IEEE P802.11
Wireless LANs

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| Minutes for TGbe MAC Ad-Hoc teleconferences, Sept to Nov 2021 |
| Date: 2021-09-22 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Liwen Chu | NXP |  |  |  |
| Jeongki Kim | Ofinno |  |  |  |
|  |  |  |  |  |

Abstract

This document contains the meeting minutes for the TGbe MAC ad hoc teleconferences held in Sept 2021 and Nov 2021.

Revisions:

* Rev0: Added the minutes from the telephone conferences held on Sept 22, Sept 23.
* Rev1: Added the minutes from the telephone conferences held on Sept 27
* Rev2: Added the minutes from the telephone conferences held on Sept 30

**Wednesday 22 pet 2021, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

MAC Ad-Hoc Chair, Jeongki Kim, calls meeting to order.

Alfred Asterjadhi will be secretary for the call today.

Chair goes over the patent policy and calls for potentially essential patents.

Nobody spoke up.

Chair goes over the copyright policy

Chair provides an overview of the agenda and asks if there is any discussion on it.

Chair asks if there is any objection to approve the agenda ([1478r4](https://mentor.ieee.org/802.11/dcn/21/11-21-1478-04-00be-sept-nov-tgbe-teleconference-agenda.docx)) by unanimous consent.

No objections were heard or noted in the chat. Hence agenda is approved with unanimous consent.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/22 | Abouelseoud, Mohamed | Sony Corporation |
| TGbe (MAC) | 9/22 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Akhmetov, Dmitry | Intel Corporation |
| TGbe (MAC) | 9/22 | Asterjadhi, Alfred | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 9/22 | Bankov, Dmitry | IITP RAS |
| TGbe (MAC) | 9/22 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/22 | Barr, David | MaxLinear |
| TGbe (MAC) | 9/22 | Bravo, Daniel | Intel Corporation |
| TGbe (MAC) | 9/22 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 9/22 | CHAN, YEE | Facebook |
| TGbe (MAC) | 9/22 | Chemrov, Kirill | IITP RAS |
| TGbe (MAC) | 9/22 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/22 | Das, Subir | Peraton Labs |
| TGbe (MAC) | 9/22 | Derham, Thomas | Broadcom Corporation |
| TGbe (MAC) | 9/22 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (MAC) | 9/22 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 9/22 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 9/22 | Gu, Xiangxin | Unisoc |
| TGbe (MAC) | 9/22 | GUIGNARD, Romain | Canon Research Centre France |
| TGbe (MAC) | 9/22 | Haider, Muhammad Kumail | Facebook |
| TGbe (MAC) | 9/22 | Handte, Thomas | Sony Corporation |
| TGbe (MAC) | 9/22 | Hervieu, Lili | Cable Television Laboratories Inc. (CableLabs) |
| TGbe (MAC) | 9/22 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Hu, Chunyu | Facebook |
| TGbe (MAC) | 9/22 | Huang, Po-Kai | Intel Corporation |
| TGbe (MAC) | 9/22 | Ibrahim, Ahmed | Samsung Research America |
| TGbe (MAC) | 9/22 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 9/22 | Joh, Hanjin | KT Corp. |
| TGbe (MAC) | 9/22 | Kain, Carl | USDoT; Noblis, Inc. |
| TGbe (MAC) | 9/22 | kim, namyeong | LG ELECTRONICS |
| TGbe (MAC) | 9/22 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/22 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 9/22 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| TGbe (MAC) | 9/22 | Levesque, Chris | Qorvo |
| TGbe (MAC) | 9/22 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 9/22 | Lorgeoux, Mikael | Canon Research Centre France |
| TGbe (MAC) | 9/22 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 9/22 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/22 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbe (MAC) | 9/22 | Naik, Gaurang | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 9/22 | Ng, Boon Loong | Samsung Research America |
| TGbe (MAC) | 9/22 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 9/22 | PANG, KUN | Honor Device Co.,Ltd. |
| TGbe (MAC) | 9/22 | Park, Eunsung | LG ELECTRONICS |
| TGbe (MAC) | 9/22 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/22 | Petrick, Albert | InterDigital, Inc. |
| TGbe (MAC) | 9/22 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 9/22 | Rege, Kiran | Perspecta Labs |
| TGbe (MAC) | 9/22 | Ryu, Kiseon | Ofinno |
| TGbe (MAC) | 9/22 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 9/22 | Sun, Li-Hsiang | Sony Corporation |
| TGbe (MAC) | 9/22 | Sun, Yanjun | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | THOUMY, Francois | Canon |
| TGbe (MAC) | 9/22 | Torab Jahromi, Payam | Facebook |
| TGbe (MAC) | 9/22 | Tsujimaru, Yuki | Canon Inc. |
| TGbe (MAC) | 9/22 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (MAC) | 9/22 | Wang, Lei | Futurewei Technologies |
| TGbe (MAC) | 9/22 | Wentink, Menzo | Qualcomm Incorporated |
| TGbe (MAC) | 9/22 | Wullert, John | Perspecta Labs |
| TGbe (MAC) | 9/22 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/22 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/22 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 9/22 | yi, yongjiang | Spreadtrum Communication USA Inc. |

