IEEE P802.11
Wireless LANs

|  |
| --- |
| IEEE 802.11 TGax, MAC Ad hocSeptember 2017 TGax Meeting Minutes |
| Date: 2017-09-13 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Kiseon Ryu | LG |  |  | kiseon.ryu@lge.com |
| Guido R. Hiertz | Ericsson | Ericsson Allee 151234 HerzogenrathGermany | +49-2407-575-5575 | hiertz@ieee.org |

Abstract

The meeting minutes from the MAC Ad Hoc group meeting of TGax in the IEEE 802.11 Kona session September 11th – 15th, 2017.

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

**Waikoloa Village, Hawaii, US**

**September 11th – 15th, 2017**

# Monday, 2017-09-11, Evening session

At 2017-09-11T19:31-10:00 the Chairman calls the meeting of the IEEE 802.11ax MAC ad hoc group to order. Chao-Chun Wang acts a Chairman. Guido R. Hiertz acts as secretary. The Chairman introduces 11-17-/1453r0 that contains the agenda for this week’s MAC ad hoc sessions.

At 2017-09-11T19:33-10:00 the Chairman presents slide 9 of his submission. The Chairman asks for potentially essential patent claims. Nobody speaks up.

At 2017-09-11T19:35 Matt Fischer presents 11-17/1138r10.

At 2017-09-11T19:50 attendees start discussing submission 11-17/1138r10. Matthew Fischer incorporates various modifications proposed by attendees into his submission. He promises to upload the modified version as 11-17/1138r11. At 2017-09-11T21:05-10:00 Matt concludes his presentation.

At 2017-09-11T21:06-10:00 Matt Fischer introduces submission 11-17/1244r0. At 2017-09-11T21:13-10:00 Matt asks the following straw poll:

Which option do you support? (In 11-17/1244r0 about HE MCS per BW support)

Option 1: Basic HE MCS (and NSS) applies to all STAs in the BSS (including IBSS and MBSS) for less than or equal to 80 MHz operation

Option 2: Explicitly define the basic MCS (and NSS) for each bandwidth

Option 3: Basic HE MCS (and NSS) applies to all HE STAs in the BSS (including IBSS and MBSS) for less than or equal to 160 MHz operation whichever bandwidth it supports

Option 4: Abstain

Straw poll result: 7/5/7/4

At 2017-09-11T21:26-10:00 the Chairman declares the meeting to be in recess.

# Tuesday, 2017-09-12 AM2 session

At 2017-09-12T10:30-10:00 the Chairman calls the meeting of the IEEE 802.11ax MAC ad hoc group to order. Chao-Chun Wang acts a Chairman. Guido R. Hiertz acts as secretary. At 2017-09-12T10:33-10:00 the Chairman reviews the IEEE patent policy. The Chairman asks for potentially essential patent claims as presented on page 9 of his slides 11-17/1453r1. Nobody responds to the call.

The Chairman reviews yesterday’s progress of the IEEE 802.11ax MAC ad hoc group. There are 28 submissions remaining to be presented. In an effort to speed up progress of the ad hoc group the Chairman asks for uncontroversial topics to be presented first. There is no objection to the Chairman’s proposal. With the help of the group the Chairman rearranges the order of presentations. At 2017-09-12T10:46-10:00 the group approves the modified agenda.

At 2017-09-12T10:47-10:00 Menzo Wentink presents submission 11-17/1081r2. At 2017-09-12T10:56-10:00 Menzo concludes his presentation. At 2017-09-12T11:12-10:00 the Chairman presents a straw poll asking for unanimous support for the resolutions provided for the comments with the CIDs 3116, 3385, 3493, 3823, 3910, 4375, 4444, 5314, 6077, 6078, 7478, 7479, 7480, 7481, 7738, 7739, 7740, 7741, 7900, 7901, 7902, 7903, 7904, 8188, 8648, 8649, 9106, 9254, 9627, 9628, 9819 as listed in submission 11-17/1081r2. Nobody objects.

