB variables for both AP MLD and non-AP MLD?

A: yes.

C: we need to have text such that the actived to be true if implemented to be true.

A: not sure about it. Can defer it.

C: please defer 19836 and 19837 for MIB variables.

A: ok.

C: check the draft. We only mention MIB variable implemented in annex. Need to fix it during the offline discussion.

C: Please defer 19833 since it is related to the MIB variables.

A: ok.

C: 19333. For EMLMR figure, we show Nss switch. Maybe we can add the similar description in the figure.

A: we can’t get the consensus in the previous discussion.

SP: Do you support to accept the resolution in 11-23/1658r1 for the following CIDs?

19292 19028 ~~19970 19971~~ 19973 ~~19974 19575~~ 19834 ~~19833~~ 19029

~~19586 19838~~ 19032 19595 19293 19294 19030 19577 19031 19208

~~19839~~ 19207 19033 19001 19724 ~~19658 20087 19659 19402 19580~~

~~19401 19835~~ 19899 ~~19836 19837~~ 19510 19333

No Objection

* 1. [1660r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1660-00-00be-lb275-cr-mlti.docx) lb275-cr-mlti Minyoung Park 21 CIDs

Discussion:

C: 19755. The comment asks a valid question. This is the typical case for power save.

A: will defer it.

C: 19852. Some offline discussion is done. Please defer it.

A: ok.

C: 19875. Please defer it.

A: ok.

C: 19206. The future generation may have more and more links. The AP MLD may not allocate the smallest link ID with link ID 0. We need to have a bound by adding the information about smallest link ID.

A: If the link ID starts from 0, the issue will be gone.

C: the statement is not there. Please add the relqated statement.

A: can add it if nobody object. Will defer the CID.

SP: Do you support to accept the resolution in 11-23/1660r0 for the following CIDs?

19669 ~~19755 19852~~ 19867 19784 19717 19718 19719 ~~19785 19786~~

~~19206 19212~~ 19720 ~~19721 19787 19788 20122~~ 19722 19723

No Objection

The call was adjourned at 9:00pm.

**Wendesday 27 September 2023, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

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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.
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**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/27 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/27 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 9/27 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 9/27 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Chu, Liwen | NXP Semiconductors |
| TGbe (MAC) | 9/27 | CHUN, JINYOUNG | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Fan, Shuang | Sanechips Technology Co., Ltd. |
| TGbe (MAC) | 9/27 | Fujimori, Yuki | Canon Research Centre France |
| TGbe (MAC) | 9/27 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 9/27 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 9/27 | Haider, Muhammad Kumail | Meta Platforms Inc. |
| TGbe (MAC) | 9/27 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 9/27 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 9/27 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 9/27 | Kipness, Michael | IEEE Standards Association (IEEE SA) |
| TGbe (MAC) | 9/27 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/27 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 9/27 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 9/27 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/27 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/27 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/27 | Nayak, Peshal | Samsung Research America |
| TGbe (MAC) | 9/27 | Ouchi, Masatomo | Canon |
| TGbe (MAC) | 9/27 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 9/27 | Qi, Yue | Samsung Research America |
| TGbe (MAC) | 9/27 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 9/27 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 9/27 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 9/27 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 9/27 | VIGER, Pascal | Canon Research Centre France |
| TGbe (MAC) | 9/27 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 9/27 | Xia, Qing | Sony Corporation |
| TGbe (MAC) | 9/27 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/27 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 9/27 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 9/27 | Yoon, Yelin | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Zhang, Maolin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/27 | Zhao, Yue | Huawei Technologies Co., Ltd |
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1. The Chair reminds that the agenda can be found in 11-23/1656r2. The Chair asks for the comments about the agenda. Per the request, 1553 for SP and 1607 for SP are added, 1660 is deferred. The updated agenda is approved.
* Technical Submissions:
	1. 1607r1 SP

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1607r1 for the following CID?

19749

No Objection

* 1. [1541r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1541-00-00be-lb275-cr-35-3-18.docx) CR 35.3.18 Liwen Chu 11 CIDs

Discussion:

C: editorial changes on NSS. Should be changed to “NSS”

C: 19979, the comment is not saying Multi-link P2P. The comment is saying, even for single link P2P, there may be some issue with the eMLMR.

C: confused about the relationship of the initial control frame and the enabled/disabled links

A: the enabled/disable is only by TID-to-Link mapping according to the TGbe draft, and the initial control frame will only be transmitted on the enabled links.

C: the spec does not say whether the non-AP MLD can have transmissions on two links.

SP: Do you support to accept the resolution in 11-23/1541r1 for the following CIDs?

19587, 19588, 19295, 19840, 19842, ~~19979, 19848, 19728, 19847, 19846,~~ 19843

No Objection

* 1. [1655r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1655-00-00be-cr-for-cid-19004-and-19169.docx) CR for CID 19004 and 19169 Po-Kai Huang 2 CIDs

Discussion:

C: 19169. is this applied to MLD reconfiguration?

A: yes.

C: a note can be added in MLD reconfiguration subclause.

C: 19169. ”shall” should be used.

A: ok if there is no objection.

