IEEE P802.11  
Wireless LANs

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| IEEE 802.11 MAC Ad hoc  May 2019 TGax Meeting Minutes | | | | |
| Date: 2019-05-13 | | | | |
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Abstract

This document contains the TGax-mac-ad-hoc meeting minutes from the IEEE 802.11 May 2019 Atlanta session.

**IEEE 802.11 Task Group ax, MAC Ad hoc**

**May 2019 Meeting, Atlanta. GA, US**

**May 13rd – 17th, 2019**

**Monday, May 13rd, 2019, PM1 TGax MAC Ad Hoc Session (13:30 - 15:30)**

1. **The meeting called to order at 1:30 PM by Chao-Chun Wang (MediaTek), the chair of 802.11 TGax MAC adhoc.**
   1. 35 people are in the room.
2. **Agenda Setting**
   1. Proposed agenda for Monday PM1:
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Submissions and comment resolution
      4. Recess
   2. Chair asked if there is any item to add to the agenda. 🡪 No response.
   3. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
      1. The agenda was accepted.
3. **Reminder and Announcement**
   1. Chair reminded that we are still operating under the IEEE-SA P&P.
   2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
   3. Attendance: <https://imat.ieee.org/attendance>
4. **Comment Resolution**
   1. **Alfred Asterjadhi (Qualcomm) presented “MAC-CR-Use of TWT information frames” based on the submission 11-19-652-00.**
      1. Summary
         1. Resolutions for the comments with following CIDs on the IEEE 802.11ax D4.0 are proposed.
            1. Relevant CIDs (25 CIDs): 20333, 20334, 20335, 20359, 20361, 20402, 20403, 20404, 20405, 20408, 21087, 21088, 21089, 21090, 21091, 21092, 21093, 21170, 20353, 20354, 20355, 20356, 20357, 20358, 20838
      2. Discussion
         1. Continued presentation and discussion on 11-19/652 from the TGax AM2 session.
         2. CIDs 20404, 20405 deferred as requested by Liwen Chu.
         3. CID 20838 deferred to add some notes for clarification
      3. **Straw Poll: Do you accept resolution to CIDs 20333, 20334, 20335, 20359, 20361, 20402, 20403, ~~20404~~, ~~20405~~, 20408, 21087, 21088, 21089, 21090, 21091, 21092, 21093, 21170, 20353, 20354, 20355, 20356, 20357, 20358, ~~20838~~ in doc 11-19/652r0?**
         1. **Result: Accepted with no objection**
      4. Next Step
         1. Approval by the TG motion.
   2. **Alfred Asterjadhi (Qualcomm) presented “MAC-CR-Individual TWT” based on the submission 11-19-725-00.**
      1. Summary
         1. Resolutions for the comments with CIDs (19 CIDs) 20119, 20124, 20262, 20263, 20380, 20383, 20399, 20680, 20702, 20819, 20837, 20844, 21063, 21064, 21070, 21071, 21072, 21073, 21074 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. CID20837 deferred for further discussion
      3. **Straw Poll: Do you accept resolution to CIDs 20119, 20124, 20262, 20263, 20380, 20383, 20399, 20680, 20702, 20819, ~~20837~~, 20844, 21063, 21064, 21070, 21071, 21072, 21073, 21074** **in doc 11-19/725r1?**
         1. **Result: Accepted with no objection**
      4. Next Step
         1. Approval by the TG motion.
   3. **Alfred Asterjadhi (Qualcomm) presented “MAC-CR-HE BSS operation in 6 GHz” based on the submission 11-19-304-00.**
      1. Summary
         1. Resolutions for the comments with CIDs (16 CIDs) 20074, 20130, 20241, 20411, 20980, 21280, 21281, 21282, 21283, 21350, 21351, 21352, 21510, 21511, 21524, 21553 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. Some objections raised for the resolution of CIDs 20074 and 20130, and they deferred.
         2. CID 20411 deferred to add some more clarification text.
         3. CID 20411 deferred
      3. **Straw Poll: Do you accept resolution to CIDs ~~20074~~, ~~20130~~, 20241, ~~20411~~, 20980, 21280, 21281, 21282, 21283, 21350, 21351, 21352, 21510, 21511, 21524, ~~21553~~ in doc 11-19/395r1?**
         1. **Result: Accepted with no objection**
      4. Next Step: Approval by the TG motion.
5. **Recess**
   1. The meeting recessed at 3:29 pm.

