IEEE P802.11  
Wireless LANs

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| Minutes of TGax ad hoc meeting (MAC-MU-SR) September 2018 in San Jose, CA | | | | |
| Date: 2018-09-10 | | | | |
| Author(s): | | | | |
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Abstract

This document contains minutes of TGax (MAC-MU-SR) ad hoc meeting September 2018 in San Jose, CA.

Rev. 0: Initial version.

**Wednesday, September 5th, 2018 TGax (MAC, MU, SR) ad hoc meeting September 2018 - Day 1**

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 10:00 AM (local time).**
   1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies) and the TGax secretary, Yasuhiko Inoue (NTT).
   2. Agenda: 11-18-0689-01 (rev. 2 is the working document)
2. **IEEE 802 and 802.11 IPR Policy and Procedure**
   1. Chair read the 5 slides of IEEE 802 Policies and Procedures.
      1. Participants have a duty to inform the IEEE - done
      2. Ways to inform IEEE - done
         1. Chair asked if there is any potentially essential patent that people are aware of.
            1. No potentially essential patent reported.
      3. Other guidelines for IEEE WG meetings - done
      4. Patent-related information - done
      5. Participation in IEEE 802 Meetings – participation as an individual expert. - done
3. **Host Information**
   1. Thanks to Tianyu Wu and Samsung for hosting the meeting.
4. **General flow of the ad hoc meeting**
   1. Proposed
      1. Wednesday (10:00 – 18:00)
         1. Comment Resolution
         2. Recess
      2. Thursday (9:00 – 18:00)
         1. Comment Resolution
         2. Recess
      3. Friday (9:00 – 16:00)
         1. Comment Resolution
         2. Adjourn
   2. Discussion
      1. Chair asked if it is okay to proceed with this schedule. - No objection.
5. **Agenda for the Wednesday September 05 TGax ad hoc meeting**
   1. Proposed agenda
      1. Call meeting to order
      2. Patent policy, etc.
      3. Announcements
      4. Call for submissions
      5. Set agenda
      6. Presentations and Comment Resolution
      7. Recess
   2. Schedule of the day
      1. 10:00 – 10:10 Call the meeting to order and IPR Slides
      2. 10:10 – 10:15 Call for Submissions
      3. 10:15 – 11:45 Comment Resolution
         1. Coexistence issues
      4. 11:45 – 1:00 Lunch
      5. 1:00 – 3:15 Comment Resolution
      6. 3:15 – 3:45 Break
      7. 3:45 – 6:00 Comment Resolution
      8. 6:00 Recess
   3. Approval of the agenda
      1. Chair asked if there is any item to add to the agenda. 🡪 No item to add to the agenda.
      2. Chair asked if there is any objection to approve the agenda. 🡪 No objection.
   4. The agenda was approved.
6. **Call for submissions**
   1. Chair included an excel file to the agenda file.
   2. The plan is to hear as many presentations as possible.
7. **Comment Resolutions**
   1. **Eldad Perahia (HP Enterprise) presented “TGax Coexistence Assurance Document,” based on the submission 11-16-1348-04.**
      1. Summary
         1. TGax CA document was updated. Resolutions for the TGax CA document is contained in 11-18-1532-00.
            1. Basically the resolutions are reject since those comments do not change the draft.
         2. CA document has been amended to acknowledge UWB with the relevant regulations.
      2. Discussion
         1. General feeling is that we need to talk to people who submitted the comments whether the updated CA document is acceptable.
      3. Next Step
         1. Maybe further offline works will be needed.
   2. **Robert Stacey (Intel) presented “No Action frame in multi-TID A-MPDU,” based on the submission 11-18-0946-01.**
      1. Summary
         1. This is an update of the presentation that Robert presented during the July 2018 session.
         2. The intention is to disallow aggregation of a management frame with QoS data in an A-MPDU since the benefit is limited.
      2. Discussion
         1. Some people asked for clarifications on the proposal.
         2. People expressed objection since there will be some scenarios that this mechanism provides benefit.
            1. Robert repeated that the benefit is not enough for the complexity of this mechanism.
      3. **Straw Poll: Do you accept resolution to CID 16684 in doc 11-18/0946r1?**
         1. **Result: Y/N/A = 7/14/6 🡪 straw poll indicates that a technical consensus of 75% would not be achieved in an equivalent motion.**
   3. **Robert Stacey (Intel) presented “CR on differentiating non-TB and TB sounding,” based on the submission 11-18-1502-00.**
      1. Summary
         1. Proposed resolutions to 16673, 16674, 16675, 16676, 16678 and 16681.
         2. The motivation of this proposal is to distinguish two sounding sequences from RA only.
      2. Discussion
         1. A member discussed the applicability of the proposed scheme to mesh STAs.
         2. Some people asked for the benefit of this proposal. 🡪 It is basically simplification.
      3. Next Step
8. **Recess for lunch @ 11:45**

