IEEE P802.11
Wireless LANs

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| Minutes for TGbe MAC Ad-Hoc teleconferences in May 2022 |
| Date: 2020-09-16 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Liwen Chu | NXP |  |  |  |
| Jeongki Kim | Ofinno |  |  |  |
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Abstract

This document contains the meeting minutes for the TGbe MAC ad hoc teleconferences held in Sept 2020.

Revisions:

* Rev0:
	+ Adding the minutes from the telephone conference held on May 09, 2022.
* Rev1:
	+ Adding the minutes from the telephone conference held on May 11, 2022.

**Monday, 09 May 2022, 19:00 –21:00 EDT (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 19:02pm EDT. The Chair introduces himself and the Secretary, Liwen Chu (NXP)
2. The Chair goes through the registration information, the meeting protocol, the attendance reminder, the copyright policy, 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 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:**

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| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 05/09 | Naseem Khan | [Leidos Engineering. LLC](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fimat.ieee.org%2F802.1%2Faffiliation%3Fd%3D05%2F09%2F2022%26p%3D3910400005%26t%3D28800043&data=05%7C01%7Cliwen.chu%40nxp.com%7C4f48031433b74bdc410308da3217dfa2%7C686ea1d3bc2b4c6fa92cd99c5c301635%7C0%7C0%7C637877375381895155%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=5vmR2xo7uOe7%2BHGCcPunqKRmdSs6zazS3W0%2F7f85wgY%3D&reserved=0) |

1. The Chair reminds that the agenda can be found in 11-22/595r3. The Chair asks for the comments about the agenda. There are no further comments. The agenda is approved.
* Technical Submissions: **Proposed Draft Text (PDTs) [Discussions and SPs]**
	1. [**200r1**](https://mentor.ieee.org/802.11/dcn/22/11-22-0200-01-00be-cc36-cr-for-qos-characteristics-element.docx) **CC36 CR for QoS Characteristics element Duncan Ho [1C 10’ C.]**

Discussion:

C: medium time allocation should be clarified when multiple links are used.

A: some text in annex may be added.

C: 8 bits may not be enough for 1s duration.

A: will check

C: why medium time field is not used for DL/UL link?

A: for DL, the AP MLD can figure out by itself. For UL case, the QOS parameters can be used by to figure out the medium time.

C: medium time may not be accurate, e.g. when medium time is announced per wide BW but the real frame exchanges use 20MHz BW.

SP deferred

* 1. [**186r1**](https://mentor.ieee.org/802.11/dcn/22/11-22-0186-01-00be-cc36-cr-txop-return-in-mu-rts-txs.docx) **cr-txop-return-in-mu-rts-txs Yunbo Li [6C 10’]**

Discussion:

C: what happens if the transmission of the frame with the sginalling fails?

A: follow the procedure of RDG.

C: Please add the capability indication at the recipient side.

A: ok.

SP deferred

* 1. [**1280r1**](https://mentor.ieee.org/802.11/dcn/21/11-21-1280-00-00be-cc36-cr-on-multi-link-element.doc) **CR on Multi-link element Guogang Huang [5C 10’]**

Discussion:

C: please add the reference where the discussion is done in the reject reason. I will put the reference in the chat window.

A: ok.

SP: Do you support to accept the resolution in 11-21/1280r1 for the following CIDs?

5289, 5332, 5335, 5338, 5341

No Objection

* 1. [**1111r11**](https://mentor.ieee.org/802.11/dcn/21/11-21-1111-11-00be-mld-architecture-part-2.docx) **MLD Architecture Part 2 Mark Hamilton [5C 25’]**

Presentation was deferred

* 1. [**564r1**](https://mentor.ieee.org/802.11/dcn/22/11-22-0564-00-00be-cc36-cr-for-35-2-1-1.docx) **CC36 CR for 35.2.1.1 Kaiying Lu [4C 15’]**

Discussion:

C: P4 only mentions STA with 320MHz support, For other EHT STA, they will also transmit according to the table.