At 2017-09-12T11:14-10:00 Guoqing Li presents document 11-17/1295r01. Attendees discuss the submission. Because of the discussion Guoqing creates r2 or her submission. The Chairman presents a straw poll asking for unanimous acceptance of the resolution provided for the comment with CID 9501 as listed in submission 11-17/1295r2. Nobody objects to the Chairman’s straw poll.

At 2017-09-12T11:17-10:00 Suhwook Kim presents document 11-17/1438r1. After Suhwook concludes his presentation the Chairman presents a straw poll asking for unanimous approval of the resolutions provided for the comments with the CID 5863, 7251 as listed in 11-17/1438r1. Nobody objects to approving the resolutions.

At 2017-09-12T11:21-10:00 Abhishek Patil presents submission 11-17/1456r1. At 2017-09-12T11:25-10:00 Abhishek concludes his presentation. The Chairman presents a straw poll that asks for unanimous acceptance of the resolution provided for the comments with the CID 8555 as explained in document 11-17/1456r1. Nobody objects to the Chairman’s straw poll.

At 2017-09-12T11:28-10:00 Zhou Lan presents submission 11-17/1132r2. At 2017-09-12T11:38-10:00 Zhou ends his presentation. Attendees discuss the benefits of the proposed mechanism. At 2017-09-12T11:51-10:00 Zhou presents a straw poll that asks to approve the resolution for the comment with CID 8426 as described in document 11-17/1131r1. Zhou’s straw poll reads as follows:

“Do you support to adopt document IEEE 802.11-17/1131r1 as the resolution of CID 8426?”

Result: Yes/No/Abstain: 14/13/7

At 2017-09-12T11:55-10:00 Alfred Asterjadhi presents document 11-17/1264r2. At 2017-09-12T12:00-10:00 the Chairman presents a straw poll asking for unanimous approval of the resolutions provided for the comments with CIDs 3012, 3013, 3014, 3117, 3164, 3168, 3170, 3172, 3173, 4988, 5012, 5129, 5132, 5158, 5319, 5757, 5826, 5955, 5956, 6081, 6151, 6323, 6325, 6326, 6327, 7261, 7263, 7485, 7486, 7488, 7748, 7749, 7750, 7913, 7956, 7958, 8112, 8189, 8253, 8254, 8650, 8653, 8654, 8655, 9102, 9264, 9350, 9470, 9473, 9631, 9635, 9638, 9640, 9641, 9644, 9822, 9824, 9825, 9829, 9832, 9833, 9990, 9991, 9992, 9994, 10002, and 10238 as listed in document 11-17/1264r2. Nobody objects.

At 2017-09-12T12:01-10:00 Alfred Asterjadhi presents document 11-17/1262r1. At 2017-09-12T12:05-10:00 Alfred concludes his presentation. An attendee reminds Alfred that this revision is not yet available on the server. Alfred promises to upload his presentation. At 2017-09-12T12:08-10:00 the Chairman presents a straw poll asking for unanimous approval of the resolutions provided for the comments with CIDs 3303, 3304, 3305, 3306, 5193, 5194, 5195, 5367, 5368, 5812, 6010, 6011, 6012, 6104, 6732, 6733, 7111, 7637, 7638, 7639, 7640, 7641, 7818, 7819, 8222, 8503, 8504, 8588, 8709, 8710, 8711, 8712, 8713, 8716, 9224, 9225, 9300, 9301, 9302, 9304, 9305, 9536, 9720, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 10151, 10152, 10153, 10156, 10160, and 8066 as listed in document 11-17/1262r1. Nobody objects to approving the resolutions.

At 2017-09-12T12:10-10:00 Liwen Chu presents submission 11-17/1475r0. At 2017-09-12T12:13-10:00 Liwen ends his presentation. At 2017-09-12T12:14-10:00 the Chairman presents a straw poll that proposes to unanimously approve the resolution provided for the comment with CID 5915 as described in document 11-17/1475r0. Nobody objects to approving this resolution.