Lunch Break

1. **Meeting reconvened @ 13:00**
   1. **Po-Kai Huang (Intel) presented “11ax D3.0 MAC Comment Resolution for MU-RTS/CTS – Part I,” based on the submission 11-18-1418-00.**
      1. Summary
         1. Resolutions for comments of TGax Draft D3.0 on MU-RTS/CTS with the following CIDs are proposed:
            1. CIDs: 15717, 16021, 16023, 16024, 17073, 15911, 15913, 15959, 16562, 16563, 16564, 16565, 16566, 16567, 16568, 16592, 16906, 17087, 16014, 16930 and 17145.
      2. Discussion
         1. After discussion with members, the resolution for CID 15959 was changed from Accept to Revised.
         2. People discussed the interpretation of some CIDs such as 16592 and 16014. 🡪 CID 16014 was deferred.
         3. CID 17145 asked for deferral.
      3. **Straw Poll: Do you agree to resolutions to CIDs 15717, 16021, 16023, 16024, 17073, 15911, 15913, 15959, 16562, 16563, 16564, 16565, 16566, 16567, 16568, 16592, 16906, 17087, 16014, 16930 and 17145 in doc 11-18/1418r1?**
         1. **CID 16014 and 17145 are deferred.**
         2. **Result: Accepted with no objection.**
   2. **Po-Kai Huang (Intel) presented “11ax D3.0 MAC Comment Resolution for NAV – Part I,” based on the submission 11-18-1189-02.**
      1. Summary
         1. Resolutions for comments of TGax Draft D3.0 with the following CIDs are proposed:
            1. CIDs: 15868, 16048, 15869, 16438, 16437, 16027, 16029, 16030, 16215, 16938, and 16422.
      2. Discussion
         1. (Re: CID 16438) A member commented that there are contradictions between the proposed text and other part of the draft.
         2. As the result of discussion with a member, Po-Kai proposed additional text in 27.
      3. Next Step
         1. Po-Kai to come back with a new revision.
2. **Recess @ 15:00**

Afternoon Break

1. **Meeting reconvened @ 15:30**
2. **Comment Resolution**
   1. **Laurent Cariou (Intel) presented “CR for MU EDCA parameters,” based on the submission 11-18-1496-00.**
      1. Summary
         1. Resolutions for CIDs 15059, 15755, 15756, 16653, 16939 and 16940 on MU EDCA are proposed.
      2. Discussion
         1. No discussion.
      3. **Straw Poll: Do you agree to resolutions to CIDs 15059 15755 15756 16653 16939 16940 in doc 11-18/1496r0?**
         1. **Result: Acepted with no objection.**
   2. **Laurent Cariou (Intel) presented “CR for OBSS\_PD,” based on the submission 11-18-1495-00.**
      1. Summary
         1. Resolutions for the following CIDs on the OBSS\_PD of IEEE 802.11ax draft 3.0 are proposed:
            1. Relevant CIDs: 15898, 16499, 15702, 15704, 15653, 15655, 15738, 15656, 15739, 15740, 17127, 15847, 15741, 15175, 15742, 15699, 17133, 17076, 15176, 16757, 17134, 15652, 15657, 15744, 16758, 17131, 16037, 16226, 16464, 15581, 15589, 15591, 16512, 16761, 16762, 16513, 17014, 15761, 16515, 16514, 16516, 15745, 15746, 15781, 15707, 15709, 15713, 15714, and 15715.
         2. Presentation was interrupted due to the limit of time. To be continued tomorrow.
3. **Recess**
   1. TGax ad hoc meeting is in recess at 17:58 until 9:00 AM tomorrow (Local Time).
4. **List of Attendees of day 1**