**Tuesday, May 14th, 2019, AM2 TGax MAC Ad Hoc Session (10:30 - 12:30)**

1. **The meeting called to order at 10:30 AM by Osama Aboul-Magd (Huawei Technologies), the chair of 802.11 TGax.**
   1. 42 people are in the room.
2. **Agenda Setting**
   1. Proposed agenda for Tuesday AM2:
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Submissions and comment resolution
      4. Recess
   2. Chair asked if there is any item to add to the agenda. 🡪 No response.
   3. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
      1. The agenda was accepted.
3. **Reminder and Announcement**
   1. Chair reminded that we are still operating under the IEEE-SA P&P.
   2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
   3. Attendance: <https://imat.ieee.org/attendance>
4. **Comment Resolution**
   1. **Ming Gan (Huawei) presented “MAC CR Fragmentation” based on the submission 11-19-785-00.**
      1. Summary
         1. Resolutions for the comments with CIDs (29 CIDs) ~~20176~~ ~~20177~~ 20302 20423 20598 20701 ~~21050~~ 21182 21183 21184 21301 21302 21303 21304 21305 21308 21309 21310 21311 21312 21313 21314 21315 21316 21317 21318 21319 ~~21587~~ ~~21588~~ on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. Alfred had some suggestion for the text changes. Will take offline discussion.
   2. **George Cherian (Qualcomm) presented “Ack related Comments Resolution” based on the submission 11-19-756-00.**
      1. Summary
         1. Resolutions for the comments with CIDs (30 CIDs) 20182, 20213, 20219, 20316, 20317, 20318, 20388, 20607, 20608, 20609, 20763, 20789, 20791, 20890, 20932, 20996, 21021, 21065, 21187, 21299, 21307, 21459, 21593, 21029, 21030, 21186, 21451, 21187, 21455, 21175 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. CID 20996 deferred for further discussion
         2. CID 21186: Yongho said that an AP might respond with a QoS Data frame instead of an Ack frame after receiving a PS-Poll frame. CID 21186 deferred.
      3. **Straw Poll: Do you accept resolution to CIDs 20182, 20213, 20219, 20316, 20317, 20318, 20388, 20607, 20608, 20609, 20763, 20789, 20791, 20890, 20932, ~~20996~~, 21021, 21065, 21187, 21299, 21307, 21459, 21593, 21029, 21030, ~~21186~~, 21451, 21187, 21455, 21175** **in doc 11-19/756r1?**
         1. **Result: Accepted with no objection**
      4. Next Step
         1. Approval by the TG motion.
   3. **Laurent Cariou (Intel) presented “CR for NFRP” based on the submission 11-19-414-01.**
      1. Summary
         1. Resolutions for the comments with CIDs (11 CIDs) 20260, 20261, 20362, 20363, 20364, 20575, 21134, 21135, 21136, 20420, 21142 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. To be continued during pm1 session.
5. **Recess**
   1. The meeting recessed at 12:30 pm.

**Tuesday, May 14th, 2019, PM1 TGax MAC Ad Hoc Session (13:30 - 15:30)**

1. **The meeting called to order at 1:35 PM by Osama Aboul-Magd (Huawei Technologies), the chair of 802.11 TGax.**
   1. 51 people are in the room.
2. **Agenda Setting**
   1. Proposed agenda for Tuesday PM1:
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Submissions and comment resolution
      4. Recess
   2. Chair asked if there is any item to add to the agenda. 🡪 No response.
   3. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
      1. The agenda was accepted.
3. **Reminder and Announcement**
   1. Chair reminded that we are still operating under the IEEE-SA P&P.
   2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
   3. Attendance: <https://imat.ieee.org/attendance>
4. **Comment Resolution**
   1. **Laurent Cariou (Intel) presented “CR for NFRP” based on the submission 11-19-414-01.**
      1. Summary
         1. Resolutions for the comments with CIDs (11 CIDs) 20260, 20261, 20362, 20363, 20364, 20575, 21134, 21135, 21136, 20420, 21142 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. Kiseon and Alfred raised some concern on applying NFRP directly to the baseline UAPSD operation since there are much ambiguity on it.
         2. Straw poll deferred for further discussion and come back later.
   2. **Laurent Cariou (Intel) presented “CR for MU EDCA” based on the submission 11-19-413-04.**
      1. Summary
         1. Resolutions for the comments with CIDs (22 CIDs) ~~20175~~, 20312, 20313, 20398, 20595, 20596, 20603, 20604, 20622, 20623, 20624, 20625, 20661, 20662, 20676, 20811, 21128, 21143, 21414, ~~21443~~, ~~21586~~, 21617 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. CID 20175, 21443, 21586 deferred for further discussion.
      3. **Straw Poll: Do you accept resolution to CIDs 20596, 20623, and 21143** **in doc 11-19/413r5?**
         1. **Result: Accepted with no objection**
      4. Next Step
         1. Approval by the TG motion.
   3. **Laurent Cariou (Intel) presented “CR for 6 GHz out-of-band discovery” based on the submission 11-19-417-01.**
      1. Summary
         1. Resolutions for the comments with CIDs (11 CIDs) 20017, 20019, 20022, 20040, 20041, 20244, 20252, 20253, 20255, 20264, 20265, 20290, 20365, 20366, 20369, 20370, 20371, 20800, 20801, 20802, 20803, 20804, 20805, 20806, 21161, 21162, 21355, 21356, 21357, 21358, 21442, 21505, 21506, 21533, 21534, 21535 ,21536, 21583, 21584, 20081, 20082, 20083, 21285, 21286, 21335, 21441 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. Discussed up to CID 21358
         2. CIDs 20017, 20022, 20252, 20253, 20255, 20264, 20265, 20365, 20369, 20370, 20803, deferred for further discussion.
5. **Recess**
   1. The meeting recessed at 3:29 pm.

