IEEE P802.11  
Wireless LANs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TGbe 2020 MAC Ad-Hoc agenda | | | | | |
| Date: 2020-03-13 | | | | | |
| Author(s): | | | | | |
| Name | Affiliation | Address | Phone | email |
| Alfred Asterjadhi | Qualcomm Inc. | 5775 Morehouse Dr, San Diego, CA 92109 | +1-858-658-5302 | aasterja@qti.qualcomm.com |
| Liwen Chu | NXP |  |  | liwen.chu@nxp.com |
| Jeongki Kim | LG Electronics |  |  | jeongki.kim@lge.com |

Abstract

This document contains the draft agenda for TGbe MAC Ad-Hoc meeting scheduled for March 13th, 2020.

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Added submissions list, which is obtained from the submissions’ list of the conference calls that are yet to be presented.
* Rev 2: First session spans for 3 hours instead of 2 hours and 45 mins. Cancelled the second and third session, which occur in the afternoon. They will be replaced with additional teleconference calls to be announced in the future with 10-day notice. Added candidate submissions list for the first session.
* Rev 3: Updated dial in information (we will be using WebEx platform). Updated the guidelines subclause including information on how to run straw polls during the Ad-hoc meeting via the online teleconference. Please read the Guideline carefully prior to joining the conference call.
* Rev 4: Updated after the end of the MAC ad-hoc teleconference, with submissions presented.

**MARCH 13th, 2020 TGbe MAC Adhoc meeting**

* **We’ll meet at the following location:**

Intel SC12

2200 Mission College Blvd

Santa Clara, CA, USA

Please send an e-mail to Laurent Cariou, [laurent.cariou@intel.com](mailto:laurent.cariou@intel.com) if you plan to attend in person.

* **We’ll use the following bridge:**

**Webex meeting:** [**Join**](https://www.google.com/url?q=https%3A%2F%2Fieee802.my.webex.com%2Fieee802.my%2Fj.php%3FMTID%3Dmc0dc4ed274ecbdf8717e09ee09f45079&sa=D&ust=1584393642619000&usg=AFQjCNEXBZTlxDw7mMqZrafFSUCOI7jsPA)

