IEEE P802.11
Wireless LANs

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

Abstract

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

Revisions:

* Rev0:
	+ Added the minutes from the telephone conferences held on Sept 16, 2020.
	+ Added the minutes from the telephone conferences held on Sept 21, 2020.

**Wednesday 16 Sept 2020, 09:00 – 11:00 ET (TGbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (LG Electronics)

Secretary: Liwen Chu (NXP)

This meeting took place using a webex session.

**Introduction**

1. The Chair (Jeongki, LG) calls the meeting to order at 09:04 EDT. The Chair introduces himself and the Secretary, Liwen Chu (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. Nobody speaks up.
3. The Chair recommends using IMAT for recording the attendance.
	* Please record your attendance during the conference call by using the IMAT system:
		1. 1) login to [imat](https://imat.ieee.org/attendance), 2) select “802.11 Telecons (<Month>)” entry, 3) select “C/LM/WG802.11 Attendance” entry, 4) click “TGbe <MAC/PHY/Joint> conference call that you are attending.
	* If you are unable to record the attendance via [IMAT](https://imat.ieee.org/attendance) then please send an e-mail to Jeongki Kim (jeongki.kim@lge.com) and Liwen Chu (liwen.chu@nxp.com)

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

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/16 | AbidRabbu, Shaima' | Istanbul Medipol University; Vestel |
| TGbe (MAC) | 9/16 | Abouelseoud, Mohamed | Sony Corporation |
| TGbe (MAC) | 9/16 | Aboulmagd, Osama | Huawei Technologies Co.,  Ltd |
| TGbe (MAC) | 9/16 | Akhmetov, Dmitry | Intel Corporation |
| TGbe (MAC) | 9/16 | Andersdotter, Amelia | None - Self-funded |
| TGbe (MAC) | 9/16 | Asterjadhi, Alfred | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Au, Kwok Shum | Huawei Technologies Co.,  Ltd |
| TGbe (MAC) | 9/16 | Au, Oscar | Origin Wireless |
| TGbe (MAC) | 9/16 | B, Hari Ram | NXP Semiconductors |
| TGbe (MAC) | 9/16 | Bankov, Dmitry | IITP RAS |
| TGbe (MAC) | 9/16 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Beg, Chris | Cognitive Systems Corp. |
| TGbe (MAC) | 9/16 | Bei, Jianwei | NXP Semiconductors |
| TGbe (MAC) | 9/16 | Berkema, Alan | HP Inc. |
| TGbe (MAC) | 9/16 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 9/16 | Carney, William | Sony Corporation |
| TGbe (MAC) | 9/16 | CHAN, YEE | Facebook |
| TGbe (MAC) | 9/16 | Chayat, Naftali | Vayyar Imaging |
| TGbe (MAC) | 9/16 | Chen, Canfeng | Xiaomi Inc. |
| TGbe (MAC) | 9/16 | Chen, Cheng | Intel Corporation |
| TGbe (MAC) | 9/16 | Chen, Cheng-Ming | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Cheng, Paul | MediaTek Inc. |
| TGbe (MAC) | 9/16 | CHERIAN, GEORGE | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/16 | Choo, Seungho | Senscomm Semiconductor Co., Ltd. |
| TGbe (MAC) | 9/16 | Chung, Chulho | SAMSUNG |
| TGbe (MAC) | 9/16 | Coffey, John | Realtek Semiconductor Corp. |
| TGbe (MAC) | 9/16 | Das, Dibakar | Intel Corporation |
| TGbe (MAC) | 9/16 | Das, Subir | Perspecta Labs Inc. |
| TGbe (MAC) | 9/16 | Davies, Robert | Signify |
| TGbe (MAC) | 9/16 | DeLaOlivaDelgado, Antonio | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Derham, Thomas | Broadcom Corporation |
| TGbe (MAC) | 9/16 | DOAN, DUNG | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Dogukan, Ali | Vestel |
| TGbe (MAC) | 9/16 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (MAC) | 9/16 | Fang, Yonggang | ZTE TX Inc |
| TGbe (MAC) | 9/16 | Fischer, Matthew | Broadcom Corporation |
| TGbe (MAC) | 9/16 | Gong, Bo | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Goto, Fumihide | Self |
| TGbe (MAC) | 9/16 | Guo, Yuchen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/16 | Hamilton, Mark | Ruckus/CommScope |
| TGbe (MAC) | 9/16 | Han, Jonghun | SAMSUNG |
