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): |
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| 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.
* Rev1: Added the minutes from the MAC ad hoc sessions held on May 11.
* Rev2: Added the minutes from the MAC ad hoc sessions held on May 12.

### 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) and Jeongki Kim (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) and Jeongki Kim (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) and Jeongki Kim (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.
	* 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
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.

### May 11, 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asked whether there is comment about agenda in 11-23/0599r6. The agenda was approved.

 **Submissions**

1. [760r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0760-00-00be-lb271-cr-9-4-1-74.docx) LB271 CR 9.4.1.74 Liwen Chu [7C-7GT]

C: 17521, presence is defined in somewhere?

C: In encoding, You remove the MCS Map count related text. There is normative text. So. Don’t need to repeat?

C: Same meaning as definition text

SP: Do you support to accept the resolution in 11-23/760r1 for the following CIDs?

17517 17518 17519 17520 17521 17522 17523

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 Cont.]

C:When we say larger than SIFS and less than or equal to PIFS, what do we mean? For 25us, + -10% us range. Any tolerance?

A: We never put any value for PIFS in existing standard.

C: Baseline covers PIFS case?

C: I don’t see any reason for ED check for PIFS.

C: no more than?

C: not larger than PIFS..

C: why not adding primary 20 reference?

A: The subclause is for PD (not ED).

17835 is deferred.

16894 is deferred.

16895 is deferred.

SP: Do you support to accept the resolution in 11-23/694r0 for the following CIDs?

15226, 15644, 15813, 16316, 16318, 16336, 16893

No objection

1. [695r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0695-00-00be-lb271-cr-on-wnm-sleep-mode-response.docx) CR on WNM Sleep Mode Response Guogang Huang [6C-5GT]

SP: Do you support to accept the resolution in 11-23/695r1 for the following CIDs?

15380 17770 17771 17772 15381 17773

No objection

1. [366r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0366-00-00be-lb271-cr-35-3-18-part-2.docx) CR 35.3.18 part 2 Liwen Chu [12C-7GT]

C: What do we need to add here?

A: In EMLSR mode STA need to be awake for listening operation before receiving initial frame. We can have the similar related text in EMLMR. 16559

C: I’m not sure this is really needed. We already have the related text.

C: Do we have a single link for EMLMR?

16559 is deferred.

Not finished due to out of time.

The AM1 session was recessed at 10:30 PT.

### May 11, 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) and Jeongki Kim (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. [593r5](https://mentor.ieee.org/802.11/dcn/23/11-23-0593-03-00be-lb271-cr-for-clause-35-3-7-3-2-part-1.docx) LB271 CR for Clause 35.3.7.3.2 - Part 1 Arik Klein [4C SP]

C: I’m fine with BSS Termination Included is set to 1 . Broadcast can be it set to 1.

C: Let’s make two docs completely aligned.

C: It will be better to have one document for related changes for consistency.

C: Could you defer this (18249)?

SP: Do you support to accept the resolution in 11-23/593r5 for the following CIDs?

16018, 16020, 16510, 18154

No objection

1. [395r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0395-01-00be-cr-for-35-3-19.docx) CR for 35-3-19-2 Kaiying Lu [22C]

C: we had two bullet. It’s not a simple editorial change. It’s a technical change. Why do we have if?

A: The last setence, primary link is not diabled and nonprimary link is disabled.

C: MLD shall have at most two link and the two links shall be an NSTR link pair. You can remove the first sentece of what you added.

C: some people think mobile AP MLD has two links while other people think differently.

C: what’s the common link of an NSTR link pair? Just put the note.

C: what about 2? Undefined?

A: Yes, Undefined

C: I think swap is confusing. How about keep switch

SP: Do you support to accept the resolution in 11-23/395r3 for the following CIDs?

16957, 18169, 16956, 16958, 15227, 15228, 15727, 15728, 15887, 16107, 17359, 1556515566, 18171, 18243, ~~15626~~, 15920, 16427, 16959, 16960, 16961, 16962, 18170, 17918, 18061

No objection

The AM2 session was recessed at 12:15 PT.

### May 11, 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:
		+ 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)
5. The Chair asked whether there is comment about agenda in 11-23/0599r6. The agenda was approved.