Meeting number: 792 997 056

Meeting password: wireless

## Technical Presentations’ List

* 36 submissions in the queue.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **DCN** | **Title** | **Author** | **Status** | **Topic** | **Session** |
| [1604r1](https://mentor.ieee.org/802.11/dcn/19/11-19-1604-01-00be-eht-direct-link-transmission.pptx) | EHT Direct Link Transmission | Dibakar Das | Pending | Medium Access | MAC |
| [1622r0](https://mentor.ieee.org/802.11/dcn/19/11-19-1622-00-00be-use-auto-repetition-in-low-latency-queue.pptx) | Use Auto Repetition in low latency queue | Tony Zeng | Pending | Low Latency | MAC |
| 1920r0 | Power Save for Multi-link | Ming Gan | Pending | ML-Power Save | MAC |
| [1962r](https://mentor.ieee.org/802.11/dcn/19/11-19-1962-02-00be-multi-link-upper-mac-entity-instance-new-frame-mac-header.pptx)2 | ML Upper-MAC Entity Inst. & New Frame MAC Header | Huizhao Wang | Presented | ML-Architecture | MAC |
| [1963r1](https://mentor.ieee.org/802.11/dcn/19/11-19-1963-01-00be-multi-link-security-and-aggregation-operations.pptx) | Multi-Link Security And Aggregation Operations | Huizhao Wang | Pending | ML-Architecture | MAC |
| [1993r1](https://mentor.ieee.org/802.11/dcn/19/11-19-1993-01-00be-discussion-about-single-and-multiple-primary-channels-in-synchronous-multi-link.pptx) | Discussion about single and multiple primary channels in synchronous multi-link | Yunbo Li | Pending | ML-Sync TX/RX | MAC |
| [1305r0](https://mentor.ieee.org/802.11/dcn/19/11-19-1305-00-00be-synchronous-multi-link-operation.pptx) | Synchronous multi-link transmission | Yongho Seok | Pending | ML-Sync TX/RX | MAC |
| [1955r0](https://mentor.ieee.org/802.11/dcn/19/11-19-1955-00-00be-multi-link-operation-per-link-aid.pptx) | Multi-link Operation: Per-link AID | Abhishek Patil | Pending | ML-Power Save | MAC |
| [2125r0](https://mentor.ieee.org/802.11/dcn/19/11-19-2125-00-00be-eht-rts-and-cts-procedure.pptx) | EHT RTS and CTS procedure | Yongho Seok | Pending | Medium Access | MAC |
| [0003r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0003-00-00be-discussion-on-latency-metric.pptx) | Discussion on latency metric | Suhwook Kim | Pending | Low Latency | MAC |
| [0005r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0005-00-00be-proposals-on-latency-reduction.pptx) | Proposals on Latency Reduction | Shubhodeep Adhikari | Pending | Low Latency | MAC |
| [0006r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0006-00-00be-proposed-corrections-to-channel-access-issues-in-802-11.pptx) | Proposed Corrections to Channel Access Issues in 802.11 | Shubhodeep Adhikari | Pending | Medium Access | MAC |
| [0012r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0012-00-00be-multi-link-acknowledgement-follow-up.pptx) | Multi-link Acknowledgement Follow Up | Taewon Song | Pending | ML-Block Ack | MAC |
| [0024r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0024-00-00be-mlo-acknowledgement-procedure.pptx) | MLO: Acknowledgement procedure | Abhishek Patil | Pending | ML-Block Ack | MAC |
| [0026r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0026-00-00be-mlo-sync-ppdus.pptx) | MLA Support for Constrained Devices | Duncan Ho | Pending | ML-Sync TX/RX | MAC |
| [0027r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0027-00-00be-mlo-sn-space-expansion.pptx) | Expansion of SN Space | Duncan Ho | Pending | MAC-Block Ack | MAC |
| [0028r1](https://mentor.ieee.org/802.11/dcn/20/11-20-0028-01-00be-indication-of-multi-link-information.pptx) | Indication of Multi-link Information | Insun Jang | Presented | ML-Link Mgmt | MAC |
| [0030r2](https://mentor.ieee.org/802.11/dcn/20/11-20-0030-02-00be-multi-link-association-follow-up.pptx) | Multi-link Association Follow Up | Guogang Huang | Presented | ML- Link Mgmt | MAC |
| [0034r0](https://mentor.ieee.org/802.11/documents?is_dcn=34&is_group=00be) | Multi-link grouping | Jason Yuchen Guo | Presented | ML- Link Mgmt | MAC |
| [0037r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0037-00-00be-power-saving-considering-non-ap-without-str-capability.pptx) | Power Saving Considering non-AP without STR Capability | Namyeong Kim | Pending | ML-Power Save | MAC |
| [0053r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0053-00-00be-multi-link-ba.pptx) | Multi-link BA | Po-Kai Huang | Pending | ML-Block Ack | MAC |
| [0054r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0054-00-00be-mld-mac-address-and-wm-address.pptx) | MLD MAC address and WM address | Po-Kai Huang | Pending | ML-Architecture | MAC |
| [0055r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0055-00-00be-multi-link-block-ack-architecture.pptx) | Multi-link block ack architecture | Rojan Chitrakar | Pending | ML-Block Ack | MAC |
| [0061r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0061-00-00be-ba-consideration.pptx) | BA Consideration | Liwen Chu | Pending | MAC-Block Ack | MAC |
| [0062r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0062-00-00be-protection-with-more-than-160mhz-ppdu-and-puncture-operation.pptx) | Protection with more than 160MHz PPDU and puncture operation | Liwen Chu | Pending | Medium Access | MAC |
| [0063r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0063-00-00be-sta-mld-link-address.pptx) | STA MLD link address | Liwen Chu | Pending | ML-Architecture | MAC |
| [0066r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0066-00-00be-multi-link-tim.pptx) | Multi-link TIM | Young Hoon Kwon | Pending | ML-Power Save | MAC |
| [0070r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0070-00-00be-multi-link-power-saving-operation.pptx) | Multi-link power saving operation | Yonggang Fang | Pending | ML-Power Save | MAC |
| [0081r1](https://mentor.ieee.org/802.11/dcn/20/11-20-0081-01-00be-mlo-synch-transmission.pptx) | MLO-Sync-TX | Matthew Fischer | Pending | ML-Sync TX/RX | MAC |
| [0082r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0082-00-00be-synchronous-transmitter-medium-state-information.pptx) | Synchronous-Transmitter-Medium-State-Information | Matthew Fischer | Pending | ML-Sync TX/RX | MAC |
| [0084r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0084-00-00be-multi-link-tim-design.pptx) | Multi-link TIM design | Minyoung Park | Pending | ML-Power Save | MAC |
| [0085r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0085-00-00be-multi-link-power-save-link-bitmap.pptx) | Multi-link power save - link bitmap | Minyoung Park | Pending | ML-Power Save | MAC |
| [0106r1](https://mentor.ieee.org/802.11/dcn/20/11-20-0106-01-00be-follow-up-on-performance-aspects-of-mlink-ops-with-constrains.pptx) | Follow up on performance aspects of multi link operations with constrains | Dmitry Akhmetov | Pending | ML-Sync TX/RX | MAC |
| [0114r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0114-00-00be-block-ack-window-extension.pptx) | Block Ack Window extension | Yongho Seok | Pending | MAC-Block Ack | MAC |
| [0122r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0122-00-00be-a-bar-variant-for-multi-link-operation.pptx) | A BAR Variant For Multi-Link Operation | Chunyu Hu | Pending | ML-Block Ack | MAC |
| [0134r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0134-00-00be-multilink-channel-access-considering-str-capability.pptx) | Multilink channel access considering STR capability | Hanseul Hong | Pending | ML-Sync TX/RX | MAC |
| 0408r0 | Prioritized EDCA Channel Access Over Latency Sensitive Links in MLO | Chunyu Hu | Pending | Low Latency | MAC |
|  | | | | | |

