IEEE P802.11  
Wireless LANs

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| TGax November 2018 Bangkok Meeting Minutes | | | | |
| Date: 2018-12-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Yasuhiko Inoue | NTT | 1-1 Hikaro-no-oka, Yokosuka, Kanagawa 239-0847 Japan | ++81-46-859-5097 | inoue.yasuhiko@lab.ntt.co.jp |
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Abstract

This document contains minutes of TGax November 2018 Bangkok Meeting.

Minutes from TGax ad hoc sessions are contained in separate documents.

* TGax PHY ad hoc: [November 2018 Bangkok PHY Ad Hoc Meeting Minutes](https://mentor.ieee.org/802.11/dcn/18/11-18-2024-00-00ax-bangkok-phy-ad-hoc-minutes.docx)
* TGax MAC ad hoc: [Minutes of TGax MAC ad hoc meeting November 2018 in Bangkok](https://mentor.ieee.org/802.11/dcn/18/11-18-2008-00-00ax-minutes-of-tgax-ad-hoc-mac-mu-sr-november-2018-in-bangkok.docx)

Rev. 0: Initial version.

**IEEE 802.11 Task Group AX,**

**The High Efficiency WLAN Standardization Task Group**

**November 2018 Bangkok Meeting**

**Bangkok Marriott Marquis Queen’s Park, Bangkok, Thailand**

**November 11th – 16th, 2018**

**Chair Osama Aboul-Magd (Huawei Technologies)**

**1st Vice-Chair Ron Porat (Broadcom Ltd.)**

**2nd Vice-Chair Alfred Asterjadhi (Qualcomm)**

**Secretary Yasuhiko Inoue (NTT Corporation)**

**Technical Editor Robert Stacey (Intel Corporation)**

# Monday, November 11th, 2018, 8:00 – 10:00, TGax ad hoc session

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 8:00 AM (local time).**
   1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies) and the TGax secretary, Yasuhiko Inoue (NTT).
   2. Agenda: 11-18-1715-01 is on the server.
2. **Announcement**
   1. This is a TGax ad hoc meeting. No motion will be taken.
   2. Please announce your affiliation when you first address the group during a meeting slot.
   3. Do NOT forget the attendance! (http://newton.meeting.verilan.com/)
3. **Agenda Setting**
   1. Proposed agenda for Monday AM1 (ad hoc meeting)
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Call for submissions and ad hoc time allocation
      4. Editor Report – Robert Stacey
      5. 6 GHz discussion
      6. Comment Assignment (if necessary)
      7. Presentations and Comment Resolution
      8. Adjourn
   2. Chair asked if there is any item to add to the agenda. 🡪 No response.
      1. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
      2. The agenda was approved.
4. **IEEE-SA 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 - done.
5. **Call for submissions and ad hoc meeting time allocation**
   1. Slides 13 and 14 of the agenda contain the general flow of the meeting this week.
      1. TGax meeting schedule for November 2018:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Monday** | **Tuesday** | | **Wednesday** | | **Thursday** |
| AM1 | TGax  (ad hoc) | TGax  ad hoc | TGax  ad hoc | TGax | | TGax |
| AM2 | WG Opening Plrnary | TGax  ad hoc | TGax  ad hoc | WG Mid-week Plenary | | TGax |
| PM1 |  |  | | TGax  ad hoc | TGax  ad hoc |  |
| PM2 | TGax | TGax  ad hoc | TGax  ad hoc |  | |  |
| PM3  (EVE) | Tutorial | TGax  ad hoc | TGax  ad hoc |  | |  |

