IEEE P802.11  
Wireless LANs

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| Minutes for REVmf 2025 April 28 Telecon | | | | |
| Date: 2025-05-01 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | Qualcomm Technologies, Inc. | 10871 N 5750 W  Highland, UT 84003 | +1 801 492 4023 | jrosdahl @ ieee . org |
|  |  |  |  |  |

Abstract

Minutes for the 802.11mf (REVmf) for telecon held on 2025 April 28 telecon.

1. **Telecon for TGmf (REVmf) on April 28, 2025**
   1. **Called to order** 10:02 am ET by the WG Chair, Mike Montemurro.
   2. **Introduction of officers:**
      1. Mike Montemurro (Huawei), Chair
      2. Mark Hamilton (Ruckus/CommScope), Vice Chair
      3. Po-Kai Huang (Intel), Editor
      4. Jon Rosdahl (Qualcomm), Secretary
      5. Joined later:
         1. Mark RISON (Samsung), Vice Chair
   3. **Attendance**: See Appendix A – Approximately 50 attendees.
   4. **Review Patent, Copyright and Participation policies**
      1. No items noted.
   5. **Review Agenda** – 802-11-25/0662r2
      1. <https://mentor.ieee.org/802.11/dcn/25/11-25-0662-02-000m-april-28-teleconference-agenda.docx>
      2. Monday 2025 April 28:

1. Call to order, attendance (https://imat.ieee.org/attendance ), and patent and copyright policy

a. Patent Policy: Ways to inform IEEE: i. Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or

ii. Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or

iii. Speak up now and respond to this Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

b. Copyright Policy:

i. By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

c. Participation and policy related (including Patent and Copyright) slides: See slides 10-19 in https://mentor.ieee.org/802.11/dcn/25/11-25-0214-01-0000-2nd-vice-chair-report-march-2025.pptx

d. Agenda Approval

2. Editor report – Po-Kai Huang (Intel)/Edward Au (Huawei)

3. Contributions:

a. Remove Clause 9 behavior requirements – doc 11-24/1735 – Joseph Levy (InterDigital)

b. Indoor enabled AP signaling – doc 11-25/351 – Youhan Kim (Qualcomm)

c. PASN ID for MLO – doc 11-25/345 – Yan Li(ZTE)

d. EHT MLO – doc 11-25/332 – Rubayet Shafin (Samsung Electronics)

e. Dynamic fragmentation MLO – doc 11-25/373 – Abhishek Patil (Qualcomm)

f. 6 GHz Discovery – doc 11-25/371 – Abhishek Patil (Qualcomm)

g. Control frame protection – 11-25/260 – Po-Kai Huang (Intel)

h. SA Query improvements – doc 11-25/1915 – Henry Ptasinski (Morse Micro)

i. Protecting Beacon TSF – doc 11-25/1919 – Henry Ptasinski (Morse Micro)

j. S1G channel update for EU – 11-25/337 – Dave Halasz (Morse Micro)

k. Reduced ANQP latency – 11-25/270 – Azin Neishaboori, General Motors

4. Motions

a. Document 11-24/1925r5 – Slide 9

5. AOB

6. Adjourn

* + 1. Drop 11-25/351
    2. Reserve remaining 15 minutes for the proposed Motion
    3. Motion needs some editing – will do when we get there.
    4. No objection to the Modified Agenda R3
  1. **Editor Report** Po-Kai Huang (Intel) 802-11-25/0723r1
     1. <https://mentor.ieee.org/802.11/dcn/25/11-25-0723-01-000m-802-11revmf-editor-s-report.pptx>
     2. Publication of New Draft is expected today.
     3. 11bh and 11be are expected at the end of May.
     4. Roll-in has to be done prior to the changes that affect 11be or 11bh, but Editor is looking to see how to apply the previously approved changes.
     5. We have only had 11me approved changes, so should be ok.
  2. **Review Doc 11-24/1735** Remove Clause 9 Behavior Requirements - Joseph LEVY (Interdigital)
     1. <https://mentor.ieee.org/802.11/dcn/24/11-24-1735-02-000m-correction-to-remove-behavior-from-clause-9-3-1-5.docx>
     2. Not ready for today.
  3. **Review Doc 11-25/345r5** - PASN ID for MLO - Yan LI (ZTE)
     1. <https://mentor.ieee.org/802.11/dcn/25/11-25-0345-05-000m-pasn-id-for-mlo.docx>
     2. Review Submission.
     3. Discussion on PASN ID and STA vs MLD.
     4. Feedback received but need to have a draft with the 11bh and 11be amendments rolled in before we can action this proposal.
  4. **Review Doc 11-25/332** – EHT MLO – Rubayet Shafin (Samsung Electronics)
     1. Was not on the call, so move submission to May Agenda.
  5. **Review doc 11-25/373** - Dynamic fragmentation MLO – Abhishek Patil (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/25/11-25-0373-00-000m-dynfrag-mlo.docx>
     2. Review Submission.
     3. Discussion that resulted in removing “PPDU” from TXOP/PPDU” in 35.3.9.
     4. Discussion on having reference to why the Fragmentation has to be done in this manner.
     5. Discussion on dynamic fragmentation is affected in transitions to different AP.
     6. Concern with different association and reassociation processes.
     7. Will work offline and bring back.
  6. **Review 11-25/0371r0** - 6 GHz Discovery – Abhishek Patil (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/25/11-25-0371-00-000m-nr-ie-6ghz-bits.docx>
     2. Review submission.
     3. Discussion on Neighbor Report Element (9.4.2.35) not apply in 6 GHz band.
     4. Discussion on minor changes that may need to be done.
     5. Will bring back in May and we can motion possible changes then.
  7. **Review Doc 11-25/260r7** – Control frame protection –Po-Kai Huang (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/25/11-25-0260-07-000m-trigger-ba-bar-protection.docx>
     2. Review submission, highlighting the changes from previous versions.
     3. Comment on Page 7, New Paragraph, “equal” should be “set to”, and there are a few others that this occurs (about 6 times).
     4. Discussion on which way is correct.
     5. Discussion on if the submission is ready for a motion or not, as there are other technical issues that may need to be addressed first.
     6. Discussion on where to add the protection control and Key ID field.
     7. Discussion on other changes that may need to be made.
     8. More items to discuss but deferred to be part of the Motion discussion.
  8. **Review doc 11-25/1915r4** – SA Query improvements –Henry Ptasinski (Morse Micro)
     1. <https://mentor.ieee.org/802.11/dcn/24/11-24-1915-04-000m-sa-query-improvements-for-low-transmit-devices.docx>
     2. Review Submission, but due to time constraints, skipped the intro, and just reviewed the proposed changes to the draft.
     3. Discussion on the wording and change to “verify”.
     4. Discussion on when this can occur, and may want to include “during an RSNA”. Or “A STA may initiate an SAQ at any time to verify xxx”
     5. Concern that all the offline comments had been addressed. Author believed he had covered most of the comments, but can check offline for any missing concerns.
     6. Discussion on what “successful” frame means. Suggested to delete “Successful”.
     7. Question on if the SA Query xxx but it does not do anything with SA, so we may want to indicate that this is Security rather than the old SA definition.
     8. We can present during May, but the Author will not be present, so a co-author could present the material.
  9. Move the next 3 documents to May and proceed with the previously announced Motion.
  10. **Motions:**
      1. **Motion #7:** **Control Frame Protection** (11-25/260) (2025-04-28) (see slide #9 - 11-24/1925r6)
      2. Moved: Po-Kai Huang
      3. Seconded: Jarkko Kneckt
      4. Discussion:
         1. Claim that we have several technical issues that have not been addressed.
         2. Discussion on the list of issues claimed to have not been addressed.
         3. Discussion on changing to state “An HE AP sets the UL HE-SIG-A2 Reserved subfield to all 1s except when control frame protection is negotiated with the recipient(s), where B61 and B62 are set as follows:"
         4. Debate on whether comments sent to the reflector had been addressed or not.
      5. Recorded vote requested.
      6. Request to call the question, but chair noted a limited number of speakers on the queue.
      7. Speakers for and against the motion made their position known.
      8. Results: 55 Yes – 8 No – 5 Abstain. – Motion passes.
      9. Validation will be done, and the list of votes will be noted in Appendix B.
  11. **Adjourned 12:00 pm ET**.

Appendix A: **IMAT Attendance:**

Timestamp                      Name                                        Affiliation  
TGmf      04/28/2025                 Liu, Yong                                         Apple Inc.  
TGmf      04/28/2025            Sun, Li-Hsiang                                      MediaTek Inc.  
TGmf      04/28/2025              Cheng, Xilin                                 NXP Semiconductors  
TGmf      04/28/2025             Halasz, David                                        Morse Micro  
TGmf      04/28/2025               RISON, Mark                  Samsung Cambridge Solution Centre  
TGmf      04/28/2025         Berger, Christian                                 NXP Semiconductors  
TGmf      04/28/2025              Rosdahl, Jon                        Qualcomm Technologies, Inc;  
TGmf      04/28/2025         Bethapudi, Shirly                                 NXP Semiconductors  
TGmf      04/28/2025              Levy, Joseph                                 InterDigital, Inc.  
TGmf      04/28/2025               Klein, Arik                       Huawei Technologies Co., Ltd  
TGmf      04/28/2025       Montemurro, Michael                       Huawei Technologies Co., Ltd  
TGmf      04/28/2025       Banerjee, Subharthi                                 NXP Semiconductors  
TGmf      04/28/2025          Bansal, Priyanka                                 NXP Semiconductors  
TGmf      04/28/2025         Pottigari, Sachin                                 NXP Semiconductors  
TGmf      04/28/2025           Qureshi, Haneya                                                 GM  
TGmf      04/28/2025              Sethi, Ankit                                 NXP Semiconductors  
TGmf      04/28/2025                Roy, Sayak                                 NXP Semiconductors  
TGmf      04/28/2025        Patwardhan, Gaurav                         Hewlett Packard Enterprise  
TGmf      04/28/2025            Kuo, Chih-Chun                                      MediaTek Inc.  
TGmf      04/28/2025         Kandala, Srinivas                                SAMSUNG ELECTRONICS  
TGmf      04/28/2025             Nayak, Peshal                           Samsung Research America  
TGmf      04/28/2025         Grandhe, Niranjan                                 NXP Semiconductors  
TGmf      04/28/2025                  Cao, Rui                                 NXP Semiconductors  
TGmf      04/28/2025               B, Hari Ram                                 NXP Semiconductors  
TGmf      04/28/2025                   li, yan                                    ZTE Corporation  
TGmf      04/28/2025           McCann, Stephen                       Huawei Technologies Co., Ltd  
TGmf      04/28/2025             Kumar, Manish                                 NXP Semiconductors  
TGmf      04/28/2025           Patil, Abhishek  Qualcomm Incorporated; Qualcomm Technologies, Inc  
TGmf      04/28/2025           Bhandaru, Nehru                               Broadcom Corporation  
TGmf      04/28/2025               Kim, Youhan                         QualcommTechnologies, Inc.  
TGmf      04/28/2025               Xu, Yanchao                                            Amlogic  
TGmf      04/28/2025            Malinen, Jouni                         Qualcomm Technologies, Inc  
TGmf      04/28/2025             Huang, Po-Kai                                  Intel Corporation  
TGmf      04/28/2025                 Li, Weiyi                  Spreadtrum Communication USA, Inc  
TGmf      04/28/2025           Sambasivan, Sam                                               AT&T  
TGmf      04/28/2025            Hamilton, Mark                                   Ruckus/CommScope  
TGmf      04/28/2025            Park, Minyoung                                          Apple Inc  
TGmf      04/28/2025             Taori, Rakesh                              Infineon Technologies  
TGmf      04/28/2025             Lee, Wookbong                                          Apple Inc  
TGmf      04/28/2025          Ptasinski, Henry                       Element78 Communications LLC  
TGmf      04/28/2025        Hedayat, Ahmadreza                                         Apple Inc.  
TGmf      04/28/2025                 Zhou, Lei                      H3C Technologies Co., Limited  
TGmf      04/28/2025            Stacey, Robert                                  Intel Corporation  
TGmf      04/28/2025         Bredewoud, Albert                               Broadcom Corporation  
TGmf      04/28/2025           Yong, Su Khiong                                         Apple Inc.  
TGmf      04/28/2025                Wu, Tianyu                               Apple Inc; Apple Inc  
TGmf      04/28/2025               Batra, Anuj                                         Apple Inc.  
TGmf      04/28/2025           Monajemi, Pooya                                          Apple Inc  
TGmf      04/28/2025               Zhang, Rong                                 NXP Semiconductors  
TGmf      04/28/2025                Zhang, Yan                                          Apple Inc  
TGmf      04/28/2025            Kneckt, Jarkko                                         Apple Inc.  
TGmf      04/28/2025               Sun, Yanjun                                          Apple Inc  
TGmf      04/28/2025          Thakur, Sidharth                                         Apple Inc.  
TGmf      04/28/2025        Ghosh, Chittabrata                                         Apple Inc.  
TGmf      04/28/2025                  Wang, Qi                                         Apple Inc.  
TGmf      04/28/2025                 HAN, DONG                                         Apple Inc.  
TGmf      04/28/2025              Bykov, Denis                                 NXP Semiconductors  
TGmf      04/28/2025  Rashid, Mohammad Mamunur                                         Apple Inc.  
TGmf      04/28/2025            Jiang, Jinjing                                         Apple Inc.  
TGmf      04/28/2025         Srinivasa, Sudhir                                 NXP Semiconductors  
TGmf      04/28/2025              Seok, Yongho                                         Apple Inc.  
TGmf      04/28/2025        Mehrnoush, Morteza                                          Apple Inc  
TGmf      04/28/2025          Akhmetov, Dmitry                           Intel; Intel Corporation  
TGmf      04/28/2025             Verma, Sindhu                                           Broadcom  
TGmf      04/28/2025      Adhikari, Shubhodeep                               Broadcom Corporation  
TGmf      04/28/2025        Asterjadhi, Alfred                         Qualcomm Technologies, Inc

Appendix B:

|  |  |
| --- | --- |
| **Participant Name** | **Motion 7 - Control Frame Protection (11-25/260) (2025-04-28) (see slide #9 - 11-24/1925r6)** |
|  | *Quiz (Single choice)* |
| [V] Nehru Bhandaru (Broadcom) | Yes |
| [V] Li-Hsiang Sun, MediaTek | Yes |
| Sid Thakur, Apple | Yes |
| Rong Zhang, Apple | Yes |
| Jarkko Kneckt, Apple | Yes |
| Yanjun Sun, Apple | Yes |
| Qi Wang, Apple | Yes |
| SK Yong, Apple | Yes |
| [V] Jouni Malinen, Qualcomm | Yes |
| Yan (ATG) Zhang, Apple | Yes |
| Chitto Ghosh, Apple | Yes |
| Wook Bong Lee, Apple | Yes |
| Yong Liu, Apple | Yes |
| [V] Denis Bykov, NXP | Yes |
| Pooya Monajemi, Apple | Yes |
| Minyoung Park, Apple | Yes |
| Joseph Levy, Interdigital | No |
| Anuj Batra, Apple | Yes |
| Jinjing Jiang, Apple | Yes |
| Reza Hedayat, Apple | Yes |
| [V] Subharthi Banerjee, NXP | Yes |
| [V] kiwin [BRCM] | Yes |
| Gaurav Patwardhan, HPE | No |
| [V] Dave Halasz, Morse Micro | Abstain |
| [V] William Li | Abstain |
| Hyungjin Kim, Broadcom | Yes |
| [V] Mark Hamilton (CommScope/Ruckus) | No |
| [V] Stephen McCann, Huawei | No |
| [V] Preston Hunt, Intel | Yes |
| [V] Dibakar Das, Intel | Yes |
| [V] Youhan Kim, Qualcomm Technologies, Inc. | Yes |
| [V] Sigurd Schelstraete, Max Linear | Abstain |
| [V] George Cherian, Qualcomm | Yes |
| Tianyu Wu, Apple | Yes |
| Necati Canpolat, Intel | Yes |
| [V] Sherief Helwa, Qualcomm | Yes |
| [V] Hui Luo, Infineon | Yes |
| [V] Po-Kai Huang, Intel | Yes |
| [V] Abhishek Mantha, Broadcom | Yes |
| [V] Rui Cao, NXP | Yes |
| [v] Manish Kumar - NXP | Yes |
| [V] Abhishek Patil (Qualcomm Technologies, Inc) | Yes |
| [V] Robert Stacey, Intel | Abstain |
| [V] Alfred Asterjadhi, Qualcomm Inc. | Yes |
| [V] Mark RISON, Samsung | No |
| [V] Dmitry Akhmetov, Intel | Yes |
| [V] Qinghua Li, Intel | Yes |
| [V] Sudhir Srinivasa [NXP] | Yes |
| [V] Ankit Sethi NXP | Yes |
| [V] Sindhu Verma, Broadcom | Yes |
| [V] Albert Bredewoud, Broadcom | Yes |
| [V] Shirly Susan Bethapudi, NXP | Yes |
| [V] Shubhodeep Adhikari, Broadcom | Yes |
| [V] Laurent Cariou, Intel | Yes |
| Gabor Bajko, MediaTek Inc. | Yes |
| [V] Niranjan Grandhe, NXP | Yes |
| [V] Peshal Nayak, Samsung | No |
| [V] Ke Zhong, Ruijie Networks | Abstain |
| [V] Jing Guo, NXP | Yes |
| Morteza Mehrnoush, Apple | Yes |
| [V] Arik Klein, Huawei | No |
| Dong Han, Apple | Yes |
| [NXP] Christian Berger, NXP | Yes |
| Yongho Seok, Apple | Yes |
| [V] Srinivas Kandala, Samsung | No |
| [V] B Hari Ram, NXP | Yes |
| Mohamed Abouelseoud, Apple | Yes |
| [v] juan fang, intel | Yes |