IEEE P802.11  
Wireless LANs

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| Minutes for TGbe MAC Ad-Hoc Meeting in January 2023 | | | | |
| Date: 2023-01-11 | | | | |
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Abstract

This document contains the meeting minutes for the TGbe MAC Ad Hoc Meeting in January 11 - 13 2023.

Revisions:

* Rev0: Added the minute from the MAC ad hoc meeting held on January 11 2023.

### AM1 January 11 2023, (TGbe MAC ad hoc meeting)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

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

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 09:03 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 went through the guidelines for Post-Quarantine during the MAC ad-hoc sessions.
6. The Chair asked whether there is comment about agenda in 11-23/0019r4. The agenda was approved.

**Submissions**

1. [1051r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1051-03-00be-lb266-cr-for-twt.docx) CR for TWT Rubayet Shafin [6C-SP 10’]

Discussion: None

SP: Do you support to accept the resolution in 11-22/1051r4 for the following CIDs?

13633, 11949, 13872, 11155, 13643

No objection

1. [1265r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1265-02-00be-lb266-cr-for-cid-13736-and-13973.docx) CR for CID 13736 and 13973 Yunbo Li [2C-SP 10’]

Discussion:

C: Typo, SIFS after or a SIFS after..

C: I already removed ”a”.

SP: Do you support to accept the resolution in 11-22/1265r3 for the following CIDs?

13736, 13973

No objection

1. [1263r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1263-03-00be-lb266-cr-for-txop-return-in-mu-rts-txs.docx) CR for TXOP return in MU-RTS TXS Yunbo Li [2C-SP 10’]

Discussion:

C: We already have the PIFS recovery in mode 1. I don’t think we need to add for mode 1.

A: I understand. I will follow the majority by group.

SP: Do you support to accept the resolution in 11-22/1263r4 for the following CID?

11486

No objection

SP: Do you support to accept the resolution in 11-22/1263r4 for the following CID?

13989

20Y, 25N, 21A

1. [1545r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1545-02-00be-lb-266-cr-for-cids-related-to-twt-information-frame.docx) CR for CIDs related to TWT Information frame Kumail Haider [12C-SP ]

Discussion:

C: I think it’s weird that we can suspend a specific R-TWT SP. I think 11ax approach like suspending all broadcast TWT SPs makes sense.

C: TWT ID, broadcast ID is link specific while individual ID is MLD level.

A: both are link level. We are not changing it.

C: Link ID can be included in the frame.

A: Link ID is used for indicating which TWT SP is applied for which link. Not MLD level.

SP is deferred

SP: Do you support to accept the resolution in 11-22/1545r3 for the following CIDs?

13311, 13738, 10733, 12074, 13015, 13057, 13312, 13240, 13657, 13658, 13661

1. [1838r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1838-02-00be-lb266-cr-for-ml-reconfiguration-clause-35-3-6-part-2.docx) CR for ML Reconfig. clause 35.3.6 part 2 Binita Gupta [18C-SP ]

Discussion:

C: 10021, can you add ”successfully” between is and negotiated.

A: established is ok?

C: you mentioned one or more TID mapped to.. may be ambiguous. Any TID? A TID..

C: TID not being mapped to remaining setup links in either direction.

Not finished

Recess at 10:30 PT

### AM2 January 11 2023, (TGbe MAC ad hoc meeting)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

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

**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 11-23/0019r4. The agenda was approved.

**Submissions**

1. [1189r7](https://mentor.ieee.org/802.11/dcn/22/11-22-1189-06-00be-cr-for-txs-part-1.docx) CR for TXS - part 1 Dibakar Das [27C-SP 20’]

Discussion:

C: Ack frame is include RA. AP sends Ack frame. How is the Ack frame sent?

A: We can have further discussion for mode 1. This case is for P2P.

C: OM seems like over optimization.

A: For second, I think we might need it. We can have separate SP.

C: Highlighted green texts are related to changes. What about blue texts in CID list?

A: Those are already resolved. White CID are related CIDs.

SP is deferred.

1. [1959r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1959-00-00be-lb-266-cr-for-r-twt-related-cids-part2.docx) CR for R-TWT related CIDs Part2 Kumail Haider [25C ]

C: Is the EOT tighltly coupled with TID?

A: No, EOT is general.