A: for other EHT STAs, the baseline rules will be followed.

C: please add the note to clarify.

C: the STA without 320MHz support will receive control frame with 320MHz indication also.

A: the text is based on current subclaue 9.

C: please defer the CIDs for further review.

A: ok.

C: please add the technical reason for rjecting 6224.

C: add the reject reason that the commenter withdraw the comment.

SP: Do you support to accept the resolution in 11-22/564r1 for the following CID?

~~4180, 5698, 6224,~~ 6225

No Objection

* 1. [**631r2**](https://mentor.ieee.org/802.11/dcn/22/11-22-0631-00-00be-cc36-comment-resolution-for-miscellaneous-comments-part-3.docx) **CR for miscellaneous comments part 3 Liwen Chu [4C 15’]**

Discussion:

SP: Do you support to accept the resolution in 11-22/631r2 for the following CIDs?

~~4286,~~ 6075, 6076, 7001, ~~5159~~

No Objection

* 1. [**599r3**](https://mentor.ieee.org/802.11/dcn/22/11-22-0599-03-00be-cr-for-miscellaneous-cids-part-ii.docx) **CR for Miscellaneous CIDs part II Po-Kai Huang [4C 15’]**

Discussion:

C: has some concern of ”shall” statement.

A: will defer 6642

C: ”shall” statement is the guideline for setting this reaon code.

C: want to more time to go through subclause 12.

SP deferred

* 1. [**196r2**](https://mentor.ieee.org/802.11/dcn/22/11-22-0196-02-00be-cc36-cr-ml-traffic-indication.docx) **CR ML Traffic Indication Minyoung Park [2C 10’]**

Discussion:

C: TIM is common to all links. Multi-Link Traffic element shouldn’t be in nontransmitted BSSID profile. I can withdraw the comment.

The chair asks whether there are any other business. No response is received. The meeting is recessed at 21:00pm

**Wendesday, 11 May 2022, 19:00 –21:00 EDT (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 19:02pm EDT. The Chair introduces himself and the Secretary, Liwen Chu (NXP)
2. The Chair goes through the registration information, the meeting protocol, the attendance reminder, the copyright policy, 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:**

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| Breakout | Timestamp | Name | Affiliation |

1. The Chair reminds that the agenda can be found in 11-22/595r9. The Chair asks for the comments about the agenda. The updated agenda (revison changes) is approved.
* Technical Submissions:
	1. [1793r5](https://mentor.ieee.org/802.11/dcn/21/11-21-1793-03-00be-cc36-cr-for-enterprise-grade-tid-mapping.docx) Com. res. for Enterprise-Grade TID Mapping Pooya Monajemi [14C SP 10’]

Discussion:

C: 35.3.7.1.1, don’t understand second paragraph. Is this default behavior.

A: no.

C: some issue with MU EDCA parameters part. For NOTE 1, you can just refer to 11ax.

C: what is the reason code of mobile AP power saving? It is not in 11be D2.0.

A: can be fixed later.

C: MU EDCA usage here may cause problem.

A: it is used for trigger-based frame exchange.

C: DL may include unicast, group-addressed frames. The group-addressed frames are not coverred.

A: it is not clear how to recommending the link for group-addressed frames.

C: the baseline channel utilization can be used instead of defining a new one.

A: the new defined element is for ML operation.

C: don’t know how to use so many reason codes.

A: those are from commenters. Can clarify them later.

SP: Do you support to accept the resolution in 11-21/1793r5 for the following CIDs?

6643, 5154, 4027, 5038, 5030, 5692, 5759, 5956, 5957, 6347, 6498, 6766, 6767, 6895, 7671, 8179

76Y, 55N, 18A

* 1. [570r7](https://mentor.ieee.org/802.11/dcn/22/11-22-0570-06-00be-cc36-comment-resolution-for-miscellaneous-comments-part-2.docx) CC36 com. Res. for miscellaneous comments part 2 Liwen Chu [10C 20’]

Discussion:

SP: Do you support to accept the resolution in 11-22/570r7 for the following CID?

