IEEE P802.11  
Wireless LANs

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| Minutes for TGbe MAC Ad-Hoc Meeting in May 2023 | | | | |
| Date: 2023-05-10 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jeongki Kim | Ofinno |  |  | [jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com) |
| Liwen Chu | NXP |  |  |  |
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Abstract

This document contains the minutes for the TGbe MAC ad hoc meetings in May 2023.

Revisions:

* Rev0: Added the minutes from the MAC ad hoc sessions held on May 10.

### May 10, 2023 (AM1, 09:00 – 10:30 PT) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a webex and in San Jose.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 09:00 PT. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * Please record your attendance during the conference call by using the IMAT system:
     + 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
   * If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-23/0599r2. The agenda was approved.

**Submissions**

1. [572r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0572-01-00be-lb271-cr-cl35-emlsr-part3.docx) lb271-cr-cl35-emlsr-part3.docx Minyoung Park [27C-3GT]

C: In this change, does it mean that non-AP can be transmitted state after the transition delay?

C: After transition, non-AP MLD is listening operation in previous text. Or transmitted state?

C: 11be spec, the delay is applicable before the next DL transmission. We can debate the changed text. This is still consistent with the current text.

C: You can change to ”starting from the end of the TXOP” instead of as measuring...

C: After the transition delay, the MLD should be listening operation.

C: There are different opinions for EMLSR operation

C: After the detection, EMLSR transition delay starts.

I can defer 15016 and related CIDs.

C: aRXPHYStartDely, there is value in the spec. Same for non-HT dup PPDU.

C: The shorter title of Figure, the better.

A: Can we do this at the next round?

C: When the K+1 to n are not in the EMLSR mode, should those beamformees exchange the initial frames with beamformer?

A: This is related to BSRP trigger frame. Those beamformees can respond the BSR.

C: I’m also confusing the figure.

A: This BSRP procedure does not hurt anything technically regardless of EMLSR mode.

C: The spec is not clear for the operation on either STR or NSTR in Signaling perspective. There are several comments.

C: EMLSR mode can be operated in NSTR mode? It’s confusing. A litte wierd. The case does not exist.

A: There is texts for STR.

16697

C: There is no concept of STR or NSTR for EMLSR because it’s a single radio operation.

C: There is a procedure by AP side on that topic. One is AP initiated and other is recommendation. The recommendation can be good approach.

1. [544r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0544-00-00be-lb271-cr-cid15062.docx) LB271 CR CID15062 M. Koundourakis [1C]

C: You can already achieve this figure based on existing standard. I don’t see one time frame exchange costs a lot.

A: We can use enhanced feature for this.

C: If the EMLSR MLD is on only one link, what’s the benefit? Because the throughput will be degraded. It’s just power saving gain. If you want to save the power on one link, then we can use SM power saving.

C: Last page. I don’t understand what you add. EMLSR Mode subfield should be changed?? To PM transition Mode subfield?

C: If MLD is on one link, there is no gain of EMLSR operation.

C: Although MLD is on one link, the MLD can be operated on EMLSR as well.

The AM1 session was recessed at 10:30 PT.

### May 10, 2023 (AM2: 10:45 – 12:00 ET) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a Webex and in San Jose.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 10:45 PT. The Chair introduces himself and the Secretary.
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
   1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
   * Please record your attendance during the conference call by using the IMAT system:
     + 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
   * If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)) and Jeongki Kim ([jeongki.kim.ieee@gmail.com](mailto:jeongki.kim.ieee@gmail.com))
5. The Chair asked whether there is comment about agenda in 11-23/0599r3. The agenda was approved.

**Submissions**

1. [572r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0572-01-00be-lb271-cr-cl35-emlsr-part3.docx) lb271-cr-cl35-emlsr-part3.docx Minyoung Park [XC SP]

SP: Do you support to accept the resolution in 11-23/572r2 for the following CIDs?

15082 15081 16928 16689 17250 17251 15058 15417

No objection

1. [678r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0678-03-00be-cr-for-miscellaneous-cids.docx) CR for miscellaneous CIDs Po-Kai Huang [10C-1GT]

C: why did you add immediate before PM?

C: This is not only for 6GHz legacy STA. It can also be applicable for MLD.

C: I don’t see any benefit to define new reason code.

C: why does non-AP MLD request the removed link?