C: Then, I think BSR control can indicate it.

C: What does the TID and Queue Size mean in EOT? How can you set those field for EOT set to 1?

C: If STA requests to extend the SP, AP finally decides it? Or just grant it?

A: AP decides it.

C: For SP, there is fairness issue with other R-TWT SPs.

C: Could you have general TWT extension SP?

**SP:** **Do you support to add a new HE variant A-control field to signal TWT SP Extension as resolution to related LB266 CIDs included in 22/1959r0 as Group 3?**

8Y/47N/6A

SP: Do you support to accept the resolution in 11-22/1959r0 for the following CIDs?

10683, 11159, 13656, 11316, 12075, 12474, 12966

No objection

1. [1935r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1935-01-00be-lb266-resolution-for-cid-10924.docx) LB266 - Resolution for CID 10924 Thomas Handte [1C ]

Discussion:

C: The spec already allows EDCA access in TWT SP.

A: EHT SCS does not mention non-trigger-enabled R-TWT SP for UL transmission.

C: I don’t think it needed here.

SP is deferred

1. [2159r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2159-00-00be-cr-for-qmf.docx) CR for QMF Po-Kai Huang [2C ]

Presented but no Q&A due to time out.

Recess at 12:15 PT.

### PM1 January 11 2023, (TGbe MAC ad hoc meeting)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

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

**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:
     + 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.
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5. The Chair asked whether there is comment about agenda in 11-23/0019r4. The agenda was approved.

**Submissions**

1. [1201r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1201-03-00be-ml-traffic-indication-using-a-control.docx) ML traffic indication using A-control Vishnu Ratnam [1C-SP 10’]

C: AP indicating this wake up might be problematic. We already have two similar method in the spec. I don’t know we need to define new third thing for same thing.

C: ML traffic indication is more efficient.

C: Is this only for STA to wake up?

C: STA behavior, is there any timer indication? If the channel is busy, STA may not transmit PS-Poll.

C: Do you have TID indication?

C: Can the LI control be used for other case?

A: Cross link power state indication may use this.

SP: Do you support to accept the resolution in 11-22/1201r4 for the following CIDs?

11587

17Y/11N/22A

1. [1539r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1539-02-00be-lb266-cr-for-subclause-35-3-10.docx) CR for subclause 35.3.10 Ming Gan [2C-SP 10’]

C: There is a proposal that I have on this issue, same CID. We need to discuss them together in this group.

A: Two CIDs are quarantined.

SP is deferred.

1. [1844r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1844-01-00be-cr-for-nstrmobileap-part2.docx) CR for 35.3.19 part1 Kaiying Lu [4C-SP 10’]

SP: Do you support to accept the resolution in 11-22/1844r1 for the following CIDs?

10168, 10721, 13007

No objection

1. [1717r1](https://mentor.ieee.org/802.11/dcn/22/11-22-1717-01-00be-lb266-cr-for-subclause-11.docx) LB266 CR for subclause 11 Ming Gan [1C-SP 10’]

SP: Do you support to accept the resolution in 11-22/1717r1 for the following CID?

13471

No objection

1. [2162r1](https://mentor.ieee.org/802.11/dcn/22/11-22-2162-01-00be-comment-resolution-for-cid-11852-13453.docx) CR for CID 11852, 13453 Li-Hsiang Sun [2C ]

C: Maximum A-MPDU Length Exponent Extension in EHT capabilities element is applicable to EHT PPDU or other PPDU? per PPDU type? Or EHT STA? Or that in HE capabilities? Do we have the same requirement for HE PPDU?

SP: Do you support to accept the resolution in 11-22/2162r2 for the following CID?

13453,11852

Note: N/A in table will be N

No objection

1. [2172r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2172-00-00be-lb266-cr-for-cids-in-35-9.docx) CR for CIDs in 35.9 Abdel K. Ajami [8C ]

C: The second sentence (”In addtion..”) is almost same as the first sentence. Why do we need the second sentence? Maybe we can combine the first and second sentences.

The related paragraph was modifed on the air.

C: ”not a member of the upcoming” is added by 13012 to D2.0 but you removed it by another CID 13036.

C: What does ” before starting transmission of any MPDU” means? PPDU is better.

C: if there is not enough time for what? You need to add the text for clarification.