1. [746r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0746-00-00be-lb271-cr-35-14-part-2.docx) CR 35.14 part 2 Liwen Chu [9C]

C: if AP want to transmit group addressed frame to only EHT STAs, it can do so.

SP: Do you support to accept the resolution in 11-23/746r1 for the following CIDs?

17120 17368 17121 17122 17123 16250 17124 17369 17125

No objection

1. [722r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0722-00-00be-lb271-9-4-2-316-qos-char-element-part-1.docx) 9.4.2.316 (QoS char element Part 1) Duncan Ho [20C]

C: This does not consider others (e.g., retransmission).

C: an MSDU is considered delivered successfully for the purpose of the computation of the MSDU Delivery Ratio value ...

C: can you defer the SP ?

SP: Do you support to accept the resolution in 11-23/722r0 for the following CIDs?

1. [721r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0721-00-00be-lb271-5-1-5-1-and-5-1-5-11-mac-data-service.docx) 5.1.5.1 and 5.1.5.11 (MAC data service) Duncan Ho [12C]

C: I’m not sure it’s consistent with the current text (18075).

C: You removed one of. Is it the intention to forward it to all sublayers.

C: You can remove ”with” after associated in 18076. And you need to update the last sentence.

1. [706r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0706-00-00be-lb271-cr-for-35-3-16-4-nstr-operation.docx) CR for 35.3.16.4 NSTR operation Yunbo Li [15C]

C: Note is deleted CID, 15875. I don’t see the reason of deleting the note. Are those changes in the same CIDs? I think the current text looks fine.

C: Same opinion as previous comment. I want to revert the removed text in the previous paragraph.

C: I think 15099 comment is reasonable. We can defer this 15099.

C: non-AP MLD may have multiple NSTR link pairs? You can delete of the NSTR link pair. One link and the other link are in the same NSTR link pair?

Several discussions on 16879 (May -> shall)

16879 is deferred.

C: 16211, why do you propose?

A: if one link is used for transmission, other link can not be used for reception. In that case, STA need to be in awake state. It’s not good for power saving operation of NSTR non-AP MLD.

C: This might be similar to EMLSR. If you want to save the power, you can enable the EMLSR.

A: This is for NSTR MLD.

A: AP can choose whether AP MLD use only one link or both links.

C: we are converging to EMLSR.

C: The power saving should be controled by STA not AP. STA can do whatever it wants.

The PM1 session was recessed at 15:30 PT.

### May 11, 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.
	* 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asked whether there is comment about agenda in 11-23/0599r6. The agenda was approved.

 **Submissions**

1. 706r0,

SP: Do you support to accept the resolution in 11-23/706r0 for the following CIDs?

15126, 15127, 16280, 16301, 16314, 16315, 16876, 16877, 16878, 16880, 17875, 18207

No objection

SPs for 722r2 and 721r1 were deferred

1. [704r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0704-00-00be-lb271-cr-for-9-6-35-10-and-9-6-35-11.docx) CR for 9.6.35.10 and 9.6.35.11 Frank Hsu [8C]

SP: Do you support to accept the resolution in 11-23/704r1 for the following CIDs?

15167 15387 15962 17785 17786 17787 17788 17789

No objection

1. [754r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0754-00-00be-lb271-cr-for-r-twt-part-2.docx) CR for R-TWT-Part 2 Kumail Haider [20C]

C: Why do you constraint the QoS null frame?

C: Isn’t it same as QoS null frame with no more data indication ?

C: R-TWT SP may be allocated to several STAs.

A: This is per-STA procedure. I will defer the SP for this CID.

C: you remove TWTOptionActivated?

A: R-TWT scheduled STA is set the Broadcast TWT to 1

CID15836 is deferred.

SP: Do you support to accept the resolution in 11-23/754r1 for the following CIDs?

15641, 15905, 17578, 15238, 15737, 15652, 15653, 16169, 16405, 16148, 17170, 15835

No objection

1. [792r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0792-00-00be-lb271-cr-for-misc-cids-in-clause-9.docx) CR for misc CIDs in clause 9 Laurent Cariou [57C]

C: You need addtional procedure

C: Some further discussion needed

C: A similar note in a different CID

15013 is deferred

SP: Do you support to accept the resolution in 11-23/792r1 for the following CIDs?