## Teleconference Agendas

### 1st Session: 09:00–12:00 (PT)

* Call the meeting to order
* IEEE 802 and 802.11 IPR policy and procedure
  + **Patent Policy: Ways to inform IEEE:**
    - Cause an LOA to be submitted to the IEEE-SA ([patcom@ieee.org](mailto:patcom@ieee.org)); or
    - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
    - Speak up now and respond to this Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

* Attendance reminder.
  + Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
  + Please send an e-mail to Jeongki Kim ([jeongki.kim@lge.com](mailto:jeongki.kim@lge.com)) and Liwen Chu ([liwen.chu@nxp.com](mailto:liwen.chu@nxp.com)), and Matthew Fischer ([matthew.fischer@broadcom.com](mailto:matthew.fischer@broadcom.com))
* Announcements: None.
* Technical Submissions:
  + [0028r1](https://mentor.ieee.org/802.11/dcn/20/11-20-0028-01-00be-indication-of-multi-link-information.pptx)–Indication of Multi-link Information (Insun Jang)
  + [0030r2](https://mentor.ieee.org/802.11/dcn/20/11-20-0030-02-00be-multi-link-association-follow-up.pptx)–Multi-link Association Follow Up (Guogang Huang)
  + [0034r0](https://mentor.ieee.org/802.11/documents?is_dcn=34&is_group=00be)–Multi-link grouping (Jason Yuchen Guo)
  + [1962r](https://mentor.ieee.org/802.11/dcn/19/11-19-1962-02-00be-multi-link-upper-mac-entity-instance-new-frame-mac-header.pptx)2–ML Upper-MAC Entity Inst. & New Frame MAC Header (Huizhao Wang)

-----------------------------------------------------------------------------------------------------------------

* + [1963r1](https://mentor.ieee.org/802.11/dcn/19/11-19-1963-01-00be-multi-link-security-and-aggregation-operations.pptx)–Multi-Link Security And Aggregation Operations (Huizhao Wang)
  + [0054r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0054-00-00be-mld-mac-address-and-wm-address.pptx)–MLD MAC address and WM address (Po-Kai Huang)
  + [0063r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0063-00-00be-sta-mld-link-address.pptx)–STA MLD link address (Liwen Chu)
  + [1604r1](https://mentor.ieee.org/802.11/dcn/19/11-19-1604-01-00be-eht-direct-link-transmission.pptx)–EHT Direct Link Transmission (Dibakar Das)
  + [2125r0](https://mentor.ieee.org/802.11/dcn/19/11-19-2125-00-00be-eht-rts-and-cts-procedure.pptx)–EHT RTS and CTS procedure (Yongho Seok)
  + [0006r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0006-00-00be-proposed-corrections-to-channel-access-issues-in-802-11.pptx)–Proposed Corrections to Channel Access Issues in 802.11 (Shubhodeep Adhikari)
  + [0062r0](https://mentor.ieee.org/802.11/dcn/20/11-20-0062-00-00be-protection-with-more-than-160mhz-ppdu-and-puncture-operation.pptx)–Protection with more than 160MHz PPDU and puncture operation (Liwen Chu)
* Test Run of the Polling System
* Adjourned

### 2st Session: 13:00–15:30 (PT)

* **Cancelled** (will be replaced with a teleconference call yet to be announced)

### 3rd Session: 15:45–18:00 (PT)

* **Cancelled** (will be replaced with a teleconference call yet to be announced)

===========================================================================

## Policies and Procedures

Teleconferences (and ad-hocs) are subject to applicable policies and procedures, see below.