C:I think the text is already covered regarding R-TWT membership text that you added.

SP: Do you support to accept the resolution in 11-23/678r3 for the following CIDs?

15392, 17282, 15479,

No objection

1. [304r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0304-00-00be-lb271-cr-for-35-15-1-part-1.docx) CR for 35.15.1-part 1 Abhishek Patil [10C-8GT]

In the figure, A-MSDU length but maximum A-MSDU length in the

SP: Do you support to accept the resolution in 11-23/304r3 for the following CIDs?

17310 16202 17311 17126 17127 15582 17313 17128 16204

No objection

1. [559r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0559-00-00be-lb271-cr-for-a-mpdu-in-9-7.docx) CR for A-MPDU in 9.7 SunHee Baek [4C-4GT]

SP: Do you support to accept the resolution in 11-23/559r3 for the following CIDs?

16136, 17790, 17791, 18005

No objection

1. [600r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0600-00-00be-lb271-cr-for-35-2-3.docx) CR for 35.2.3 SunHee Baek [1C]

SP: Do you support to accept the resolution in 11-23/600r0 for the following CID?

15965

No objection

1. [696r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0696-00-00be-lb271-cr-for-tdls.docx) CR on TDLS Guogang Huang [18C-7GT]

C: Please keep this sentence in 15568. 11be already mandates EMLSR. I don’t think this prevents anything in UHR.

A: Then how about adding EHT MLD?

C: UHR STA can be EHT STA.

C: Change to An EHT TDLS non-AP STA .... . Keep the note 1.

SP: Do you support to accept the resolution in 11-23/696r2 for the following CIDs?

15059 16174 16281 16294 16463 18313 15477 15568 15569 16979 16980 16982 16983 16984 16985 16987

No objection

The AM2 session was recessed at 12:15 PT.

### May 10, 2023 (PM1-13:30 – 15:30 PT) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a Webex and in San Jose.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 13:30 PT. 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:
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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))
5. The Chair asked whether there is comment about agenda in 11-23/0599r4. The agenda was approved.

1. [692r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0692-00-00be-lb271-cr-on-eht-operation-element.docx) CR on EHT Operation element Guogang Huang [26C-21GT]

C: Why do you say not supporting? We can defer it.

C: delete two of.

SP: Do you support to accept the resolution in 11-23/692r1 for the following CIDs?

15030 15036 15037 17264 17265 17605 15806 15909 17298 17599 17907 17163 17263 17297 17598 17302 17604 17597 17600 17602 17603 17606 17607 17608 17609

No objection

1. [658r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0658-00-00be-lb271-cr-for-listen-interval.docx) CR for Listen Interval Ming Gan [15C-9GT]

C: Requested link may not be setup link?

C: I will submit the comment on wake up for Listen Interval in REVme.

SP: Do you support to accept the resolution in 11-23/658r3 for the following CIDs?

17963 16829 15872 16537 16538 16539 16540 16436 16046 16830 16541 16542 15102 16437 17294

No objection

1. [690r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0690-01-00be-lb271-cr-for-subclause-35-3-15-part-2.docx) cr-for-subclause 35.3.15\_part 2 Ming Gan [14C-9GT]

SP: Do you support to accept the resolution in 11-23/690r2 for the following CIDs?

16612 16613 16614 16381 16550 15642 16551 16552 16852 16853 16854 16855 15687 15684

No objection

1. [723r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0723-00-00be-lb271-cr-for-35-3-16-2-multi-link-device-capability-and-operation-signaling.docx) CR for MLD cap. and op. signaling Yunbo Li [15C-7GT]

SP: Do you support to accept the resolution in 11-23/723r1 for the following CIDs?

15064, 15414, 15415, 15555, 15556, 15643, 16276, 16858, 16860, 16861, 16862, 16863, 16864, 17872, 18302

No objection

1. [688r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0688-00-00be-lb271-cr-for-35-3-5-4.docx) CR for 35.3.5.4 Insun Jang [5C-4GT]

SP: Do you support to accept the resolution in 11-23/688r1 for the following CIDs?

15050, 15984, 16092, 16093, 17488

No objection

1. [714r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0714-00-00be-lb271-cr-for-35-3-3-6-2.docx) LB271 CR for 35.3.3.6.2 Yelin Yoon [8C-7GT]

C: Note. Comment says are only used to differentiate APs.