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|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Alfred Asterjadhi | Qualcomm |
| 3 | Stephane Baron | Canon Research |
| 4 | Laurent Cariou | Intel |
| 5 | Liwen Chu | Marvell Semiconductors |
| 6 | Sean Coffey | RealTek |
| 7 | Matthew Fischer | Broadcom Ltd. |
| 8 | Ming Gan | Huawei Technologies |
| 9 | Ravi Gidvani |  |
| 10 | Chunyu Hu | Broadcom Ltd. |
| 11 | Po-Kai Huang | Intel |
| 12 | Yasuhiko Inoue | NTT |
| 13 | Shailencler Karmuchi | Samsung |
| 14 | Jarkko Knect | Apple |
| 15 | Zhou Lan | Broadcom Ltd. |
| 16 | Wook Bong Lee | Samsung |
| 17 | Yunbo Li | Huawei Technologies |
| 18 | Pooya Monajemi | Cisco Systems |
| 19 | Sharan Naribele | Samsumg |
| 20 | Kome Oteri | InbterDigital |
| 21 | Abhishek Patil | Qualcomm |
| 22 | Eldad Perahia | HP Enterprize |
| 23 | Al Petrick | InterDigital Communications |
| 24 | Md Majharul Islam Rajib | Samsung |
| 25 | Moumiter Ray | Samsung |
| 26 | Kiseon Ryu | LG Electronics |
| 27 | Sangho Seo | Cypress |
| 28 | Yongho Seok | MediaTek |
| 29 | Robert Stacey | Intel |
| 30 | Paul Strauch | Cypress |
| 31 | Pascal Vigar | Canon Research |
| 32 | Huizhao Wang | Quantenna Communications |
| 33 | Tianyu Wu | Samsung |
| 34 | James Yee | MediaTek |
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**Thursday, September 6th, 2018 TGax (MAC, MU, SR) ad hoc meeting September 2018 - Day 2**

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 9:03 AM (local time).**
   1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies), the TGax secretary, Yasuhiko Inoue (NTT) and Technical Editor, Robert Stacey (Intel).
   2. Agenda: 11-18-1372-03
2. **Agenda for the Thursday September 06 TGax ad hoc meeting**
   1. Proposed agenda
      1. Call meeting to order
      2. Patent policy, etc.
      3. Announcements
      4. Call for submissions
      5. Set agenda
      6. Presentations and Comment Resolution
      7. Recess
   2. Schedule of the day
      1. 9:00 – 9:05 Call the meeting to order and IPR Slides
      2. 9:05 – 10:30 Comment Resolution
      3. 10:30 – 10:45 Break
      4. 10:45 – 11:45 Comment Resolution
      5. 11:45 – 1:00 Lunch
      6. 1:00 – 3:15 Comment Resolution
      7. 3:15 – 3:45 Break
      8. 3:45 – 6:00 Comment Resolution
      9. 6:00 Recess
   3. Approval of the agenda
      1. Chair asked if there is any item to add to the agenda. 🡪 No item to add to the agenda.
      2. Chair asked if there is any objection to approve the agenda. 🡪 No objection.
   4. The agenda was approved.
3. **Announcement**
   1. Chair reminded that we are still operating under the IEEE-SA and IEEE 802 Policies and Procedures.
4. **Progress Review of Wednesday (Day 1)**
   1. 11-18/0946 (Robert Stacey): SP indicates that a technical consensus of 75% would not be achieved in an equivalent motion.
   2. 11-18/1502 (Robert Stacey): No SP. Need more discussion.
   3. 11-18/1418 (Po-Kai Huang): CID 16014 and 17145 are deferred. No objection to resolution to other CIDs.
   4. 11-18/1189 (Po-Kai Huang): Accepted with no objection.
   5. 11-18/1496 (Laurent Cariou): Approved with no objection.
   6. 11-18/1495 (Laurent Cariou): CIDs 16759, 16760 and 16411 are added to document. To be continued on Thursday.
5. **Comment Resolutions**
   1. **Laurent Cariou (Intel) continued his presention of “TGax Coexistence Assurance Document,” based on the submission 11-18-1495-00.**
      1. Discussion
         1. Re: CID 16516: Some people are concerned by the spec of TxPWR = 25 dBm.
         2. People discussed the CCA mechanism whether energy detect is good enough or not.
         3. CID 15707 is covered by another volunteer’s document.
         4. After discussions several CIDs such as 15175, 17134, 15652, 16758 and 15589 are deferred.
         5. Some CIDs need to be checked with PHY experts.
      2. Next Step
         1. .
6. **Recess @ 10:33 AM.**