7489

No Objection

* 1. [600r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0600-00-00be-some-tdls-cids-resolution.docx) Some\_TDLS\_CIDs\_resolution Ahmed Ibrahim [3C 15’]

Discussion:

C: 160+160 is not allowed in 11be.

A: ok, will remove 160+160.

C: the rules are comlicated. The power save should be applied to avoid simultaneous Tx/Rx among NSTR link pair.

A: can defer the two related CIDs.

C: 80+80 is also not allowed for EHT.

A: ok.

C: EHT STA can transmit HE PPDU.

SP: Do you support to accept the resolution in 11-22/600r2 for the following CID?

~~4033,~~ 4590, ~~4593~~

No Objection

* 1. [1278r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1278-00-00be-cc36-cr-for-d1-0-afc-cids.docx) CC36 CR for D1.0 AFC CIDs Rojan Chitrakar [1C 10’]

Discussion:

SP: Do you support to accept the resolution in 11-21/1278r0 for the following CIDs?

6943, 5363

No Objection

* 1. [314r1](https://mentor.ieee.org/802.11/dcn/22/11-22-0314-00-00be-resolution-for-cid-related-to-ml-probing-rule.docx) Resolution for CID related to ML probing rule Jiin Kim [1C 10’]

Discussion:

C: the paragraph was removed per the motion this morning.

A: ok

SP deferred

* 1. [185r1](https://mentor.ieee.org/802.11/dcn/22/11-22-0185-00-00be-cc36-cr-of-cid-4301.docx) cr-of-cid-4301 Yunbo Li [1C 10’]

Discussion:

SP: Do you support to accept the resolution in 11-22/185r1 for the following CID?

4301

No Objection

* 1. [580r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0580-00-00be-cc36-for-cid-5032.pptx) CC36 for CID 5032 Jay Yang [1C 20’]

Discussion:

C: do you assume TDLS link?

A: STA reports the peer information.

C: MLD part in SP is not important, right?

A: yes.

C: this operation needs STA’s change of center frequency. Need to check with PHY expert.

A: ok.

C: the SIFS switch time is not enough.

SP deferred

The chair asks whether there are any other business. No response is received. The meeting is recessed at 21:00pm

**Thursday, 12 May 2022, 19:00 –21:00 EDT (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 19:02pm EDT. The Chair introduces himself and the Secretary, Liwen Chu (NXP)
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**Recorded attendance through Imat and e-mail:**

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| Breakout | Timestamp | Name | Affiliation |

1. The Chair reminds that the agenda can be found in 11-22/595r13. The Chair asks for the comments about the agenda. The updated agenda (adding 552r4, revision changes) is approved.
* Technical Submissions:
	1. [704r1](https://mentor.ieee.org/802.11/dcn/22/11-22-0704-00-00be-cr-for-multi-link-security-for-individually-addressed-management-frame.docx) CR for ML Security for Individually addressed Management Frame Guogang Huang [2C 10]

Discussion:

C: some concerns. link specific information should be used to protect the message. By using MLD address, the link specific information is missing. The change is too late.

A: link ID is used to indicate the intended link. There should be no security issue.

C: wth link ID in the frme body, there should be no issue. But the inclusion of link ID in the frame body is not mandatory.

C: the proposal is the good method.

C: disagree with the comment. The discussion is wrong. The change is too late.

A: link ID will be always in the frame body.

C: this is not true.

SP: Do you support to accept the resolution in 11-22/704r1 for the following CIDs?

5181 and 5184

23Y, 51N, 30A

* 1. [1584r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1584-00-00be-cc36-resolution-for-cids-related-to-mlo-ba-procedures-part-3.docx) Resolution for CIDs related to MLO BA procedures - part 3 Abhishek Patil [1C 10’]

Discussion:

C: TID to link mapping is related both UL and DL. Which direction is applied here.

A: this is related to Tx operation. Will add ”transmitted”

SP: Do you support to accept the resolution in 11-21/1584r1 for the following CIDs?