17303 17378 17377 17304 17528 17905 18082 17537 17536 18083 17535 18084 17542 17539 17543 17544 17540 15131 17561 17562 17564 18085 17563 17565 17566 18086 17568 17878 17569 17570 17571 17572 15907 17879 17880 17573 15946 17590 17591 18096 18098 17348 17349 17748 18101 18102 17749 18103 18104 17750 18109

SP is deferred.

The PM2 session was recessed at 18:00 PT.

### May 12, 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asked whether there is comment about agenda in 11-23/0599r7. The agenda was approved.

 **Submissions**

1. [792r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0792-00-00be-lb271-cr-for-misc-cids-in-clause-9.docx) CR for misc CIDs in clause 9 Laurent Cariou [57C SP]

SP: Do you support to accept the resolution in 11-23/792r2 for the following CIDs?

17303 17378 17377 17304 17528 17905 18082 17537 17536 18083 17535 18084 17542 17539 17543 17544 17540 15131 17561 17562 17564 18085 17563 17565 17566 18086 17568 17878 17569 17570 17571 17572 15907 17879 17880 17573 15946 17590 17591 18096 18098 17348 17349 17748 18101 18102 17749 18103 18104 17750 18109

No objection

1. [722r3](https://mentor.ieee.org/802.11/dcn/23/11-23-0722-02-00be-lb271-9-4-2-316-qos-char-element-part-1.docx) 9.4.2.316 (QoS char element Part 1) Duncan Ho [20C SP]

C: Mean Data Rate field, you can add some text ” rounded up to the nearest kilobit per second”?

SP: Do you support to accept the resolution in 11-23/722r4 for the following CIDs?

15011, 15012, 15024, 15378, 15807, 15808, 15809, 16079, 16134, 17646, 18014, 18041, 18042, 18043, 18045, 18046, 18047, 18048, 18049

No objection

1. [721r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0721-01-00be-lb271-5-1-5-1-and-5-1-5-11-mac-data-service.docx) 5.1.5.1 and 5.1.5.11 (MAC data service) Duncan Ho [12C SP]

SP: Do you support to accept the resolution in 11-23/721r2 for the following CIDs?

 15495, 15496, 16257, 16364, 16388, 18073, 18074, 18075, 18076, 18077, 16246, 16320

No objection

1. [790r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0790-01-00be-lb271-cr-for-cids-in-35-3-11.docx) CR for CIDs in 35.3.11 Laurent Cariou [27C-16GT]

C: STA need to receive beacon frame after channel switching

C: after complete channel swithc STA need to receive beacon frame. This should be mandatory.

A: Ok, I will change this.

C: Why we need two Channel Switch element?

C: Channel switch wrapper is mandatory in baseline.

C: This (18001) is related to the first comment. The first three elements are enough.

C: 18298 and 18297 should be revised.

SP: Do you support to accept the resolution in 11-23/790r2 for the following CIDs?

16520 17833 16521 16815 18296 17834 16522 18297 16523 18298 16816 17881 18251 18300 16817 15406 15539 18252 15407

No objection

1. [366r2](https://mentor.ieee.org/802.11/dcn/23/11-23-0366-00-00be-lb271-cr-35-3-18-part-2.docx) CR 35.3.18 part 2 Liwen Chu [12C-7GT]

C: There is another document for EMLSR. Can we do together?

I will defer the CID

C: Why do you defer two CIDs?

C: Padding delay and transition delay are same.

C: Do you mean notification frame? Those are in the Capabilities

C: There are two issues, first is we need two fields for EMLMR? The second is how we can incorporate EMLMR fields with EMLSR fields. Need more discussion.

SP: Do you support to accept the resolution in 11-23/366r3 for the following CIDs?

16940 16941 16560 16942 16561

16943 16944 15915 16618 16945

No Objection

updated

1. 300r2, Abhi

C: what’s the change?

A: Just adding reference.

SP: Do you support to accept the resolution in 11-23/300r2 for the following CIDs?

16379

No Objection

The AM1 session was recessed at 10:30 PT.

### May 12, 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) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asked whether there is comment about agenda in 11-23/0599r7. The agenda was approved.