**Break**

1. **Meeting recovened @ 10:46 AM.**
2. **Comment Resolutions**
   1. **Pascal Viger (Canon Research) presented “11ax D3.0 MAC Comment Resolution for Random Access with multiple BSS,” based on the submission 11-18-1458-02.**
      1. Summary
         1. Resolution for the comment with CID 16540 on random access with multiple BSS is proposed.
      2. Discussion
         1. Pascal needs to have more offline discussion with other members.
      3. Next Step
         1. Straw poll was deferred for more discussion.
   2. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs in 27.5.3.3,” based on the submission 11-18-1455-01.**
      1. Summary
         1. Resolutions for comments received for TGax LB233 on subclause 27.5.3.3 are proposed (9):
            1. Relevant CIDs: 17142, 16753, 16754, 16475, 16064, 16755, 16347, 16016, and 16668.
      2. Discussion
         1. Re: CID 16668: A member commented that the resolution may be an implementation issue and asked for more discussion. 🡪 CID 16668 deferred.
         2. CID 16475 also deferred.
      3. **Straw Poll: Do you agree to resolutions to CIDs 17142, 16753, 16754, 16475, 16064, 16755, 16347, 16016 and 16668 in doc 11-18/1455r1?**
         1. **Result: Resolutions to CIDs written in black are approved with no objection.**
   3. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs related to Random Access,” based on the submission 11-18-1266-02.**
      1. Summary
         1. Resolutions for the following comments on OFDM Random Access are proposed:
            1. Relevant CIDs: 17124, 17125, 16506, 16498, 16507, 16539, 16538, 15091, 15686, 15092, 15109, 16545, 15111, 15812, 15114, 15112, 15113, 15813, 16544, 16546, 16468, 15872, 17103, 15057, and 15060.
         2. Presentation was interrupted @ 11:43 AM.
3. **Recess @ 11:43 AM until 13:00.**

Lunch Break

1. Meeting reconvened @ 13:10.
2. **Comment Resolution**
   1. **Abhishek Patil (Qualcomm) continued his presentation of 11-18-1266-01.**
      1. Discussion
         1. Re: CID 16507: People discussed the mandatory behaviour of an HE STA.
         2. Re: CID 15057: The UORA needs more work to facilitate the active scanning procedure.
      2. **Straw Poll: Do you agree to resolutions to CIDs 17124, 17125, 16506, 16498, 16507, 16539, 16538, 15091, 15686, 15092, 15109, 16545, 15111, 15812, 15114, 15112, 15113, 15813, 16544, 16546, 16468, 15872, 17103, 15057 and 15060 in doc 11-18/1266r2?**
         1. **Result: Resolutions to CIDs other than 16507 and 15057 are accepted with no objection.**
   2. **Jarkko Kneckt (Apple) presented “OM Control Comment Resolutions,” based on the submission 11-18-1246-02.**
      1. Summary
         1. Resolution for the following OM Control related comments are proposed.
            1. CIDs: 15010, 15011, 15105, 15173, 15372, 15734, 15735, 15736, 15737, 15766, 15864, 15865, 15990, 16615, 16188, 16362, 16488, 16489, 17016, 17017, 17031, 17033 and 17034.
      2. Discussion
         1. CID 16602 has been already resolved by other submission.
         2. Some CIDs such as 15990 and 12033 are deferred for more discussion..
         3. Re: CID 15735: The resolution for this CID is changed and the related part of the proposed text is updated.
         4. Re: CID 15011: People discussed proposed removal of a Table in the draft.
      3. Next Step
         1. Jarkko to have more offline discussion.
3. **Recess @ 15:22 until 15:52.**

Afternoon Break

1. **Comment Resolution**
   1. **Po-Kai Huang (Intel) presented “11ax D3.0 MAC Comment Resolution for NAV – Part I,” based on the updated submission 11-18-1189-04.**
      1. Summary
         1. Po-Kai updated the document. Changes are basically editorial.
      2. Discussion
         1. No discussion.
      3. **Straw Poll: Do you agree to resolutions to CIDs 15868, 16048, 15869, 16438, 16437, 16027, 16029, 16030, 16215, 16938 and 16422 in doc 11-18/1189r4?**
         1. **Result: Accepted with no objection.**
   2. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs related to Multiple BSSID,” based on the submission 11-18-1320-01.**
      1. Summary
         1. Resolutions for the following comments received for TGax LB233 on Multiple BSSID are proposed.
            1. CIDs: 15054, 15058, 15082, 16129, 16586, 16587, 15056, 16590, 16591, and 16589.
      2. Discussion
         1. Re: CID 15056: Some people are concerned by the use of a technical term “fragment” which means different think from traditional fragmentation of the 802.11 Std.
         2. People had a long discussion on the Multi-BSSID related IE in a Beacon.
      3. **Straw Poll: Do you agree to resolutions to CIDs 15054, 15058, 15082, 16129, 16586, 16587, 15056, 16590, 16591 and 16589 in doc 11-18/1320r4?**
         1. **Result: Resolutions of CIDs written in black are approved with no objection.**
2. **AoB**
   1. Nobody is ready to present.
3. **Recess @ 17:22 until 9:00 AM tomorrow.**
4. **List of Attendees**