| TGbe (MAC) | 9/16 | Han, Zhiqiang | ZTE Corporation |
| TGbe (MAC) | 9/16 | Handte, Thomas | Sony Corporation |
| TGbe (MAC) | 9/16 | Hong, Hanseul | WILUS Inc. |
| TGbe (MAC) | 9/16 | Hsiao, Ching-Wen | MediaTek Inc. |
| TGbe (MAC) | 9/16 | Hsu, Chien-Fang | MediaTek Inc. |
| TGbe (MAC) | 9/16 | Hu, Chunyu | Facebook |
| TGbe (MAC) | 9/16 | Huang, Guogang  | Huawei |
| TGbe (MAC) | 9/16 | Huang, Lei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (MAC) | 9/16 | Huang, Po-Kai | Intel Corporation |
| TGbe (MAC) | 9/16 | Ikegami, Tetsushi | Meiji University |
| TGbe (MAC) | 9/16 | Inohiza, Hirohiko | Canon |
| TGbe (MAC) | 9/16 | Inoue, Yasuhiko | Nippon Telegraph and Telephone Corporation (NTT) |
| TGbe (MAC) | 9/16 | Jang, Insun | LG ELECTRONICS |
| TGbe (MAC) | 9/16 | Jeffries, Timothy | Futurewei Technologies |
| TGbe (MAC) | 9/16 | Ji, Chenhe | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Jones, Allan | Activision |
| TGbe (MAC) | 9/16 | Jones, Vincent Knowles IV | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | JUNG, MYUNG CHEUL | Pantech Inc. |
| TGbe (MAC) | 9/16 | Kain, Carl | USDoT |
| TGbe (MAC) | 9/16 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Kamel, Mahmoud | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Kandala, Srinivas | SAMSUNG |
| TGbe (MAC) | 9/16 | Kasher, Assaf | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Kedem, Oren | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Khan, Naseem | Leidos Engineering. LLC |
| TGbe (MAC) | 9/16 | Khorov, Evgeny | IITP RAS |
| TGbe (MAC) | 9/16 | Kim, Myeong-Jin | SAMSUNG |
| TGbe (MAC) | 9/16 | kim, namyeong | LG ELECTRONICS |
| TGbe (MAC) | 9/16 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/16 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 9/16 | Kim, Yongho | Korea National University of Transportation |
| TGbe (MAC) | 9/16 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Kim, Youn-Kwan | The Catholic University of Korea |
| TGbe (MAC) | 9/16 | Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| TGbe (MAC) | 9/16 | Klein, Arik | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Klimakov, Andrey | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/16 | Kneckt, Jarkko | Apple, Inc. |
| TGbe (MAC) | 9/16 | Ko, Geonjung | WILUS Inc. |
| TGbe (MAC) | 9/16 | Kondo, Yoshihisa | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/16 | Kwon, Young Hoon | NXP Semiconductors |
| TGbe (MAC) | 9/16 | Lalam, Massinissa | SAGEMCOM BROADBAND SAS |
| TGbe (MAC) | 9/16 | Lan, Zhou | Broadcom Corporation |
| TGbe (MAC) | 9/16 | Lee, Il-Gu | Sungshin University |
| TGbe (MAC) | 9/16 | Le Houerou, Brice | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Levitsky, Ilya | IITP RAS |
| TGbe (MAC) | 9/16 | Levy, Joseph | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Li, Nan | ZTE Corporation |
| TGbe (MAC) | 9/16 | Li, Yiqing | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Li, Yunbo | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/16 | Lin, Wei | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Lindskog, Erik | SAMSUNG |
| TGbe (MAC) | 9/16 | Liu, Der-Zheng | Realtek Semiconductor Corp. |
| TGbe (MAC) | 9/16 | Liu, Yong | Apple, Inc. |
| TGbe (MAC) | 9/16 | Lopez, Miguel | Ericsson AB |
| TGbe (MAC) | 9/16 | Lorgeoux, Mikael | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Lou, Hanqing | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Lu, Liuming | ZTE Corporation |
| TGbe (MAC) | 9/16 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbe (MAC) | 9/16 | Lv, kaiying | MediaTek Inc. |
| TGbe (MAC) | 9/16 | Ma, Mengyao | HUAWEI |
| TGbe (MAC) | 9/16 | Max, Sebastian | Ericsson AB |
| TGbe (MAC) | 9/16 | McGuire, Colin | The MathWorks, Inc. |
| TGbe (MAC) | 9/16 | Mehrnoush, Morteza | Facebook |
| TGbe (MAC) | 9/16 | Memisoglu, Ebubekir | Istanbul Medipol University; Vestel |