 **Submissions**

1. [733r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0733-01-00be-lb271-resolution-for-cids-on-bandwidth-indication.docx) Resolution for CIDs on BW indication M. Mehrnoush [28C-23GT]

C: 17266, you mention it can follows the legacy behavior. There are two. Which one do they follow?

A: We can discuss offline. I will defer it.

C: Two bullets are not contradict.

C: The second part can be covered by the first part.

A: The first part is set to the maximum bandwidth while the second is set to less than the bandwidth

C: We have two separate rule for this in EHT BSS. We don’t need to remove it.

Several discussions on element and subelements/

C: Why do you use the same name for element and field?

A: There is definition of the field and element. So no confusion.

SP: Do you support to accept the resolution in 11-23/733r3 for the following CIDs?

15163, 15164, 15165, 15166, 15361, 15364, 15456, 17262, 17530, 17531, 17532, 17574, 17575, 17752, 17753, 17754, 17756, 17757, 17762, 17763, 17971, 17999, 18000

No objection

1. [661r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0661-00-00be-lb271-cids-assigned-to-abhi-part-5.docx) CIDs assigned to Abhi - Part 5 Abhishek Patil [10C-8GT]

C: why do you mention expetion for the last clause?

A: Additional rule for it?

C: Yes

C: Is there any other element at MLD level? TCLS or TSPEC? TID-to-link mapping?

I can defer 18240.

C: Regarding the core of the, outside the Probe Reqest ML element..

SP: Do you support to accept the resolution in 11-23/661r3 for the following CIDs?

15108 16082 16759 16777 16778 16972 17662 18239 ~~18240~~ 18272

No objection

1. [765r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0765-00-00be-lb271-cr-for-ml-reconfiguration-add-delete-link.docx) CR for ML Reconfiguration Add Delete Link Binita Gupta [22C]

Not finished

The AM2 session was recessed at 12:15 PT.

### May 12, 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.
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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)
5. The Chair asked whether there is comment about agenda in 11-23/0599r8. The agenda was approved.

**Submissions**

1. [765r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0765-01-00be-lb271-cr-for-ml-reconfiguration-add-delete-link.docx) CR for ML Reconfiguration Add Delete Link Binita Gupta [22C 5’]

C: EML capability, how this will be used?

A: Association and reassociation case, non-AP MLD can use this when the link will be added.

C: Then, when the link is deleted, this is not used?

C: AP removal case is not used. Other case, we can use this.

SP is deferred

1. [645r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0645-00-00be-lb271-cr-for-35-15-1-part-2.docx) CR for 35.15.1-part 2 Abhishek Patil [9C]

C: shall indicate a supported channel width rather than maximum supported channel with.

C: the first CID should be revised

SP: Do you support to accept the resolution in 11-23/645r2 for the following CIDs?

17314 17129 16203 17316 17317 17130 17133 17318 17132

No objection

1. [662r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0662-00-00be-lb271-cr-cl35-mlti-part2.docx) CR CL35 MLTI part 2, CL3.2, Misc. Minyoung Park [22C]

C: Can we still use this recommendation if all TIDs are not mapped to all the enabled links?

C: What is the difference between Per-link traffic indications and Link recommendation?

A: Same meaning. Link recommendation can be in Beacon frame or Link recommendation frame.

15472 is deferred

C: The last bullet is not related to the comment. We can keep it.

A: The second bullet can cover the third bullet.

C: Ok

C: Can we call this buffered BU in case that one STA is in active mode?

A: It does not appliy because in that case TIM bit is set to 0.

C: EMLMR delay is not only EMLMR padding delay.

A: Ok I will transfer

C: At least one of ... do we need still paranthesis?

A: There could be multiple MLDs

C: Then you can remove of the...like at least one associated non-AP MLD., same as the second bullet.

C: Do we need to add a similar definition for disabled link? A setup link to which no TID is mapped neither in both DL nor UL for a non-AP MLD

C: A setup link of a non-AP MLD

C: I’m confusing about why enabled link, disabled link is related to TID-to-link mapping.

C: Definition of EMLMR, Nss and MCS can be larger or smaller? There is not description

A: Smaller more makes sense.

C: What is true defintion?