4276

No Objection

* 1. [757r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0757-00-00be-cr-for-cid-6057-6058-6059.docx) CR for CID 6057, 6058, 6059 Zinan Lin [4C 10’]

Discussion:

No

SP: Do you support to accept the resolution in 11-22/757r2 for the following CIDs?

6057 6058 6059 7800

No Objection

* 1. [749r4](https://mentor.ieee.org/802.11/dcn/22/11-22-0749-02-00be-mac-cr-miscellaneous-no-dcns.docx) MAC-CR-Miscellaneous No DCNs Alfred Asterjadhi [38C 30’]

Discussion:

SP: Do you support to accept the resolution in 11-22/749r4 for the following CIDs?

4077, 4080, 4238, ~~4276~~, 4288, 4730, ~~4822,~~ 4926, 4933, 5061,

5135, ~~5181~~, 5262, 5307, 5333, 5334, 5347, ~~5363,~~ 5502, 5504,

5535, 5772, ~~5802, 5882, 6057, 6058, 6059,~~ 6065, 6227, 6243,

~~6391,~~ 6457, 6496, 6515, 6654, 6655, 6656, 6758, ~~6765,~~ 6889,

6947, 7346, ~~7489,~~ 7575, ~~7727,~~ ~~7800,~~ ~~7864,~~ ~~7892,~~ 8060, 8154,

8271, 8272.

No Objection

* 1. [1111r16](https://mentor.ieee.org/802.11/dcn/21/11-21-1111-15-00be-mld-architecture-part-2.docx) MLD Architecture Part 2 Mark Hamilton [5C SP 10’]

Discussion:

C: what is the meaning of link merging?

A: originally the word merging is used and is too weak. Instead link merging is used.

C: nice to defer this one to Monday for further checking by Arik.

A: ok.

SP: Do you support to accept the resolution in 11-21/1111r16 for the following CIDs?

5171, 5172, 5173, 6187, 7349

SP deferred

* 1. [200r4](https://mentor.ieee.org/802.11/dcn/22/11-22-0200-02-00be-cc36-cr-for-qos-characteristics-element.docx) CR for QoS Characteristics element Duncan Ho [1C SP 10’]

Discussion:

C: concern to use the element to report the P2P resource. EDCA and TB based method can be used for frame exchange. AP can’t figure out the remaining resource required.

A: this element doesn’t try to address the dynamic resource requirement.

SP: Do you support to accept the resolution in 11-22/200r4 for the following CIDs?

4822

33Y, 31N, 36A

* 1. [540r7](https://mentor.ieee.org/802.11/dcn/22/11-22-0540-05-00be-cr-for-nstr-mobile-ap-mlo-part3.docx) CR-for-NSTR-Mobile-AP-MLO-part3 Kaiying Lu [5C SP 10’]

Discussion:

C: CID 5225, non-AP MLD’s capability should be mentioned here.

A: ok

C: same paragraph. Tx and Rx are mentioned in R5. Why is Rx is removed?

A: received a comment about removing it.

SP: Do you support to accept the resolution in 11-22/540r7 for the following CIDs?

5225, 5705, 5706, 8212, 5269

No Objection

* 1. [564r1](https://mentor.ieee.org/802.11/dcn/22/11-22-0564-01-00be-cc36-cr-for-35-2-1-1.docx) CR for 35.2.1.1 Kaiying Lu [2C SP 10’]

Discussion:

SP: Do you support to accept the resolution in 11-22/564r1 for the following CIDs?

4180, 5698

No Objection

* 1. [631r4](https://mentor.ieee.org/802.11/dcn/22/11-22-0631-03-00be-cc36-comment-resolution-for-miscellaneous-comments-part-3.docx) CC36 comment resolution for miscellaneous comments part 3 Liwen Chu [2C SP 10’]

Discussion:

SP: Do you support to accept the resolution in 11-22/631r4 for the following CID?

4286

No Objection

The chair asks whether there are any other business. No response is received. The meeting is adjourned at 21:00pm