IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TGax Teleconferences Minutes from February to March 2017 | | | | |
| Date: 2016-2-22 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Yasuhiko Inoue | NTT | 1-1 Hikaro-no-oka, Yokosuka, Kanagawa 238-0847 Japan | ++81-46-859-5097 | inoue.yasuhiko@lab.ntt.co.jp |
|  |  |  |  |  |

Abstract

This document contains minutes of TGax teleconference from February to March 2017.

Rev. 0: Minutes from TGax teleconference on February 2nd, 2017.

Rev. 1: Some bug fixes to the rev. 0.

Minutes from TGax teleconference on Frbruary 16th, 2017 are added.

Rev. 2: Bug fixes to the rev. 1.

Minutes from TGax teleconference on February 23rd, 2017 are included.

# Teleconference on Thursday, February 2nd, 2017, 10:00 – 12:00 (ET)

1. Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 10:00 (ET).
   1. Introduction of the chairperson and secretary.
2. Agenda Setting
   1. Proposed Agenda
      1. Call the meeting to order
      2. IEEE 802 and 802.11 IPR Policy and Procedure
      3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
      4. TGax ad hoc meeting reminder
         1. Please send email to the chair to indicate the plan to attend.
         2. Please send a request for visitor’s badge to Darleen Craig-Ernst as announced in the email from Bin Tian.
      5. Annoucement
      6. Presentation
         1. 11-17-0191 “Comment resolution for clause 10.28,” Jarkko Kneckt (Apple)
         2. 11-17-0207 “11ax D1.0 MAC Comment Resolution for 9.3.1.23.4,” Po-Kai Huang (Intel)
         3. 11-17-0204 “CR for MU EDCA parameters – 27.2.3,” Laurent Cariou (Intel)
      7. AOB
      8. Adjourn
   2. 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. The agenda was approved.
3. IEEE 802 and 802.11 IPR Policy and Procedure
   1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
   2. Relevant documents
      1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
      2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
      3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
      4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
      5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
      6. Ethics - <http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf>
      7. IEEE 802.11 Working Group Operartions Manual - <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-16-0000-802-11-operations-manual.docx>
   3. Chair asked if there is any potentially essential patent that people are aware of.
      1. No potentially essential patent reported.
4. Attendance
   1. Chair asked the attendees to send an email to Yasu ([inoue.yasuhiko@lab.ntt.co.jp](mailto:inoue.yasuhiko@lab.ntt.co.jp)) and/or Osama ([osama.aboulmagd@huawei.com](mailto:osama.aboulmagd@huawei.com)) to record attendance.
5. Announcement
   1. Chair asked to state name and affiliation when addressing for the first time during the meeting.
   2. Chair asked to put the cellphone mute when not speaking.
   3. Ad hoc meeting in San Diego
      1. Bin Tian (Qualcomm) has sent out the meeting announcement on the reflector.
         1. Please send email to the chair to indicate the plan to attend.
         2. Please send a request for visitor’s badge to Darleen Craig-Ernst as announced in the email from Bin Tian.
6. Presentations
   1. **Jarkko Kneckt (Apple) presented “Comment resolution for clause 10.28,” based on the submission 11-17-0191-02.**
      1. Summary:
         1. Resolutions for 12 comments on clause 10.28 have been proposed.
            1. Relevant CIDs: 6974, 6975, 6978, 6979, 6980, 6981, 7532, 7533, 8293, 8486, 9865, and 9866.
         2. One of the 13 comments assigned to Jarkko was excluded from this document since it needs separate submission.
      2. Discussion:
         1. CID #6974: Some member commented that normative behaviour of RD initiator is not clear enough.
         2. CID #6975: A member discussed restriction on the use of AC Constraint field for non-AP STA. 🡪 It is not necessary to limit to the non-AP STA.
         3. CID #6978: A member proposed a modification on the proposed text.
         4. CID #7532: The comment discusses the use of MBA in RD sequence, but a member mentioned there is misunderstanding.
         5. CID #8293: A member suggested discussion with the commenter to make sure if his/her concern was cleared.
      3. Next Step:
         1. Jarkko to revise the document.
   2. **Po-Kai Huang (Intel) presented “11ax D1.0 MAC Comment Resolution for 9.3.1.23.4,” based on the submission 11-17-0207-01.**
      1. Summary:
         1. Resolutions for 23 comments on clause 9.3.1.23.4 (MU-RTS variant) have been proposed.
            1. Relevant CIDs: 3166, 6086, 6328, 7267, 7272, 7275, 7753, 8396, 9834, 9836, 5682, 7271, 3019, 6329, 9835, 9646, 9647, 8252, 7273, 7274, 7490, 8117, 10342.
      2. Discussion:
         1. Some people mentioned that there is no specification of Doppler mode.
            1. Po-Kai is talking to some PHY guys to clarify this.
            2. A member mentioned that the Doppler mode is referred in multiple clauses. Need to check with the editor.
      3. Next Step
         1. Po-Kai to continue his presentation in the next conference call.
7. AOB
   1. There will be no conference call on the week of February 6th since we have Wi-Fi Alliance meeting.
   2. Chair asked to send email notification if people plan to attend the TGax ad hoc meeting in San Diego.
8. Adjourn
   1. Meeting adjourned at 11:59 (ET).
9. List of Attendees

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Woojin Ahn | WILUS Institute |
| 3 | Alfred Asterjadhi | Qualcomm |
| 4 | Stephane Baron | Canon Research |
| 5 | Fred Bloggs | ??? |
| 6 | Laurent Cariou | Intel |
| 7 | Minho Cheong | Newracom |
| 8 | Sean Coffey | RealTek |
| 9 | Peter Ecclesine | self |
| 10 | Yonggang Fang | ZTE |
| 11 | Po-Kai Huang | Intel |
| 12 | Yasuhiko Inoue | NTT |
| 13 | Junichi Iwatani | NTT |
| 14 | Suhwook Kim | LG Electronics |
| 15 | Jarkko Kneckt | Apple |
| 16 | Geonjung Ko | Wilus Institute |
| 17 | Zhou Lan | Broadcom |
| 18 | Sun Geun Lee | Cypress |
| 19 | Joseph Levy | InterDigital |
| 20 | Peter Loc | Huawei Technologies |
| 21 | Han Qing Lou | ??? |
| 22 | Jing Ma | NICT |
| 23 | Patrice Nezou | Canon Research |
| 24 | Kome Oteri | InterDigital |
| 25 | Albert Petrick | InterDigital |
| 26 | Mark Rison | Samsung |
| 27 | Sigurd Schelstraete | Quantenna |
| 28 | Jung Hoon Suh |  |
| 29 | Julien Sevin | ??? |
| 30 | John Son | WILUS Institute |
| 31 | Dorothy Stanley | HP Enterprize |
| 32 | Adrian Stephens | Intel |
| 33 | L. SUN | ??? |
| 34 | Pascal Viger | Canon Research |
| 35 | Chao-Chun Wang | MediaTek |
| 36 | Huizhao Wang | Qualntenna |
| 37 | Xiaofei Wang | InterDigital |
| 38 | Rui Yang | InterDigital |
| 39 | James Yee | MediaTek |
| 40 |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Teleconference on Thursday, February 16th, 2017, 20:00 – 22:00 (ET)

1. Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 20:00 (ET).
   1. Introduction of the chairperson and secretary.
2. Agenda Setting
   1. Proposed Agenda
      1. Call the meeting to order
      2. IEEE 802 and 802.11 IPR Policy and Procedure
      3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
      4. TGax ad hoc meeting reminder
         1. Please send email to the chair to indicate the plan to attend.
         2. Please send a request for visitor’s badge to Darleen Craig-Ernst as announced in the email from Bin Tian.
      5. Annoucement
      6. Presentation
         1. 11-17-0207 “11ax D1.0 MAC Comment Resolution for 9.3.1.23.4,” Po-Kai Huang (Intel) – continuation from the previous teleconference.
         2. 11-17-0204 “CR for MU EDCA parameters – 27.2.3,” Laurent Cariou (Intel)
         3. 11-17-0223 “LB225 CR Sub-clause 8.3.5,” Yongho Seok (Newracom)
         4. 11-17-0227 “LB225 CR Sub-clause 10.3.2.4,” Yongho Seok (Newracom)
         5. 11-17-0248 “LB225 CR Sub-clause 27.11.2,” Yongho Seok (Newracom)
         6. 11-17-0255 “LB225 CR MAC Miscellaneous Part1,” Yongho Seok (Newracom)
         7. 11-17-0242 “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 2,” Lochan Verma (Qualcomm)
         8. 11-17-0244 “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 3,” Lochan Verma (Qualcomm)
         9. 11-17-0263 “11ax D1.0 MAC Comment Resolution for 27.11.5,” Po-Kai Huang (Intel)
         10. 11-17-0264 “11ax D1.0 MAC Comment Resolution for 10.3.2.8a,” Po-Kai Hunag (Intel)
         11. Lochan has another 5 submissions.
      7. AOB
      8. Adjourn
   2. 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. The agenda was approved.
      3. A member asked for an announcement on the reflector when submissions are placed on the server.
3. IEEE 802 and 802.11 IPR Policy and Procedure
   1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
   2. Relevant documents
      1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
      2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
      3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
      4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
      5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
      6. Ethics - <http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf>
      7. IEEE 802.11 Working Group Operartions Manual - <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-16-0000-802-11-operations-manual.docx>
   3. Chair asked if there is any potentially essential patent that people are aware of.
      1. No potentially essential patent reported.
4. Attendance
   1. Chair asked the attendees to send an email to Yasu ([inoue.yasuhiko@lab.ntt.co.jp](mailto:inoue.yasuhiko@lab.ntt.co.jp)) and/or Osama ([osama.aboulmagd@huawei.com](mailto:osama.aboulmagd@huawei.com)) to record attendance.
5. Announcement
   1. Chair asked to state name and affiliation when addressing for the first time during the meeting.
   2. Chair asked to put the cellphone mute when not speaking.
   3. Ad hoc meeting in San Diego
      1. Bin Tian (Qualcomm) has sent out the meeting announcement on the reflector.
         1. Please send email to the chair to indicate the plan to attend.
         2. Please send a request for visitor’s badge to Darleen Craig-Ernst as announced in the email from Bin Tian.
      2. Discussion
         1. A member asked if he/she can confirm that the badge request is received.
            1. Bin or his colleague can help it.
6. Presentations
   1. **Po-Kai Huang (Intel) presented “11ax D1.0 MAC Comment Resolution for 9.3.1.23.4,” based on the submission 11-17-0207-05.**
      1. Due to the connection issue, Po-Kai’s presentation was deferred and will be revisited during the next teleconference.
   2. **Laurent Cariou (Intel) presented “CR for MU EDCA parameters – 27.2.3,” based on the submission 11-17-0204-01.**
      1. Summary
         1. Proposed resolutions for CIDs related to MU EDCS parameters in clause 27.2.3 and proposed modification to the text are presented.
         2. Relevant CIDs: 3193, 3194, 4747, 4748, 5032, 5684, 5853, 5854, 5906, 5908, 6159, 7138, 7178, 7185, 7186, 7795, 8212, 8213, 8214, 8264, 8296, 8297, 9403, 9491, 9521, 9702, 10248, 10249, 10327, 3244, 3389, 3499, 3830, 3919, 4270, 4454, 4483, 4742, 4744, 5843, 5911, 5912, 6462, 6463, 6464, 7562, 8201, 8262, 8263, 8290, and 4745
      2. Discussion
         1. Re: CID 4748 – People discussed the proposed text in the document. The CID 4748 has some relationship with other comment and text is modified considering those comments.
         2. Re: CID 5853 – A member expressed objection to the current resolution (REJECTED) and asked more time to think about it.
         3. Re: CID 8212 – A member mentioned that the proposed resolution does not address the issue.
         4. Re: CID 8297 – Resolution for this CID is updated.
         5. Re: CID 8262 – Based on the discussion, the resolution will be changed.
         6. Re: CID 8290 – The resolution for this comment will be changed from REJECTED to REVISED as suggested by a member.
         7. Re: CID 4745 – A member commented that the proposed change to the text does not address the issue raised by this comment. More discussion will be needed.
         8. There are some editorial comments from the members.
      3. Next step
         1. Laurent to work offline with some people and update the document.
7. AoB

The next TGax conference call will be on February 23rd, 2017, 10:00 AM - 12:00 (ET).

1. Adjournment
   1. TGax teleconference adjourned @ 22:00 (ET).
2. List of Attendees

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Tomoko Adachi | Toshiba |
| 3 | Woojin Ahn | WILUS Institute |
| 4 | Alfred Asterjadhi | Qualcomm |
| 5 | Laurent Cariou | Intel |
| 6 | Xiaogang Chen | Intel |
| 7 | George Cherian | Qualcomm |
| 8 | Rojan Chitrakar | Panasonic |
| 9 | Liwen Chu | Marvell |
| 10 | Jason Yunchen Guo |  |
| 11 | Reza Hedayat | Newracom |
| 12 | Hanseul Hong | Yonsei Univ. |
| 13 | Lei Huang | Panasonic |
| 14 | Po-Kai Huang | Intel |
| 15 | Russell Huang | MediaTek |
| 16 | Yasuhiko Inoue | NTT |
| 17 | Junichi Iwatani | NTT |
| 18 | Jinjing Jiang | Marvell |
| 19 | Jeongki Kim | LG Electronics |
| 20 | Suhwook Kim | LG Electronics |
| 21 | Jarkko Kneckt | Apple |
| 22 | Geonjung Ko | Wilus Institute |
| 23 | Young Hoon Kwon | Newracom |
| 24 | Zhou Lan | Broadcom |
| 25 | Sun Geun Lee | Cypress |
| 26 | Dongguk Lim | LG Electronics |
| 27 | Peter Loc | Huawei Technologies |
| 28 | Jing Ma | NICT |
| 29 | Narendar Madhavan | Toshiba |
| 30 | Patrice Nezou | Canon Research |
| 31 | Kome Oteri | InterDigital |
| 32 | Albert Petrick | InterDigital |
| 33 | Sigurd Schelstraete | Quantenna |
| 34 | Yongho Seok | Newracom |
| 35 | Jung Hoon Suh | Huawei Technologies |
| 36 | Shoko Shinohara | NTT |
| 37 | John Son | WILUS Institute |
| 38 | Bo Sun | ZTE |
| 39 | Yusuke Tanaka | Sony |
| 40 | Lochan Verma | Qualcomm |
| 41 | Chao-Chun Wang | MediaTek |
| 42 | Huizhao Wang | Qualntenna |
| 43 | Xiaofei Wang | InterDigital |
| 44 | Tianyu Wu | MediaTek |
| 45 | David Xun Yang | Huawei Technologies |
| 46 | Rui Yang | InterDigital |
| 47 | James Yee | MediaTek |
| 48 | Ross Jian Yu | Huawei Technologies |
| 49 |  |  |
| 50 |  |  |
|  |  |  |

# Teleconference on Thursday, February 23rd, 2017, 10:00 – 12:00 (ET)

1. Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 10:02 (ET).
   1. Introduction of the chairperson and secretary.
2. Agenda Setting
   1. Proposed Agenda
      1. Call the meeting to order
      2. IEEE 802 and 802.11 IPR Policy and Procedure
      3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
      4. TGax ad hoc meeting reminder
         1. Please send email to the chair to indicate the plan to attend.
         2. Please send a request for visitor’s badge to Darleen Craig-Ernst as announced in the email from Bin Tian.
      5. Annoucement
      6. Presentation
         1. 11-17-0191 “Comment resolution for clause 10.28,” JarkkoKneckt (Apple) – ready for motion.
         2. 11-17-0207 “11ax D1.0 MAC Comment Resolution for 9.3.1.23.4,” Po-Kai Huang (Intel) – being continued from the previous teleconference.
         3. 11-17-0204 “CR for MU EDCA parameters – 27.2.3,” Laurent Cariou (Intel) – r2 uploaded. Some CIDs are yet to be addressed.
         4. 11-17-0223 “LB225 CR Sub-clause 8.3.5,” Yongho Seok (Newracom)
         5. 11-17-0227 “LB225 CR Sub-clause 10.3.2.4,” Yongho Seok (Newracom)
         6. 11-17-0248 “LB225 CR Sub-clause 27.11.2,” Yongho Seok (Newracom)
         7. 11-17-0255 “LB225 CR MAC Miscellaneous Part1,” Yongho Seok (Newracom)
         8. 11-17-0242 “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 2,” Lochan Verma (Qualcomm)
         9. 11-17-0244 “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 3,” Lochan Verma (Qualcomm)
         10. 11-17-0263 “11ax D1.0 MAC Comment Resolution for 27.11.5,” Po-Kai Huang (Intel)
         11. 11-17-0264 “11ax D1.0 MAC Comment Resolution for 10.3.2.8a,” Po-Kai Hunag (Intel)
         12. 11-17-0243 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 1,” Lochan Verma (Qualcomm)
         13. 11-17-0245 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 2,” Lochan Verma (Qualcomm)
         14. 11-17-0246 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 3,” Lochan Verma (Qualcomm)
         15. 11-17-0247 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 4,” Lochan Verma (Qualcomm)
         16. 11-17-0261 “Comment Resolutions on Clause 28.3.14.3 (Transmit Requirements for an HE trigger-based PPDU),” Lochan Verma (Qualcomm)
         17. 11-17-0271 “11ax D1.0 MAC Comment Resolution for 17.2.2.1 and 17.3.9.10,” Po-Kai Huang (Intel)
      7. AOB
      8. Adjourn
   2. Approval of the agenda
      1. Chair mentioned that it is not possible to cover all of the submissions above, however, he 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. The agenda was approved.
      3. A member asked for an announcement on the reflector when submissions are placed on the server.
3. IEEE 802 and 802.11 IPR Policy and Procedure
   1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
   2. Relevant documents
      1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
      2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
      3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
      4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
      5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
      6. Ethics - <http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf>
      7. IEEE 802.11 Working Group Operartions Manual - <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-16-0000-802-11-operations-manual.docx>
   3. Chair asked if there is any potentially essential patent that people are aware of.
      1. No potentially essential patent reported.
4. Attendance
   1. Chair asked the attendees to send an email to Yasu ([inoue.yasuhiko@lab.ntt.co.jp](mailto:inoue.yasuhiko@lab.ntt.co.jp)) and/or Osama ([osama.aboulmagd@huawei.com](mailto:osama.aboulmagd@huawei.com)) to record attendance.
5. Announcement
   1. Chair asked to state name and affiliation when addressing for the first time during the meeting.
   2. Chair asked to put the cellphone mute when not speaking.
6. Ad hoc meeting in San Diego
   1. There will be 66 people, except Qualcomm people, attending the TGax ad hoc meeting in San Diego.
      1. There will be parallel sessions of PHY and non-PHY.
7. Presentations
   1. **Yongho Seok (Newracom) presented “LB225 CR Sub-clause 8.3.5,” based on the submission 11-17-0223-01.**
      1. Summary
         1. Resolutions for the comments on the clause 8.3.5 and modification to the text are proposed.
         2. Relevant CIDs: 6935, 3102, 7707, 8494, 4715, 6936, 4716, 6937, 5432, 4717 (10 CID)
      2. Discussion
         1. No discussion.
      3. Next Step
         1. Yongho have found some editorial mistakes and will update the document.
   2. **Yongho Seok (Newracom) presented “LB225 CR Sub-clause 10.3.2.4,” based on the submission 11-17-0227-00.**
      1. Summary
         1. Resolutions for the comments on the clause 10.3.2.4 and modification to the text are proposed.
         2. Relevant CIDs: 5931, 7528, 9748 (3 CID)
      2. Discussion
         1. A member asked if there will be related pre-motion (He did not have enough time to review the document). 🡪 No pre-motion during the teleconference. Motions are conducted only in the TGax official meetings.
         2. Re: CID 9748 – A member commented that only a part of the comment is resolved. 🡪 it is because the other part of the comment was rejected (use of the aRxPHYStartDelay in the NAVTimeout calculation will be an implementation issue).
   3. **Yongho Seok (Newracom) presented “LB225 CR Sub-clause 27.11.2,” based on the submission 11-17-0248-03.**
      1. Summary
         1. Resolutions for the comments on the clause 27.11.2 and modification to the text are proposed.
         2. Relevant CIDs: 4266, 4479, 5211, 10290 (4 CIDs).
      2. Discussion
         1. Re: CID #5211 – A member asked for the clarification of the “channel access procedure” in the resolution. 🡪 it is in the base standard (clause 11.24.15). Reference was added to the resolution.
         2. Re: CID #8316 – A member asked why this CID is removed. 🡪 Just because it is excluded from this document.
         3. Re: CID #10290 – Use of the Public Action frame bwtween Aps, between AP and non-AP STA and between non-AP STAs are discussed. Related text was modified as a result of the discussion.
   4. **Yongho Seok (Newracom) presented “**LB225 CR MAC Miscellaneous Part1**,” based on the submission 11-17-0255-00.**
      1. Summary
         1. This submission proposes resolutions for comments with CIDs #9756 and #7788 received from TGax LB225.
            1. CID #9756: A comment for the contents of Nontransmitted BSSID contents.
            2. CID #7788: Asks to add the basic HE-MCS to the association rule.
         2. Proposed resolutions are revised - agreed in principle.
      2. Discussion
         1. No discussion.
      3. Next Step
         1. A member asked for a time to review the document.
         2. Chair mentioned there is no motion during a conference call and asked people to contact the author of the document for any suggestions.
   5. **Po-Kai Huang (Intel) presented “11ax D1.0 MAC Comment Resolution for 9.3.1.23.4,” based on the submission 11-17-0207-05.**
      1. Summary
         1. Resolutions for the comments on clause 9.3.1.23.4 MU-RTS variant of the Trigger frame and modifications to the text are proposed.
         2. Relevant CIDs: 3166, 6086, 6328, 7267, 7272, 7275, 7753, 8396, 9834, 9836, 5682, 7271, 3019, 6329, 9835, 9646, 9647, 8252, 7273, 7274, 7490, 8117, and 10342 (23 CIDs).
      2. Discussion
         1. Re: CID #7274 – A member discussed BW subfield.
         2. Some parts of the proposed text are modified based on the discussion.
      3. Next Step
         1. Po-kai to upload the revised document.
   6. **Lochan Verma (Qualcomm) presented “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 2,” based on the submission 11-17-0242-04.**
      1. Summary
         1. Resolutions for the 12 comments on 9.4.2.218.3 (HE PHY Capabilities) and modifications to the text were proposed.
         2. Relevant CIDs: 3554, 5157, 5786, 5789, 6429, 7558, 8258, 9083, 9114, 8676, 8381, and 6074.
      2. Next Step
         1. Time is up.
         2. Lochan to continue his presentation in the next teleconference.
8. AoB
   1. The next TGax teleconference will be on March 2nd, 2017, starting at 20:00 (ET).
9. Adjournment

TGax teleconference adjourned @ 12:01 PM (ET).

1. List of attendees

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Woojin Ahn | WILUS Institute |
| 3 | Alfred Asterjadhi | Qualcomm |
| 4 | Edward Au | Huawei Technologies |
| 5 | Stephane Baron | Canon |
| 6 | Liwen Chu | Marvell |
| 7 | Sean Coffey | RelTek |
| 8 | Po-Kai Huang | Intel |
| 9 | Yasuhiko Inoue | NTT |
| 10 | Jarkko Kneckt | Apple |
| 11 | Geonjung Ko | Wilus Institute |
| 12 | Jing Ma | NICT |
| 13 | Kome Oteri | InterDigital |
| 14 | Jayh Park | LG Electronics |
| 15 | Albert Petrick | InterDigital |
| 16 | Mark Rison | Samsung |
| 17 | Alphan Sahin | InterDigital |
| 18 | Sigurd Schelstraete | Quantenna |
| 19 | Yongho Seok | Newracom |
| 20 | Jung Hoon Suh | Huawei Technologies |
| 21 | Lochan Verma | Qualcomm |
| 22 | Pascal Vigar | Canon |
| 23 | James Wang | MediaTek |
| 24 | Xiaofei Wang | InterDigital |
| 25 |  |  |
|  |  |  |
|  |  |  |

# Teleconference on Thursday, March 2nd, 2017, 20:00 – 22:00 (ET)

1. Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 10:02 (ET).
   1. Introduction of the chairperson and secretary.
2. Agenda Setting
   1. Proposed Agenda
      1. Call the meeting to order
      2. IEEE 802 and 802.11 IPR Policy and Procedure
      3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
      4. TGax ad hoc meeting reminder
         1. Please send email to the chair to indicate the plan to attend.
         2. Please send a request for visitor’s badge to Darleen Craig-Ernst as announced in the email from Bin Tian.
      5. Annoucement
      6. Presentation
         1. 11-17-0242 “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 2,” Lochan Verma (Qualcomm)
         2. 11-17-0244 “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 3,” Lochan Verma (Qualcomm)
         3. 11-17-0263 “11ax D1.0 MAC Comment Resolution for 27.11.5,” Po-Kai Huang (Intel)
         4. 11-17-0264 “11ax D1.0 MAC Comment Resolution for 10.3.2.8a,” Po-Kai Hunag (Intel)
         5. 11-17-0243 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 1,” Lochan Verma (Qualcomm)
         6. 11-17-0245 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 2,” Lochan Verma (Qualcomm)
         7. 11-17-0246 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 3,” Lochan Verma (Qualcomm)
         8. 11-17-0247 “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 4,” Lochan Verma (Qualcomm)
         9. 11-17-0261 “Comment Resolutions on Clause 28.3.14.3 (Transmit Requirements for an HE trigger-based PPDU),” Lochan Verma (Qualcomm)
         10. 11-17-0271 “11ax D1.0 MAC Comment Resolution for 17.2.2.1 and 17.3.9.10,” Po-Kai Huang (Intel)
         11. 11-17-0267 “CR for 27.9.2.2 spatial reuse,” Laurent Cariou (Intel)
      7. AOB
      8. Adjourn
   2. Approval of the agenda
      1. Chair mentioned that it is not possible to cover all of the submissions above, however, he 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. The agenda was approved.
      3. A member asked for an announcement on the reflector when submissions are placed on the server.
3. IEEE 802 and 802.11 IPR Policy and Procedure
   1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
   2. Relevant documents
      1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
      2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
      3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
      4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
      5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
      6. Ethics - <http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf>
      7. IEEE 802.11 Working Group Operartions Manual - <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-16-0000-802-11-operations-manual.docx>
   3. Chair asked if there is any potentially essential patent that people are aware of.
      1. No potentially essential patent reported.
4. Attendance
   1. Chair asked the attendees to send an email to Yasu ([inoue.yasuhiko@lab.ntt.co.jp](mailto:inoue.yasuhiko@lab.ntt.co.jp)) and/or Osama ([osama.aboulmagd@huawei.com](mailto:osama.aboulmagd@huawei.com)) to record attendance.
5. Announcement
   1. Chair asked to state name and affiliation when addressing for the first time during the meeting.
   2. Chair asked to put the cellphone mute when not speaking.
6. Ad hoc meeting in San Diego
   1. A member asked for the flexibility of the ad hoc meeting agenda (he will not be able to attend all of the days). Chair said it can be arranged.
   2. There will be 66 people, except Qualcomm people, attending the TGax ad hoc meeting in San Diego. A member asked for some coordination.
   3. A member mentioned that some topics should be discussed in a whole group. 🡪 Due to the capacity of the meeting rooms, joint session is not pobbsible during the ad hoc.
7. Presentations
   1. Lochan Verma (Qualcomm) presented “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 2,” based on the submission 11-17-0242-05.
      1. Summary
         1. This is continuation of the presentation.
         2. Proposes resolutions for the following 13 comments on 9.4.2.218.3 (HE PHY Capabilities):
            1. 3554, 5157, 5786, 5789, 6429, 7558, 8258, 9083, 9114, 8676, 8381, 6074.
      2. Discussion
         1. A member discussed the DCM Encoding At Tx And Rx in Table 9-262aa whether B24 -25 should include the signaling for maximum constellation support of DCM for HE-SIG-B.
      3. Next Step
         1. Lochan to think about the resolution and proposed change for the text related to CID #5789.
   2. Lochan Verma (Qualcomm) presented “Comment Resolutions on Clause 9.4.2.218.3 (HE PHY Capabilities) Part 3,” based on the submission 11-17-0244-01.
      1. Summary
         1. proposes resolutions for the following 16 comments on 9.4.2.218.3 (HE PHY Capabilities):
            1. 5147, 5148, 5149, 5150, 5151, 5152, 5153, 5154, 5155, 5841, 5842, 7557, 7559, 7573, 8346, 8347
         2. The above comments
      2. Discussion
         1. CID #5153: A member commented that this is not the right place to discuss this comment. Should talk to the TGax technical editor.
   3. Lochan Verma (Qualcomm) presented “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 1,” based on the submission 11-17-0243-01.
      1. Summary
         1. Proposes resolutions for the following 18 comments on Clause 28.1.1:
            1. 3795, 4854, 4855, 4856, 4902, 4930, 4931, 5232, 5234, 5242, 5746, 5747, 5750, 5754, 5755, 5791, 10355, 10356
      2. Discussion
         1. No comments.
   4. Lochan Verma (Qualcomm) presented “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 2,” based on the submission 11-17-0245-01.
      1. Summary
         1. Proposes resolutions for the following 17 comments on Clause 28.1.1:
            1. 4903, 4934, 4935, 5236, 5237, 5238, 5239, 5240, 5745, 6110, 6818, 6819, 7218, 8331, 8332, 8357, 8361
         2. The above comments are rejected.
      2. Discussion
         1. CID #6818: A member commented that the exended range mode should be excluded from 802.11ax and related text should be removed. 🡪 Lochan prepared the resolution based on the SFD and the extended range is included in it. The commenter still believes that ER mode should not be included in the 802.11ax specification. Chair suggested offline discussion.
         2. CID #8332: The commenter of this comment mentioned that the resolution does not change the commenter’s position. The EN 301 893 will be in effect after June 30th. 🡪 Lochan to come back to this comment later.
      3. Next Step
         1. Lochan to reconsider some of the resolutions.
   5. Lochan Verma (Qualcomm) presented “Comment Resolutions on Clause 28.1.1 (HE PHY Introduction) Part 3,” based on the submission 11-17-0246-00.
      1. Summary
         1. Presented proposes resolutions for the following 18 comments on Clause 28.1.1.
            1. 8623, 8624, 8635, 8637, 8638, 8639, 8640, 8733, 8734, 8736, 8738, 8740, 8741, 8742, 8743, 10360, 10404, 10355
         2. The resolutions for the above comments are rejected.
      2. Discussion
         1. CID #8635: A member commented that use of HE MCS 10 and 11 in an HE PPDU is confusing. 🡪 Will have an offline discussion.
         2. CID #8039 and #8738: Offline discussions requested.
         3. CID #10360: There is a comment that power pre-correction for the preamble part is not clear enough since current spec defines the data part only. 🡪 Offline discussion suggested.
      3. Next Step
         1. Lochan to take offline discussions with the commenters.
8. AoB
   1. The next TGax meeting will be the ad hoc meeting in San Diego from March 8th to 10th , 2017.

9 Adjournment

TGax teleconference adjourned @ 12:01 PM (ET).

10 List of attendees

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Tomoko Adachi | Toshiba |
| 3 | Woojin Ahn | WILUS Institute |
| 4 | Alfred Asterjadhi | Qualcomm |
| 5 | Edward Au | Huawei Technologies |
| 6 | Minho Cheong | Newracom |
| 7 | Rojan Chitrakar | Panasonic |
| 8 | Liwen Chu | Marvell |
| 9 | Sean Coffey | RelTek |
| 10 | Peter Ecclesine | self |
| 12 | Lei Huang | Panasonic |
| 12 | Yasuhiko Inoue | NTT |
| 13 | Junichi Iwatani | NTT |
| 14 | Suhwook Kim | LG Electronics |
| 15 | Geonjung Ko | Wilus Institute |
| 16 | Sung Eun Lee | Cypress |
| 17 | Jing Ma | NICT |
| 18 | Saishankar Nandagparan | Cypress |
| 19 | Kome Oteri | InterDigital |
| 20 | Albert Petrick | InterDigital |
| 21 | Sigurd Schelstraete | Quantenna |
| 22 | Shoko Shinohara | NTT |
| 23 | John Son | Willus Institute |
| 24 | Lochan Verma | Qualcomm |
| 25 | Pascal Vigar | Canon |
| 26 | Xiaofei Wang | InterDigital |
| 27 |  |  |
|  |  |  |
|  |  |  |