A: I can defer this CID 16221.

C: Sound sequence is already in baseline. Do we need this?

C: TXOP sharing, another method can be addressed. For example, non-AP STA can return its TXOP, Can you defer this?

Related CIDs were deferred

16899 was deferred

SP: Do you support to accept the resolution in 11-23/662r4 for the following CIDs?

15958 16041 17742 18099 17739 15090 15918 16425 17743 1566215377 15919 16426 16468 15685 16220 1638416222 16258 16438 15060

No objection

1. [730r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0730-00-00be-lb271-cr-for-35-3-19-2.docx) CR for 35.3.19 Kaiying Lu [17C]

C: It can only report only nonprimary link of the NSRT link?

C: Mobile AP MLD should cover multiple BSSID feature?

C: Why standard should prohibit it? Why do we remove the MBSSID in this feature?

A: I can defer the CID

C: A non-AP MLD affiliated with an NSTR mobile AP MLD???

C: 16963,

SP: Do you support to accept the resolution in 11-23/730r2 for the following CIDs?

15453, 16108, 16109, 16619, 17850, 16963, 18172, 17918, 18061, 15888, 18293, 18294, 16966, 16964, 16965, 18173, 18294

No objection

The TGbe ad hoc meeting was adjourned at 15:30 PT.

Attendance

### Attendance of May 10 sessions

Breakout Timestamp Name Affiliation

TGbe (MAC) AdHoc - San Jose 5/10 Abouelseoud, Mohamed Apple Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Ajami, Abdel Karim Qualcomm Technologies, Inc

TGbe (MAC) AdHoc - San Jose 5/10 Baek, SunHee LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/10 CHENG, yajun Xiaomi Communications Co., Ltd.

TGbe (MAC) AdHoc - San Jose 5/10 Choi, Jinsoo LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/10 Chu, Liwen NXP Semiconductors

TGbe (MAC) AdHoc - San Jose 5/10 Chung, Chulho SAMSUNG

TGbe (MAC) AdHoc - San Jose 5/10 Erkucuk, Serhat Ofinno

TGbe (MAC) AdHoc - San Jose 5/10 Fang, Yonggang Mediatek

TGbe (MAC) AdHoc - San Jose 5/10 Fischer, Matthew Broadcom Corporation

TGbe (MAC) AdHoc - San Jose 5/10 Gu, Xiangxin Unisoc

TGbe (MAC) AdHoc - San Jose 5/10 Haider, Muhammad Kumail Meta Platforms Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Hamilton, Mark Ruckus/CommScope

TGbe (MAC) AdHoc - San Jose 5/10 Ho, Duncan Qualcomm Incorporated

TGbe (MAC) AdHoc - San Jose 5/10 Huang, Po-Kai Intel

TGbe (MAC) AdHoc - San Jose 5/10 Kim, Geon Hwan LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/10 Kim, Jeongki Ofinno

TGbe (MAC) AdHoc - San Jose 5/10 Kim, Sang Gook LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/10 Kim, Sanghyun WILUS Inc

TGbe (MAC) AdHoc - San Jose 5/10 Kim, Youhan Qualcomm Technologies, Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Klein, Arik Huawei Technologies Co., Ltd

TGbe (MAC) AdHoc - San Jose 5/10 Koundourakis, Michail Samsung Cambridge Solution Centre

TGbe (MAC) AdHoc - San Jose 5/10 Levy, Joseph InterDigital, Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Li, Weiyi Spreadtrum

TGbe (MAC) AdHoc - San Jose 5/10 Lorgeoux, Mikael Canon Research Centre France

TGbe (MAC) AdHoc - San Jose 5/10 Lou, Hanqing InterDigital, Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Lu, kaiying MediaTek Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Lu, Liuming Guangdong OPPO Mobile Telecommunications Corp.,Ltd

TGbe (MAC) AdHoc - San Jose 5/10 Luo, Yuanqiu Futurewei Technologies

TGbe (MAC) AdHoc - San Jose 5/10 Ma, Yongsen SAMSUNG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/10 Mehrnoush, Morteza Apple Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Montemurro, Michael Huawei Technologies Co., Ltd