**Wednesday, May 15th, 2019, PM2 TGax MAC Ad Hoc Session (16:00 - 18:00)**

1. **The meeting called to order at 4:01 PM by Osama Aboul-Magd (Huawei Technologies), the chair of 802.11 TGax.**
   1. 51 people are in the room.
2. **Agenda Setting**
   1. Proposed agenda for Wednesday PM2:
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Submissions and comment resolution
      4. Recess
   2. Chair asked if there is any item to add to the agenda. 🡪 No response.
   3. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
      1. The agenda was accepted.
3. **Reminder and Announcement**
   1. Chair reminded that we are still operating under the IEEE-SA P&P.
   2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
   3. Attendance: <https://imat.ieee.org/attendance>
4. **Comment Resolution**
   1. **Alfred Asterjadhi (Qualcomm) presented “MAC-CR-Fast passive scanning” based on the submission 11-19-910-00.**
      1. Summary
         1. Resolutions for the comments with CIDs (16 CIDs) 20077, 20078, 20079, 20349, 20350, 20351, 20373, 21043, 21526, 21527, 21528, 21529, 21530, 21554, 21577, 21578 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. CID 20373, 21577, 21578 deferred for further discussion.
      3. **Straw Poll: Do you accept resolution to CIDs 20077, 20078, 20079, 20349, 20350, 20351, ~~20373~~, 21043, 21526, 21527, 21528, 21529, 21530, 21554, ~~21577~~, ~~21578~~** **in doc 11-19/910r1?**
         1. **Result: Accepted with no objection**
   2. **Tomoko Adachi (Toshiba Corporation) presented “Resolutions to comments to subclause 9.3.1.8” based on the submission 11-19-816-01.**
      1. Summary
         1. Resolutions for the comments with CIDs (13 CIDs) 21045, 20584, 20200, 20827, 20104, 20648, 21124, 21469, 21171, 20105, 20954, 20955, 20893 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. CID 20827: The related comment was resolved in last November meeting, but the duplicate comment (CID 20827) was re-submitted. The proposed resolution was to reject it. Ran a separate straw poll for CID 20827.
         2. CID 20104, 20648, 21124, 21469 deferred for further discussion.
      3. **Straw Poll: Do you accept resolution to CIDs 20827 in doc 11-19/816r1?**
         1. **Result: Y/N/A = 17/2/4 🡪Accepted**
      4. **Straw Poll: Do you accept resolution to CIDs 21045, 20584, 20200, 20827, ~~20104~~, ~~20648~~, ~~21124~~, ~~21469~~, 21171, 20105, 20954, 20955, 20893 in doc 11-19/816r2?**
         1. **Result: Accepted with no objection**
   3. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs related to MU Operation” based on the submission 11-19-510-02.**
      1. Summary
         1. Resolutions for the comments with CIDs (16 CIDs) 20748, 20048, 20539 on the IEEE 802.11ax D4.0 are proposed.
      2. Discussion
         1. No discussion.
      3. **Straw Poll: Do you accept resolution to CIDs 20748, 20048, 20539** **in doc 11-19/510r2?**
         1. **Result: Accepted with no objection**
5. **Adjourn**
   1. The meeting adjourned at 5:59 pm.