C: there may be some issue for legacy STA if ”shall” is used.

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

SP deferred

* 1. 1671r0 SRS control related CRs George Cherian 4 CIDs

Discussion:

C:19576. AP MLD and NSTR AP MLD should be separated to two sentences.

A: ok.

C: 19576. this feature is originally defined for AP MLD. Please defer 19576.

A: ok.

C: in NSTR AP MLD subclause, some text about SRS is included. Need to do offline check.

A: I can remove NSTR related text being added.

SP: Do you support to accept the resolution in 11-23/1671r1 for the following CIDs?

19359, 19360, 19394, 19576

No Objection

* 1. [1478r7](https://mentor.ieee.org/802.11/dcn/23/11-23-1478-05-00be-channel-usage.docx) Channel Usage Brian Hart [Q-SP-1]

Discussion:

C: reassociation response is not trusted frame.

A: once the 4-way handshake is done, you can look back.

C: it is not true.

A: ok.

C: 35.3.3.4 Channel Usage element should be mentioned in Per-STA profile.

A: ok.

SP: Do you support to accept the resolution in 11-23/1478r8 for the following CIDs?

19478

No Objection

* 1. 1553r4 SP

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1553r4 for the following CIDs?

19027, 20114, 20115, 19982, 19983, 19984, 19976, 19977

SP deferred per the request

**Monday 09 October 2023, 07:00pm – 09:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 07:00pm EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
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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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)

**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 10/9 | Ajami, Abdel Karim | Apple Inc. |
| TGbe (MAC) | 10/9 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/9 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 10/9 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 10/9 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/9 | Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/9 | Erkucuk, Serhat | Ofinno |
| TGbe (MAC) | 10/9 | Fan, Shuang | Sanechips Technology Co., Ltd. |
| TGbe (MAC) | 10/9 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 10/9 | Hu, Chunyu | Spreadtrum Communications USA |
| TGbe (MAC) | 10/9 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 10/9 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 10/9 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 10/9 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 10/9 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/9 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/9 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 10/9 | Lou, Hanqing | InterDigital, Inc. |
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| TGbe (MAC) | 10/9 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 10/9 | Naik, Gaurang | Qualcomm Technologies, Inc |
| TGbe (MAC) | 10/9 | Ouchi, Masatomo | Canon |
| TGbe (MAC) | 10/9 | Park, Minyoung | Intel |
| TGbe (MAC) | 10/9 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 10/9 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 10/9 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 10/9 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 10/9 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 10/9 | Sato, Takuhiro | SHARP CORPORATION |
| TGbe (MAC) | 10/9 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 10/9 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 10/9 | Xia, Qing | Sony Corporation |
| TGbe (MAC) | 10/9 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/9 | Zhao, Yue | Huawei Technologies Co., Ltd |
|  |  |  |  |

1. The Chair reminds that the agenda can be found in 11-23/1656r4. The Chair asks for the comments about the agenda. Per the request, 1660 is deferred. The updated agenda is approved.
* Technical Submissions:
	1. [1658r3](https://mentor.ieee.org/802.11/dcn/23/11-23-1658-02-00be-lb275-cr-emlsr-part1.docx) lb275-cr-emlsr-part1 Minyoung Park [5C SP]

Discussion:

C: 19833. Remove ”since ...” from the first sentence of CID discussion part.

A: ok.

C: what is the differnece between implemented and activated?

A: there is some inconsistence in the baseline. It depends on how our group use them.

SP: Do you support to accept the resolution in 11-23/1658r4 for the following CIDs?

19833, 19835, 19836, 19837, 19838

No Objection

* 1. [1652r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1652-01-00be-tgbe-lb275-security-comment-resolutions-part-1.docx) Security Comment Resolutions Part 1 Michael Montemurro [27C]

Contribution is deferred

* 1. [1685r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1685-00-00be-proposed-resolution-for-miscellaneous-lb275-comments-part-2.docx) Prop. Res. for misc. LB275 comments - Part 2 Edward Au [19C]

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1685r1 for the following CIDs?

19501, 19095, 19100, 19052, 19221, 19065, 19488, 19504, 19160, 19218,

19220, 19503, 19076, 19048, 19740, 19671, 19397, 19098, 19448

No Objection

* 1. [1542r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1542-00-00be-lb275-cr-for-ml-reconfiguration-part-4.docx) CR for ML Reconfiguration part 4 Binita Gupta [25C]

Discussion:

C: this inheritance is different from the baseline rule since the first per-STA profile is used as the reference. How does teh recipeint know the inheritance?

A: the recipient will assume that the inheriance will be applied.

C: there may be some inter-op issue for the current product without implementing such feature.

A: will defer it.

C: 19416. Don’t think the change is enough. Confused by OCI being added.

A: that is another CID.

C: the issue is related.

A: will defer it.

C: 19418. Group Key Data is strange. We should use the element being defined in the baseline for FT.

A: it is used to carry the group keys of multiple links. We should not change the frame format at this stage.

C: FTE being not in the per-STA profile should be explicitly mentioned.

A: will think about it.

C: please 19418.

C: 19421. The behavior should follow link setup. The response frame should carry the link being rejected so that the non-AP MLD knows the reason why a link is rejected. If the response only carries the accepted link, .the status in per-STA profile is not needed.

A: I think the current text is what we agreed. Can defer the CID.

C: 19768. When a link is added, the number of simultaneous links will be increased by 1.

A: this part is non-AP MLD’s adding links. The number of simultaneous links being increased by 1 is about AP MLD.

C: it is better to add a note.

A: ok.

C: please defer 19939.

A: ok.

C: 19940. Is this change needed? The proposed change is obious.

A: will reject the CID.

C: 20028. Is ”shall” reasonable since this is about link recommendation?

A: will do offline discussion.

 Unifinished document

The teleconference is adjourned at 09:00pm

**Wendesday 11 October 2023, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

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**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 10/11 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGbe (MAC) | 10/11 | Bankov, Dmitry | IITP RAS |
| TGbe (MAC) | 10/11 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 10/11 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 10/11 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 10/11 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 10/11 | Chemrov, Kirill | IITP RAS |
| TGbe (MAC) | 10/11 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/11 | Chung, Chulho | SAMSUNG |
| TGbe (MAC) | 10/11 | Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/11 | Erkucuk, Serhat | Ofinno |
| TGbe (MAC) | 10/11 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 10/11 | Fujimori, Yuki | Canon Research Centre France |
| TGbe (MAC) | 10/11 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 10/11 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 10/11 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 10/11 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 10/11 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 10/11 | Khorov, Evgeny | IITP RAS |
| TGbe (MAC) | 10/11 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 10/11 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 10/11 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/11 | Levitsky, Ilya | IITP RAS |
| TGbe (MAC) | 10/11 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/11 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 10/11 | Loginov, Vyacheslav | IITP RAS |
| TGbe (MAC) | 10/11 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 10/11 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 10/11 | Naik, Gaurang | Qualcomm Technologies, Inc |
| TGbe (MAC) | 10/11 | Ng, Boon Loong | Samsung Research America |
| TGbe (MAC) | 10/11 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 10/11 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 10/11 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 10/11 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 10/11 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 10/11 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 10/11 | Xia, Qing | Sony Corporation |
| TGbe (MAC) | 10/11 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 10/11 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 10/11 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/11 | Yoon, Yelin | LG ELECTRONICS |
| TGbe (MAC) | 10/11 | Zhao, Yue | Huawei Technologies Co., Ltd |
|  |  |  |  |

1. The Chair reminds that the agenda can be found in 11-23/1656r5. The Chair asks for the comments about the agenda. No comment is received. The proposed agenda is approved.
* Technical Submissions:
	1. [1542r2](https://mentor.ieee.org/802.11/dcn/23/11-23-1542-01-00be-lb275-cr-for-ml-reconfiguration-part-4.docx) CR for ML Reconfiguration part 4 Binita Gupta [25C CTDs]

Discussion:

C:CID 19415. the note is not clear, please follow the inheritance rules about association response.

A: will update the nomative text and note accordingly.

C: the updated note should be normative text.

A: we already have it.

C: the related rules are in different places. The later note is contradictory to the normative text in the early place.

C: we just need to use the inheritance of basic multi-link element.

A: If we go what you proposed. The frame needs to carry the elements.

C: please defer 19939.

A: ok.

C: 20028. Why do we need the restricted order for first delete and then add?

A: If ”add” is done first, it is not in line with what is indicated in the BTM.

C: Still don’t understand the reason for the restricted order.

A: will defer it per chair’s request.

C: 19936. The referece should be changed to link reconfiguration since the subclause name was already changed.

A: editor will fix it. Can adda note for editor.

C: please defer my comments and the similar comments of the other members.

SP: Do you support to accept the resolution in 11-23/1542r2 for the following CIDs?

19468 19768 19769 19936 19937 19938 19940 20027 20029 20030 20031 20034 20036 20037

The SP is deferred for several minutes for the checking per the request.

* 1. [1526r2](https://mentor.ieee.org/802.11/dcn/23/11-23-1526-02-00be-lb275-cr-for-cids-in-clause-9.docx) CR for CIDs in clause 9 Ming Gan [1C SP]

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1526r2 for the following CID?

19832

No Objection

* 1. [1555r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1555-00-00be-lb275-cr-for-cids-in-35-3-10.docx) CR for CIDs in 35.3.10 Ming Gan [1C SP]

Discussion:

None

SP: Do you support to accept the resolution in 11-23/150r0 for the following CID?

20057

No Objection

* 1. [1621r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1621-00-00be-cr-for-cid-19593.docx) CR for CID 19593 Yingqiao Quan [1C]

Discussion:

C: I am not sure whether the text change can address your problem. It seems the change is not needed.

C: why is the baseline doesn’t need such change? The situation is the same.

C: for TDLS operation, th requirement is that the TDLS peers are associated with the same AP. In your figure, peer STA and STA3 (TDLS peers) are not associated with the same AP. What you are shown is not allowed by TDLS.

A: don’t agree with that. This is implementation choice. Don’t think it is a new TDLS link.

C: don’t have strong opinion. Why STA1, STA3 addresses are mentioned. The MLD address will be used instead of STA1 and STA3.

The chair asks the offline discussion.

SP: Do you support to accept the resolution in 11-23/1621r1 for the following CIDs?

* 1. [1542r3](https://mentor.ieee.org/802.11/dcn/23/11-23-1542-01-00be-lb275-cr-for-ml-reconfiguration-part-4.docx) CR for ML Reconfiguration part 4 Binita Gupta [SP only]

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1542r3 for the following CIDs?

19468 19768 19769 19936 19937 19938 19940 20027 20029 20030 20031 20034 20036 20037

No Objection

The chair asks whether addional document can be discussed. Per the request 1553 is added.

* 1. [1553r5](https://mentor.ieee.org/802.11/dcn/23/11-23-1542-01-00be-lb275-cr-for-ml-reconfiguration-part-4.docx)

Discussion:

C: somebody mentioned that we have alternative solution. Why do we need such solution?

A: the point is that R-TWT is broadcast TWT. It is difficult to match the parameters. The maintenence of synchronized awake state after R-TWT parameter change is easy per the propsoed solution.

C: it seems this is the optimization.

A: right. Because of TXOP sharing, this becomes more critical.

C: why do we need this mechanism? It seems the individual TWT is enough.

A: the individual TWT makes things complicated.

C: not sure whether the updated R-TWT parameters are applicable to the P2P traffic.

A: you don’t need the negotiation with the AP for P2P.

SP: Do you support to accept the resolution in 11-23/1553r5 for the following CIDs?

19027, 20114, 20115, 19982, 19983, 19984, 19976, 19977

14Y, 32,N 10A

The meeting Chair asks whether there is any other business. The TG chair asks the members to submit the sontributions and review the email of him. The teleconference is adjourned at 11:50am

**Thursday 19 October 2023, 07:00pm – 09:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 07:00pm EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
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. 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)

**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 10/19 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGbe (MAC) | 10/19 | Ajami, Abdel Karim | Apple Inc. |
| TGbe (MAC) | 10/19 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | Bahn, Christy | IEEE STAFF |
| TGbe (MAC) | 10/19 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 10/19 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/19 | Choi, Jinsoo | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | CHUN, JINYOUNG | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | Chung, Chulho | SAMSUNG |
| TGbe (MAC) | 10/19 | Fan, Shuang | Sanechips Technology Co., Ltd. |
| TGbe (MAC) | 10/19 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 10/19 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 10/19 | GUIGNARD, Romain | Canon Research Centre France |
| TGbe (MAC) | 10/19 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 10/19 | Handte, Thomas | Sony Corporation |
| TGbe (MAC) | 10/19 | huang, kaikai | Nokia |
| TGbe (MAC) | 10/19 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 10/19 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/19 | Li, Xin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/19 | Li, Yanchun | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/19 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | Lorgeoux, Mikael | Canon Research Centre France |
| TGbe (MAC) | 10/19 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 10/19 | Lu, kaiying | MediaTek Inc. |
| TGbe (MAC) | 10/19 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 10/19 | Naik, Gaurang | Qualcomm Technologies, Inc |
| TGbe (MAC) | 10/19 | Nayak, Peshal | Samsung Research America |
| TGbe (MAC) | 10/19 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 10/19 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 10/19 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 10/19 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 10/19 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 10/19 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 10/19 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 10/19 | Yoon, Yelin | LG ELECTRONICS |
| TGbe (MAC) | 10/19 | Zhao, Yue | Huawei Technologies Co., Ltd |
|  |  |  |  |

1. The Chair reminds that the agenda can be found in 11-23/1656r8. The Chair asks for the comments about the agenda. The feedback is that 1769 was uploaded. The updated agenda is approved.
* Technical Submissions:
	1. [1400r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1400-00-00be-lb275-cr-for-subclause-35-3-7-5-2-part-2.docx) CR-for-Subclause-35.3.7.5.2 - Part 2 Arik Klein [7C]

Discussion:

C: first CID. Don’t understand the procedure. It seems thr original text with ”should” is good.

A: the ”shall” is in line with the baseline.

C: want to provide clarification. The text is for non-EHT STA. So ”shall” makes sense.

C: In general description part, why do we define non-AP non-MLD STA behavior? Is there any normative behavior change to legacy STA because of the change here?

A: no normative behavior change to legacy STA.

C: 19164. The added text is informative. We have normative text. Why do we need this text being added.

A: The commenter prefers such addition. Will check with the commenter.

C: 20053. The added text contradicts with note 4. Please defer it.

A: Note 4 is about channel switch. There is no contradiction. Will defer it.

SP: Do you support to accept the resolution in 11-23/1400r1 for the following CIDs?

19266, 19422, 19953, 20052, 20077

No Objection

* 1. [1483r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1483-00-00be-lb275-cr-for-non-ap-mld-operation-parameter-update.docx) CR for Non-AP MLD op. parameter update Frank Hsu [5C]

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1483r1 for the following CIDs?

19079 19107 19108 19779 19849

No Objection

* 1. [1748r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1748-00-00be-cr-for-cid-19520.docx) CR for CID 19520 Po-Kai Huang [1C]

Discussion:

None

SP: Do you support to accept the resolution in 11-23/1748r0 for the following CID?

19520

No Objection

* 1. [1753r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1753-00-00be-lb275-cr-mlti-part2.docx) CR MLTI part2 Minyoung Park [2C, Def-10C]

Discussion:

C: the following need to be addressed if a broadcast Action frame SIFS after each Beacon: the Action frame needs to carried in EHT PPDU; the protection of the Action frame needs to use the PN and GTK for Beacon protection; the Action frame being used should be ”should” requirement to allow the Beacon to carry Multi-Link Traffic Indication.

A: will defer it for offline discussion.

C: 19206. We discussed the issue several time. It seems ok to ”start from 0” for link ID selection. But I think ”shall” is too strong.

A: this address the comment that came several times. Is ”should” ok?

C: we don’t need the sentence.

C: ”increase sequentially” seems not right when we consider the AP MLD reconfiguration.

A: the note addresses it.

SP: Do you support to accept the resolution in 11-23/1753r0 for the following CIDs?

SP deferred

* 1. [1459r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1459-00-00be-lb275-cr-for-35-3-7-2-4-part-2.docxhttps%3A/mentor.ieee.org/802.11/dcn/23/11-23-1459-00-00be-lb275-cr-for-35-3-7-2-4-part-2.docx) Cr-for-35.3.7.2.4-part-2 Jason Y. Guo [13C]

Discussion:

C: 20074. Where is two DTIM beacon periods from?

A: please check the last sentence in the same paragraph.

C: Don’t see the relationship between duration and two DTIM beacon periods.

A: will defer the CID.

SP: Do you support to accept the resolution in 11-23/1459r1 for the following CIDs?

19948 19653 19945 19702 20044 19775 19703 19704 19705 19949

19950 20046

No Objection

The teleconference is adjourned at 11:58am

**Monday 23 October 2023, 07:00pm – 09:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 07:00pm EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
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. 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)

**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 10/23 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 10/23 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/23 | Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/23 | Fan, Shuang | Sanechips Technology Co., Ltd. |
| TGbe (MAC) | 10/23 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 10/23 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 10/23 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 10/23 | Haider, Muhammad Kumail | Meta Platforms Inc. |
| TGbe (MAC) | 10/23 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 10/23 | Hu, Chunyu | Spreadtrum Communications USA |
| TGbe (MAC) | 10/23 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 10/23 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 10/23 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 10/23 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 10/23 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/23 | Levy, Joseph | InterDigital, Inc. |
| TGbe (MAC) | 10/23 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/23 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 10/23 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/23 | Nayak, Peshal | Samsung Research America |
| TGbe (MAC) | 10/23 | Ouchi, Masatomo | Canon |
| TGbe (MAC) | 10/23 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 10/23 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 10/23 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 10/23 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 10/23 | Seo, Sangho | Broadcom Corporation |
| TGbe (MAC) | 10/23 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 10/23 | Shirakawa, Atsushi | SHARP CORPORATION |
| TGbe (MAC) | 10/23 | VIGER, Pascal | Canon Research Centre France |
| TGbe (MAC) | 10/23 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 10/23 | Wullert, John | Peraton Labs |
| TGbe (MAC) | 10/23 | Yang, Jay | Nokia |
| TGbe (MAC) | 10/23 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 10/23 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 10/23 | Zhang, Maolin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/23 | Zhao, Yue | Huawei Technologies Co., Ltd |
|  |  |  |  |

1. The chair reminds the motion planed on Nov. 1 and asks the members to review the motions.
2. The Chair reminds that the agenda can be found in 11-23/1656r9. The Chair asks for the comments about the agenda. Per the request, 1770 is deferred. The updated agenda is approved.
* Technical Submissions:
	1. [1621r3](https://mentor.ieee.org/802.11/dcn/23/11-23-1621-02-00be-cr-for-cid-19593.docx) CR for CID 19593 Yingqiao Quan [1C SP]

Discussion:

C: I don’t see why MLD is special, and don’t see the reason for the text change.

A: the TDLS STA can’t be in active mode when doing channel switch, is it correct?

C: the text doesn’t mention the channel switch.

A: it can be implementaiton dependent.

SP: Do you support to accept the resolution in 11-23/1621r3 for the following CID?

19593

5Y, 13N, 14A

* 1. [1652r2](https://mentor.ieee.org/802.11/dcn/23/11-23-1652-02-00be-tgbe-lb275-security-comment-resolutions-part-1.docx) Security Comment Resolutions Part 1 Michael Montemurro [27C]

Discussion:

C: the changed note 4 is not correct, e.g. for authentication frame the note.

A: the note is for EAPOL key frame.

C: the question about resolution for 19496, 20071, 19067: For link reconfiguration, do we need to add the similar change?

A: the link reconfiguraiton frames are protected.

C: the message 3 is protected already.

A: no, so imformation in message 3 is not protected.

SP: Do you support to accept the resolution in 11-23/1652r2 for the following CIDs?

19121, 19124, 19385, 19383, 19524, 19230, 19491, 19516, 19517, 19635, 19636, 19101, 19068, 19492, 19493, 19637, 19638, 19494, 19639, 19518, 19495, 19384, 19326, 19067, 19496, 20071, 19500

No Objection

* 1. [1472r2](https://mentor.ieee.org/802.11/dcn/23/11-23-1472-00-00be-lb275-cr-for-eht-mu-operation.docx) Cr-for-eht-mu-operation Jason Y. Guo [6C]

Discussion:

C: some text is soliciting PPDU, some text uses soliciting EHT PPDU. Are they same?

A: yes.

C: is it possible that some soliciting PPDUs are not EHT PPDU?

A: no.

SP: Do you support to accept the resolution in 11-23/1472r2 for the following CIDs?

19629 19529 19336 19337 19335 19890

No Objection

* 1. [1769r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1769-00-00be-lb275-cr-for-ml-reconfiguration-part-5.docx) CR for ML Reconfiguration part 5 Binita Gupta [10C]

Discussion:

C: in this list, what is the feature by adding a new AP procedure?

A: it is defined in 25.3.6.2.

C: the added list is clause 4, right?

A: yes.

C: have serious concern about the change. Why do we add such detail in clause 4 as informative clause?

A: this change is in line with the other deature list in clause 4.

C: the added text is going too far. Prefer to add a bullet for MLD reconfiguration.

A: but some bullets are mandatory, some are optional.

C: agree with previous comment.

C: propose to add two bullets: one is for ML reconfiguration, and another one link recommendation

A: link reconfiguraiton is not addressed by the changes.

C: question for third bullet, are you talking about global removal procedure or one by one procedure?

A: it talks about global procedure.

C: 11me trys to remove subclause 4.

A: ok will defer the related CID.

C: 19930. There is some benifit for the proposed change by the comment. Understand it may be too late for the change. You can add there is no consensus.

A: ok.

C: (the chair) I can add a SP for the CID.

C: what is the last CID about? Is link removal being toached?

A: it atalks bout the inheritance of Link Reconfiguration element.

C: the transmitted BSSID AP may be removed based on the first bullet, right?

A: the text mentions the transmitted BSSID AP’s transmission of the element.

C: please defer the last CID.

A: ok.

SP: Do you support to accept the resolution in 11-23/1769r1 for the following CIDs?

19677, ~~19853,~~ 19928, ~~19929, 19930,~~ 19942, 20016, 20017, 20026, ~~20073~~

No Objection

SP: Do you support to accept the resolution in 11-23/1769r1 for the following CID?

19930

10Y, 8N, 18A

* 1. [1792r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1792-00-00be-lb275-cr-for-cid-20090-on-channel-access-rules-for-r-twt-sps.docx) CR for CID 20090 Liuming Lu [1C]

Discussion:

No time for dicussion

The teleconference is adjourned at 08:59pm

**Wednesday 25 October 2023, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 10:01am EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
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. 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)

**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 10/25 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGbe (MAC) | 10/25 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 10/25 | Bahn, Christy | IEEE STAFF |
| TGbe (MAC) | 10/25 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 10/25 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 10/25 | CHENG, yajun | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/25 | Chung, Chulho | SAMSUNG |
| TGbe (MAC) | 10/25 | Dong, Xiandong | Xiaomi Communications Co., Ltd. |
| TGbe (MAC) | 10/25 | Erkucuk, Serhat | Ofinno |
| TGbe (MAC) | 10/25 | Fan, Shuang | Sanechips Technology Co., Ltd. |
| TGbe (MAC) | 10/25 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 10/25 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 10/25 | Fujimori, Yuki | Canon Research Centre France |
| TGbe (MAC) | 10/25 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 10/25 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 10/25 | Haider, Muhammad Kumail | Meta Platforms Inc. |
| TGbe (MAC) | 10/25 | Handte, Thomas | Sony Corporation |
| TGbe (MAC) | 10/25 | Hart, Brian | Cisco Systems, Inc. |
| TGbe (MAC) | 10/25 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 10/25 | Hu, Chunyu | Spreadtrum Communications USA |
| TGbe (MAC) | 10/25 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 10/25 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 10/25 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 10/25 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 10/25 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/25 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 10/25 | Li, Xin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/25 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 10/25 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 10/25 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 10/25 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/25 | Naik, Gaurang | Qualcomm Technologies, Inc |
| TGbe (MAC) | 10/25 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 10/25 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 10/25 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 10/25 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 10/25 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 10/25 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 10/25 | Seo, Sangho | Broadcom Corporation |
| TGbe (MAC) | 10/25 | Sosack, Robert | Molex Incorporated |
| TGbe (MAC) | 10/25 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 10/25 | Wullert, John | Peraton Labs |
| TGbe (MAC) | 10/25 | Xia, Qing | Sony Corporation |
| TGbe (MAC) | 10/25 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 10/25 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 10/25 | Zhang, Maolin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 10/25 | Zhao, Yue | Huawei Technologies Co., Ltd |
|  |  |  |  |

1. The chair reminds the motion planed on Nov. 1 and asks the members to review the motions.
2. The Chair reminds that the agenda can be found in 11-23/1656r11. The Chair asks for the comments about the agenda. Per the request, 1772 is deferred, 1794 is added. The updated agenda is approved.
* Technical Submissions:
	1. [1792r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1792-00-00be-lb275-cr-for-cid-20090-on-channel-access-rules-for-r-twt-sps.docx) CR for CID 20090 Liuming Lu [1C Q&A]

Discussion:

C: the motivation is mentioned in the document. It seems you misunderstand the Quiet interval usage for R-TWT based on the discussion. We already have all the required rules. The related changes are not needed.