At 2017-09-12T12:16-10:00 Liwen Chu presents submission 11-17/1285r3. At 2017-09-12T12:17-10:00 Liwen concludes his presentation. At 2017-09-12T12:18-10:00 the Chairman presents a straw polls asking for unanimous approval of the resolution provided for the comments with CIDs as described and listed in document 11-17/1285r3. Nobody objects to approving this resolution.

At 2017-09-12T12:21-10:00 Osama Aboul-Magd presents submission 11-17/1429r0. At 2017-09-12T12:27-10:00 Osama concludes his presentation.

At 2017-09-12T12:28-10:00 the Chairman declares the MAC ad hoc group of be in recess.

# Tuesday, 2017-09-12 PM2 session

At 2017-09-12T16:02-10:00 the Chairman calls the meeting of the IEEE 802.11ax MAC ad hoc group to order. Chao-Chun Wang acts a Chairman. Guido R. Hiertz acts as secretary. The Chairman reviews the agenda contained in document 11-17/1453r2. At 2017-09-12T16:03-10:00 the Chairman calls for potentially essential patent claims. Nobody speaks up in response to this call.

At 2017-09-12T16:08-10:00 Po-Kai Huang presents document 11-17/1301r1. At 2017-09-12T16:12-10:00 Po-Kai concludes his presentation. At 2017-09-12T12:12-10:00 the Chairman presents a straw poll that asks for unanimous approval of the resolutions provided for the comments with CIDs 9636 and 9699 as listed in document 11-17/1301r1. Nobody objects to approving the resolutions.

At 2017-09-12T16:14-10:00 Liwen Chu presents submission 11-17/1290r2. At 2017-09-12T16:39-10:00 Liwen concludes his presentation. Attendees discuss Liwen’s submission. Based on the discussion Liwen announces that he will upload r3 of his submission.

At 2017-09-12T16:49-10:00 George Cherian presents submission 11-17/1330r0. At 2017-09-12T17:31-10:00 George concludes his presentation. At 2017-09-12T17:49-10:00 discussion ends and George states that he will upload revision r1 of his submission.

At 2017-09-12T17:50-10:00 Liwen Chu presents submission 11-17/1290r4. At 2017-09-12T17:51-10:00 Liwen ends his presentation. At 2017-09-12T17:53-10:00 the Chairman presents a straw poll asking for unanimous approval of the resolutions provided for all comments listed in document 11-17/1290r4. The CIDs of these comments are 3388, 3497, 3828, 3916, 4383, 4453, 5538, 5540, 5541, 5543, 5544, 5545, 5546, 5547, 5549, 5550, 7994, 8106, 8107, 8681, 8688. Nobody objects to approving the resolutions.

# Tuesday, 2017-09-12 Evening session

At 2017-09-12T19:35-10:00 the Chairman calls the meeting of the IEEE 802.11ax MAC ad hoc group to order. Chao-Chun Wang acts a Chairman. Guido R. Hiertz acts as secretary. The Chairman reviews the agenda contained in document 11-17/1453r2. At 2017-09-12T19:38-10:00 the Chairman calls for potentially essential patent claims. Nobody speaks up in response to this call.

At 2017-09-12T19:40-10:00 Liwen Chu presents submission 11-17/1294r0. At 2017-09-12T19:47-10:00 Liwen concludes his presentation. At 2017-09-12T19:50-10:00 the Chairman presents a straw poll that proposes approval of the resolutions provided for the comments with CIDs 4756, 9605, 9606, and 9855 as outlined in document 11-17/1294r0. Nobody objects to approving the resolutions.

At 2017-09-12T19:52-10:00 James Yee presents document 11-17/1304r2. At 2017-09-12T20:06-10:00 James concludes his presentation. At 2017-09-12T20:07-10:00 the Chairman presents a straw poll asking approval of the resolutions provided for the comments with CIDs 3186, 5334, 6174, 6175, 6518, 7021, 7886, 8147, 9327, 9341, 9430, 9687, 9688, and 9856 as explained in document 11-17/1304r2. Nobody objects to the Chairman’s proposal to unanimously support the resolutions.

At 2017-09-12T20:08-10:00 the Chairman asks reminds the group that the previously presented document 11-17/1429r0 has been uploaded. Consequently, the Chairman presents a straw poll that proposes approval of the resolutions provided for the comments with CIDs 3098, 9594, 9595, and 9596 as listed and explained in document 11-17/1429r0. Nobody objects to approving these resolutions.

At 2017-09-12T20:12-10:00 George Cherian presents submission 11-17/1330r1. At 2017-09-12T20:14-10:00 the Chairman presents a straw poll that proposes to approve the resolutions provided for the comments with the CID 3059, 4852, 7084, 7529, 7538, 8432, 8460, 8467, 8469, 9429 8479, 8481, 8483, 8484, 8487, 8488, 8489, 8492, 8493, 9394, and 9395s in document 11-17/1330r1. Nobody objects to approving the resolutions.

At 2017-09-12T20:16-10:00 Jarkko Kneckt presents 11-17/1339r0. At 2017-09-12T20:27-10:00 Jarkko concludes his presentation. At 2017-09-12T20:37 Jarkko presents 11-17/1346r0. At 2017-09-12T20:45 Jarkko asks the following straw poll:

“Do you agree that the TWT requesting STA should be able to indicate the times when it is not able to or has limited capability to transmit or receive?”

Yes/No/Abstain: 1/6/10

At 2017-09-12T20:48-10:00 Liwen Chu presents submission 11-17/1069r1. At 2017-09-12T21:11 Liwen concludes his presentation.

At 2017-09-12T21:17-10:00 Peter Loc presents submission 11-17/1358r1. 2017-09-12T21:20-10:00 Peter concludes his presentation. At 2017-09-12T21:21-10:00 the Chairman presents a straw poll asking for approval of the resolution provided for the comment with CID 6942 as described in document 11-17/1358r1. Nobody objects to the Chairman’s proposal of approving this resolution.

At 2017-09-12T21:23-10:00 the Chairman declares the group to be in recess.

**MAC Adhoc Session #6**

**Wednesday, September 13th, 2017, PM1 TGax Session (1:30 – 3:30pm)**

1. **The meeting called to order by Chao-Chun Wang (MediaTek), the co-chair of the TGax MAC Ad hoc**
2. **Announcement**
	1. Agenda Document 11-17/1453r3 is on the server.
	2. Meeting Protocol: The Chair asked to state name and affiliation when speaking for the first time.
	3. Attendance reminder.
		1. The attendance server: https://imat.ieee.org/
3. **The chair reviewed the mandatory slides of P&P.**
	1. Instructions from the WG Chair. [reviewed~~, did not review~~]
	2. Participants, Patents, and Duty to Inform. [reviewed~~, did not review~~]
	3. Patent Related Links. [reviewed, ~~did not review~~]
	4. Call for potentially essential patents.
		1. Chair asked if anyone is aware of potentially essential patents

 [Asked. ~~Did not ask~~]

* + 1. Potentially essential patents

 [None reported. ~~Reported as follows~~]

* 1. Other Guidelines for IEEE WG Meetings.
1. **The Chair identified remaining presentations to be treated in MAC Ad hoc**
	1. Requested to add 11-17/1492, 11-17/1493, 11-17/1476 in the agenda
2. **The Chair asked for approval of the agenda**
	1. No objection raised
3. **Presentation of contributions**
	1. **11-17/0389r10 CIDs-for-27-2-1-part1**

**R9 was approved in the non-PHY adhoc meeting a week before, but there is some update in the document. R10 passes with no objection.**

* 1. **11-17/1399r1 Resolution for CID 3099 (1 CIDs)**
* **SP#22: Do you agree with the resolution of CID 3099 as proposed in 11-17/1399r1:**

**No objection.**

**SP passes**

* 1. **11-17/1401r2 Resolution for CIDs 5285, 6198 (3 CIDs)**
* **SP#23: Do you agree with the resolution of CIDs 5285, 6198 and 7603** **as proposed in 11-17/1401r2:**

**No objection.**

**SP passes**

* 1. **11-17/1402r1 Resolution for PICS (11 CIDs)**
* **SP#24: Do you agree with the resolution of CIDs 7001, 9597, 7004, 7005, 9335, 9324, 7880, 8313, 7012, 7006, and 7000 as proposed in 11-17/1402r1:**

**No objection.**

**SP passes**

* 1. **11-17/1476r0 lb225-11ax-d1-0-comment-resolution-27.10.4 remaining CIDs (4 CIDs)**
* **SP#25: Do you agree with the resolution of CIDs 4794, 6030, 6772, 8163 as proposed in 11-17/1476r0:**

**No objection.**

**SP passes**

* 1. **11-17/1494r0 CID8470 - Ack related (1 CID)**
* **SP#26: Do you agree with the resolution of CID 8470 as proposed in 11-17/1494r0:**

**No objection.**

**SP passes**

* 1. **11-17/1138r12 CR-TWT-Operation (58 CIDs)**

Will comeback in PM2 session.

1. **The chair announced the recess of the session at 03:30 pm**

**MAC Adhoc Session #7**

**Wednesday, September 13th, 2017, PM2 TGax Session (4:00 – 6:00pm)**

1. **The meeting called to order by Chao-Chun Wang (MediaTek), the co-chair of the TGax MAC Ad hoc**
2. **Announcement**
	1. Agenda Document 11-17/1453r3 is on the server.
	2. Meeting Protocol: The Chair asked to state name and affiliation when speaking for the first time.
	3. Attendance reminder.
		1. The attendance server: https://imat.ieee.org/
3. **The chair reviewed the mandatory slides of P&P.**
	1. Instructions from the WG Chair. [reviewed~~, did not review~~]
	2. Participants, Patents, and Duty to Inform. [reviewed~~, did not review~~]
	3. Patent Related Links. [reviewed, ~~did not review~~]
	4. Call for potentially essential patents.
		1. Chair asked if anyone is aware of potentially essential patents

 [Asked. ~~Did not ask~~]

* + 1. Potentially essential patents

 [None reported. ~~Reported as follows~~]

* 1. Other Guidelines for IEEE WG Meetings.
1. **The Chair identified remaining presentations to be treated in MAC Ad hoc**
	1. No additional submission requested in the agenda
2. **The Chair asked for approval of the agenda**
	1. No objection raised
3. **Presentation of contributions**
	1. **11-17/1138r12 CR-TWT-Operation (30 CIDs)**
* **SP#27: Do you agree with the resolution of CID** 4846 4767 4777 4778 4779 5061 5062 5064 5777 5778 5970 6105 6547 6548 6549 6902 7209 7210 7211 7212 7213 7214 7215 8084 8129 8423 8425 9435 9867 9972 **as proposed in 11-17/1138r12:**

**No objection.**

**SP passes**

* 1. **11-17/1270r1 lb225-cr-10\_22\_2\_11-CID\_5374 (1 CID)**
* **SP#28: Do you agree with the resolution of CID 5374 as proposed in 11-17/1270r1:**

**No objection.**

**SP passes**

* 1. **11-17/1069r4 LB225 11ax D1.0 Comment Resolution 9.7.3 (33 CIDs)**
* **SP#29: Do you agree with the resolution of CID 4757, 3133, 3134, 4758, 8407, 8302, 5849, 6486, 6487, 4759, 9387, 9388, 3191, 6185, 7038, 5793, 4763, 3180, 4762, 8408, 9678, 9679, 4764, 4796, 7566, 61867039, 9389, 9390, 3181, 4761, 4760, 8409 as proposed in 11-17/1069r4:**

**No objection.**

**SP passes**

* 1. **11-17/1492r0 Improve Scanning for Identifying Transmitted BSSID**
* **SP#30: Do you agree to adopt the proposed text change in 11-17/1493r2:**

**Y/N/A: 7/14/14**

**SP fails**

* 1. **11-17/1087r2 MAC-CR-CIDs 4813-4814 (2 CIDs)**
* **SP#31: Do you agree with the resolution of CID 4813, 4814 as proposed in 11-17/1087r2:**

**No objection.**

**SP passes**

1. **The chair adjourned the session at 05:50 pm**