| TGbe (MAC) | 9/16 | Montemurro, Michael | Self |
| TGbe (MAC) | 9/16 | Montreuil, Leo | Broadcom Corporation |
| TGbe (MAC) | 9/16 | Moon, Juseong | Korea National University of Transportation |
| TGbe (MAC) | 9/16 | Morioka, Hitoshi | SRC Software |
| TGbe (MAC) | 9/16 | Murti, Wisnu | SeoulTech |
| TGbe (MAC) | 9/16 | Naribole, Sharan | SAMSUNG |
| TGbe (MAC) | 9/16 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Nguyen, An | DHS/CISA |
| TGbe (MAC) | 9/16 | noh, yujin | Newracom Inc. |
| TGbe (MAC) | 9/16 | Ozbakis, Basak | VESTEL |
| TGbe (MAC) | 9/16 | Palm, Stephen | Broadcom Corporation |
| TGbe (MAC) | 9/16 | Park, Minyoung | Intel Corporation |
| TGbe (MAC) | 9/16 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/16 | Petrick, Albert | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Pettersson, Charlie | Ericsson AB |
| TGbe (MAC) | 9/16 | QIU, WEI | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/16 | Rafique, Saira | Istanbul Medipol University ; VESTEL |
| TGbe (MAC) | 9/16 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Rantala, Enrico-Henrik | Nokia |
| TGbe (MAC) | 9/16 | Rege, Kiran | Perspecta Labs |
| TGbe (MAC) | 9/16 | Reshef, Ehud | Intel Corporation |
| TGbe (MAC) | 9/16 | Sakoda, Kazuyuki | Sony Corporation |
| TGbe (MAC) | 9/16 | Salman, Hanadi | Istanbul Medipol University; VESTEL |
| TGbe (MAC) | 9/16 | Sandhu, Shivraj | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Sethi, Ankit | NXP Semiconductors |
| TGbe (MAC) | 9/16 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Sherlock, Ian | Texas Instruments Incorporated |
| TGbe (MAC) | 9/16 | Smely, Di Dieter | Kapsch TrafficCom AG |
| TGbe (MAC) | 9/16 | Stacey, Robert | Intel Corporation |
| TGbe (MAC) | 9/16 | Stott, Noel | Keysight Technologies |
| TGbe (MAC) | 9/16 | Sun, Bo | ZTE Corporation |
| TGbe (MAC) | 9/16 | Sun, Li-Hsiang | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | SURACI, FRANK | U.S. Department of Homeland Security |
| TGbe (MAC) | 9/16 | Tanaka, Yusuke | Sony Corporation |
| TGbe (MAC) | 9/16 | THOUMY, Francois | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Torab Jahromi, Payam | Facebook |
| TGbe (MAC) | 9/16 | Urabe, Yoshio | Panasonic Corporation |
| TGbe (MAC) | 9/16 | VIGER, Pascal | Canon Research Centre France |
| TGbe (MAC) | 9/16 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (MAC) | 9/16 | Wang, Hao | Tencent |
| TGbe (MAC) | 9/16 | Wang, Lei | Huawei R&D USA |
| TGbe (MAC) | 9/16 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 9/16 | Wang, Xiaofei | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Want, Roy | Google |
| TGbe (MAC) | 9/16 | Wentink, Menzo | Qualcomm |
| TGbe (MAC) | 9/16 | Wilhelmsson, Leif | Ericsson AB |
| TGbe (MAC) | 9/16 | Wu, Tianyu | Apple, Inc. |
| TGbe (MAC) | 9/16 | Wullert, John | Perspecta Labs |
| TGbe (MAC) | 9/16 | Xin, Liangxiao | Sony Corporation |
| TGbe (MAC) | 9/16 | Xin, Yan | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/16 | Xue, Qi | Qualcomm Incorporated |
| TGbe (MAC) | 9/16 | Xue, Ruifeng | Cisco Systems, Inc. |
| TGbe (MAC) | 9/16 | YAGHOOBI, HASSAN | Intel Corporation |
| TGbe (MAC) | 9/16 | Yang, Bo | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/16 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/16 | YANG, RUI | InterDigital, Inc. |
| TGbe (MAC) | 9/16 | Yang, Yunsong | Futurewei Technologies |
| TGbe (MAC) | 9/16 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/16 | Yee, James | MediaTek Inc. |
| TGbe (MAC) | 9/16 | yi, yongjiang | Futurewei Technologies |
| TGbe (MAC) | 9/16 | Yu, Heejung | Korea University |
| TGbe (MAC) | 9/16 | Yu, Jian | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/16 | Zein, Nader | NEC Laboratories Europe |
| TGbe (MAC) | 9/16 | Zeng, Yan | Huawei Technologies Co.,  Ltd |
| TGbe (MAC) | 9/16 | Zuo, Xin | Tencent |