1. **Call for submissions and ad hoc meeting scheduling**
   1. PHY submissions
      1. 11-18-1363, “CD for CID 16597,” Po-Kai Huang (Intel)
      2. 11-18-1432, “Doze Transition Signaling,” Matthew Fischer (Broadcom Ltd.)
      3. 11-18-1454, “Figure 27-12,” Abhishek Patil (Qualcomm)
      4. 11-18-1492, “Remaining PHY Math comment resolutions,” Yan Zhang (Marvell Semiconductor)
      5. 11-18-1500, “CR for 6 GHz – 6 GHz Map,” Laurent Cariou (Intel)
      6. 11-18-1503, “LB233 CR TUA Access Delay,” Yongho Seok (MediaTek)
      7. 11-18-1507, “11ax D3.0 MAC Comment Resolution for Co-located BSS,” Po-Kai Huang (Intel)
      8. 11-18-1508, “11ax D3.0 MAC Comment Resolution for Multiple BSSID,” Po-Kai Huang (Intel)
      9. 11-18-1519, “11ax D3.0 MAC Comment Resolution for Control response,” Robert Stacey (Intel)
      10. 11-18-1531, “Spatial Reuse DSC and TPC,” Graham Smith (SR Technologies)
      11. 11-18-1532, “TGax Coexistence Assurance Document Comments,” Eldad Perahia (HP Enterprize)
      12. 11-18-1534, “CR for PPDU formats,” Tianyu Wu (Samsung)
      13. 11-18-1734, “PHY subcarriers and RU part 2,” Yujin Noh (Newracom)
      14. 11-18-1735, “CR on PHY Intro,” Yujin Noh (Newracom)
      15. 11-18-1759, “Comment Resolutions for xVECTORs,” Bo Sun (ZTE)
      16. 11-18-1762, “CR PHY Introduction,” Lochan Verma (Qualcomm)
      17. 11-18-1764, “HE-SIG CR Part6,” Ross Jian Yu (Huawei Technologies)
      18. 11-18-1767, “CR PHY Miscellaneous,” Lochan Verma (Qualcomm)
      19. 11-18-1790, “CR on PHY Miscellaneous,” Yujin Noh (Newracom)
      20. 11-18-1832, “D3.0 Comment Resolution on CID for 28.4.3,” Jianhan Liu (MediaTek)
      21. 11-18-1841, “Comment Resolution on PHY Introduction,” Bin Tian (Qualcomm)
      22. 11-18-1842, “Comment Resolution on PHY Miscellaneous,” Bin Tian (Qualcomm)
      23. 11-18-1848, “CID 17100,” Youhan Kim (Qualcomm)
      24. 11-18-1849, “D3.0 Comment Resolution Part 3,” Youhan Kim (Qualcomm)
      25. 11-18-1850, “D3.0 Comment Resolution Part 4,” Youhan Kim (Qualcomm)
      26. 11-18-1891, “Discussions on Trigger Frame MAC Padding,” Hongyuan Zhang (Marvell Semiconductor)
      27. 11-18-1906, “Comment Resolution on Trigger Frame MAC Padding,” Hongyuan Zhang (Marvell Semiconductor)
      28. 11-18-1907, “Comment Resolution of MU-CTS Scrambling,” Hongyuan Zhang (Marvell Semiconductor)
      29. 11-18-1980, “D3.0 CR for PHY Misc,” Tianyu Wu (Samsung)
      30. 11-18-2007, Changes to D3.0 “,” Xiaogang Chen (Intel)
      31. 11-18-2017, “PHY Remaining CSD,” Bin Tian (Qualcomm)
      32. 11-18-2019, “Resolution for SIG\_B\_Compression\_Mode definition in TxVector,” Jerome Vanthournout (CEVA-DSP)
      33. 11-18-2023, “Comment Resolution on CID 16768,” Jianhan Liu (MediaTek)
   2. MAC submissions
      1. 11-18-0218, “Fragment Flushing BlockAckReq,” Matthew Fischer (Broadcom Ltd.)
      2. 11-18-1454, “Figure 27-12,” Abhishek Patil (Qualcomm)
      3. 11-18-1471, “Comment resolutions for 27.16.1 related to 6 Ghz band,” Alfred Asterjadhi (Qualcomm)
      4. 11-18-1472, “Comment resolutions for 27.7.4,” Alfred Asterjadhi (Qualcomm)
      5. 11-18-1473, “Comment resolutions for miscellaneous CIDs – Part 1,” Alfred Asterjadhi (Qualcomm)
      6. 11-18-1474, “Comment resolutions for 27.7.2,” Alfred Asterjadhi (Qualcomm)
      7. 11-18-1487, “11ax D3.0 Comment Resolution 27.5.3.2.3,” Liwen Chu (Marvell Semiconductor)
      8. 11-18-1488, “11ax D3.0 Comment Resolution 27.5.3.4,” Liwen Chu (Marvell Semiconductor)
      9. 11-18-1498, “CR for 27.5.6,” Laurent Cariou (Intel)
      10. 11-18-1505, “LB233 CR MAC TXVECTOR,” Yongho Seok (MediaTek)
      11. 11-18-1506, “LB233 CR ER Beacon,” Yongho Seok (MediaTek)
      12. 11-18-1508, “CR for multiple BSSID,” Po-Kai Huang (Intel)
      13. 11-18-1696, “Comment resolutions for 9.6.25,” Alfred Asterjadhi (Qualcomm)
      14. 11-18-1697, “Comment resolutions for 27.7.3,” Alfred Asterjadhi (Qualcomm)
      15. 11-18-1698, “Comment resolutions for miscellaneous CIDs part 2,” Alfred Asterjadhi (Qualcomm)
      16. 11-18-1699, “Comment resolutions for subclause 9.2.4,” Alfred Asterjadhi (Qualcomm)
      17. 11-18-1703, “Resolution to CID 17150,” Tomoko Adachi (Toshiba)
      18. 11-18-1733, “CID 16364 on Packet Extension,” Yujin Noh (Newracom)
      19. 11-18-1774, “Resolution to CID 16624 (HE-SIG-B),” Brian Hart (Cisco Systems)
      20. 11-18-1775, “Comment resolutions for miscellaneous – Part 3,” Alfred Asterjadhi (Qualcomm)
      21. 11-18-1777, “Ack-related CIDs remaining,” George Cherian (Qualcomm)
      22. 11-18-1778, “LB233 CR subclause 27.15.2 and 27.15.3,” Yongho Seok (MediaTek)
      23. 11-18-1779, “LB233 CR Transmit Power Control,” Yongho Seok (MediaTek)
      24. 11-18-1780, “LB233 CR MAC Miscellaneous,” Yongho Seok (MediaTek)
      25. 11-18-1799, “CR for 16668,” Po-Kai Huang (Intel)
      26. 11-18-1800, “CR for Miscelaneous CIDs,” Po-Kai Huang (Intel)
      27. 11-18-1807, “Proposed Resolutions for Miscellaneous CIDs,” Yasuhiko Inoue (NTT)
      28. 11-18-1808, “Proposed Resolutions for CIDs related to HE MAC Capabilities,” Yasuhiko Inoue (NTT)
      29. 11-18-1814, “Resolution for CIDs related to Multiple BSSID – Part 2,” Abhishek Patil (Qualcomm)
      30. 11-18-1815, “Miscellaneous CIDs,” Abhishek Patil (Qualcomm)
      31. 11-18-1816, “CID 16668,” Abhishek Patil (Qualcomm)
      32. 11-18-1817, “Figure 9-63j1,” Abhishek Patil (Qualcomm)
      33. 11-18-1820, “Doze Transition Signaling MoreData,” Matthew Fischer (Broadcom Ltd.)
      34. 11-18-1821, “Maximum RX PPDU Duration Signaling,” Matthew Fischer (Broadcom Ltd.)
      35. 11-18-1822, “Temporarily Limited Connection,” Matthew Fischer (Broadcom Ltd.)
      36. 11-18-1830, “CR for TSPEC,” Jarkko Kneckt (Apple)
      37. 11-18-1831, “OMI comment resolution,” Jarkko Kneckt (Apple)
      38. 11-18-1844, “LB233 CR on Fragmentation,” Ming Gan (Huawei Technologies)
      39. 11-18-1851, “Resolutions to comments to subclause 9.3.1.9,” Tomoko Adachi (Toshiba)
      40. 11-18-1852, “General and Annex G Comment Resolution,” Osama Aboul-Magd (Huawei Technologies)
      41. 11-18-1853, “Resolutions to comments to subclauses 10.3.7, 3.1, 3.2, and 27.5.1.1,” Tomoko Adachi (Toshiba)
      42. 11-18-1855, “Comments Resolution – 27.16.4,” Chao-Chun Wang (MediaTek)
      43. 11-18-1856, “11ax D3.0 Comment Resolution 9.7.1,” Liwen Chu (Marvell)
      44. 11-18-1857, “11ax D3.0 Comment Resolution 27.10.1 27.10.3” Liwen Chu (Marvell)
      45. 11-18-1858, “11ax D3.0 Comment Resolution 9.7.3,” Liwen Chu (Marvell)
      46. 11-18-1859, “11ax D3.0 Comment Resolution 27.10.4,” Liwen Chu (Marvell)
      47. 11-18-1867, “CR for OPS 2,” Laurent Cariou (Intel)
      48. 11-18-1868, “CR for Clause 4,” Guoqing Li (Apple)
      49. 11-18-1876, “Resolutions to Miscellaneous MAC Comments,” Osama Aboul-Magd (HuaweiTechnoloies)
      50. 11-18-1887, “11ax D3.2 MAC Comment Resolution for Section 27.5,” Zhou Lan (Broadcom Ltd.)
      51. 11-18-1900, “11ax D3.2 MAC Comment Resolution for Section 27.7.7,” Zhou Lan (Broadcom Ltd.)
      52. 11-18-1901, “D3.0 Comment Resolution – Part 5,” Youhan Kim (Qualcomm)
      53. 11-18-1921, “11ax D3.0 sounding comments,” Menzo Wentink (Qualcomm)
      54. 11-18-1932, “Proposed Resolutions to Miscs PHY and MAC CIDs,” Peter Loc (Huawei Technologies)
      55. 11-18-1935, “Resolutions to CIDs 15935 and 16150,” Osama Aboul-Magd (Huawei Technologies)
      56. 11-18-1939, “Comment resolution on MIBs – part 1,” Edward Au (Huawei Technologies)
      57. 11-18-1942, “Comment resolution on PICs,” Edward Au (Huawei Technologies)
      58. 11-18-1944, “Comment resolution on MIBs – part 2,” Edward Au (Huawei Technologies)
      59. 11-18-1958, “CR for CID 16643,” Yunbo Li (Huawei Technologies)
      60. 11-18-1969, “Proposed resolution for CIDs for 27-2-2-Part 2,” Kaiying Lv (ZTE)
      61. 11-18-1975, “11ax D3.0 Comment Resolution 27.5.3.4,” Liwen Chu (Marvell Semiconductor)
      62. 11-18-1987, “D3.0 Comment Resolution on MAC Miscellaneous,” Jae Seung Li (ETRI)
      63. 11-18-1991, “,” Alfred Asterjadhi (Qualcomm)
      64. 11-18-1995, “Resolution for CIDs: 15302, 15906, 16750,” Huizhao Wang (Quantenna)
      65. 11-18-1999, “RTS CTS protection coverage,” Jarkko Kneckt (Apple)
   3. MU submissions
      1. 11-18-1803, “CR on MU-RTS/CTS part II,” Po-Kai Huang (Intel)
      2. 11-18-1812, “Resolution for CIDs related to Random Access – Part 2,” Abhishek Patil (Qualcomm)
   4. SR submissions
      1. 11-18-1866, “CR for OBSS\_PD 2,” Laurent Cariou (Intel)
   5. TG submissions
      1. 11-18-0496, “Disallowed Sub-Channels,” Matthew Fischer (Broadcom Ltd.)
      2. 11-18-1489, “Operation at 6GHz Band,” Liwen Chu (Marvell Semiconductor)
      3. 11-18-1827, “6 GHz operation for 11ax follow up,” Wook Bong Lee (Samsing)
      4. 11-18-1828, “D3.0 CR for 6GHz Post Association,” Wook Bong Lee (Samsing)
      5. 11-18-1922, “Considerations on 6 GHz Discovery,” Thomas Derham (Broadcom Ltd.)
      6. 11-18-1959, “CR for 6GHz – Out-of-band association,” Lauernt Cariou (Intel)
      7. 11-18-1960, “6 GHz – Out-of-band discovery discussion,” Laurent Cariou (Intel)
      8. 11-18-1961, “6 GHz association discussion,” Laurent Cariou (Intel)
   6. TGax meeting schedule
      1. Considering the number of submissions, meeting schedule is decided as follow.