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|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Alfred Asterjadhi | Qualcomm |
| 3 | Stephane Baron | Canon Research |
| 4 | Laurent Cariou | Intel |
| 5 | Liwen Chu | Marvell Semiconductors |
| 6 | Sean Coffey | RealTek |
| 7 | Matthew Fischer | Broadcom Ltd. |
| 8 | Ming Gan | Huawei Technologies |
| 9 | Chunyu Hu | Broadcom Ltd. |
| 10 | Po-Kai Huang | Intel |
| 11 | Yasuhiko Inoue | NTT |
| 12 | Jarkko Knect | Apple |
| 13 | Zhou Lan | Broadcom Ltd. |
| 14 | Wook Bong Lee | Samsung |
| 15 | Guoqing Li | Apple |
| 16 | Yunbo Li | Huawei Technologies |
| 17 | Kaiying Lv | ZTE |
| 18 | Pooya Monajemi | Cisco Systems |
| 19 | Sharan Naribele | Samsung |
| 20 | Kome Oteri | InbterDigital |
| 21 | Abhishek Patil | Qualcomm |
| 22 | Al Petrick | InterDigital Communications |
| 23 | Kiseon Ryu | LG Electronics |
| 24 | Sangho Seo | Cypress |
| 25 | Yongho Seok | MediaTek |
| 26 | Robert Stacey | Intel |
| 27 | Paul Strauch | Cypress |
| 28 | Pascal Vigar | Canon Research |
| 29 | Huizhao Wang | Quantenna Communications |
| 30 | Tianyu Wu | Samsung |
| 31 | James Yee | MediaTek |
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**Thursday, September 7th, 2018 TGax (MAC, MU, SR) ad hoc meeting September 2018 - Day 3**

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 9:03 AM (local time).**
   1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies), the TGax secretary, Yasuhiko Inoue (NTT).
   2. Agenda: 11-18-1372-03
2. **Agenda for the Thursday September 06 TGax ad hoc meeting**
   1. Proposed agenda
      1. Call meeting to order
      2. Patent policy, etc.
      3. Announcements
      4. Call for submissions
      5. Set agenda
      6. Presentations and Comment Resolution
      7. Adjourn
   2. Schedule of the day
      1. 9:00 – 9:05 Call the meeting to order and IPR Slides
      2. 9:05 – 10:30 Comment Resolution
      3. 10:30 – 10:40 Break
      4. 10:40 – 11:45 Comment Resolution
      5. 11:45 – 12:45 Lunch
      6. 12:45 – 2:30 Comment Resolution
      7. 2:30 – 2:45 Break
      8. 2:45 – 4:00 Comment Resolution
      9. 4:00 Adjourn
   3. Approval of the agenda
      1. Chair asked if there is any item to add to the agenda. 🡪 No item to add to the agenda.
      2. Chair asked if there is any objection to approve the agenda. 🡪 No objection.
   4. The agenda was approved.
3. **Announcement**
   1. Chair reminded that we are still operating under the IEEE-SA and IEEE 802 Policies and Procedures.
4. **Review Progress of Yesterday**
   1. 11-18/1458 (Pascal Viger) – SP deferred. To be discussed this afternoon.
   2. 11-18/1455 (Abhishek Patil) – CIDs except 16475 and 16668 are accepted.
   3. 11-18/1266 (Abhishek Patil) – CIDs except 16507 and 15057 are accepted. Two CIDs are deferred for more discussion.
   4. 11-18/1246 (Jarkko Kneckt) – SP was deferred.
   5. 11-18/1320 (Abhishek Patil) – CIDs 16586, 16587, 15056, 16590, 16591, and 16589 are deferred. Resolutions for the other CIDs are accepted.
5. **Comment Resolutions**
   1. **Yongho Seok (MediaTek) presented “A-Control subfield,” based on the submission 11-18-1504-00.**
      1. Discussion
         1. People discussed the meaning of Queue Size High, Queue Size All and Scaling Factor subfields in the BSR Control.
         2. Re: CID 16441: Another participant has a related submission.
         3. CID 16448: A member requested deferral of this CID.
         4. Re: CID 16738: Some people disagreed with the resolution saying the comment fails to identify a specific technical issue since the comment is very specific about a technical issue.
      2. **Straw Poll: Do you agree to comment resolutions to CIDs 15008, 16740, 16645, 16741, 15009, 15863, 17030, 16742, 17146, 15866, 16913, 16914, 16441, 16448, 16738, 17065 (16 CIDs) in doc 11-18/1504r1?**
         1. **Result: Resolutions to CIDs written in black are approved with no objection.**
      3. Next Step
         1. Yongho will come back with updated resolutions for the deferred CIDs.
   2. **Zhou Lan (Broadcom Ltd.) presented “11ax D3.0 MAC Comment Resolution for Bandwidth Queue Report,” based on the submission 11-18-1515-00.**
      1. Summary
         1. Resolutions for comments of TGax Draft D3.0 with the following CIDs are proposed:
            1. CIDs: 15071, 15074, 15075, 15078, 15680, 16547.
      2. Discussion
         1. .
      3. **Straw Poll: Do you agree to resolutions to CIDs 15071, 15074, 15075, 15078, 15680, 16547 in doc 11-18/1515r1?**
         1. **Result: Accepted with no objection.**
   3. **Zhou Lan (Broadcom Ltd.) presented “11ax D3.0 MAC Comment Resolution for Bandwidth Queue Report,” based on the submission 11-18-1516-00.**
      1. Discussion
         1. Resolutions for CIDs 15867 and 16543 on Bandwidth Query Report Poll are proposed.
      2. Next Step
         1. CID 15867: A member asked for deferral of this CID for more offline discussion.
      3. **Straw Poll: Do you accept resolutions to CIDs 16543 and 15867 in doc 11-18/1516r0?**
         1. **Result: No objection to resolution of CID 16543.**
6. **Recess @ 10:35 AM until 10:45 AM.**

10 minutes Break (from 10:35 AM to 10:45 AM)

1. **Meeting reconvened @ 10:45 AM**
2. **Comment Resolution**
   1. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 9.4.2.200,” based on the submission 11-18-1465-00.**
      1. Summary
         1. Resolutions for comments related to TGax D3.0 with the following CIDs on subclause 9.4.2.200 are proposed.
            1. CIDs

15025, 15026, 15027, 15030, 15031, 15032, 15242, 15243, 15880, 15881, 15882, 15883, 16436, 16445, 16459, 16460, 16461

* + 1. Discussion
       1. Re: CID 15026: People discussed the TWT Protection.
       2. CIDs 15027 and 16461 are deferred for more offline discussion.
    2. **Straw Poll： Do you accept resolutions to CIDs 15025, 15026, 15027, 15030, 15031, 15032, 15242, 15243, 15880, 15881, 15882, 15883, 16436, 16445, 16459, 16460, 16461 in doc 11-18/1465r1?**
       1. **Result: No objection to the resolutions to the CIDsnwritten in black.**
  1. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 10.43.1,” based on the submission 11-18-1466-00.**
     1. Summary
        1. Resolutions for comments related to TGax D3.0 with the following CIDs 15290, 15291, 15292.
     2. Discussion
        1. No discussion.
     3. **Straw Poll: Do you agree to resolutions to CIDs 15290, 15291, and 15292 in doc 11-18/1466r0?**
        1. **Result: Accepted with no objection.**
  2. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 27.16.1 not related to 6 GHz band,” based on the submission 11-18-1467-00.**
     1. Summary
        1. Resolutions for the following comments related to TGax D3.0 on subclause 27.16.1 with the following CIDs (9 CIDs):
           1. CIDs: 15414, 15415, 15416, 16039, 16074, 16227, 16251 16690, 17090.
     2. Discussion
        1. No discussion. Just minor update 🡪 r1.
     3. **Straw Poll: Do you agree to resolutions to CIDs 15414, 15415, 15416, 16039, 16074, 16227, 16251 16690, 17090 in doc 11-18/1467r1?**
        1. **Result: Accepted with no objection.**

1. **Recess @ 11:45 AM until 12:45 AM.**

Lunch Break (from 11:45 AM to 12:45 PM)