**Submissions**

* [**1275r5**](https://mentor.ieee.org/802.11/dcn/21/11-21-1275-05-00be-cc36-cr-for-d1-0-proxy-arp-cids.docx) **(Rojan Chitrakar, CR for 3 CIDs)**
	+ Author provides an overview of the changes made to the document based on received feedback. Changes are highlighted in grey in the doc.
	+ Chair asks if there is any discussion on this document.
	+ Clarification question how STA6 connect to the AP MLD.
	+ STA6 is connected via an ethernet connection.
	+ Do you call it a STA or device then?
	+ Some more clarificatory discussion on this particular topic in terms of terminology.

SP: Do you agree to incorporate the resolution provided in [IEEE 802.11-21/1275r5](https://mentor.ieee.org/802.11/dcn/21/11-21-1275-05-00be-cc36-cr-for-d1-0-proxy-arp-cids.docx) to the next revision of 802.11be draft for the following CIDs:

* 6715, 6716, 7890

Discussion: Some clarification on the wording. Amended to say resolution rather than changes.

Result: No objection.

* [**1360r1**](https://mentor.ieee.org/802.11/dcn/21/11-21-1360-01-00be-cc-36-cr-for-35-3-11-and-35-3-12.docx) **(Po-Kai Huang, CR for 19 CIDs)**
	+ Author starts from where he left last time, namely resolution for CID 6681.
	+ Question on CID the changes related to 6681 batch that the behavior should be w.r.t. the MLD, not the STA affiliated with it.
	+ Answer: The reference to the “STA affiliated to” is so that it is aligned with baseline, which refers to STA.
	+ Question: Why is the column for “Transmitter Requirement” empty? Answer: It is inherited from the baseline, where it is also empty.
	+ Some discussion on CID 6736, ending up agreeing with the proposed resolution.
	+ Suggestion by member to apply the resolution for CID 7512 throughout the draft (i.e., replace “an STA” with “a STA”). Author agrees and incorporates the suggestion.
	+ Some editorial suggestion on whether “Any STA” or “No STA”. Result of that suggestion lead to rejecting CIDs 8200 and 8202.
	+ Another question on the changes w.r.t. “TR1”. Author highlights that CID 6691 is still to be discussed so it is deferred for now.

SP: Do you agree to incorporate the resolution provided in [1360r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1360-02-00be-cc-36-cr-for-35-3-11-and-35-3-12.docx) to the next revision of 802.11be draft for the following CIDs:

* 6029, 6030, 6679, 6680, 6682, 6683, 6710, 7512, 6308, 6736, 8200, 8201, 8202, 8203, 8242, 8243, 8244, 6377

Discussion: None.

Result: No objection.

* [**1249r3**](https://mentor.ieee.org/802.11/dcn/21/11-21-1249-03-00be-cc36-cr-for-eht-om-part-ii.docx) **(Po-Kai Huang, CR for 6 CIDs)**
* Author goes over the document.
* Some suggestion on the changes for CID 4164 which are incorporated in r4 of the document, which will be posted in the server.