A: the added text is to let the EHT STA/AP to ignore the quiet interval used for protecting the R-TWT SP.

SP: Do you support to accept the resolution in 11-23/1792r1 for the following CID?

20090

SP deferred

* 1. [1809r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1809-00-00be-cr-for-cid-19387.docx) CR for CID 19387 Po-Kai Huang [1C]

Discussion:

C: rejection reason, ”MLD MAD”🡪 ”MLD MAC”.

A: ok.

C: change ”non-AP MLD MLD MAC address” to ”MLD MAC address of non-AP MLD”

.

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

19387

No Objection

* 1. [1807r2](https://mentor.ieee.org/802.11/dcn/23/11-23-1807-01-00be-cr-for-cid-19876-nstr-operation.docx) cr for cid 19876 nstr operation Yue Zhao [1C]

Discussion:

C: I support this document. In page 2, please change ”shall be in awake state” to ”shall transition to awake state”

A: ok.

C: have some question about the feature. The feature introduces overhead because of addtional frame exchange for mode switch.

A: the additional frame exchange is not transmitted for each TXOP. The mode switch in another link of NSTR link pair is automatic.

C: the mechanism is similar to eMLSR mode. The overhead of eMLSR is addtional MU-RTS/CTS.

A: there are some difference, e.g. eMLSR requries RF chain switch.

C: you can put the transition delay to minimal value.

SP: Do you support to accept the resolution in 11-23/1807r2 for the following CID?

19876

SP deferred

* 1. [1655r2](https://mentor.ieee.org/802.11/dcn/23/11-23-1655-02-00be-cr-for-cid-19004-and-19169.docx) CR for CID 19004 and 19169 Po-Kai Huang [2C SP]

Discussion:

C: is this for avoiding the MAC address coliding or spoofing MAC address?

A: we can’t differentiate the two cases.

C: There are some differences, e.g. for impersonating MAC address, we should reject the whole association.

A: we will not remember the history of what was going on. So it is difficult to differentiate them.

C: ok to not keep the history information. We may need a new security mechanism to address it.

C: is this about duplicate MAC address detection?

A: yes.

C: this has been discussed before. I agree with the change. But I don’t agree ML reconfiguration has the same issue since ML reconfiguration is protected.

A: fine with your argument. I can defer this for further discussion. Do you mean for the last bullet for the ML reconfiguration?

C: prefer the whole thing at this stage.

A: ok.

.

SP: Do you support to accept the resolution in 11-23/1655r3 for the following CIDs?

19004, 19169

SP deferred per the request

* 1. 1794r0 cr-for-NSTR related CIDs Yunbo Li [7C]

Discussion:

C: 19234. Change ”subcluse 36.3.21” to ”36.3.21”.

A: ok.

C: 19725. It seems you mix the normative behavior and description. Add ”of the link” after ”in the queue”

A: ok.

C: 19726. the current sentence is not clear.

A: will defer 19726.

SP: Do you support to accept the resolution in 11-23/1794r1 for the following CIDs?