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| --- | --- | --- | --- | --- | --- | --- |
|  | **Monday** | **Tuesday** | | **Wednesday** | | **Thursday** |
| AM1 | TGax  (ad hoc) |  | MAC  ad hoc | TGax | | TGax |
| AM2 | WG Opening Plrnary | PHY  ad hoc | MAC  ad hoc | WG Mid-week Plenary | | TGax |
| PM1 |  |  | | PHY  ad hoc | MAC  ad hoc |  |
| PM2 | TGax | PHY  ad hoc | MAC  ad hoc |  | |  |
| PM3  (EVE) | Tutorial |  | MAC  ad hoc |  | |  |

1. **6 GHz Discussion**
   1. Chair plans to have 6 GHz discussions after Thursday Motions.
2. **Presentation/Comment Resolution**
   1. **Osama Aboul-Magd (Huawei Technologies) presented “Resolutions to CIDs 15935 and 16150,” based on the submission 11-18-1935-00.**
      1. Summary
         1. Resolutions for the following two comments with CID 15935 and 16150 are proposed.
            1. Relevant CIDs: 15935 and 16150
      2. Discussion
         1. (Re: CID 15935) A member commented that MU PPDU is a PHY format. It is DL MU PPDU when transmitted by an AP and is UL MU PPDU otherwise.
         2. Another member mentioned we should be clear what we would like to define. His suggested having a definition of the MU PPDU.
         3. There was an opinion that the technical difference between an HE MU PPDU transmitted by an AP and an HE MU PPDU transmitted by a non-AP STA should be stated.
         4. Group also discussed revising the definition of VHT MU PPDU.
         5. (Re: CID 16150) There was a comment that the resolution for this CID should be changed from “Rejected” to “Revised.”
      3. Next Step
         1. Osama to revise the document considering the result of discussion.
   2. **Yasuhiko Inoue (NTT) presented “Proposed Resolutions for CIDs related to HE MAC Capabilities,” based on the submission 11-18-1808-01.**
      1. Summary
         1. Resolutions for the comments with following CIDs on IEEE 802.11ax D3.0 HE MAC Capabilities are proposed.
            1. Relevant CIDs: 15033, 15034, 15885, 15887
      2. Discussion
         1. (Re: CID 15885) A member mentioned that there are many places to change based on the resolution to this CID and requested more time to check all the modifications are made.
      3. Next Step
         1. Yasu to double check if the necessary changes have been made.
   3. **Yongho Seok (MediaTek) presented “LB233 CR 27.15.2 and 27.15.3,” based on the submission 11-18-1778-01.**
      1. Summary
         1. Resolutions to the comments with following 14 CIDs on 802.11ax D3.0 on subclause 27.15.2 (PPDU format selection) and subclause 27.15.3 (MCS,NSS, BW and DCM selection) are proposed.
            1. Relevant CIDs: 16080, 15119, 16685, 16458, 16126, 16140, 16141, 15799, 16598, 17023, 16687, 16688, 16143, 16689.
      2. Discussion
         1. (Re: CID 16689)
         2. (Re: CID 16143) A member mentioned that the definition of DCM Max BW has been changed during the ad hoc last week.
         3. A member has alternative proposals for the resolutions of CIDs 16687, 16688 and 16689 which are contained in 18/1519r1. 🡪 CID 16687, 16688 and 16689 are deferred.
      3. Next Step
         1. Yongho to revise the document.
3. **AOB**
   1. None.
4. **Adjournment**
   1. TGax ad hoc meeting adjourned @ 9:57 AM.
   2. The next TGax session is in PM2.

# Monday, November 11th, 2018, 16:00 – 18:00, TGax sessions

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 16:00 (local time).**
   1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies) and the TGax secretary Yasuhiko Inoue (NTT)..
   2. Agenda: 11-18-1715-01 is on the server and is the working document. Chair will upload the rev 2 shortly after this session.
2. **Announcement**
   1. Please announce your affiliation when you first address the group during a meeting slot.
   2. Do NOT forget the attendance! (http://newton.meeting.verilan.com/)
3. **Agenda Setting**
   1. Proposed Agenda for Monday PM2
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Submissions and ad hoc groups time allocation.
      4. Summary from September 2018 meeting
      5. TG motions
         1. Approve TG meeting and Telecon minutes since March 2018 meeting.
      6. Timeline
      7. Presentations and Comment Resolution
      8. Recess
   2. Approval of the agenda
      1. Chair asked if there is any objection to proceed with this agenda. – No response.
      2. The agenda was approved.
4. **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
      2. Ways to inform IEEE
         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
      4. Patent-related information
      5. Participation in IEEE 802 Meetings
5. **Summary from September 2018**
   1. Continued with comment resolution
   2. Allocated time for discussing 6 GHz related issues
   3. Had a discussion with 802.15.4 and 802.18 on coexistence issues in 6 GHz.
6. **TG motions**
   1. Approval of TG Minutes (September 2018 Meeting and Teleconferences Mintues)
      1. **Motion: Approve TGax minutes of meetings and teleconferences from September 2018 Interim meeting to today:**
   * <https://mentor.ieee.org/802.11/dcn/18/11-18-1617-00-00ax-tgax-september-2018-waikoloa-meeting-minutes.docx>
   * <https://mentor.ieee.org/802.11/dcn/18/11-18-1517-00-00ax-minutes-of-tgax-ad-hoc-mac-mu-sr-meeting-september-2018-in-san-jose.docx>
   * <https://mentor.ieee.org/802.11/dcn/18/11-18-1657-00-00ax-mac-mu-ad-hoc-september-2018-tgax-meeting-minutes.docx>
   * <https://mentor.ieee.org/802.11/dcn/18/11-18-1682-00-00ax-spatial-reuse-ad-hoc-group-sept-2018-minutes.docx>
   * <https://mentor.ieee.org/802.11/dcn/18/11-18-1568-00-00ax-sept-2018-san-jose-phy-ad-hoc-meeting-minutes.docx>
   * <https://mentor.ieee.org/802.11/dcn/18/11-18-1824-00-00ax-minutes-of-tgax-teleconferences-oct-and-nov-2018.docx>
     1. **Moved by Allan Jones, Seconded by Alan Berkema**
     2. **Discussion – No discussion.**
     3. **Result: The motion was accepted with no objection.**
7. **Timeline**
   1. Current TGax timeline:
      1. **September 2014: start of the TG**
      2. **Nov. 2014: First draft of the TG SFD was approved**
      3. **Jan. 2016: proposed TG draft**
      4. **September 2016: Draft D0.1 was approved and CC started**
      5. **November 2016: Draft 1.0 and WG letter ballot – Failed (57.77%)**
         1. **LB-225: opened Dec. 1st 2016 and closed January 8th 2017**
      6. **September 2017: Draft 2.0 and WG letter ballot – Failed (62.84%)**
         1. **LB-230: opened Oct 5th and closed Nov 4th, 2017**
      7. **May 2018: Draft 3.0 and WG letter Ballot.**
         1. **LB-233: Opened June 1st and closed July 1st, 2018 – Passed (86.5%)**
      8. **~~July November 2018: MDR (Mandatory Document Review) – Currently underway~~**
      9. **November 2018: Draft D4.0 and Recirculation**
      10. **February 2019: Formation of SB pool**
      11. **March 2019: Draft 5.0 and Recirculation (unchanged)**
      12. **~~September May 2019: Sponsor Ballot (Draft D5.0)~~**
      13. **January 2020: RevCom and publication**
   2. We may have a time to discuss the timeline on Thursday.
8. **Presentation and Comment Resolution**
   1. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs in 9.3.1.23,” based on the submission 11-18/1456r1.**
      1. Summary
         1. Resolutions for the comments on the IEEE 802.11ax D3.0 subclause 9.3.1.23 with following CIDs are proposed.
            1. CIDs: 15013, 16194, 16273, 17072, 16380, 16317, 16022, 17104, 15950, 17105, 15873, 15848, 16983, 17106, 16318, 16541, 17035, 17036
      2. Discussion
         1. (Re: CID 16273) The commenter is not happy with the proposed resolution which is “Rejected.” Abhishek to work with the commenter.
         2. (Re: CID 16317) A commenter suggested further modification to the proposed text changes.
         3. (Re: CID 15013) A member suggested modification to the proposed text in 9.3.1.23.4 (MU-RTS variant).
         4. Some other member also have comments. Abhishek to work with them.
   2. **Abhishek Patil (Qualcomm) presented “Resolution for miscellaneous CIDs,” based on the submission 11-18/1815r2.**
      1. Summary
         1. Resolutions for the comments with following CIDs are proposed.
            1. CIDs: 15999, 15998, 15933, 16386, 16847, 16128, 15944, 16611, 15955, 16998, 15943
      2. Discussion
         1. (Re: CID 16386) Group discussed the definition of the “broadcast RU.”
            1. Zhou Lan to take it offline.
         2. (Re: CID 16611) A member suggested editorial fix to the proposed text.
         3. (Re: CID 15943) Clarification and editorial changes suggested by a member.
         4. (Re: CID 15999) Deferred by request from a member.
         5. Need more discussion to come to a agreement.
   3. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs related to Multiple BSSID – Part 2,” based on the submission 11-18/1814r4.**
      1. Summary
         1. Resolutions to the comment with CID 16589 on Multiple-BSSID is proposed.
      2. Discussion
         1. (Re: CID 16589) A member asked for the relationship between this resolution and submission 11-18/1456r1.
      3. **Straw Poll: Do you accept resolution to CID 16589 and the added text in doc 11-18/1814r2?**
         1. **Result: Accepted with no objection.**
   4. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs related to Random Access,” based on the submission 11-18/1812r1.**
      1. Summary
         1. Resolutions for the comments on Random Access with the following CIDs are proposed.
            1. CIDs: 16870, 16498, 16506, 15686
      2. Discussion
         1. (Re: CID 16498 & 16506) These comments have already been resolved, however, Abhishek got some feedback and are reconsidered.
         2. (Re: CID 15686) This one as well.
         3. A member suggested editorial changes.
         4. Another member asked for clarification on the RA-RU and AID 2045.
9. **Time is up!**
   1. We have TGax MAC ad hoc on Tuesday AM1.
   2. Abhishek’s presentation will be continued.
10. **Recess**
    1. TGax is in recess@18:00.
    2. There is TGax MAC ad hoc on Tuesday AM1 session (8:00 – 10:00 AM tomorrow).