SP: Do you agree to incorporate the resolution provided in [1249r6](https://mentor.ieee.org/802.11/dcn/21/11-21-1249-06-00be-cc36-cr-for-eht-om-part-ii.docx) to the next revision of 802.11be draft for the following CIDs:

* 8156, 6606, 5799, 8155, 5800, 4164

Discussion: None.

Result: No objection.

* **1421r0 (Insun Jang, CR for 1 CID)**
	+ Author goes over the document. It resolves one CID, namely 6729.
	+ Question: The status code also indicates the reason for the rejection, not only whether it is accepted or not. Answer: Author provides an overview of the intention of that added sentence.
	+ Some more discussion on the wording of that sentence and also some additional observations.

SP: Do you agree to incorporate the resolution provided in [1421r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1421-01-00be-cc36-cr-for-cid-6729.docx) to the next revision of 802.11be draft for the following CIDs:

* 6729

Discussion: None.

Result: No objection.

* [**1401r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1401-00-00be-resolution-for-cids-related-to-status-code-field.docx) **(Namyeong Kim, CR for 2 CIDs)**
	+ Author goes over the document. It resolves two CIDs.
	+ No discussion on the document.

SP: Do you agree to incorporate the resolution provided in [1401r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1421-01-00be-cc36-cr-for-cid-6729.docx) to the next revision of 802.11be draft for the following CIDs:

* 4006, 4290

Discussion: None.

Result: No objection.

* [**1425r2**](https://mentor.ieee.org/802.11/dcn/21/11-21-1425-02-00be-cc-36-cr-for-4-5-3.docx) **(Po-Kai Huang, CR for 37 CIDs)**
	+ Author goes over the document. Resolves 37 CIDs.
	+ Time is running out so author finished presenting up to CID 6161. Will resume next conference call to discuss the other CIDs.
* Chair asks if there is any other business.
* None was heard
* Call is adjourned.

**Thursday 23 Sept 2021, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting takes place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 10:02am EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
	1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
	* Please record your attendance during the conference call by using the IMAT system:
		1. 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
	* If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Liwen Chu (liwen.chu@nxp.com) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asks whether there is comment about agenda in 11-21/1478r6. Several changes are made per the comment(1330 deferred, 1360 added, 1327 deferred). The modified agenda was approved.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/23 | AbidRabbu, Shaima' | Istanbul Medipol University; Vestel |
| TGbe (MAC) | 9/23 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (MAC) | 9/23 | B, Hari Ram | NXP Semiconductors |
| TGbe (MAC) | 9/23 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 9/23 | Bankov, Dmitry | IITP RAS |
| TGbe (MAC) | 9/23 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/23 | Barr, David | MaxLinear |
| TGbe (MAC) | 9/23 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 9/23 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/23 | Das, Subir | Peraton Labs |
| TGbe (MAC) | 9/23 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (MAC) | 9/23 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 9/23 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 9/23 | Gu, Xiangxin | Unisoc |
| TGbe (MAC) | 9/23 | GUIGNARD, Romain | Canon Research Centre France |
| TGbe (MAC) | 9/23 | Haasz, Jodi | IEEE Standards Association (IEEE-SA) |
| TGbe (MAC) | 9/23 | Haider, Muhammad Kumail | Facebook |
| TGbe (MAC) | 9/23 | Han, Jonghun | SAMSUNG |
| TGbe (MAC) | 9/23 | Handte, Thomas | Sony Corporation |
| TGbe (MAC) | 9/23 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 9/23 | Hu, Chunyu | Facebook |
| TGbe (MAC) | 9/23 | Huang, Po-Kai | Intel Corporation |
| TGbe (MAC) | 9/23 | Ibrahim, Ahmed | Samsung Research America |
| TGbe (MAC) | 9/23 | Kain, Carl | USDoT; Noblis, Inc. |
| TGbe (MAC) | 9/23 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 9/23 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbe (MAC) | 9/23 | Khorov, Evgeny | IITP RAS |
| TGbe (MAC) | 9/23 | kim, namyeong | LG ELECTRONICS |
| TGbe (MAC) | 9/23 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/23 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 9/23 | Kim, Yongho | Korea National University of Transportation |
| TGbe (MAC) | 9/23 | Ko, Geonjung | WILUS Inc. |
| TGbe (MAC) | 9/23 | Levesque, Chris | Qorvo |
| TGbe (MAC) | 9/23 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 9/23 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 9/23 | Lu, kaiying | MediaTek Inc. |
| TGbe (MAC) | 9/23 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/23 | LU, Yuxin | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/23 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbe (MAC) | 9/23 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/23 | Moon, Juseong | Korea National University of Transportation |
| TGbe (MAC) | 9/23 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 9/23 | Ng, Boon Loong | Samsung Research America |
| TGbe (MAC) | 9/23 | Park, Eunsung | LG ELECTRONICS |
| TGbe (MAC) | 9/23 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/23 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/23 | Perez, Dan | IEEE STAFF |
| TGbe (MAC) | 9/23 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbe (MAC) | 9/23 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 9/23 | Rege, Kiran | Perspecta Labs |
| TGbe (MAC) | 9/23 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 9/23 | Sun, Li-Hsiang | Sony Corporation |
| TGbe (MAC) | 9/23 | THOUMY, Francois | Canon |
| TGbe (MAC) | 9/23 | Torab Jahromi, Payam | Facebook |
| TGbe (MAC) | 9/23 | Wentink, Menzo | Qualcomm Incorporated |
| TGbe (MAC) | 9/23 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/23 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/23 | yi, yongjiang | Spreadtrum Communication USA Inc. |