SP: Do you support to accept the resolution in 11-22/2172r0 for the following CIDs?

13307, 11112

1. [2170r2](https://mentor.ieee.org/802.11/dcn/22/11-22-2170-02-00be-lb266-misc-cids.docx) Misc CIDs Gaurang Naik [18C]

C: The current text is correct.

A: You’re refering the old version.

Not finished.

Recess at 15:30 PT

### PM2 January 11 2023 (TGbe MAC ad hoc meeting)

Chairman: Liwen Chu (NXP)

Secretary: Jeongki Kim (Ofinno)

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

**Introduction**

1. The Chair (Liwen, NXP) calls the meeting to order at 16:00 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.
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5. The Chair asked whether there is comment about agenda in 11-22/0019r4. The agenda was approved.

**Submissions**

1. [1181r2](https://mentor.ieee.org/802.11/dcn/22/11-22-1181-02-00be-lb266-cr-cl35-emlsr-part1.docx) CR CL35 EMLSR part1 Minyoung Park [5C-SP 10’]

SP: Do you support to accept the resolution in 11-22/1181r3 for the following CIDs?

10052, 12853

No objection

1. [1129r3](https://mentor.ieee.org/802.11/dcn/22/11-22-1129-03-00be-lb266-cr-cl9-emlsr.docx) CR CL9 EMLSR Minyoung Park [1C-SP 10’]

C: Resolution column should include No further change need.

A: I think this is fine.

SP: Do you support to accept the resolution in 11-22/1129r3 for the following CID?

11505

No objection

1. [1204r4](https://mentor.ieee.org/802.11/dcn/22/11-22-1204-04-00be-lb266-cr-cl35-emlsr-part2.docx) CR CL35 EMLSR part2 Minyoung Park [1C-SP 10’]

C: There are benefits that AP recommends non-AP MLD should enable EMLSR. You can change the rejection reason like cannot reach consensus.

A: ok

SP: Do you support to accept the resolution in 11-22/1204r5 for the following CIDs?

10158, 14077

No objection

1. [2174r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2174-00-00be-proposed-resolution-to-lb266-cid-on-emlsr-parameter-indication.docx) Prop. Res. to CID on EMLSR parameter indication Qi Wang [1C ]

C: These parameters are related capabilities. How do you update?

A: Link set is changed like enabled or disabled.

C: I think this is over design.

C: Are you going to have the same value or different value for different link?

C: You can put EMLMR together. Do we need additional bits for it?

C: This is optional for AP side.

A: Reserved for AP. AP reception and following is mandatory

SP is deferred.

1. [2175r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2175-00-00be-proposed-resolutions-to-lb266-cids-on-emlsr-entering-and-exit-process.docx) Prop. Res. to CIDs on EMLSR entering and exit process Qi Wang [3C ]

C: I already commented it. 16 Tus. 8 TU is too small.

A: I’m not running SP today

C: You use every values. No reserved.

C: spread is a little bit weird in the first table.

C: What is the rationale of the added text (less than or equal to 6)?

1. [2184r0](https://mentor.ieee.org/802.11/dcn/22/11-22-2184-00-00be-lb266-cr-for-remaining-cids.docx) LB266 CR for Remaining CIDs Jeongki Kim [2C ]

C: The spec already cover the operation. We can have note for it.

A: Not clearly mention the operation.

C: How does not AP know buffer status of STA?

A: AP can transmit BSRP to STA. STA sends BSR in response.

C: Does the STA enter the doze state during quiet intervals? How can the STA receive CF-End?

A: Some STAs may not enter the doze state. No description of it in the spec

C: Why do we need this operation?

A: STA sets the NAV based on the received Quiet element.

C: Do we need for 1 TU quiet interval?

A: AP should be able to transmit CF-End at least for the interval. Whether AP transmit or not is implementation.

1. 22/1906

C: rTWT membership does not require scs+qos but it can use scs+qos to indicate QoS info optionally

C: I think that's a gap in the spec as pointed out by many comments that you mass-rejected in Bangkok.

C: Can AP announce a new R-TWT according to received QoS requirement?

C: This is NOT adding the capability to allow the rTWT to carry the QoS char element

C: my point is STA's QoS info sharing with the AP should be integrated with R-TWT setup process. I think this was the theme of those CIDs.

Not finished

Recess at 18:00 PT