1. The Chair reminds that the agenda can be found in 11-20/1269r6. The Chair asked for the comments bout the agenda. Tere was no further comments. The agenda was approved.

 **Submissions**

1. [1359r3](https://mentor.ieee.org/802.11/dcn/20/11-20-1359-02-00be-pdt-mac-eht-operation-element.docx) EHT Operation element Guogang Huang [SP]

Discussion:

C: asked to remove to TBD in third row of the table (ENT Operation Informaiton field).

A: agreed.

C: 160+160 should be removed.

A: 160+160 is in the motion

C: 160+160 should be highlighted in yellow.

A: we should follow the passed motion.

SP:

Do you support to incorporate the proposed draft text in 11-20/1359r4 into TGbe Draft 0.1?

The straw polls are deferred.

51/13/35

1. 1353r5 EHT BSS operation Liwen Chu [SP]

Discussion:

C: change HE Operating element to HE Operation element.

A: agreed.

C: using same primary channel by HE and EHT should be clarified.

A: the same primary channel for HE Operation element and EHT Operaiton element since they share the same primary channel field.

SP:

Do you support to incorporate the proposed draft text in 11-20/1353r5 into TGbe Draft 0.1?

The straw polls are deferred.

54/1/39

1. 1309r5 ML General, Authentication, Association, and Setup Po-Kai Huang [SP]

Discussion:

C: P21, regarding data, do we support TDLS?

A: We don’t have motion about TDLS.

More discussion about TDLS, e.g. legacy TDLS. Most people agreed to not include TDLS.

SP:

Do you support to incorporate Part II of the proposed draft text in 11-20/1353r5 into TGbe Draft 0.1?

The straw polls are deferred.

Approved with unanimous consent

1. 1281r4 TXOP-Bandwidth Signaling Kaiying Lu [SP]

Discussion:

C: once the TXVECTOR is mentioned, the changes in 9.3 for various control frames are not needed.

A: in 9.2 scrambler sequence is mentioned. This is not true for >160MHz non-HT duplicate PPDU.

C: no change is needed in subcaluse 21.

A: so where should we put the changes.

C: we need to change subclause 17. But further discussion is needed.

C: TBD field in 9.3 seems MAC layer change.

A: But TBD field can be in RESERVED field of SERVICE field.

SP:

Do you support to incorporate the proposed draft text in 11-20/1281r4 into TGbe Draft 0.1?

The straw polls are deferred.

Approved with unanimous consent

1. 1336r5 MLO BA: share and extension of SN space Liwen Chu [SP]

Discussion:

The ahthor indicated that the BA bitmap length indication is not in line the passed motion.

1. 1295r9 Multi-Link-Channel-Access-General-Non-STR Matthew Fischer [SP]

Discussion:

C: the definition question. Why you called out receiving RTS.

A: the subclause is about CTS procedure.

The teleconference was adjourned at 11:00am EDT

**Monday 21 Sept 2020, 10:00 AM– 01:00PM ET (Gbe MAC ad hoc conference call)**

Chairman: Jeongki Kim (LG Electronics)

Secretary: Liwen Chu (NXP)

This meeting took place using a WebEx session.

**Introduction**

1. The Chair (Jeongki, LG) calls the meeting to order at 10:04am EDT. The Chair introduces himself and the Secretary, Liwen Chu (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. Nobody speaks up.
3. The Chair recommends using IMAT for recording the attendance.
	* Please record your attendance during the conference call by using the IMAT system:
		1. 1) login to [imam](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 Jeongki Kim (jeongki.kim@lge.com) and Liwen Chu (liwen.chu@nxp.com)

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

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbe (MAC) | 9/21 | Aboulmagd, Osama | Huawei Technologies Co.,  Ltd |
| TGbe (MAC) | 9/21 | Akhmetov, Dmitry | Intel Corporation |
| TGbe (MAC) | 9/21 | Andersdotter, Amelia | None - Self-funded |
| TGbe (MAC) | 9/21 | Asterjadhi, Alfred | Qualcomm Incorporated |
| TGbe (MAC) | 9/21 | Baek, SunHee | LG ELECTRONICS |
| TGbe (MAC) | 9/21 | Bankov, Dmitry | IITP RAS |
| TGbe (MAC) | 9/21 | baron, stephane | Canon Research Centre France |
| TGbe (MAC) | 9/21 | Bredewoud, Albert | Broadcom Corporation |
| TGbe (MAC) | 9/21 | Carney, William | Sony Corporation |
| TGbe (MAC) | 9/21 | Chen, Na | MaxLinear Corp |
| TGbe (MAC) | 9/21 | Cheng, Paul | MediaTek Inc. |
| TGbe (MAC) | 9/21 | Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| TGbe (MAC) | 9/21 | Chu, Liwen | NXP Semiconductors |
| TGbe (MAC) | 9/21 | Das, Dibakar | Intel Corporation |
| TGbe (MAC) | 9/21 | Das, Subir | Perspecta Labs Inc. |
| TGbe (MAC) | 9/21 | Derham, Thomas | Broadcom Corporation |
| TGbe (MAC) | 9/21 | Ding, Baokun | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/21 | Dong, Xiandong | Xiaomi Inc. |
| TGbe (MAC) | 9/21 | Fang, Yonggang | ZTE TX Inc |
| TGbe (MAC) | 9/21 | Ghosh, Chittabrata | Intel Corporation |
| TGbe (MAC) | 9/21 | Guo, Yuchen | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/21 | Han, Jonghun | SAMSUNG |
| TGbe (MAC) | 9/21 | Han, Zhiqiang | ZTE Corporation |
| TGbe (MAC) | 9/21 | Hong, Hanseul | WILUS Inc. |
| TGbe (MAC) | 9/21 | Hsu, Chien-Fang | MediaTek Inc. |
| TGbe (MAC) | 9/21 | Huang, Guogang  | Huawei |
| TGbe (MAC) | 9/21 | Huang, Po-Kai | Intel Corporation |
| TGbe (MAC) | 9/21 | Inoue, Yasuhiko | Nippon Telegraph and Telephone Corporation (NTT) |
| TGbe (MAC) | 9/21 | Kakani, Naveen | Qualcomm Incorporated |
| TGbe (MAC) | 9/21 | Kedem, Oren | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/21 | Khorov, Evgeny | IITP RAS |
| TGbe (MAC) | 9/21 | Kim, Sang Gook | LG ELECTRONICS |
| TGbe (MAC) | 9/21 | Kim, Sanghyun | WILUS Inc |
| TGbe (MAC) | 9/21 | Kim, Yongho | Korea National University of Transportation |
| TGbe (MAC) | 9/21 | Kim, Youn-Kwan | The Catholic University of Korea |
| TGbe (MAC) | 9/21 | Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| TGbe (MAC) | 9/21 | Klein, Arik | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/21 | Klimakov, Andrey | Huawei Technologies Co., Ltd |
| TGbe (MAC) | 9/21 | Kneckt, Jarkko | Apple, Inc. |
| TGbe (MAC) | 9/21 | Ko, Geonjung | WILUS Inc. |
| TGbe (MAC) | 9/21 | Kwon, Young Hoon | NXP Semiconductors |
| TGbe (MAC) | 9/21 | Le Houerou, Brice | Canon Research Centre France |
| TGbe (MAC) | 9/21 | Levitsky, Ilya | IITP RAS |
| TGbe (MAC) | 9/21 | Li, Yiqing | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/21 | Lin, Wei | Huawei Technologies Co. Ltd |
| TGbe (MAC) | 9/21 | Liu, Yong | Apple, Inc. |
| TGbe (MAC) | 9/21 | Lu, Liuming | ZTE Corporation |
| TGbe (MAC) | 9/21 | Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. |
| TGbe (MAC) | 9/21 | Lv, kaiying | MediaTek Inc. |
| TGbe (MAC) | 9/21 | Ma, Mengyao | HUAWEI |
| TGbe (MAC) | 9/21 | Max, Sebastian | Ericsson AB |
| TGbe (MAC) | 9/21 | Moon, Juseong | Korea National University of Transportation |
| TGbe (MAC) | 9/21 | Naribole, Sharan | SAMSUNG |
| TGbe (MAC) | 9/21 | Nezou, Patrice | Canon Research Centre France |
| TGbe (MAC) | 9/21 | Ouchi, Masatomo | Canon |
| TGbe (MAC) | 9/21 | Park, Minyoung | Intel Corporation |
| TGbe (MAC) | 9/21 | Patil, Abhishek | Qualcomm Incorporated |
| TGbe (MAC) | 9/21 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| TGbe (MAC) | 9/21 | Raissinia, Alireza | Qualcomm Incorporated |
| TGbe (MAC) | 9/21 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| TGbe (MAC) | 9/21 | Sedin, Jonas | Ericsson AB |
| TGbe (MAC) | 9/21 | Sevin, Julien | Canon Research Centre France |
| TGbe (MAC) | 9/21 | Solaija, Muhammad Sohaib | Istanbul Medipol University; Vestel |
| TGbe (MAC) | 9/21 | Startsev, Ivan | IITP RAS |
| TGbe (MAC) | 9/21 | Wang, Chao Chun | MediaTek Inc. |
| TGbe (MAC) | 9/21 | Wang, Huizhao | Quantenna Communications, Inc. |
| TGbe (MAC) | 9/21 | Wang, Lei | Huawei R&D USA |
| TGbe (MAC) | 9/21 | Wang, Qi | Apple, Inc. |
| TGbe (MAC) | 9/21 | Wang, Xiaofei | InterDigital, Inc. |
| TGbe (MAC) | 9/21 | Wentink, Menzo | Qualcomm |
| TGbe (MAC) | 9/21 | Wullert, John | Perspecta Labs |
| TGbe (MAC) | 9/21 | Yang, Jay | Nokia |
| TGbe (MAC) | 9/21 | Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) |
| TGbe (MAC) | 9/21 | Yee, James | MediaTek Inc. |

1. The Chair reminds that the agenda can be found in 11-20/1269r8. The Chair asked for the comments bout the agenda. Tere was no further comments. The agenda was approved.

 **Submissions**

1. [1309r6](https://mentor.ieee.org/802.11/dcn/20/11-20-1309-04-00be-proposed-draft-specification-for-ml-general-mld-authentication-mld-association-and-ml-setup.docx) ML General, Authentication, Association, and Setup Po-Kai Huang [SP]

SP:

Do you support to incorporate Part III of the proposed draft text in 11-20/1309r6 into TGbe Draft 0.1?

Approved with unanimous consent.

1. [1336r](https://mentor.ieee.org/802.11/dcn/20/11-20-1336-05-00be-11be-spec-text-for-mlo-ba-share-and-extension-of-sn-space.docx)5 MLO BA: share and extension of SN space Liwen Chu [SP]

SP:

Do you support to incorporate the proposed draft text in 11-20/1336r5 into TGbe Draft 0.1?

Approved with unanimous consent.

1. [1292r6](https://mentor.ieee.org/802.11/dcn/20/11-20-1292-05-00be-pdt-mac-mlo-power-save-traffic-indication.docx) MLO Power Save Traffic Indication Minyoung Park [SP]

Discussion:

C: last sentence question. What is the purpose to use the recommended link?

A: this is based on Motion 106 from Abhi. Non-AP MLD uses single link for Beacon reception to save power. AP MLD recommend to non-AP MLD which link is recommended for receiving the buffered frames.

SP:

Do you support to incorporate Part III of the proposed draft text in 11-20/1292r6 into TGbe Draft 0.1?

Approved with unanimous consent.

1. [1395r10](https://mentor.ieee.org/802.11/dcn/20/11-20-1395-10-00be-pdt-mac-mlo-multi-link-channel-access-general-non-str.docx) Multi-Link-Channel-Access-General-Non-STR Matthew Fischer [SP]

Discussion:

C: the definition should not be normative text. It should refer to related normative subclause. The definition should be cleaned up.

C: concern on the definition on NSTR. The content should be moved to related normative subclause. The original definition is clearer.

A: the detail in the definition is addded to give the recipient more informaiton to decide which to do. This is based on the discussion in teleconference and offline discussion.

C: I am wondering whether we should consider the CCA.

A: minimum receive sensitivity is 20db less than ED. CCA is the combination of ED, minimum receive sensitivity etc.

C: the 3rd and 4th paragraph are contradicted with each other.

A: they don’t contradict.

C: they are not from the motion text.

A: we will do the SP about whether put the text in the draft.

C: remove receive minimum input from the contribution.

A: ok.

C: prefer simple definition. There is no motion related to the definition.

A: receive many comments that suggest more complex statement.

C:do you want to do separate SPs of the 3rd and 4th paragraphs (last two paragraphs)?

A: yes.

SP 1:

do you wish to keep 2nd from last paragraph?

”A STA that is affiliated with a non-AP MLD may transmit a frame on a link of one of its NSTR link pairs at the same time that another STA affiliated with the same non-AP MLD is not receiving a frame addressed to that receiving STA on the other link of the NSTR link pair, provided that the transmission meets other restrictions indicated in this subclause.”