 **Submissions**

1. 1360r2

SP: Do you support to accept the resolution in 11-21/1360r2 for the following CIDs?

6681

No Onjection

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1. [1425r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1425-02-00be-cc-36-cr-for-4-5-3.docx) CC 36 CR for 4.5.3 Po-Kai Huang [37 CIDs 45’]

The author went through the document.

C: CID 8256, why is multi-link transittion under mobility scenario?

A: will use the resolution used before (ML transition is under BSS transition) and change the rejected to revised.

C: CID 4302, at least explains the difference between MLO and legacy. What the comment asked should be considered later.

C: Ok with the rejection as long as the group knows the issue.

C: for the CIDs from tomo (e.g. 7509), it may be possible for a MLD to associate with a legacy AP.

A: it is clarified that it is not allowed.

C: one-link association will fall back to legacy association.

A: this is separate discussion whether an EHT STA always belongs to MLD.

C: put in another way, do we allow single link association with ML element without Per link profile.

A: this should be separate discussion. Will derfer the CID.

**SP: Do you support to accept the resolution in 11-21/1425r3 for the following CIDs?**

* 4094, 4130, 4131, 4302, 4804, 5069, 5229, 5575, 5576, 5577, 5891, 5892, 6115, 6116, 6160, 6161, 6180, 6749, 7020, 7400, 7401, 7403, 7404, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7510, 7562, 7877, 8254, 8255, 8256, 6111, 6113

No Objection

1. [1222r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1222-00-00be-cc36-cr-for-ml-ie-usage-for-ml-setup-part-2.docx) CR for ML IE Usage for ML Setup - Part 2 Insun Jang [3 CIDs 20’]

The author went through the document.

C: why is the MLD address removed?

A: it alreayd mandatory.

C: the dissussion assumes that adding links after association is allowed. This is not allowed in 11be.

A: you are right. But I think single link association under MLD is useful.

C: Do we allow single link association without MLD is allowed?

A: yes.

C: if one link setup is done, ML element is not needed.

Several similar comments that 11be doesn’t allow the addition of links after association.

C: what does it break if single link association under MLD is allowed?

C: after MLD association, link informaiton varification under authentiation is required. However there is no link information in this case.

SP deferred

1. [1426r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1426-00-00be-cc-36-cr-for-35-3-5-1-and-35-3-5-3.docx) CR for 35.3.5.1 and 35.3.5.3 Po-Kai Huang [43 CID 45’]

The author went through the document.

C: CID 4257, the resolution doesn’t address the CID. Make it clear about either it is allowed or not allowed.

A: what is in the request is what you discoverred. Will defer the CID.