SP: Do you support to accept the resolution in 11-23/714r3 for the following CIDs?

15852, 15853, 16083, 16084, 16775, 17916, 18242

No objection

1. [713r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0713-00-00be-lb271-cr-for-35-3-16-3.docx) CR for 35.3.16.3 GeonHwan Kim [2C]

C: we already deferred the similar CID to this CID. This should be addressed together.

A: This is not related EMLSR but simlar proposal. This is different issue.

C: You might modify the rejection reason.

C: The contribution shows some benefit of it. The rejection reason is not appropriate. For example, the group does not reach consensus on it although that contribution was discussed. You can remove the current reason.

The reason was changed based on the comments.

SP: Do you support to accept the resolution in 11-23/713r2 for the following CIDs?

15065, 16096

No objection

1. [752r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0752-00-00be-lb271-cr-10-12.docx) CR for 10.12 Liwen Chu [2C-2GT]

SP: Do you support to accept the resolution in 11-23/752r1 for the following CIDs?

15504 17353

No objection

1. [753r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0753-00-00be-lb271-cr-35-4-1.docx) CR for 35.4.1 Liwen Chu [4C-2GT]

SP: Do you support to accept the resolution in 11-23/752r2 for the following CIDs?

17001 17002 17003 16344

No objection

The PM1 session was recessed at 15:30 PT.

### May 10, 2023 (PM2 - 16:00 – 18:00 PT) (TGbe MAC ad hoc)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

This meeting took place using a Webex and in San Jose.

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 16:00 PT. 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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5. The Chair asked whether there is comment about agenda in 11-23/0599r4. The agenda was approved.

**Submissions**

1. [627r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0627-00-00be-lb271-cr-for-subclause-35-3-1.docx) cr-for-subclause 35.3.1 Ming Gan [30C-14GT]

C: AP may have a different separate TSF timer. Implementation issue.

C: so that the difference between the TSF timers of any two affiliated APs is within ...

C: clock drift is within 30us but the difference between TSF timers is different

A: the clock drift difference between TSF timers

C: what is a consquence ? or normative text?

A: We can remove as a result without removing shall

C: Isn’t it already covered in the spec the drift difference? I guess the original sentence already works.

SP: Do you support to accept the resolution in 11-23/627r3 for the following CIDs?

16369 16739 17164 17245 18188 17861 18112 16370 15675 15224 15225 15724 15725 17862 16743 15178 16371 15811 15850 16372 16744 17246 17247 16746 17818 17979

No objection

1. [638r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0638-00-00be-lb271-cr-for-subclause-35-3-15-part-1.docx) cr-for-subclause 35.3.15-part 1 Ming Gan [31C]

C: Baseline mentions all buffered group addressed frames “that arrive via the DS”. “that arrive via the DS” should not be deleted.

C: I am confused about 35.3.15.1. (15412, 17363)

A: OK. We will discuss online CIDs 15412, 17363.

C: The word immediately is too strong (35.3.15.1)

C: Let us delete immediately.

C: Baseline indicates immediately.

A: Let us discuss offline.

C: Concerns about CIDs 15413 and 16845. Group addressed data frames for broadcast ve individually addressed. Further discussion needed.

C: CIDs 15413 and 16845 should be rejected with the same reasoning.

A: OK. We will discuss online CIDs 15413 and 16845.

C: Regarding CIDs 17843, 16193, notes are specific to ML operation (35.3.5.1). Why are they moved to EHT BSS operation(35.15)? Let us keep it where it was.

SP: Do you support to accept the resolution in 11-23/638r2 for the following CIDs?

17843 16193 15019 15640 16844 17364 18253 15488 16846 16847 16848 16849 15873 17366 16547 16380 16609 16610 16548 16611 15689 16851 16549

No objection

1. [694r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0694-00-00be-lb271-cr-for-35-3-16-7-error-recovery-on-a-nstr-link-pair-within-pifs.docx) CR for Error rec. on a NSTR link pair within PIFS Yunbo Li [10C]

C: Disagree with changing should to shall.

C: Agree with Gaurang.

A: Let us use is instead of shall.

C: Disagree. Should is proper to use.

No agreement on CID 16894. Further online discussions.

The PM2 session was recessed at 18:00 PT.