1. **Meeting reconvened @ 12:45 AM**
2. **Comment Resolution**
   1. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 27.7.7,” based on the submission 11-18-1468-00.**
      1. Summary
         1. . Resolutions for the comments related to TGax D3.0 on subclause 27.7.7 (HE subchannel selective transmission operation) with the following CIDs (5 CIDs):
            1. CIDs: 15696, 15914, 16462, 17047, 17143.
      2. Discussion
         1. .CIDs 15696 and 17143 are deferred for more offline discussion. Other CIDs are okay.
      3. **Straw Poll: Do you accept resolutions to CIDs 15696, 15914, 16462, 17047 and 17143 in doc 11-18/1468r1?**
         1. **Result: Resolutions to CIDs written in black are aproved with no objection.**
   2. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 27.7.6,” based on the submission 11-18-1469-00.**
      1. Summary
         1. .Resolutions for the comment related to TGax D3.0, subclause 27.7.6 (Negotiation of wake TBTT and wake interval) with CID 16466 is proposed.
      2. Discussion
         1. .People discussed meanings of some technical terms such as Suggest TWT and Demand TWT.
      3. **Straw Poll: Do you a accept resolution to CID 16466 in doc 11-18/1469r1?**
         1. **Result: Accepted with no objection.**
   3. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 27.7.5,” based on the submission 11-18-1470-00.**
      1. Summary
         1. . Resolutions for the comment related to subclause 27.7.5 (Power save operation during TWT SPs) of TGax D3.0 with CID 15103 is proposed.
      2. Discussion
         1. .No discussion.
      3. **Straw Poll: Do you accept resolution to CID 15103 in doc 11-18/1470r0?**
         1. **Result: Accepted with no objection.**
   4. **Laurent Cariou (Intel) presented “CR for OPS,” based on the submission 11-18-1497-00.**
      1. Summary
         1. . Resolutions for the comments related to OPS of TGax D3.0 with following CIDs:
            1. CIDs: 17000, 15022, 17025, 15877, 15878, 17027, 15816, 15821, 15180, 15115, 15117, 15169, 16469, 15170, 15171, 17026, 15730, 15172, 16470, 16471, 15116, 16473, 15118, 16474, 15822, 15167 and 15168.
      2. Discussion
         1. .CID 15730: Deferred for more discussion.
      3. **Straw Poll: Do you accept resolutions to CIDs 17000, 15022, 17025, 15877, 15878, 17027, 15816, 15821, 15180, 15115, 15117, 15169, 16469, 15170, 15171, 17026, 15730, 15172, 16470, 16471, 15116, 16473, 15118, 16474, 15822, 15167 and 15168 in doc 11-18/1497r1?**
         1. **Result: Resolutions written in black are approved with no objection.**
   5. **Po-Kai Huang (Intel) presented “11ax D3.0 MAC Comment Resolution for Multiple BSSID,” based on the submission 11-18-1508-00.**
      1. Summary
         1. . Resolutions for comments on Multiple BSSID of the TGax Draft D3.0 with the CID 16588 is proposed.
      2. Discussion
         1. .This comment relates to 6 GHz band and will be discussed during the TGax session next week.
      3. **Straw Poll: Do you accept resolution to CID 16588 in doc 11-18/1508r0?**
         1. **Result: This submission is related to 6 GHz and will be considered next week with the other related submissions.**
   6. **Pascal Vigar (Canon Research) presented “11ax D3.0 MAC Comment Resolution for Random Access with multiple BSS,” based on the updated submission 11-18-1458-03.**
      1. Summary
         1. .Document 11-18-1458 is updated.
      2. Discussion
         1. .A member commented that the OFDMA random access under multiple BSSID setting is allowed in current spec and he is not happy with the suggested changes.
         2. Straw poll is conducted.
      3. **Straw Poll: Which option do you prefer?**
         1. **Option 1) The solution in r2 of the submission – single TF with BSS specific RA-RUs.**
         2. **Option 2) The solution in r3 of the same submission. R2 + one RA-RU for ALL STAs of the BSS set (AID12=2047)**
         3. **Option 3) None of the above (may have a note for DL MU PPDU)**
         4. **Result: Option 1/Option 2/Option 3 = 3/0/9.**
3. **Recess @ 14:26 until 14:40.**

Break (from 14:26 to 14:40)