C: CID 4379, use a new name or define a new Management frame.

A: the commenter asks for to define a new management frame.

C: CID 5288, in the feedback to the commenter, how about public action frame?

A: will defer the CID.

The chair asks whether there is any other business before djourning the session. Nobody responds.

The meeting is adjourned at 11:59am ET.

**Monday 27 Sept 2021, 17:00pm – 19:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting takes place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 04:02pm EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
	1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
	* Please record your attendance during the conference call by using the IMAT system:
		1. 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
	* If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Liwen Chu (liwen.chu@nxp.com) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asks whether there is comment about agenda in 11-21/1478r8. Several changes are made per the comment(revision change, deferred 1222). The modified agenda was approved.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/27 | Adachi, Tomoko | TOSHIBA Corporation |
| TGbe (MAC) | 9/27 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (MAC) | 9/27 | Asterjadhi, Alfred | Qualcomm Incorporated |
| TGbe (MAC) | 9/27 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/27 | CHAN, YEE | Facebook |
| TGbe (MAC) | 9/27 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/27 | Coffey, John | Realtek Semiconductor Corp. |
| TGbe (MAC) | 9/27 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (MAC) | 9/27 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 9/27 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 9/27 | Hamilton, Mark | Ruckus/CommScope |
| TGbe (MAC) | 9/27 | Han, Zhiqiang | ZTE Corporation |
| TGbe (MAC) | 9/27 | Ho, Duncan | Qualcomm Incorporated |
| TGbe (MAC) | 9/27 | Huang, Po-Kai | Intel Corporation |
| TGbe (MAC) | 9/27 | Joh, Hanjin | KT Corp. |
| TGbe (MAC) | 9/27 | Kain, Carl | USDoT; Noblis, Inc. |
| TGbe (MAC) | 9/27 | Kim, Jeongki | Ofinno |
| TGbe (MAC) | 9/27 | kim, namyeong | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/27 | Kim, Yongho | Korea National University of Transportation |
| TGbe (MAC) | 9/27 | Kneckt, Jarkko | Apple, Inc. |
| TGbe (MAC) | 9/27 | Ko, Geonjung | WILUS Inc. |
| TGbe (MAC) | 9/27 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 9/27 | Lu, kaiying | MediaTek Inc. |
| TGbe (MAC) | 9/27 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/27 | Moon, Juseong | Korea National University of Transportation |
| TGbe (MAC) | 9/27 | Nayak, Peshal | Samsung Research America |
| TGbe (MAC) | 9/27 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 9/27 | Ng, Boon Loong | Samsung Research America |
| TGbe (MAC) | 9/27 | Ouchi, Masatomo | Canon |
| TGbe (MAC) | 9/27 | Palayur, Saju | Maxlinear Inc |
| TGbe (MAC) | 9/27 | PANG, KUN | Honor Device Co.,Ltd. |
| TGbe (MAC) | 9/27 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/27 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/27 | Petrick, Albert | InterDigital, Inc. |
| TGbe (MAC) | 9/27 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbe (MAC) | 9/27 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| TGbe (MAC) | 9/27 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 9/27 | Sun, Li-Hsiang | Sony Corporation |
| TGbe (MAC) | 9/27 | Torab Jahromi, Payam | Facebook |
| TGbe (MAC) | 9/27 | Wang, Lei | Futurewei Technologies |
| TGbe (MAC) | 9/27 | Wullert, John | Perspecta Labs |
| TGbe (MAC) | 9/27 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/27 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/27 | Yee, James | MediaTek Inc. |

 **Submissions**

1. [1425r3](https://mentor.ieee.org/802.11/dcn/21/11-21-1425-03-00be-cc-36-cr-for-4-5-3.docx) CC 36 CR for 4.5.3 Po-Kai Huang [1CID SP-5’]

The author went through the document.

SP: Do you support to accept the resolution in 11-21/1425r3 for the following CID?

 4840

No objection

1. [1426r4](https://mentor.ieee.org/802.11/dcn/21/11-21-1426-00-00be-cc-36-cr-for-35-3-5-1-and-35-3-5-3.docx) CR for 35.3.5.1 and 35.3.5.3 Po-Kai Huang [43 CID 45’]

The author went through the document.

C: CID 5288, you should add ”unless there are additional restriction”.

A: ok

C: we didn’t refer to related subclause when 11be say channel enabled/disabled.

A: two styles in 802.11 baseline, add reference or not.

C: CID 5299, how about change to ”may accept a requested link”.

C: this is MLD level decision. ”accept one or more...” is accurate.

A: change to ”accept a subset of...”. Is this ok to commenter?

C: it looks good.

C: CID 5647. There are many issues. One is association. Referring to baseline text which is not correct is not good. Association is the relationship with ESS.

A: ”association with AP” is used in baseline.

C: we should not use the description that is not the right way.

A: We have disagreement. Will run the SP separately.

C: 5836. The comment is good comment. The figure should be updated.

A: the normative text already cover the case. The figure is just example.

1. [395r5](https://mentor.ieee.org/802.11/dcn/21/11-21-0395-00-00be-tspec-request.pptx) TSPEC Request [SP 10’]

The author went through the document.

C: slide 5, understand the proposal. Question is what happens if the traffic flow changes?

A: the solution can be done through considering the historical information.

C: STA’s application has better knowledge of the traffic.

1. [361r3](https://mentor.ieee.org/802.11/dcn/21/11-21-0361-00-00be-ap-assisted-multi-link-synchronous-transmission.pptx) AP Assisted Multi-link Synchronous Transmission [25’]

The author went through the document.

C: slide 6, it seems that CTS-to-Self transmitted by AP2 can’t be receveid by STA2.

A: it is sent to other STAs for TXOP protection.

C: the concern is that PPDU2 may be pretty longer. It may be difficult to allign PPDU2 and CTS-to-Self.

A: the padding can be used.

1. [1929r3](https://mentor.ieee.org/802.11/dcn/20/11-20-1929-00-00be-protection-of-qos-periods.pptx) Protection of QoS periods Gaurav Patwardhan [25’]

The author went through the document.

C: slide 6, do you need new Duration field in new frame?

A: there is no need for new Duration field. Different STAs interpret the Duration filed differently.

C: Maybe MU-RTS could be used.

C: how does AP decide when to transmit such frame.

A: the frame can be combined with SP for low latency traffic, e.g. transtted at the beginning of the SP.

The chair asks whether there is any other business before djourning the session. Nobody responds.

The meeting is adjourned at 19:00 pm ET.

**Thursday 30 Sept 2021, 10:00am – 12:00pm ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (Ofinno)

Secretary: Liwen Chu (NXP)

This meeting takes place using a webex session.

**Introduction**

1. The Chair (Jeongki, Ofinno) calls the meeting to order at 10:02pm EDT. The Chair introduces himself and the Secretary, Liwen (NXP)
2. The Chair goes through the 802 and 802.11 IPR policy and procedures and asks if there is anyone that is aware of any potentially essential patents.
	1. Nobody responds.
3. The Chair goes through the IEEE copyright policy.
4. The Chair recommends using IMAT for recording the attendance.
	* Please record your attendance during the conference call by using the IMAT system:
		1. 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
	* If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Liwen Chu (liwen.chu@nxp.com) and Jeongki Kim (jeongki.kim.ieee@gmail.com)
5. The Chair asks whether there is comment about agenda in 11-21/1478r12. Several changes are made per the comment(revision change,). The modified agenda was approved.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/30 | AbidRabbu, Shaima' | Istanbul Medipol University; Vestel |
| TGbe (MAC) | 9/30 | Ajami, Abdel Karim | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | Andersdotter, Amelia | Sky UK Group |
| TGbe (MAC) | 9/30 | Asterjadhi, Alfred | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 9/30 | Bahn, Christy | IEEE STAFF |
| TGbe (MAC) | 9/30 | Bankov, Dmitry | IITP RAS |
| TGbe (MAC) | 9/30 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/30 | Barr, David | MaxLinear |
| TGbe (MAC) | 9/30 | CHAN, YEE | Facebook |
| TGbe (MAC) | 9/30 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/30 | Choi, Jinsoo | LG ELECTRONICS |
| TGbe (MAC) | 9/30 | Coffey, John | Realtek Semiconductor Corp. |
| TGbe (MAC) | 9/30 | Das, Subir | Peraton Labs |
| TGbe (MAC) | 9/30 | Fang, Yonggang | Mediatek |
| TGbe (MAC) | 9/30 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 9/30 | Gu, Xiangxin | Unisoc |
| TGbe (MAC) | 9/30 | GUIGNARD, Romain | Canon Research Centre France |
| TGbe (MAC) | 9/30 | Han, Jonghun | SAMSUNG |
| TGbe (MAC) | 9/30 | Han, Zhiqiang | ZTE Corporation |
| TGbe (MAC) | 9/30 | Handte, Thomas | Sony Corporation |
| TGbe (MAC) | 9/30 | Huang, Po-Kai | Intel Corporation |
| TGbe (MAC) | 9/30 | Jung, Insik | LG ELECTRONICS |
| TGbe (MAC) | 9/30 | Kain, Carl | USDoT; Noblis, Inc. |
| TGbe (MAC) | 9/30 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbe (MAC) | 9/30 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/30 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 9/30 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | Klein, Arik | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/30 | Ko, Geonjung | WILUS Inc. |
| TGbe (MAC) | 9/30 | Levesque, Chris | Qorvo |
| TGbe (MAC) | 9/30 | Levy, Joseph | InterDigital, Inc. |
| TGbe (MAC) | 9/30 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (MAC) | 9/30 | Liu, Der-Zheng | Realtek Semiconductor Corp. |
| TGbe (MAC) | 9/30 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 9/30 | Lu, kaiying | MediaTek Inc. |
| TGbe (MAC) | 9/30 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/30 | Martinez Vazquez, Marcos | MaxLinear Corp; MAXLINEAR INC |
| TGbe (MAC) | 9/30 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/30 | Mehrnoush, Morteza | Facebook |
| TGbe (MAC) | 9/30 | Mohajeri, Hessam | Cadence Design Systems, Inc. |
| TGbe (MAC) | 9/30 | Naik, Gaurang | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | NANDAGOPALAN, SAI SHANKAR | Synaptics |
| TGbe (MAC) | 9/30 | Nayak, Peshal | Samsung Research America |
| TGbe (MAC) | 9/30 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 9/30 | Ng, Boon Loong | Samsung Research America |
| TGbe (MAC) | 9/30 | Park, Eunsung | LG ELECTRONICS |
| TGbe (MAC) | 9/30 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/30 | Petrick, Albert | InterDigital, Inc. |
| TGbe (MAC) | 9/30 | Pushkarna, Rajat | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/30 | Rafique, Saira | Istanbul Medipol University ; VESTEL |
| TGbe (MAC) | 9/30 | Ratnam, Vishnu | Samsung Research America |
| TGbe (MAC) | 9/30 | Ryu, Kiseon | Ofinno |
| TGbe (MAC) | 9/30 | Salman, Hanadi | Istanbul Medipol University; VESTEL |
| TGbe (MAC) | 9/30 | Santulli, Jennifer | IEEE STAFF |
| TGbe (MAC) | 9/30 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 9/30 | Shafin, Rubayet | Samsung Research America |
| TGbe (MAC) | 9/30 | Shilo, Shimi | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/30 | Stacey, Robert | Intel Corporation |
| TGbe (MAC) | 9/30 | Stanley, Dorothy | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/30 | Sun, Yanjun | Qualcomm Incorporated |
| TGbe (MAC) | 9/30 | Tsujimaru, Yuki | Canon Inc. |
| TGbe (MAC) | 9/30 | Wullert, John | Perspecta Labs |
| TGbe (MAC) | 9/30 | Yang, Bo | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/30 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/30 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/30 | yi, yongjiang | Spreadtrum Communication USA Inc. |
| TGbe (MAC) | 9/30 | Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |

**Submissions**

1. [1259r4](https://mentor.ieee.org/802.11/dcn/21/11-21-1259-04-00be-cr-35-3-14-3-nstr-operation.docx) CR-35-3-14-3-NSTR-operation Matthew Fischer [1C SP-10’]

The author went through the change for CID7606 in the document.

C: do you still need ”...might fail... caused by its transmission on the second link.” once the definition is added?

A: add a note for deleting ” caused by its transmission on the second link” since the google doc is used.

C: add NSTR link pair in the new definition.

A: the NSTR interferance doesn’t necessarily occur between the NSTR link pair.

SP deferred

1. [1339r3](https://mentor.ieee.org/802.11/dcn/21/11-21-1339-01-00be-cc36-cr-for-35-3-15-7.docx) CR for 35.3.15.7 Dibakar Das [32C SP-10’]

The author went through the new changes in the updated document.

SP: Do you support to accept the resolution in 11-21/1339r3 for the following CIDs?

4235, 4837, 5266, 8208, 4754, 5450, 6775, 4414, 6774, 4415, 5104, 5105, 5168, 5169, 8250, 7781, 4416, 4236, 4727, 4417, 7574, , 4728, 7779, 8210, 6321, 5106, 8351, 7783, 7780, 8171 5941 6020 7576 7573 4817 7572 5745

No Objection

1. [1224r5](https://mentor.ieee.org/802.11/dcn/21/11-21-1224-05-00be-cc-36-cr-for-restricted-twt-setup.docx) CR for Restricted TWT Setup M. K. Haider [11C SP-10’]

The author went through the new changes in the updated document.

C: Will put some comments about P2P text in the reflector. RTWT is broadcast in nature. P2P is not broadcast.

A: It seems you agree that P2P should be supported.

C: sometimes there is only UL or DL traffic. How to deal with such case.

A: No TIDs are specificed.

C: similar question. What is the meaning of 0.

A: 0 means no low latency traffic.

C: but the text says that 0 means that all TIDs are low latency traffic.

A: the last frame will not use 0 value.

1. [1426r5](https://mentor.ieee.org/802.11/dcn/21/11-21-1426-05-00be-cc-36-cr-for-35-3-5-1-and-35-3-5-3.docx) CR for 35.3.5.1 and 35.3.5.3 Po-Kai Huang [22C 30’]

The author went through the document.

C: CID 8222, it would be nice to defer this since some work about terminalogy is going on.

A: it seems this change doesn’t contradict with your work. I wll defer some related CIDs.

C: CID 4049. This is the group agreement. Not just for STR AP MLD.

C: agree with the comment. Two basebands with coex interface exist.

A: will do offline discussion.

SP: Do you support to accept the resolution in 11-21/1246r5 for the following CIDs?

4379, 5212, 5255, 6272, 5298, 6203, 5299, 5301, 5302, 5666, 5674, 5836,, 6112, 8222,, 6271, 6273, 6274, 6275, 8334, 8335, 8185, 6454, 6276,8186, 8187, 6452, 6453, 7366, 7386, 7459,

No Objection

SP: Do you support to accept the resolution in 11-21/1246r5 for the following CID?

5647

27Y, 4N, 27A

1. [1327r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1327-00-00be-cc36-resolution-for-cid-5154.docx) CC36-Resolution-for-CID-5154 Arik Klein [1C 20’]

The author went through the document.

C: Similar outcome with the corrent mechanism. Is the motivision for AP’s power save.

A: it is one of the reasons. Other reasons may exist.

C: Can the existing power save protocol solve the problem?

A: it is not possible since the power save is only allowed for STAs.

C: Broadcast TWT where no STAs are members of it can be used by AP.

C: if one link is disabled by AP MLD the STA MLD needs to TID to link mapping.

A: yes.

C: the change of disable/enable has many issues. We need to discuss whether the group want to go with this route. Then we can discuss the issue. AP MLD reconfiguration may address the same issue. CSA may solve the issue.

A: There is a requirement for AP to do AP power save. It is not good to only allow STAs to do power save.

C: for RNR change, why not remove the AP from RNR. It seems the new Action frame can be defined.

A: the reason for using Beacon is that the disabling is for associated STAs and unassociated STAs.

The chair asks whether there is any other business before adjourning the session. Nobody responds.

The meeting is adjourned at 12:00 pm ET.