IEEE P802.11  
Wireless LANs

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| REVmd CRC Telecon March 11 & 13, 2020 | | | | |
| Date: 2020-03-13 | | | | |
| Author(s): | | | | |
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Abstract

802.11md REVmd CRC teleconferences for March 11 and 13, 2020.

R0: contains the minutes for March 11, 2020.

R1: Added Minutes for March 13, 2020.

1. **IEEE 802.11md REVmd CRC Telecon March 11, 2020 16:33 – 18:00 ET**
   1. **Called to order** at 4:33pm ET by the TG Vice Chair, Michael MONTEMURRO (Blackberry).
   2. **Attendance**:
      1. Jon ROSDAHL (Qualcomm)
      2. Michael MONTEMURRO (Blackberry)
      3. Emily QI (Intel)
      4. Joseph LEVY (Interdigital)
      5. Mark HAMILTON (Ruckus/CommScope)
      6. Mark RISON (SAMSUNG)
   3. **Review Patent Policy**
      1. No issues reported.
   4. Review Agenda: 11-20/234r15
      1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0234-15-000m-2020-jan-mar-teleconference-and-adhoc-agendas.docx>
      2. Review Agenda:

**The draft agenda for the teleconferences is below:**

1.       Call to order, attendance, and patent policy

a.       **Patent Policy: Ways to inform IEEE:**

1. Cause an LOA to be submitted to the IEEE-SA ([patcom@ieee.org](mailto:patcom@ieee.org)); or
2. Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
3. 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.      Participation slide: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

c. Adhoc meeting reminders:

April 21-23 Cambridge UK (Mark Rison [m.rison@samsung.com](mailto:m.rison@samsung.com) )

Webex to be provided.  
Please unicast email the respective host if you are attending in person so that local arrangements (e.g. lunch) can be made.

2.   Editor report – Emily QI/Edward AU

3.   Comment resolution:

e.2020-03-11 Wednesday – 4:30-6pm Eastern \*\*\*\*\*Teleconference announced with 10-day notice\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*(London is +4)

i. Mark RISON CIDs

4. AOB

5. Adjourn

* 1. Editor Review – Emily QI
     1. Working on speculative draft
     2. Review in process
     3. Expect to have 3.2 on Monday.
  2. Review Mark RISON CIDs
     1. Doc 11-20/0435r0
     2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0435-00-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>
     3. CID 4393 (MAC)
        1. Review Comment
        2. Review minutes from AdHoc – Sunrise:

7.7.1 CID 4393 (MAC)

7.7.1.1 Review comment

7.7.1.2 Discussion on why “(no data)” should be deleted.

7.7.1.3 P790.79 is example of when we have it and when we don’t.

7.7.1.4 There are 24 locations of (no data)

7.7.1.5 The “(no data)” is unnecessary. The text does not add to the description of the frames that carry no data. QoS NULL is the name of the QoS NULL frame.

7.7.1.6 QoS CF-Poll has no data

7.7.1.7 A submission is required to prepare the changes and the cited locations.

7.7.1.8 There was no specific objection to making this change.

7.7.1.9 Request to have a submission prepared to see the actual changes.

7.7.1.10 Will come back with submission

* + - 1. Review submission discussion
      2. Proposed Resolution: CID 4393 (MAC): REVISED (MAC: 2020-03-11 20:42:34Z): In D3.1:

At 782.10 change:

QoS (+)Null frame refers to all three QoS data subtypes with “no data”: the QoS Null (no data) frame, subtype 1100; the QoS CF-Poll (no data) frame, subtype 1110; and the QoS CF-Ack +CF-Poll frame, subtype 1111.

to:

QoS (+)Null frame refers to all three QoS data subtypes with an empty frame body: the QoS Null frame, subtype 1100; the QoS CF-Poll frame, subtype 1110; and the QoS CF-Ack +CF-Poll frame, subtype 1111.

Delete “ (no data)” at 785.60, 786.15/18/20, 790.48 (2x), 790.49, 799.43, 850.32 (3x), 850.33 (2x), 1860.24, 3605.32/35/39/47, 3613.23/27/30/41.

* + - 1. No Objection – Mark Ready for Motion
    1. CID 4432 (MAC)
       1. Review Comment
       2. Review Discussion in submission.
       3. Note that in the submission it says TA instead of RA, so a check will need to be done.
       4. Proposed Resolution was in the submission, but there needs to be a check before we resolve this CID.
       5. ACTION ITEM: Mark RISON to check the “Announce” frames and the TA vs RA description.
    2. CID 4451 (MAC)
       1. Review Comment
       2. Review Submission Discussion
       3. Review the rules
       4. Review the proposed changes
       5. Request for more time to review.
       6. Schedule for March 20th Telecon
    3. CID 4433 (MAC)
       1. Review Comment
       2. Review submission discussion
       3. Proposed Resolution: REVISED (MAC: 2020-03-11 21:06:18Z): At the end of the sentence in 10.27.5 Protection rules for VHT STAs (D3.1 P1907.14) add " and that the applicable HT protection mechanisms are extended to include 80, 160 and 80+80 MHz transmissions using non-HT duplicate frames defined in Clause 21".
       4. No objection – Mark Ready for Motion
    4. CID 4582 (PHY)
       1. Review Comment
       2. Review Submission Discussion.
       3. Review proposed changes.
       4. Discussion on if DEFVAL should be 512 or 500 for EDCA.
       5. Proposed Resolution: REVISED (PHY: 2020-03-11 21:06:00Z) - Make the changes shown under “Proposed changes” for CID 4582 in 11-20/0435r0 <https://mentor.ieee.org/802.11/dcn/20/11-20-0435-00-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>, which address the issue raised by the commenter (except for the one at 1763.63 -- see CID 4168).
       6. No Objection – Mark Ready for Motion
    5. CID 4284 (MAC)
       1. Review Comment
       2. Review proposed changes.
       3. Proposed resolution: CID 4284 (MAC): REVISED (MAC: 2020-03-11 21:24:51Z): Make the changes shown under “Proposed changes” for CID 4284 in 11-20/0435r0 <https://mentor.ieee.org/802.11/dcn/20/11-20-0435-00-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>, which allow for optional subelements in the requests identified by the commenter.
       4. No Objection – Mark Ready for Motion
    6. CID 4499 (EDITOR)
       1. Review Comment
       2. Review submission Discussion
       3. Review proposed changes
       4. Discussion on the proposed changes:
          1. From the REVmd CRC AdHoc Minutes – Sunrise:

2.6.6 CID 4499 (EDITOR):

2.6.6.1 Review Comment.

2.6.6.2 Proposed Resolution: Rejected. IEEE Editor completed MEC with TGmd draft 2.1. There is no issue with the term “Master”.

2.6.6.3 No objection - Mark Ready for motion

* + - 1. The proposed changes are either field names or regulatory identified names.
      2. Discussion on if the term Slave or Master are offensive. Are the changes warranted or not?
         1. Timing master maybe we want to change, but after more thought, it may be better to not change rather than change to controller.
      3. Master has other connotations than the objectionable Master-Slave, i.e. Master Clock, Master Craftsman, Master Plumber etc.
      4. From CID 2020: REVISED (EDITOR: 2019-03-11 16:20:39Z)- change the cited sentence to "The BeamLink isMaster subfield is set to 1 to indicate that the STA is the master of the data transfer and set to 0 otherwise. The STAs use the BeamLink isMaster subfield to negotiate the dot11BeamLinkMaintenanceTime as specified in Table 9-343 (The Beamformed Link Maintenance negotiation)."
      5. The old text (before CID 2020), was: "The BeamLink isMaster subfield is set to 1 to indicate that the STA is the master of the data transfer and set to 0 if the STA is a slave of the data transfer."
      6. There was discussion on the relationship of Radio vernacular, Master and Client are often used.
      7. Look to bring back to the group- Not enough consensus.
      8. This was already rejected: Current Resolution: REJECTED (EDITOR: 2020-02-20 10:25:02Z). Reject Reason: IEEE Editor completed MEC with TGmd draft 2.1. There is no issue with the term “Master”.
      9. See Motion #162. (REVmd CRC AdHoc – Sunrise meeting)
      10. Mark RISON was told he could bring his updated proposed resolution back during the motion time on the 20th.
          1. Proposed replacement resolution: REVISED

In 9.5.6 Beamformed Link Maintenance field inc. Figure 9-852—Beamformed Link Maintenance field format and Table 9-344—The Beamformed Link Maintenance negotiation, change “isMaster” to “isController” (5x). In 9.5.6 Beamformed Link Maintenance field change “master of the data transfer” to “controller of the data transfer”.

In 11.1.2.1 TSF for an infrastructure BSS or a PBSS change “timing master” to “timing source”.

* + - 1. There was not consensus to make the updated change.
    1. CID 4715 and 4716 (GEN)
       1. Review Comment
       2. Proposed Resolution: REVISED (GEN: 2020-03-11 21:45:38Z) Make the changes shown under “Proposed changes” for CIDs 4715 and 4716 in 11-20/0435r0 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0435-00-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>>, which clarify the use of MLME-FINETIMINGMSMTRQ primitives and also MLME-TIMINGMSMTRQ primitives.
       3. No objection – Mark Ready for Motion
    2. CID 4591 (MAC)
       1. Review Comment
       2. Review the usage of UTF-8 String vs UFT-8 encoded code points.
       3. Discussion on if the SSID is a String vs Encoding points.
       4. Discussion on the proposed changes
       5. Discussion on the use of the word “string” vs “encoded code points”.
       6. Note: 6.4.7.1.2 (which defines an ESSIdentifier parameter): "An identifier composed of the string value of the SSID element concatenated with ..."
       7. A Proposed resolution was prepared at the REVmd CRC AdHoc – Sunrise. Today’s discussion is to replace that resolution with the proposed resolution here.
       8. Discussion on which resolution should be used.
       9. We are at time, will bring back later on Friday (March 13, 2020).
  1. Adjourned 6:01pm ET.

1. **IEEE 802.11md REVmd CRC Telecon Friday March 13, 2020 10:00 – 12:00 ET**
   1. **Called to order** at 10:06am ET by the TG Vice Chair, Michael MONTEMURRO (Blackberry).
   2. **Attendance**:
      1. Jon ROSDAHL (Qualcomm)
      2. Michael MONTEMURRO (Blackberry)
      3. Carol ANSLEY (CommScope)
      4. Edward AU (Huawei)
      5. Emily QI (Intel)
      6. Joseph LEVY (Interdigital)
      7. Jouni Malinen (Qualcomm)
      8. Mark HAMILTON (Ruckus/CommScope)
      9. Mark RISON (SAMSUNG)
      10. Osama Aboul-Magd (Huawei)
      11. Sean Coffey (Realtek)
      12. Menzo WENTINK (Qualcomm)
   3. **Review Patent Policy**
      1. No issues reported.
   4. **Review Agenda:** 11-20/234r15
      1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0234-15-000m-2020-jan-mar-teleconference-and-adhoc-agendas.docx>
      2. Review Agenda:
2. **2020-03-13 Friday 10 am Eastern 2 hours (London is +4)**
   1. Edward AU - https://mentor.ieee.org/802.11/dcn/20/11-20-0270 – <https://mentor.ieee.org/802.11/dcn/20/11-20-0364-00-000m-resolution-for-cmmg-related-cids-4559-and-4600.docx>  
      <https://mentor.ieee.org/802.11/dcn/20/11-20-0371-00-000m-resolution-for-cmmg-mac-related-cids-4217-4218-and-4250.docx> 30 mins
   2. Emily QI - <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-03-000m-sa1-proposed-resolutions-for-editor-adhoc.doc> – 30 mins
   3. Graham SMITH - <https://mentor.ieee.org/802.11/dcn/20/11-20-0272-02-000m-cids-from-mike-to-graham-2.docx> – 50 mins
   4. Mark RISON CIDs
      * 1. Change Mark RISON CIDs, to GEN CIDs
        2. No objection to changes to Agenda
   5. **Editor Report** Emily QI (Intel)
      1. Will have new draft sent later today to Dorothy
      2. Expect available next week.
   6. **Review doc 11-20/270r3** Edward AU (Huawei)
      1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0270-03-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0-part-ii.docx>
      2. CID 4281 and 4282 (EDITOR2)
         1. Review Comments
         2. Review proposed changes
         3. Review examples in the draft.
         4. Discussion on the value of the change: Consistency (possibly).
         5. About 17 instances of Enumerated Values with Quotes.
         6. Column names and Enumerated values sometimes have quotes and sometimes do not.
         7. CID 4282 is about Enumerated Types – seems consensus
         8. An Alternate could be to put quotes on Column names.
         9. Proposed Resolution: CID 4282: Revised.

Remove the scare quotes of No at 195.28 and 992.24.

Remove the scare quotes of Yes at 196.27, 273.47, 992.18, 992.27, 1464.50, 1717.39, 1907.22, 1907.23, and 2328.57.

Remove the scare quotes of SUCCESS at 1636.59, 2251.31, 2450.22, 2451.50, 2458.15, and 2459.6.

Remove the scare quotes of Subelements at 992.21 and 1464.52.

* + - 1. No objection – Mark CID 4282 Ready for Motion
      2. Discussion on which is harder to find missing quotes or remove quotes.
      3. CID 2584 was cited as possibly similar – reviewed resolution.
      4. Straw Poll: Do you support the reject of the comment of CID 4218?
         1. Results:1 Yes, 4 No, 4 Abstain
      5. More work to be done on this for review later.
      6. Straw Poll: Do you support the proposed resolution for CID 4281 shown in 11-20/0270r4?
         1. Results: 6 Yes 0 No 4 Abstain
      7. Proposed Resolution: CID 4281: Revised

Remove the scare quotes of Robust at 195.28 and 196.27.

Remove the scare quotes of Channel spacing at 199.12 and 199.18.

Remove the scare quotes of Channel starting frequency at 199.13 and 199.19.

Remove the scare quotes of Code at 913.42.

Remove the scare quotes at VHT-MCS index at 935.42.

Remove the scare quotes at MCS index at 935.44.

Remove the scare quotes at MCS Idx at 935.48.

Remove the scare quotes at Responding STA role at 943.32.

Remove the scare quotes of Element ID Extension present at 978.20.

Remove the scare quotes of Extensible at 992.18, 992.20, 1464.49, 1464.50, 1464.52, 1464.56, 1464.60, 1907.22, and 1907.23.

Remove the scare quotes of Fragmentable at 992.27.

Remove the scare quotes of Channel spacing (MHz) at 1004.43, 1015.17, 1015.41, 1016.1, 1016.35, 1048.27, 1049.26, 1049.60, and 1051.11.

Remove the scare quotes of Channel set at 1015.16, 1015.40, 1015.64, 1048.25, 1049.25, and 1049.59.

Remove the scare quotes of Definition of context at 1685.22.

Remove the scare quotes of Time priority at 1717.39.

Replace “the “applies to” column” with “the Applies to column” at 1751.13 and 1752.53.

Remove the scare quotes of Status at 1751.13 and 1752.53.

Remove the scare quotes of Multiplicity at 1751.14.

Remove the scare quotes of Transmitter requirements at 1751.17.

Remove the scare quotes of Multiplicity / Cache size at 1752.55.

Remove the scare quotes of Receiver requirements at 1752.57.

Remove the scare quotes of Encoding at 1807.39.

Remove the scare quotes of Group Addressed Privacy at 2328.57.

Remove the scare quotes at TXVECTOR at 2991.56, 3149.41, 3282.25, 3337.49, and 3489.31.

Remove the scare quotes at RXVECTOR at 2991.56, 3149.41, 3282.25, 3337.49, and 3489.31.

* + - 1. No objection – Mark CID 4281 Ready for Motion
    1. CID 4019 (EDITOR2)
       1. Review Comment
       2. Review Submission discussion
       3. Proposed Resolution: Revised. Replace the title of the subclause from “Frame exchange operation” to “Link cooperation data transmission procedure”.
       4. Discussion on the title change words.
       5. Discussion on possible changes of other subclauses.
       6. No Objection – Mark Ready for Motion
    2. CID 4792 (EDITOR2)
       1. Review Comment
       2. Review proposed changes
       3. Only two instances of mixing “-“ and “\_” left.
       4. Review list of changes from comments in submission.
       5. Proposed Resolution: Revised;

Replace “shall have the ADD-PPDU parameter of the TXVECTOR” with “shall have the ADD\_PPDU parameter of the TXVECTOR” at 1811.60 ,

Replace “ADD-PPDU” with “ADD\_PPDU” at 3091.39, 3109.22, 3458.26, 3469.14, 3486.56, and 3505.18.

Replace “TRN-LEN” with “TRN\_LEN” at 1733.60 (twice), 2028.49, 2056.51, 2059.54, 2060.1, 2060.9, 2060.27, 2060.32, 2064.12, 2064.26, 2064.31, 2064.55, 2064.62, 3091.52, 3091.54 (twice), 3109.45, 3458.38, 3458.40 (twice), 3469.36, and 3488.61.

Replace “The value of TRN-LEN in the following PPDU” with “The value of the TRN\_LEN parameter in the TXVECTOR of the following PPDU” at 2059.65 .

Replace “The value of TRN-LEN parameter in the following PPDU” with “The value of the TRN\_LEN parameter in the TXVECTOR of the following PPDU” at 2064.25.

* + - 1. No objection – Mark Ready for Motion
    1. CID 4095 (EDITOR2)
       1. Commenter has requested to withdraw the comment.
       2. An Email has been sent to TG Chair
       3. Proposed Resolution: Rejected. The commenter withdraws his comment.
       4. No objection – Mark Ready for Motion
  1. **Review doc 11-20/0141r10** Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-10-000m-sa1-proposed-resolutions-for-editor-adhoc.doc>
     2. CID 4800 (EDITOR)
        1. This was discussed in Florida but pulled from a prepared motion.
        2. Review comment
        3. Review history of CID noted in the submission
        4. Proposal to change all uses to “collocated”.
        5. Discussion on the difference of meaning to the words with one “l” or hyphen vs “ll” version of the word.
        6. Which spelling should be used was debated.
           1. One opinion from web: “You’re witnessing the appearance of either a new sense of “collocate,” an old verb that means to set in place, or a relatively new word spelled “colocate” or “co-locate” that means to share a location.
           2. Another opinion from web: From that same second source: "Collocate is a verb that is defined as words or items being set side by side." In other words, it is transitive.
           3. Another option from web: an alternative spelling includes a hyphen, co-locate, though at least one prominent dictionary did not list it. The hyphenated spelling is the first listing in some European dictionaries, In actual usage, we found that the hyphen spelling is found in and outside the United States and is, in fact, the more preferred form.
        7. Straw Poll: Can you accept the spelling of the word?
           1. A: Colocated
           2. B: Co-located
           3. C: Collocated
           4. You have Multiple options
           5. Results: A: 5 B: 4 C: 3
        8. Slight preference to one “l” and we then discussed usages.
        9. Straw Poll: Do you prefer the spelling of this word?
           1. A: Colocated
           2. B: Co-located
           3. Results: A: 1 B: 7
        10. Proposed Resolution: Accept; Note to editor, add this exception to the Editor's Guidelines.
     3. CID 4375 (EDITOR)
        1. Review comment
        2. Discussion on maybe use “IGTK” instead of proposed change.
        3. Concern on the use of “hierarchy” being lost.
        4. In a table, where IGTK is used, and then in the description should be spelled out, not just reuse of the acronym.
        5. Proposed Resolution: Revised. Change "Integrity Group key"/"integrity group key" to "integrity group temporal key" throughout, except the instances in “Integrity group key hierarchy”.
        6. No objection – Mark Ready for Motion
     4. CID 4586 (EDITOR)
        1. Review Comment
        2. Review submission discussion
        3. Discussion on use of “Request” and “Response” in the names of the frames.
        4. Proposed Resolution: Rejected.

The Neighbor Report Request frame is transmitted requesting information in the neighbor report about neighboring APs. The Neighbor Report Response frame is transmitted in response to a Neighbor Report Request frame. Neighbor Report elements are included in the Neighbor Report Response frame. There is no confusion about the Neighbor Report Request frame and Neighbor Report Response frame.

* + - 1. No objection – Mark Ready for Motion
    1. CID 4581 (EDITOR)
       1. Review Comment
       2. Discussion on the proposed changes.
       3. Review cited locations for changes. – Noted that the mixed case “looks” better even if it is not correct.
       4. Proposed Resolution: Revised.

Change “ToA” to “TOA” and change “ToD” to “TOD” throughout the draft.

At 4592.25, also change “Arrival” to “arrival”.

Note to Editor: locations are: 2370.28/29/31/32/39, 4592.25 (also Arrival->arrival), 4592.26 (2x), 4592.49, 4593.8/10/13/14/19/20/30/31/35/37

* + - 1. No objection – Mark Ready for Motion
    1. CID 4577 (EDITOR)
       1. Review Comment
       2. Review cited locations for context.
       3. Question on why only PHY entries should be changed as opposed to MAC entries as well, but it was noted that the values are not in the text for the MAC entries. So, the discussion was on if the PHY could be addressed similarly as the MAC.
       4. Discussion on the value of the table with the values included.
       5. Discussion: Maybe we need to make text just reference the table.
       6. Proposed resolution: Rejected. Those numbers provide useful information and comparison for different PPDUs, in spite of the duplication. There is no confusion and no ambiguity in the table. No changes needed.
       7. Straw poll: Do you support resolution:
          1. A: Accept
          2. B: Revised – change to remove values from text and reference the table
          3. C: Reject - No Change
          4. Results: A:1 B:2 C:4 Abstain:2
       8. Propose to go with the Rejection.
       9. Mark Ready for Motion
  1. **Adjourned 12:03pm ET**

**References:**

**March 11:**

1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0234-15-000m-2020-jan-mar-teleconference-and-adhoc-agendas.docx>
2. <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
3. <https://mentor.ieee.org/802.11/dcn/20/11-20-0435-00-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>
4. <https://mentor.ieee.org/802.11/dcn/20/11-20-0435-00-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>

**March 13:**

1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0234-15-000m-2020-jan-mar-teleconference-and-adhoc-agendas.docx>
2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0270-03-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0-part-ii.docx>
3. <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-10-000m-sa1-proposed-resolutions-for-editor-adhoc.doc>