TGbe (MAC) AdHoc - San Jose 5/10 Nayak, Peshal Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/10 Ng, Boon Loong Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/10 Palayur, Saju Maxlinear Inc

TGbe (MAC) AdHoc - San Jose 5/10 Park, Minyoung Intel

TGbe (MAC) AdHoc - San Jose 5/10 Patil, Abhishek Qualcomm Incorporated

TGbe (MAC) AdHoc - San Jose 5/10 Patwardhan, Gaurav Hewlett Packard Enterprise

TGbe (MAC) AdHoc - San Jose 5/10 Petrick, Albert InterDigital, Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Qi, Yue Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/10 Quan, Yingqiao Unisoc

TGbe (MAC) AdHoc - San Jose 5/10 Ryu, Kiseon NXP Semiconductors

TGbe (MAC) AdHoc - San Jose 5/10 Shafin, Rubayet Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/10 Shirakawa, Atsushi SHARP CORPORATION

TGbe (MAC) AdHoc - San Jose 5/10 Wang, Huizhao NXP Semiconductors

TGbe (MAC) AdHoc - San Jose 5/10 Wang, Qi Apple, Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Wullert, John Peraton Labs

TGbe (MAC) AdHoc - San Jose 5/10 Xia, Qing Sony Corporation

TGbe (MAC) AdHoc - San Jose 5/10 Yan, Aiguo Zeku

TGbe (MAC) AdHoc - San Jose 5/10 Yang, Jimmy Moxa Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Yee, James MediaTek Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Yee, Peter NSA-CSD

TGbe (MAC) AdHoc - San Jose 5/10 Yi, Yongjiang Spreadtrum Communication USA, Inc

TGbe (MAC) AdHoc - San Jose 5/10 Yoon, Kangjin Meta Platforms Inc.

TGbe (MAC) AdHoc - San Jose 5/10 Yoon, Yelin LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/10 Zhao, Yue Huawei Technologies Co., Ltd

TGbe (MAC) AdHoc - San Jose 5/10 Zhou, Lei H3C Technologies Co., Limited

TGbe (MAC) AdHoc - San Jose 5/10 Zhou, Pei Guangdong OPPO Mobile Telecommunications Corp.,Ltd

Requested via email

TGbe (MAC) AdHoc - San Jose 5/10 Tomoko Adachi Toshiba Corporation

### Attendance of May 11 sessions

Breakout Timestamp Name Affiliation

TGbe (MAC) AdHoc - San Jose 5/11 Ajami, Abdel Karim Qualcomm Technologies, Inc

TGbe (MAC) AdHoc - San Jose 5/11 baron, stephane Canon Research Centre France

TGbe (MAC) AdHoc - San Jose 5/11 CHENG, yajun Xiaomi Communications Co., Ltd.

TGbe (MAC) AdHoc - San Jose 5/11 Chung, Chulho SAMSUNG

TGbe (MAC) AdHoc - San Jose 5/11 Coffey, John Realtek Semiconductor Corp.

TGbe (MAC) AdHoc - San Jose 5/11 Erkucuk, Serhat Ofinno

TGbe (MAC) AdHoc - San Jose 5/11 Fang, Yonggang Mediatek

TGbe (MAC) AdHoc - San Jose 5/11 Fischer, Matthew Broadcom Corporation

TGbe (MAC) AdHoc - San Jose 5/11 Gu, Xiangxin Unisoc

TGbe (MAC) AdHoc - San Jose 5/11 Haider, Muhammad Kumail Meta Platforms Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Hamilton, Mark Ruckus/CommScope

TGbe (MAC) AdHoc - San Jose 5/11 Ho, Duncan Qualcomm Incorporated

TGbe (MAC) AdHoc - San Jose 5/11 Hu, Chunyu Facebook

TGbe (MAC) AdHoc - San Jose 5/11 Huang, Po-Kai Intel

TGbe (MAC) AdHoc - San Jose 5/11 Jang, Insun LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/11 Kim, Geon Hwan LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/11 Kim, Jeongki Ofinno

TGbe (MAC) AdHoc - San Jose 5/11 Kim, Sang Gook LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/11 Kim, Sanghyun WILUS Inc

TGbe (MAC) AdHoc - San Jose 5/11 Kim, Youhan Qualcomm Technologies, Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Klein, Arik Huawei Technologies Co., Ltd