# Tuesday, November 13th, 2018, 8:00 – 10:00, TGax ad hoc sessions

* MAC Ad hoc : Chitlada 3

# Tuesday, November 13th, 2018, 10:30 – 12:30, TGax ad hoc sessions

* + Ad hoc #1: PHY 🡪 Chitlada 1
  + Ad hoc #2: MAC 🡪 Chitlada 3

# Tuesday, November 13th, 2018, 16:00 – 18:00 AM, TGax ad hoc sessions

* + Ad hoc #1: PHY 🡪 Chitlada 1
  + Ad hoc #2: MAC 🡪 Chitlada 3

# Tuesday, November 13th, 2018, 19:30 – 21:30 AM, TGax ad hoc sessions

* + Ad hoc #2: MAC 🡪 Chitlada 3

# Wednesday, November 14th, 2018, 8:00 – 10:00 AM, TGax full sessions

1. **Meeting called to order @ 8:01 AM by Osama Aboul-Magd, the TGax chairperson.**
   1. Introduction of the people at the front table.
2. **Reminder/Announcement**
   1. Chair reminded people that we are still operating under the IEEE-SA IPR Policy and Procedure.
   2. Chair asked people to state name and affiliation when speaking for the first time during the session.
   3. Chair reminded people to do the attendance.
3. **Agenda Setting**
   1. Proposed agenda for this session:
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. Progress review from the ad hoc groups
      4. Presentations and Comment Resolution
         1. 11-18/1851, Tomoko Adachi (Toshiba)
         2. 11-18/0496, Matthew Fischer (Broadcom Ltd.)
         3. 11-18/1958, Yunbo Li (Huawei Technologies)
         4. Others (if time allows)
      5. 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 for Tuesday AM2 is approved.
4. **Progress Review**
   1. The volunteers, Youhan Kim and George Cherian, are still checking the contents of the tables.
5. **Comment Resolution**
   1. **Tomoko Adachi (Toshiba) presented “Resolutions to comments to subclause 9.3.1.9,” based on the submission 11-18-1851-01.**
      1. Summary
         1. Resolutions to the comments on IEEE 802.11ax D3.0 subclause 9.3.1.9 with the following CIDs are proposed.
            1. CIDs: 16440, 15012, 15930, 15207, 15870, 15871, 16092, 16093, 16202, 16359, 16371, 16374, 16379, 16391, 17043.
      2. Discussion
         1. (Re: CID 16371) Need more discussion on how to modify the baseline text in the draft related to this CID.
         2. (Re: CID 16379) The commenter is not happy with the proposed changes to the draf. His again requests to remove the reserved field. However, some other members believe current specification is good enough. And a straw poll was proposed.
            1. Straw Poll: Do you support the resolution to CID 16379?

Result: Y/N/A = 53/2/5 🡪 Current resolution will be the consensus.

* + - 1. (Re: CID 16371 and 16374) Requested to be deferred for more discussion.
    1. **Straw Poll: Do you accept resolutions to CIDs 16440, 15012, 15930, 15207, 15870, 15871, 16092, 16093, 16202, 16359, 16371, 16374, 16379, 16391, 17043 in doc 11-18/1851r2?**
       1. **Result: CIDs 16371 and 16374 need further discussion. The rest of the CIDs are ready for motion.**
  1. **Po-Kai Huang (Intel) presented “11ax D3.0 MAC Comment Resolution for ER SU Disable,” based on the submission 11-18-1219-01.**
     1. Summary
        1. The resolution for the comment of TGax Draft D3.0 with CID 16602 is prosed.
     2. Discussion
        1. There was a minor editorial comment. 🡪 Po-Kai updated the text.
     3. Straw Poll: **Do you?**
        1. **Result: Y/N/A = 53/2/5. The straw poll will be converted to a motion.**
  2. **Matthew Fischer (Broadcom Ltd.) presented “Disallowed Sub channels,” based on the submission 11-18-0496-14.**
     1. Summary
        1. Resolutions for the comments on IEEE 802.11ax D3.0 subclause 28.3.16 with following CIDs are proposed.
           1. CIDs: 16723 and 15920
     2. Discussion
        1. A member has some editorial comments and will send them by email.
     3. **Straw Poll: Do you accept to resolutions to CIDs 16723 and 15920 in doc 11-18/0496r14?**
        1. **Result: Accepted with no objection.**
  3. **Yunbo Li (Huawei Technologies) presented “CR for CID 16643,” based on the submission 11-18-1958-02.**
     1. Summary
        1. A resolution to the comment with CID 16643 on 8.3.5.12 PHY-CCA.indication primitive is proposed..
     2. Discussion
        1. A member commented that some subclauses other than 9.4.2.160 and 28.3.17.6.3 in doc. 11-18-1958r2 such as 10.22, 10.24.3.2.3 need to be changed. 🡪 Yunbo to work offline.
  4. **Yongho Seok (MediaTek) presented “LB233 CR 27.15.2 and 27.15.3,” based on the submission 11-18-1778-02.**
     1. Summary
        1. Resolutions to the comments on IEEE 802.11ax D3.0 subclauses 27.15.2 and 27.15.3 with following CIDs are proposed.
           1. CIDs: 16080, 15119, 16685, 16458, 16126, 16140, 16141, 15799, 16598, 17023, 16687, 16688, 16143, 16689 (14 CIDs)
     2. Discussion
        1. (Re: CIDs 16688 and 16689) A member requested to change all “should” statement to “may” statement. There are supportive opinion while some other member mentioned it is not a critical point. 🡪 Yongho proposed a straw poll.
           1. **Straw Poll: Do you support to change “should” to “may”?**

**Result: Y/N/A = 30/18/8.**

* + - 1. (Re: CIDs 16688 and 16689) A member mentioned that change “should” to “may” does not make sense. 🡪 Yongho proposed to transfer these CIDs to another memer (Robert Stacey).
    1. **Robret Stacey (Intel) presented 11-18/1519r1 “11ax D3.0 MAC Comment Resolution for Control response”**
       1. Summary: Resolutions for CID 16687, 16688 and 16689 are proposed.
       2. Discussion: A member commented that the proposal is technically flawed. The TXOP and EIFS settings are broken.
       3. **Straw Poll: Do you accept the resolutions to CIDs 16687, 16688 and 16689 in doc 11-18/1519r1?**
          1. **Result: Y/N/A = 14/24/14. Not enough support.**
       4. **Straw Poll: Do you accept the resolutions to CIDs 16080, 15119, 16685, 16458, 16126, 16140, 16141, 15799, 16598, 17023, 16687, 16688, 16143, 16689 (14 CIDs) in doc 11-18/1778r1?**
          1. **Result: Y/N/A = 49/0/5. 🡪 To be converted to a motion.**
  1. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs in 9.3.1.23,” based on the submission 11-18-1456-02.**
     1. Summary
        1. Resolutions to the comments on IEEE 802.11ax D3.0 subclause 9.3.1.23 with following CIDs are proposed.
           1. CIDs: 15013, 16194, 16273, 17072, 16380, 16317, 16022, 17104, 15950, 17105, 15873, 15848, 16983, 17106, 16318, 16541, 17035, 17036
        2. Abhishek gave an update highlighting the changes.
     2. Discussion
        1. A member mentioned that the Table 9-31g is not clear enough. Need rationale for the proposed changes. 🡪 The changes are based on the comment saying that the Table is not clear.
     3. **Straw Poll: Do you accept resolutions to CIDs 15013, 16194, 16273, 17072, 16380, 16317, 16022, 17104, 15950, 17105, 15873, 15848, 16983, 17106, 16318, 16541, 17035, 17036 in doc 11-18/1456r2?**
        1. **Result: Y/N/A = 9/11/5. Not enough support.**
     4. Discussion
        1. Need more discussion to achieve consensus.

1. **AoB** – none.
2. **Recess** 
   1. **TGax is in recess @ 10:00 AM.**
   2. **PM1 session (13:30)**
   3. **The next TGax full session is on Thursday AM1..**

# Wednesday, November 14th, 2018, 13:30 – 15:30, TGax ad hoc sessions

* MAC Ad hoc : Chitlada 3

# Thursday, November 15th, 2018, 8:00 – 10:00, TGax sessions

1. **Meeting called to order @ 8:00 AM by Osama Aboul-Magd, the TGax chairperson.**
   1. Introduction of the people at the front table.
   2. TGax got an additional time slot in Thursday PM2.
2. **Agenda Setting**
   1. Proposed agenda for today (AM1, AM2 and PM2):
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. TG Motion
      4. CR Submission and motion
      5. PM2
         1. Review unresolved comments and draft resolutions
      6. Ad hoc meeting (if necessary)
      7. Teleconference scheduling
      8. Adjourn
   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 for Tuesday AM2 is approved.
3. **Announcement and Reminder**
   1. Chair reminded people that we are still operating under the IEEE-SA IPR Policy and Procedure.
   2. Chair asked people to state name and affiliation when speaking for the first time during the session.
   3. Chair reminded people to do the attendance.
4. **TG Motions**
   1. **PHY Motions**
      1. **PHY Motion #210: Move to accept the proposed modification proposal to IEEE P802.11ax D3.2 as in 11-18/2019r0**
         1. **Moved by Bin Tian, Seconded by Youhan Kim**
         2. **Discussion**
            1. **A member asked for a count.**
         3. **Result: Y/N/A = 41/0/3, motion passes.**
   2. **CR Motions (PHY)**
      1. **CR Motion #713: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1832r0.**
         1. **CID 16700, 16982**
         2. **Moved by Yongho Seok, Seconded by Bin Tian**
         3. **Discussion**
            1. **A member asked for a count.**
         4. **Result: Y/N/A = 30/0/4, motion passes.**
      2. **CR Motion #714: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1764r0.**
         1. **CID 16179, 15979**
         2. **Moved by Ross Jian Yu, Seconded by Bin Tian**
         3. **Discussion**
            1. **A member asked for a count.**
         4. **Result: Y/N/A = 23/0/3, motion passes.**

***CR Motion from #715 to # are voted together in CR Motion #.***

* + 1. **CR Motion #715: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1735r0.**
       1. **CID 16773, 16572, 15917, 16553, 16554, 16550, 16552, 16724, 16520, 16555, 16705**
    2. **CR Motion #716: Move to accept the proposed comment resolution to the following CIDs without those marked in red and corresponding modification to 11ax spec draft D3.2 as in 11-18/1759r1.**
       1. **CID 16779, 16989, 16229, 16348, 16990, 16830, 15967, 16349, 16262, 16829, 16134, 16051, 16635, 16855, 15951, 16065, 16306, 16778, 16834, 16828, 16736, 16831, 15969, 16780, 16781, 16782, 16784**
    3. **CR Motion #717: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1849r1.**
       1. **CID 17095, 16699, 16025, 15793, 15600, 15601, 16826**
    4. **CR Motion #718: Move to accept the proposed comment resolution to the following CIDs and corresponding modification as in 11-18/1841r1.**
       1. **CID 16259, 16314, 16315, 16341, 16522, 16524, 16726, 16725, 16772, 16774, 16776, 16777, 16964**
    5. **CR Motion #719: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1842r2.**
       1. **CID 15596, 15599, 16189, 16336, 16418, 6838, 16669, 15954, 7102, 16043, 15665, 15980**
    6. **CR Motion #720: Move to accept the proposed comment resolution to the following CID and corresponding modification to 11ax spec draft D3.2 as in 11-18/1534r3.**
       1. **CID 16981**
    7. **CR Motion #721: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1848r1.**
       1. **CID 17100**
    8. **CR Motion #722: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1734r1.**
       1. **CID 16632, 16692, 16693, 16694**
    9. **CR Motion #723: Move to accept the proposed comment resolution to the following CIDs and corresponding modification to 11ax spec draft D3.2 as in 11-18/1790r1.**
       1. **CID 16008, 15626, 16525, 16733, 15465, 16706, 16526, 16528, 16529, 16852, 16843, 16536, 16854, 16853, 16856, 16993, 16871, 15572, 16716, 16717**
    10. **CR Motion #724: Move to accept the proposed comment resolution to the following CID and corresponding modification to 11ax spec draft D3.2 as in 11-18/1759r2.**
        1. **CID 17128**
    11. **CR Motion #725: Move to accept the proposed comment resolution to the following 19 CIDs and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1850r2.**
        1. **CID 15666, 15667, 16002, 15663, 16325, 16323, 16004, 16633, 16376, 16231, 15571, 15574, 15159, 15580, 16823, 15575, 15576, 16824, 16825**
    12. **CR Motion #726: Move to accept the proposed comment resolution to the following CID and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1850r2.**
        1. **CID 15160**
    13. **CR Motion #727: Move to accept the proposed comment resolution to the following 2 CIDs and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1907r0.**
        1. **CID 16014, 16050**
    14. **CR Motion #728: Move to accept the proposed comment resolution to the following CID as in 11-18/2007r0.**
        1. **CID 16363**
    15. **CR Motion #729: Move to accept the proposed comment resolution to the following 2 CIDs and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1980r1.**
        1. **CID 16067, 16846**
    16. **CR Motion #730: Move to accept the proposed comment resolution to the following CID and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1841r2.**
        1. **CID 15660**
    17. **CR Motion #731: Move to accept the proposed comment resolution to the following CID and the corresponding modification proposal to IEEE P802.11ax D3.1 as in 11-18/1733r1.**
        1. **CID 16364**
    18. **CR Motion #732: Move to accept the proposed comment resolution to the following 13 CIDs and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1939r1.**
        1. **CID 15148, 15149, 15150, 15151, 15152, 16244, 16420, 16720, 16112, 16113, 16332, 16333 and 16875**
    19. **CR Motion #733: Move to accept the proposed comment resolution to the following 3 CIDs and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1944r0.**
        1. **CID 16234, 17063, and 17064**
    20. **CR Motion #734: Move to accept the proposed comment resolution to the following 6 CIDs and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/1942r1.**
        1. **CID 15174, 15156, 16928, 16929, 17136 and 17137**
    21. **CR Motion #735: Move to accept the proposed comment resolution to the following 2 CIDs as in 11-18/2017r1.**
        1. **CID 15916, 16775**
    22. **CR Motion #736: Move to accept the proposed comment resolution to the following CID and the corresponding modification proposal to IEEE P802.11ax D3.2 as in 11-18/2023r2.**
        1. **CID 16768**
    23. **CR Motion #737: Move to accept comment resolution motions numbered from715 up to 736.**
        1. **Moved by Bin Tian, Seconded by Abhishek Patil**
        2. **Result: Y/N/A = 30/0/6, motion passes.**
  1. **CR Motions (MAC/MU/SR)**
     1. **CR Motion #738: Move to accept resolutions to CIDs 15799, 16598, 17023, 15800, 16599, 16967, 15801, 16600, 15802, 16601, 16966 in doc 11-18/1181r5.**
        1. **Moved by Po-Kai Huang, Seconded by Abhishek Patil**
        2. **Discussion**
           1. **A member asked for a count.**
        3. **Result: Y/N/A = 32/1/3, motion passes.**

CR Motion from #739 to #745 are considered in CR Motion #746 all together.

* + 1. **CR Motion #739 (Osama Aboul-Magd): Move to accept resolutions to CIDs 16876, 16877, 16878, 16879, 16880, 16881, 16882, 16883, 16884, 16885, 16886, 16887, 16888, 16889, 16890,16891, 16892, 16893, 16894, 16895, 16896, 16897, 16898, 16899, 16900, 16901, 16902, 16903, 16904, 16905 in doc 11-18/1532r2.**
    2. **CR Motion #740 (Osama Aboul-Magd): Move to accept resolutions to CIDs 15183, 16081, 16383, 15912, 16075, 16701, 17054, 17055, and 17056 in doc 11-18/1852r2.**
    3. **CR Motion #741 (Po-Kai Huang): Move to accept resolutions to CIDs 15158, 15803, 15804, 16026, 16041, 16103, 16144, 16160, 16161, 16184, 16211, 16255 in doc 11-18/1800r1.**
    4. **CR Motion #742 (Po-Kai Huang): Move to accept resolution to CID 16668 in doc 11-18/1799r1.**
    5. **CR Motion #743 (Alfred Asterjadhi): Move to accept resolutions to CIDs 16367, 15805, 15806, 16078, 16001, 16000, 16443, 15743, 15839, 16327, 16326, 15884, 15886 in doc 11-18/1775r1.**
    6. **CR Motion #744 (Alfred Asterjadhi): Move to accept resolutions to CIDs 15002, 15036, 15044, 15163, 15903, 16472, 16737, 16490, 16120, 15007, 17111 in doc 11-18/1473r2.**
    7. **CR Motion #745 (Alfred Asterjadhi): Move to accept resolutions to CIDs 15094, 15095, 15849, 16424, 16453, 16961, 16962 in doc 11-18/1474r2.**
    8. **CR Motion #746: Move to accept CR motions from #739 up to #745.**
       1. **Moved by Po-Kai Huang, Seconded by Abhishek Patil**
       2. **Result: Y/N/A = 36/0/3, motion passes.**
    9. **CR Motion #747: Move to accept resolutions to CIDs 15093, 15130, 15131, 15752 15753 and 17048 in doc 11-18/1830r1.**
       1. **Moved by Jarkko Kneckt, Seconded by Guoqing Li**
       2. **Discussion – A member requested for a count.**
       3. **Result: Y/N/A = 36/0/1, motion passes.**
    10. **CR Motion #748: Move to accept resolutions to CIDs 16252, 16683, 17088 in doc 11-18/1857r3.**
        1. **Moved by Liwen Chu, Seconded by Ming Gan**
        2. **Discussion**
           1. **Reference in the resolution was updated.**
           2. **A member requested for a count.**
        3. **Result: Y/N/A = 27/0/2, motion passes.**
    11. **CR Motion #749: Move to accept resolutions to CIDs 15730, 15815, 15038, 15047 in doc 11-18/1867r0.**
        1. **Moved by Laurent Cariou, Seconded by Po-Kai Huang**
        2. **Discussion – Editorial changes were made to the r0 of the document (🡪 r1).**
        3. **Result: Accepted with no objection.**
    12. **CR Motion #750: Move to accept resolutions to CIDs 15040, 15041, 15043 in doc 11-18/1696r1.**
        1. **Moved by Alfred Asterjadhi, Seconded by Bin Tian**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 32/0/1, motion passes.**
    13. **CR Motion #751: Move to accept resolutions to CIDs 15162, 15901, 15902, 16118, 16164, 16207, 16208, 16209, 16210, 16212, 16228, 16253, 16271, 16290, 16291, 16292, 16648, 16649, 16650, 16651, 17037, 17038 in doc 11-18/1858r7.**
        1. **Moved by Liwen Chu, Seconded by Alfred Asterjadhi**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 29/0/1, motion passes.**
    14. **CR Motion #752: Move to accept resolutions to CIDs 16264, 16266, 16267, 16294, 16647, 16908, 17040 in doc 11-18/1856r2.**
        1. **Moved by Liwen Chu, Seconded by Ming Gan**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 34/0/3, motion passes.**
    15. **CR Motion #753: Move to accept to resolutions to CIDs 16723 and 15920 in doc 11-18/0496r15.**
        1. **Moved by Matthew Fischer, Seconded by Ming Gan**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 40/1/8, motion passes.**
    16. **CR Motion #754: Move to accept resolutions to CIDs 15033, 15034, 15885, 15887 in doc 11-18/1808r1.**
        1. **Moved by Yasuhiko Inoue, Seconded by Yongho Seok**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 30/0/1, motion passes.**
    17. **CR Motion #755: Move to accept resolutions to CIDs 16080, 15119, 16685, 16458, 16126, 16140, 16141, 15799, 16598, 17023, 16687, 16688, 16143, 16689 (14 CIDs) in doc 11-18/1778r3.**
        1. **Moved by Yongho Seok, Seconded by Frank Hsu**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 34/1/2, motion passes.**
    18. **CR Motion #756: Move to accept resolutions to CIDs 15999, 15998, 15933, 16386, 16847, 16128, 15944, 16611, 15955, 16998, 15943 in doc 11-18/1815r3.**
        1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi**
        2. **Discussion – No discussion.**
        3. **Result: Accepted with no objection.**
    19. **CR Motion #757: Move to accept resolution to CID 17150 in doc 11-18/1703r2.**
        1. **Moved by Tomoko Adachi, Seconded by Alfred Asterjadhi**
        2. **Discussion – No discussion.**
        3. **Result: Accepted with no objection.**
    20. **CR Motion #758: Move to accept resolution to CID 15696 and 17143 in doc 11-18/1900r4.**
        1. **Moved by Zhou Lan, Seconded by Matthew Fischer**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 40/0/2, motion passes.**
    21. **CR Motion #759: Move to accept resolution to CID 16589 and the added text in doc 11-18/1814r2.**
        1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi**
        2. **Discussion – No discussion.**
        3. **Result: Accepted with no objection.**
    22. **CR Motion #760: Move to accept resolutions to CIDs 15908,16932 in doc 11-18/1969r1.**
        1. **Moved by Liwen Chu, Seconded by Yongho Seok**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 20/0/5, motion passes.**
    23. **CR Motion #761: Move to accept resolutions to CIDs 15050, 15052, 15859, 15942, 16162, 16186, 16372, 16497, 16501, 16652, 16654, 16656, 16660, 16919, 16920, 16927, 16942, 16944 in doc 11-18/1777r1.**
        1. **Moved by George Cherian, Seconded by Alfred Asterjadhi**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 28/0/3, motion passes.**
    24. **CR Motion #762: Move to remove CID 16927 from CR Motion #761.**
        1. **Moved by Alfred Asterjadhi, Seconded by Mark Rison**
        2. **Discussion –No discussion.**
        3. **Result: Accepted with no objection.**
    25. **CR Motion #763: Move to accept resolutions to CID 17145 in doc 11-18/1803r1.**
        1. **Moved by Po-Kai Huang, Seconded by Alfred Asterjadhi**
        2. **Discussion – No discussion.**
        3. **Result: Accepted with no objection.**
    26. **CR Motion #764: Move to accept resolutions to CIDs 16870, 16498, 16506, 15686 and added text in doc 11-18/1812r2.**
        1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 33/0/2, motion passes.**
    27. **CR Motion #765: Move to accept resolutions to CIDs 15595, 15597, 16324, 16087, 16089, 16570, 15593, 15594, 16088, 15598 as in doc 11-18/1901r1.**
        1. **Moved by Youhan Kim, Seconded by Bin Tian**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 20/1/5, motion passes.**
    28. **CR Motion #766: Move to accept resolutions to CID 16191 in doc 11-18/2034r0.**
        1. **Moved by Youhan Kim, Seconded by Bin Tian**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 23/1/2, motion passes.**
    29. **CR Motion #767: Move to accept resolution to CID 16441 in doc 11-18/1779r2.**
        1. **Moved by Yongho Seok, Seconded by Bin Tian**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 28/0/4, motion passes.**
    30. **CR Motion #768: Move to accept resolutions to CIDs 15609, 15936, 16086, 16713, 16714, 16835, 16858, 16859, 16861, 16862, 16992, 16171, 16857 under ready-for-motion tab in doc 11-18/2038r0.**
        1. **Moved by Youhan Kim, Seconded by Bin Tian**
        2. **Discussion – A member requested a count for this motion.**
        3. **Result: Y/N/A = 24/1/2, motion passes.**

1. **Recess**
   1. **TGax is in recess @ 9:55 AM until start of AM2 (10:30 AM).**

# Thursday, November 15th, 2018, 10:30 – 12:30, TGax sessions

1. **Meeting called to order @ 10:30 AM by Osama Aboul-Magd, the TGax chairperson.**
   1. Introduction of the people at the front table.
2. **Agenda Setting**
   1. Proposed agenda for today (AM1, AM2 and PM2) – already approved during AM1
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. TG Motion
      4. CR Submission and motion
      5. PM2
         1. Review unresolved comments and draft resolutions
      6. Ad hoc meeting (if necessary)
      7. Teleconference scheduling
      8. Adjourn
3. **Announcement and Reminder**
   1. Chair reminded people that we are still operating under the IEEE-SA IPR Policy and Procedure.
   2. Chair asked people to state name and affiliation when speaking for the first time during the session.
   3. Chair reminded people to do the attendance.
4. **Comment Resolutions and motions**

Motion will be voted after a presentation following the Q&A session without a straw poll.

* 1. **Osama Aboul-Magd (Huawei Technologies) presented the update on resolutions to the CIDs contained in the document 11-18/1935-02.**
     1. Discussion – There was an editorial comment 🡪 Adopted and the document was updated to r3.
     2. **CR Motion #769: Move to accept resolutions to CIDs 15935 and 16150 in doc 11-18/1935r3.**
        1. **Moved by Osama Aboul-Magd, Seconded by Yasuhiko Inoue.**
        2. **Discussion – no discussion.**
        3. **Result: Accepted with no objection.**
  2. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for 27.7.4,” based on the submission 11-18-1472-02.**
     1. Summary
        1. Resolutions to the comments on 802.11ax D3.0 subclause 27.7.4 (Use of TWT Information frames) with following CIDs are proposed.
           1. CIDs: 15102, 15181, 15757, 15845, 16425, 16426, 16427, 16428, 16429
     2. Discussion
        1. (Re: CID 15757) This CID is under discussion.
        2. (Re: CID 16248) Group discussed the difference of two types of TWT, i.e. individual TWT and broadcast TWT.
        3. Group also discussed the “Available” state and “Unavailable” state in the Active mode. A member requested to change “unavailable” state to “doze” state when the STA is operating in a power save mode.
        4. (Re: CID 16428) Removed for more discussion.
        5. A member requested to add a new definition in subclause 11.2.
  3. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for subclause 9.2.4,” based on the submission 11-18-1699-02.**
     1. Summary
        1. Resolutions to the comments on 802.11ax D3.0 subclause 9.2.4 (Frame fields) with following CIDs are proposed.
           1. CIDs: 15861, 15862, 15960, 15963, 16232, 16366, 16389, 16911, 16912, 16077
     2. Discussion
        1. A member suggested some editorial changes. 🡪 The document was updated to r3.
     3. **CR Motion #770: Move to accept resolutions to CIDs 15861, 15862, 15960, 15963, 16232, 16366, 16389, 16911, 16912, 16077 in doc 11-18/1699r3..**
        1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
        2. **Discussion – A member asked for a count.**
        3. **Result: Y/N/A = 35/0/4, motion passes.**
  4. **Hongyuan Zhang (Marvell Semiconductor) presented the update on resolutions to the CIDs contained in the document 11-18/1906-02.**
     1. Discussion
        1. (Re: CID 16983) This CID has been resolvced in the document 11-18-.
        2. A member commented on some points:
           1. Do not understand why LDPC is difficult for HE while it is employed by the HT and VHT.
           2. Relation between 4 x symbol duration and MAC padding is not clear enough.
           3. Relation between Packet Extension and MAC padding is not clear enough.
     2. **CR Motion #771: Move to accept resolutions to CIDs 15662, 16984 in doc 11-18-1906r1.**
        1. **Moved by Hongyuan Zhange, Seconded by Yasuhiko Inoue.**
        2. **Discussion – A member asked for a count.**
        3. **Result: A = 27/11/11, motion failes.**
  5. **Laurent Cariou (Intel) presented “CR for OBSS\_PD,” based on the submission 11-18-1866-01.**
     1. Summary
        1. Resolutions for the comments on 802.11 D3.0 OBSS\_PD with following CIDs are proposed.
           1. CIDs: 15175, 15652, 16411, 17077, 17001, 16124, 15716
     2. Discussion
        1. (Re: CID 15175) A member suggested editorial changes on the definition.
        2. (Re: CID 16411) The commenter expressed objection to the resolution for this comment.
     3. Next step
        1. Laurent to update the document before the motion.
  6. **Laurent Cariou (Intel) presented “CR for 27.5.6,” based on the submission 11-18-1498-04.**
     1. Summary
        1. Resolutions to the comments on 802.11ax D3.0 subclause 27.5.6 (NDP feedback report procedure) with following CIDs are proposed.
           1. CIDs: 15621, 15818, 15819, 15830, 15836, 15837, 16057, 16394, 17126, 15622, 16783, 15820
     2. Discussion
        1. (Re: CID 15818) There was a comment that the reason for the rejection is not clear enough.
           1. A member asked for an update of the resolution.
     3. **CR Motion #772: Move to accept resolutions to CIDs 15935 and 16150 in doc 11-18/1935r3.**
        1. **Moved by Laurent Cariou, Seconded by Alfred Asterjadhi.**
        2. **Discussion – a member asked for a count.**
        3. **Result: Y/N/A = 27/1/4, motion passes.**

1. **Recess**
   1. **TGax meeting is in recess @ 12:30 until start of PM2 (16:00) today.**

# Thursday, November 15th, 2018, 16:00 – 18:00, TGax sessions

1. **The meeting was called to order @ 16:00 by Osama Aboul-Magd, the TGax chairperson.**
   1. Introduction of the people at the front table.
2. **Agenda Setting**
   1. Proposed agenda for today (AM1, AM2 and PM2) – already approved during AM1
      1. Call meeting to order
      2. IEEE-SA IPR policy and Procedure
      3. TG Motion
      4. CR Submission and motion
      5. PM2
         1. Review unresolved comments and draft resolutions
      6. Ad hoc meeting (if necessary)
      7. Teleconference scheduling
      8. Adjourn
3. **Announcement and Reminder**
   1. Chair reminded people that we are still operating under the IEEE-SA IPR Policy and Procedure.
   2. Chair asked people to state name and affiliation when speaking for the first time during the session.
   3. Chair reminded people to do the attendance.
4. **Comment Resolutions and motions**
   1. **Honghyuan Zhang (Marvell Semiconductor) presented the updated version of 11-18-1906-03 “”**
      1. Summary
         1. Based on the discussion in AM2, Honghyuan updated the document.
      2. Discussion
         1. The references in the resolution column need to be fixed. The document was updated to r4.
      3. **CR Motion #773: Move to accept resolutions to CIDs 15662, 16984 in doc 11-18/1906r4.**
         1. **Moved by Hongyuan Zhang, Seconded by Youhan Kim.**
         2. **Discussion – no discussion.**
         3. **Result: Accepted with no objection.**
   2. **Menzo Wentink (Qualcomm) presented “11ax D3.0 sounding comments,” based on the submission 11-18-1921-03.**
      1. Summary
         1. Resolutions to the comments on 802.11ax D3.0 Sounding Procedure with following CIDs are proposed.
            1. CIDs: 15020, 15138, 15658, 15687, 15688, 15689, 15690, 15692, 15693, 15765, 15767, 15768, 15876, 15922, 15923, 15924, 15927, 15966, 15988, 15989, 16011, 16047, 16054, 16069, 16070, 16165, 16174, 16237, 16257, 16258, 16260, 16272, 16298, 16299, 16300, 16301, 16302, 16303, 16304, 16305, 16310, 16311, 16329, 16330, 16337, 16338, 16350, 16368, 16369, 16508, 16672, 16679, 16680, 16703, 16743, 16756, 16874, 16955, 16956, 16958, 16959, 16960, 16969, 16970, 16974, 16975, 17053, 17057, 17058, 17059, 17060, 17107, 17119
      2. Discussion
         1. (Re: CID 16165) A member asked for the rationale of “12” for scidx. 🡪 More DC for 80 MHz and 160 MHz CHBW.
         2. (Re: CID 16174) People discussed setting of the Nc and Nr parameters in CQI feedback procedure. During the discussion, chair made a judgement to change related to this CID. A member, Mark Rison, expressed strong objection to this judgement while most of the prople in the room are okay with it.
         3. (Re: CID 16310) More rationale should be added to the proposed resolution.
         4. (Re: CID 16330) A straw poll was conducted:
            1. **Straw Poll: Do you oppose adding words in 9.4.1.65 in draft D3.0 linking CQI feedback to OFDMA operation?**

**Result: Y/N/A = 19/2/11.**

**Most of the people seemed to be not happy with the addition.**

* + - 1. The group had a long discussion on this submission.
    1. **CR Motion #774: Move to accept resolutions to CIDs 15020, 15138, 15658, 15688, 15765, 15767, 15768, 15876, 15922, 15923, 15924, 15927, 15966, 15988, 15989, 16011, 16047, 16054, 16069, 16070, 16165, 16174, 16237, 16257, 16258, 16260, 16272, 16298, 16299, 16300, 16301, 16302, 16303, 16304, 16305, 16310, 16311, 16329, 16330, 16337, 16338, 16350, 16368, 16369, 16508, 16672, 16679, 16680, 16703, 16743, 16874, 16955, 16956, 16958, 16959, 16960, 17053, 17057, 17058, 17059, 17060, 17107, 17119 in doc 11-18/1921r4.**
       1. **Moved by Menzo Wentink, Seconded by Youhan Kim.**
       2. **Discussion – A member asked for a count.**
       3. **Result: Y/N/A = 39/1/0, motion passes.**
  1. **Yongho Seok (MediaTek) presented “LB233 CR MAC Miscellaneous,” based on the submission 11-18-1780-04.**
     1. Summary
        1. Resolutions for the comments on the 802.11ax D3.0 MAC with following CIDs are proposed.
           1. This document has already been presented. Remaining CIDs are discussed.
           2. CIDs: 16176, 16223, 16448 (3 CIDs)
     2. Discussion
        1. (Re: CID 16448) A member commented that the relative power level difference is enough and he did not understand the point of setting the maximum transmit power capability.
        2. (Re: CID 16176 and 16223) Group discussed requirement for each combination 20 MHz-only STA and HE BSS.
     3. Next Step
        1. Yongho to update the document before the motion.
  2. **Abhishek Patil (Qualcomm) presented “Resolution for CIDs in 9.3.1.23,” based on the submission 11-18-1456-07.**
     1. Summary
        1. Abhishek presented the updated version of the doc.11-18-1456.
           1. Remained CID: 16318
     2. Discussion
        1. A member expressed objection to a NOTE in the proposed changes.
     3. **CR Motion #775: Move to accept resolutions to CIDs 15013, 16194, 16273, 17072, 16380, 16317, 16022, 17104, 15950, 17105, 15873, 15848, 16983, 17106, 16318, 16541, 17035, 17036 in doc 11-18/1456r8.**
        1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi.**
        2. **Discussion – a member asked for a count.**
        3. **Result: Y/N/A = 36/1/4, motion passes.**
  3. **Tomoko Adachi (Toshiba) presented “Resolutions to comments to subclause 9.3.1.9,” based on the submission 11-18-1851-03.**
     1. Summary
        1. One CID is removed from the 18/1851.
     2. Discussion – No discussion.
     3. **CR Motion #776: Move to Move to accept resolutions to CIDs 15012, 15930, 15207, 15870, 15871, 16092, 16093, 16202, 16359, 16371, 16374, 16379, 16391, 17043 in doc 11-18/1851r3.**
        1. **Moved by Tomoko Adachi, Seconded by Yongho Seok.**
        2. **Discussion – no discussion.**
        3. **Result: Accepted with no objection.**
  4. **Ming Gan (Huawei Technologies) presented “LB233 CR on Fragmentation,” based on the submission 11-18-1844-00.**
     1. Summary
        1. Remained CID which is #16432 in 11-1844r0 was discussed.
        2. The dynamic fragmentation level 3 and the related BlockAck procedure were discussed.
     2. Discussion – No discussion.
     3. **CR Motion #777: Move to accept resolutions to CIDs 15179 15670 15671 15672 16430 16431 16931 16432 16433 16434 16435 in doc 11-18/1844r0.**
        1. **Moved by Ming Gan, Seconded by Alfred Asterjadhi.**
        2. **Discussion – A member requested for a count.**
        3. **Result: Y/N/A = 36/0/2, motion passes.**
  5. **Jarkko Kneckt (Apple) presented “,** **Comment resolution to CIDs 15990, 17031 and 17033” based on the submission 11-18-1831-02.**
     1. Summary
        1. Resolutions to the comments on Operating Mode with CIDs 15990, 17031 and 17033 were proposed.
     2. Discussion
        1. A member mentioned that the proposal was adding another mode which was not useful.
        2. Another member expressed objection to delete the third column of the Table 9-18b.
     3. **CR Motion #778: Move to accept resolutions to CIDs 15990, 16487, 17031 and 17033 in doc 11-18/1831r2.**
        1. **Moved by Jarkko Kneckt, Seconded by Guoqing Li.**
        2. **Discussion – A member asked for a count.**
        3. **Result: Y/N/A = 25/14/18, motion fails.**
  6. **Yunbo Li (Huawei Technologies) presented “CR for CID 16643,” based on the submission 11-18-1958-04.**
     1. Summary
        1. A resolution for the comment with CID 16643 was proposed.
     2. Discussion – No discussion.
     3. **CR Motion #779: Move to accept resolution to CID 16643 in doc 11-18/1958r4.**
        1. **Moved by Yunbo Li, Seconded by Peter Loc.**
        2. **Discussion – no discussion.**
        3. **Result: Accepted with no objection.**
  7. **Yongho Seok (MediaTek) presented “LB233 CR MAC Miscellaneous,” based on the submission 11-18-1780-05.**
     1. Summary
        1. Yongho updated the document 18/1780 based on the previous discussion.
        2. Now the revision number of is r5.
     2. Discussion – No discussion.
     3. **CR Motion #780: Move to accept resolutions to CIDs 16176, 16223, 15628, 15024, 15225, 16395, 15940, 15062, 16465 in doc 11-18/1780r5.**
        1. **Moved by Yongho Seok, Seconded by James Yee.**
        2. **Discussion – no discussion.**
        3. **Result: Accepted with no objection.**

1. **Teleconference scheduling**
   1. **Thursday** 
      1. Nov. 29, Dec 13, January 3 18:00 – 20:00 ET
      2. Dec. 6, 20 10:00 – 12:00 ET
   2. Discussion
      1. Chair encouraged people to make use of teleconferences.
2. **Ad hoc meeting in January 2019**
   1. People agreed that the TGax ad hoc meeting is not necessaey in January 2019.
3. **Adjournment**
   1. TGax adjourned for the week @ 17:58.