19125, 19314, 19476, 19165, 19725, ~~19726,~~ 19727

No Objection

The teleconference is adjourned at 11:53am

**Thursday 02 November 2023, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

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**Recorded attendance through Imat and e-mail:**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 11/2 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGbe (MAC) | 11/2 | Asterjadhi, Alfred | Qualcomm Incorporated |
| TGbe (MAC) | 11/2 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 11/2 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 11/2 | Carney, William | Sony Group Corporation |
| TGbe (MAC) | 11/2 | Cha, Dongju | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | Chen, Junbin | TP-Link |
| TGbe (MAC) | 11/2 | Chu, Liwen | NXP Semiconductors |
| TGbe (MAC) | 11/2 | Cui, Yaoshen | TP-Link Corporation Limited |
| TGbe (MAC) | 11/2 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 11/2 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 11/2 | Gu, Xiangxin | Spreadtrum Communications (Shanghai) Co., Ltd. |
| TGbe (MAC) | 11/2 | GUIGNARD, Romain | Canon Research Centre France |
| TGbe (MAC) | 11/2 | Gupta, Binita | Meta Platforms, Inc. |
| TGbe (MAC) | 11/2 | Hart, Brian | Cisco Systems, Inc. |
| TGbe (MAC) | 11/2 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 11/2 | Hu, Chunyu | Spreadtrum Communications USA |
| TGbe (MAC) | 11/2 | Huang, Po-Kai | Intel |
| TGbe (MAC) | 11/2 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 11/2 | Kim, Geon Hwan | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | Kim, Jeongki | Ofinno |
| TGbe (MAC) | 11/2 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | Kipness, Michael | IEEE Standards Association (IEEE SA) |
| TGbe (MAC) | 11/2 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 11/2 | Li, Haozheng | TP-Link |
| TGbe (MAC) | 11/2 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 11/2 | Li, Xin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 11/2 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 11/2 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 11/2 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 11/2 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 11/2 | Petrick, Albert | InterDigital, Inc. |
| TGbe (MAC) | 11/2 | Qi, Yue | Samsung Research America |
| TGbe (MAC) | 11/2 | Quan, Yingqiao | Spreadtrum |
| TGbe (MAC) | 11/2 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 11/2 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| TGbe (MAC) | 11/2 | Ryu, Kiseon | NXP Semiconductors |
| TGbe (MAC) | 11/2 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 11/2 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 11/2 | shi, shuyu | TP-Link |
| TGbe (MAC) | 11/2 | SUH, JUNG HOON | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 11/2 | Wang, Xiaofei | InterDigital, Inc. |
| TGbe (MAC) | 11/2 | Wullert, John | Peraton Labs |
| TGbe (MAC) | 11/2 | Yang, Jay | Nokia |
| TGbe (MAC) | 11/2 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 11/2 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 11/2 | Yi, Yongjiang | Spreadtrum Communication USA, Inc |
| TGbe (MAC) | 11/2 | Yoon, Yelin | LG ELECTRONICS |
| TGbe (MAC) | 11/2 | Zhao, Yue | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 11/2 | Zhou, Lei | H3C Technologies Co., Limited |
| TGbe (MAC) | 11/2 | Zhu, Yu | TP-Link Corporation Ltd |

1. The Chair reminds that the agenda can be found in 11-23/1656r13. The Chair asks for the comments about the agenda. No request is received. The propsoed agenda is approved.
* Technical Submissions:
	1. [1769r3](https://mentor.ieee.org/802.11/dcn/23/11-23-1769-02-00be-lb275-cr-for-ml-reconfiguration-part-5.docx) CR for ML Reconfiguration part 5 Binita Gupta [2C SP]

Discussion:

C: is the reference to 11.1.3.8.4 enough? We may just need a note here. The text in two subclauses may have conflict.

A: I am following T2LM style.

C: would like this to be deferred.

C: this is the clarification. Ok to have a note. More condition may be needed.

A: will defer the CID.

SP: Do you support to accept the resolution in 11-23/1769r4 for the following CID?

19853

No Objection

* 1. [1542r4](https://mentor.ieee.org/802.11/dcn/23/11-23-1542-03-00be-lb275-cr-for-ml-reconfiguration-part-4.docx) CR for ML Reconfiguration part 4 Binita Gupta [6C SP]

Discussion:

C: If we use the basic ML element to replace reconfiguration ML element, we don’t need to add multiple paragraphes here.

A: this was discussed several time. The group selected the way in D4.0.

C: the Link Reconfiguration frame is protected by PTK, correct?

A: yes.

C: how a 3rd-party non-AP MLD knows the key. The text change is ok. But I don’t agree with the resolution text.

C: we do the operating channel validation in legacy AP. In genreal, I agree with the more discussion.

A: ok, I will remove the resolution text. I will defer the CID 20070.

C: CID 20007. I don’t understand this reason code. Please defer the CID.

C: the maximal allowed setup links seem related to load balancing.

A: this is not directly related to load balancing.

C: I don’t understand the purpose of the change.

A: will defer 20007.

SP: Do you support to accept the resolution in 11-23/1542r4 for the following CIDs?

20028, 20032, 20033

No Objection

SP: Do you support to accept the resolution in 11-23/1542r4 for the following CID?

19459

13Y, 24N, 19A

* 1. [1798r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1798-00-00be-lb275-cr-for-miscellaneous-cids.docx) cr-for-miscellaneous CIDs Yunbo Li [4C]

Discussion:

C: Please defer the last CID 19452.

A: ok.

SP: Do you support to accept the resolution in 11-23/1798r for the following CIDs?

19440., 19513, ~~19657, 19452~~

No Objection

* 1. [1805r0](https://mentor.ieee.org/802.11/dcn/23/11-23-1805-00-00be-lb275-cr-for-9-4-2-19-and-9-4-2-20.docx) CR for 9.4.2.19 and 9.4.2.20 Guogang Huang [9C]

Discussion:

C: I don’t understand the prupose. The beacon is per link thing. The beacon report should be per link report.

A: the meausrement request/response frames are exchanged between MLDs.

C: the AP MLD does care which STA of a non-AP MLD to send the probe. The reason is that the measurement shoudl be done in the specific link.

A: will defer 19427, 19428.

C: Please defer these 4 CIDs.

A: ok.

C: in current measurement report, MSDU measurement is defined. We may use the current per link measurement to figure out the MLD level MSDU measurement.

A: the new added field is the trigger event.

C: please defer the two CIDs.

A: ok

The teleconference is adjourned at 11:50am