TGbe (MAC) AdHoc - San Jose 5/11 Levy, Joseph InterDigital, Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Li, Weiyi Spreadtrum

TGbe (MAC) AdHoc - San Jose 5/11 Lou, Hanqing InterDigital, Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Lu, kaiying MediaTek Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Lu, Liuming Guangdong OPPO Mobile Telecommunications Corp.,Ltd

TGbe (MAC) AdHoc - San Jose 5/11 Luo, Yuanqiu Futurewei Technologies

TGbe (MAC) AdHoc - San Jose 5/11 Ma, Yongsen SAMSUNG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/11 Mehrnoush, Morteza Apple Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Nayak, Peshal Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/11 Ng, Boon Loong Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/11 Palayur, Saju Maxlinear Inc

TGbe (MAC) AdHoc - San Jose 5/11 Park, Minyoung Intel

TGbe (MAC) AdHoc - San Jose 5/11 Patil, Abhishek Qualcomm Incorporated

TGbe (MAC) AdHoc - San Jose 5/11 Patwardhan, Gaurav Hewlett Packard Enterprise

TGbe (MAC) AdHoc - San Jose 5/11 Petrick, Albert InterDigital, Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Qi, Yue Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/11 Quan, Yingqiao Unisoc

TGbe (MAC) AdHoc - San Jose 5/11 Ryu, Kiseon NXP Semiconductors

TGbe (MAC) AdHoc - San Jose 5/11 Shafin, Rubayet Samsung Research America

TGbe (MAC) AdHoc - San Jose 5/11 Shirakawa, Atsushi SHARP CORPORATION

TGbe (MAC) AdHoc - San Jose 5/11 Wang, Huizhao NXP Semiconductors

TGbe (MAC) AdHoc - San Jose 5/11 Wang, Qi Apple, Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Wullert, John Peraton Labs

TGbe (MAC) AdHoc - San Jose 5/11 Xia, Qing Sony Corporation

TGbe (MAC) AdHoc - San Jose 5/11 Yee, James MediaTek Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Yi, Yongjiang Spreadtrum Communication USA, Inc

TGbe (MAC) AdHoc - San Jose 5/11 Yoon, Kangjin Meta Platforms Inc.

TGbe (MAC) AdHoc - San Jose 5/11 Yoon, Yelin LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/11 Zhao, Yue Huawei Technologies Co., Ltd

TGbe (MAC) AdHoc - San Jose 5/11 Zhou, Lei H3C Technologies Co., Limited

TGbe (MAC) AdHoc - San Jose 5/11 Zhou, Pei Guangdong OPPO Mobile

Telecommunications Corp.,Ltd

Requested via email

TGbe (MAC) AdHoc - San Jose 5/11 Tomoko Adachi Toshiba Corporation

TGbe (MAC) AdHoc - San Jose 5/11 Ghosh, Chittabrata Apple Inc.

### Attendance of May 12 sessions

Breakout Timestamp Name Affiliation

TGbe (MAC) AdHoc - San Jose 5/12 Ajami, Abdel Karim Qualcomm Technologies, Inc

TGbe (MAC) AdHoc - San Jose 5/12 Asterjadhi, Alfred Qualcomm Incorporated

TGbe (MAC) AdHoc - San Jose 5/12 Baek, SunHee LG ELECTRONICS

TGbe (MAC) AdHoc - San Jose 5/12 CHENG, yajun Xiaomi Communications Co., Ltd.

TGbe (MAC) AdHoc - San Jose 5/12 Chung, Chulho SAMSUNG

TGbe (MAC) AdHoc - San Jose 5/12 Coffey, John Realtek Semiconductor Corp.

TGbe (MAC) AdHoc - San Jose 5/12 Erkucuk, Serhat Ofinno

TGbe (MAC) AdHoc - San Jose 5/12 Fischer, Matthew Broadcom Corporation

TGbe (MAC) AdHoc - San Jose 5/12 Fujimori, Yuki Canon Research Centre France

TGbe (MAC) AdHoc - San Jose 5/12 Ghosh, Chittabrata Apple Inc.

TGbe (MAC) AdHoc - San Jose 5/12 Gupta, Binita Meta Platforms, Inc.

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