1. **Meeting reconvened @ 14:40.**
2. **Comment Resolution**
   1. **Abhishek Patil (Qualcomm) presented “,” based on the updated submission 11-18-1266-03.**
      1. Summary
         1. Abhishek presented updated version of 11-18-1266.
         2. The resolutions for CID 16507 and 15057 are updated.
         3. The CID 16540 is added to the document.
      2. Discussion
         1. No further discussion
      3. **Straw Poll on the three CIDs: Do you agree to resolutions to CIDs 16507, 15057, and 16540 in doc 11-18/1266r4?**
         1. **Result: No objection.**
   2. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs related to Multiple BSSID,” based on the updated submission 11-18-1320-03.**
      1. Summary
         1. Document 11-18-1320 is updated.
         2. Abhishek explained the updates from the previous version.
      2. Discussion
         1. A member suggested removal of duplicated text.
         2. CIDs 16586, 16587 and 16589 need further discussion.
      3. **Straw Poll: Do you agree to resolutions to CIDs 15056, 16590 and 16591 in doc 11-18/1320r4?**
         1. **Result: Approved with no objection.**
   3. **Ming Gan (Huawei Technology) presented “LB233 CR on MU Cascading,” based on the submission 11-18-1512-00.**
      1. Summary
         1. Resolutions of comments received from TGax LB233 on MU Cascading are proposed.
            1. CIDs: 16076, 16702 and 16869 (3 CIDs)
      2. Discussion
         1. No discussion.
      3. **Straw Poll: Do you agree to resolutions to CIDs 16076, 16702, 16869 (3 CIDs) in doc 11-18/1512r0?**
         1. **Result: Approved with no objection.**
   4. **Laurent Cariou (Intel) presented “CR for OBSS\_PD,” based on the submission 11-18-1495-01.**
      1. Summary
         1. Laurent presented the updated version of 11-18/1495.
            1. Relevant CIDs: 15898, 16499, 15702, 15704, 15653, 15655, 15738, 15656, 15739, 15740, 17127, 15847, 15741, 15175, 15742, 15699, 17133, 17076, 15176, 16757, 17134, 15652, 15657, 15744, 16758, 17131, 16037, 16226, 16464, 15581, 15589, 15591, 16512, 16761, 16762, 16513, 17014, 15761, 16515, 16514, 16516, 15745, 15746, 15781, 15709, 15713, 15714, 15715, 16759, 16760 and 16411.
      2. Discussion
         1. CIDs 16759, 16760 and 16411 are added to document.
         2. People are still concerned by the spec of TxPWR = 25 dBm and asked where from this value came.
      3. **Straw Poll: Do you agree to resolutions to CIDs 15898, 16499, 15702, 15704, 15653, 15655, 15738, 15656, 15739, 15740, 17127, 15847, 15741, 15175, 15742, 15699, 17133, 17076, 15176, 16757, 17134, 15652, 15657, 15744, 16758, 17131, 16037, 16226, 16464, 15581, 15589, 15591, 16512, 16761, 16762, 16513, 17014, 15761, 16515, 16514, 16516, 15745, 15746, 15781, 15707, 15709, 15713, 15714 and 15715 in doc 11-18/1495r1?**
         1. **Result: Resolutions CIDs written in black are approved with no objection.**
3. **AoB**
   1. TGax ad hoc in November 2018 will be discussed next week.
4. **Adjournment**
   1. **TGax ad hoc meeting September 2018 adjourned @ 16:00 (PT).**
5. **List of the attendees**

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|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Alfred Asterjadhi | Qualcomm |
| 3 | Stephane Baron | Canon Research |
| 4 | Laurent Cariou | Intel |
| 5 | Liwen Chu | Marvell Semiconductors |
| 6 | Matthew Fischer | Broadcom Ltd. |
| 7 | Ming Gan | Huawei Technologies |
| 8 | Chunyu Hu | Broadcom Ltd. |
| 9 | Po-Kai Huang | Intel |
| 10 | Yasuhiko Inoue | NTT |
| 11 | Jarkko Knect | Apple |
| 12 | Zhou Lan | Broadcom Ltd. |
| 13 | Guoqing Li | Apple |
| 14 | Yunbo Li | Huawei Technologies |
| 15 | Kaiying Lv | ZTE |
| 16 | Hiroshi Mano | Koden-TI |
| 17 | Pooya Monajemi | Cisco Systems |
| 18 | Abhishek Patil | Qualcomm |
| 19 | Al Petrick | InterDigital Communications |
| 20 | Ashok Ranganath | Samsung |
| 21 | Kiseon Ryu | LG Electronics |
| 22 | Sangho Seo | Cypress |
| 23 | Yongho Seok | MediaTek |
| 24 | Pascal Vigar | Canon Research |
| 25 | Huizhao Wang | Quantenna Communications |
| 26 | Tianyu Wu | Samsung |
| 27 | James Yee | MediaTek |
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