29Y, 21N, 25A

SP 2:

do you wish to keep the last paragraph?

” A STA that is affiliated with a non-AP MLD and that transmits a frame on a link of one of its NSTR link pairs at the same time that another STA affiliated with the same non-AP MLD is receiving a frame on the other link of the NSTR link pair should ensure that the transmitted PPDU ends at the same time or earlier than the PPDU that is being recevied”

12Y, 41N, 27A

1. [1320r5](https://mentor.ieee.org/802.11/dcn/20/11-20-1320-04-00be-pdt-mac-mlo-multi-link-channel-access-capability-signaling.docx) Multi-link-channel-access-capability-signaling Yunbo Li

Discussion:

C: the last sentence of 1st paragraph duplicates with Matthew’s contribution. The contributions should be harmonized.

A: ok.

C: similar with the first commenter. The 3rd last paragraph seems to allow simultaneous transmission with NSTR.

A: it is not allowed. The paragraph refers to other paragraph which allows transmitting in one link and receiving in another link.

C: how dynamic about your dynamic STR capability? It is per TXOP capability?

A: agree that it should be clarified.

C: second part ofthe first paragraph is already coverred by Matthew’s contribution.

A: will check offline.

1. [1274r5](https://mentor.ieee.org/802.11/dcn/20/11-20-1274-04-00be-mac-pdt-mlo-ml-ie-structure.docx) ML-IE-Structure Abhishek Patil

Discussion:

C: P7, what is the meaning of ”Number of Supported Links”?

A: the links that the MLD can work on. It is not related to the radio.

C: Do you think we shuld put multi-link element in authentication frame?

A: I think so.

C: RNR element will be enough in DL. ML IE may not be needed.

A: With RNR, how do you know the number of supported links?

C: RNR will carry all the informaiton of the links.

A: no strong opinion of ”Number of Supported Links”. I can remove it.

C: comment of complete and partial indicaiton. There is no motion related to Complete Profile field.

A: sometimes partial profile is needed. Sometimes complete information is needed. We need clear indicaiton.

1. [1332r2](https://mentor.ieee.org/802.11/dcn/20/11-20-1332-02-00be-pdt-mac-mlo-bss-parameter-update.docx) MLO BSS parameter update Ming Gan

Discussion:

C: we have no motion about how the change sequence will be carried when multi-BSSID is supported. The motion mentioned it as TBD.

A: ok.

C: in 3rd paragraph, another AP should be that AP.

A: agreed.

C: the length of Change Sequence should be TBD.

C: The motion doesn’t mention the Check Beacon field.

A: I can change the text to ”the Change Sequence field is TBD”.

C: the last paragraph should not be shall requirement. It is internal behavior.

A: it is copied from the motion.

1. [1333r1](https://mentor.ieee.org/802.11/dcn/20/11-20-1333-01-00be-pdt-mac-mlo-discovery-ml-ie-usage-rules-in-the-context-of-discovery.docx) ML IE usage/rules in the context of discovery Ming Gan

Discussion:

C: you should not say common informaiton field. Common infomation includes multiple fields.

A: ok.

C: the last paragraph should cover Beacon also per the motion.

A: other paragraph already covers the Beacon.

C: no.

C: the first sentence. The motion is ”when including in the Beacon frame the ML element should...”. You should use the motion text.

C: the last sentence should be removed. It is in ML element.

A: there is no motion about it.

1. [1407r4](https://mentor.ieee.org/802.11/dcn/20/11-20-1407-04-00be-pdt-mac-mlo-soft-ap-mld-operation.docx) Soft-AP-MLD-Operation Kaiying Lu

Discussion:

C: in the definition you should refer to a pair of links.

A: ok.

C: what do you mean by ”when the same physical device acts as non-AP MLD”?

A: change to ”with dot11softAPMLDActivated”.