==================================================

Teleconferences are subject to applicable policies and procedures, see below.

**IEEE Code of Ethics**

<http://www.ieee.org/about/corporate/governance/p7-8.html>

**IEEE Standards Association (IEEE-SA) Affiliation FAQ**

<http://standards.ieee.org/faqs/affiliation.html>

**Antitrust and Competition Policy**

<http://standards.ieee.org/resources/antitrust-guidelines.pdf>

**Letter of Assurance Form**

[http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#loa](http://standards.ieee.org/develop/policies/bylaws/sect6-7.html)

[https://development.standards.ieee.org/myproject/Public//mytools/mob/loa.pdf](http://standards.ieee.org/board/pat/pat-slideset.ppt)

**IEEE-SA Patent Committee FAQ & Patent slides**

<http://standards.ieee.org/board/pat/faq.pdf> and <http://standards.ieee.org/board/pat/pat-slideset.ppt>

**The current version of the IEEE-SA Standards Board Bylaws is available at:**

<http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf> (PDF version)

**The current version of the IEEE-SA Standards Board Operations Manual is available at:**

<http://standards.ieee.org/develop/policies/opman/sb_om.pdf> (PDF version)

**IEEE 802 Policies & Procedures (Approved June 2014)**

<http://standards.ieee.org/board/aud/LMSC.pdf>

**IEEE 802 Operations Manual (Approved 13 July 2018)**

<https://mentor.ieee.org/802-ec/dcn/17/ec-17-0090-22-0PNP-ieee-802-lmsc-operations-manual.pdf>

**IEEE 802 Working Group Policies & Procedures (29 July 2016)**

<http://www.ieee802.org/PNP/approved/IEEE_802_WG_PandP_v19.pdf>

**IEEE 802 LMSC Chair's Guidelines (Approved 13 July 2018)**

<https://mentor.ieee.org/802-ec/dcn/17/ec-17-0120-27-0PNP-ieee-802-lmsc-chairs-guidelines.pdf>

**Participation in IEEE 802 Meetings**

<https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

**IEEE 802.11 WG Operations Manual (Approved 13 July 2018):**

<https://mentor.ieee.org/802.11/dcn/14/11-14-0629-22-0000-802-11-operations-manual.docx>

* **The** [**IEEE-SA Standards Board Bylaws**](http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf) **require that “participants in the IEEE standards development individual process shall act based on their qualifications and experience”**
* **This means participants:**
  + **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
  + **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
  + **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
* **By participating in standards activities using the “*individual process*”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation**

## Guideline-Running StrawPolls Online (Currently for WebEx Only)

1. Reminder: Members will be placed on mute upon joining the call to reduce background noise. Hence, in order to speak, please unmute yourself
2. Each member that intends to join the conference call and vote needs to:
   1. Ensure that their name and affiliation is listed in the participants list
      * If you are not properly identified in the participants list, your vote will be removed from the straw polls results
   2. Ensure that they join the conference call online before dialing in, in order to ensure that name and affiliation appear in the participants list
      * Audio connection via cellphone or landline can be achieved by having WebEx calling the phone number or by dialing in using the identification numbers provided when joining online
3. One or more Straw Polls can be run for each presentation (no motions allowed)
   1. Straw Poll will first be shown on the screen (after discussions as usual))
   2. Chair will then copy the straw poll and display it via the conference call’s polling system
      * A straw poll can allow either a single choice response or multiple choice responses (e.g., vote for as many as you like); single choice will be used by default unless presenter indicates otherwise
   3. A Pop-Up window with the SP will appear for each member that is online
      * The Chair will remind members to cast their vote and will announce the end of the vote, after which no more voting can take place
      * Members are invited to cast their vote in a timely fashion, othwerise they will miss the window of vote and be unable to cast their vote
      * Choose carefully! The system will not allow a vote to be changed once the vote has been submitted, even if the SP is still open for voting
      * After a reasonable time (1 min or so) the chair will close the poll
   4. The Outcome of the SP is reported to the group and will be noted in the meeting minutes, as usual
      * Note 1: Votes cast by unidentified members may be removed, so please ensure that name and affiliation are correct
      * Note 2: Voting results will be provided in the minutes. Individual votes will be included in the minutes if a member calls for a roll call, although such information will be traced, whenever possible, by the chair so that it can be shared with the WG leadership upon request.

Note 1: Note that where a group of individuals is attending in common through a single dial in, there is only one vote available and therefore, all participants who wish to vote need to individually sign into the meeting to be included in the participant list.

Note 2: This is the first time that such a system is being used for this purpose and as such we will learn/adjust as we go.

## References: