IEEE P802.11  
Wireless LANs

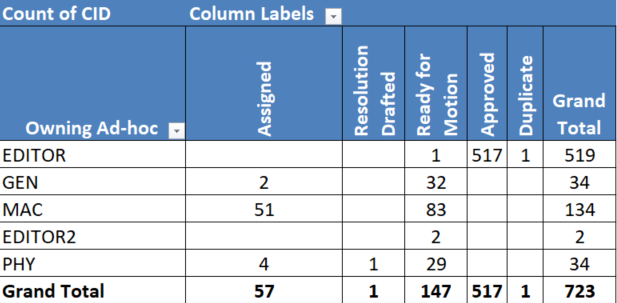
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| Minutes for REVmd - Sept 2019 - Hanoi | | | | |
| Date: 2019-09-19 | | | | |
| Author(s): | | | | |
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|  |  |  |  |  |

Abstract

This file contains the minutes for the IEEE 802.11md (REVmd) task group meetings held at the September 2019 IEEE 802 Wireless Interim held at the JW Marriot Hanoi, Hanoi, Vietnam September 16-19, 2019.

1. **802.11md (REVmd) Meetings – September 2019 IEEE 802 Wireless Interim – Hanoi - Monday PM1 13:30-15:30** 
   1. **Called to order** at 1:31 pm by the chair, Dorothy STANLEY (HPE)
   2. **Review patent policy**
      1. No issues noted.
   3. **Review Participation slide**:
      1. <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
   4. **Review Agenda doc**– 11-19/1374r2
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1374-02-000m-2019-september-tgmd-agenda.pptx>
      2. Discuss the order of the proposed agenda.
         1. Discussion on 2937 and 2934 having some outstanding discussion, but in a quick review, they are more likely to be rejected for lack of details.
         2. CID 2198 and 2644 GEN CIDs will be included in the insufficient detail motion.
         3. CID 2696, 2088, 2694, 2698 – Thomas DERHAM add to Monday PM1
         4. CID 2704 – status should be insufficient detail.
         5. CID 2357 (PHY)
      3. Updated Agenda in 11-19/1374r3.
         1. **Monday PM1**

* Chair’s Welcome, Policy & patent reminder, Approve agenda
* Status, Review of Objectives,
* Editor Report 11-17-0920
* CID 2654 Mark RISON
* 11-18-2165 CIDs 2051, 2670 – Assaf KASHER
* Carlos CORDEIRO/Payam TORAB CID 2105
* CIDs (2520, 2429, 2664) Menzo WENTINK
* 11-19-1173 – Michael MONTEMURRO
  + - 1. **Tuesday AM2**
* Motions (Telecons, ad-hoc)
* CID 2343 – Youhan KIM
* 11-19-0181 - CID 2186 – Sean COFFEY
* CIDs 2696, 2088, 2694, 2698 - Thomas DERHAM
* 11-19-1189 CIDs (2702, 2704) Menzo WENTINK
* 11-19-551 - MAC CIDs– Mark HAMILTON
  + - 1. **Wednesday PM1**
* Motions (Mon, Tues, insufficient detail)
* 11-19-1444 – Edward AU – MEC Review
* 11-19-551 - MAC CIDs– Mark HAMILTON
* Carlos Cordeiro/Payam TORAB CIDs (2079, 2080, 2084, 2098, 2611, 2634, 2636, 2637)
* 11-19-1620 CIDs 2123, 2124, and 2125 Emily QI
  + - 1. **Wednesday PM2**
* CIDs 2300, 2388 - Graham SMITH
* CID 2678 – Jiamin CHEN
* 11-19-306, 11-19-1561, 11-19-1562, 11-19-1564 Matthew FISCHER
* 11-19-0856 -CIDs 2616, 2620, 2621, 2622 – Mark Rison
  + - 1. **Thursday AM2**
* Available CIDs
* CIDs 2434, 2430 already motioned, revisit
  + - 1. **Thursday PM1**
* Available CIDs
* Motions
* Plans for September – November 2019
* Adjourn
  + 1. After final discussions the forgoing agenda approved.
       1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1374-03-000m-2019-september-tgmd-agenda.pptx>
    2. **MOTION HV1:** Move to Approve Agenda in 11-19/1374r3
       1. Moved Assaf 2nd Michael MONTEUMURRO
       2. Results of HV1: Unanimous approval, motion passes
  1. **Editor Report Emily QI (Intel) -** 11-17/0920r19
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-19-000m-802-11revmd-editor-s-report.ppt>
     2. Review draft history
     3. REV D2.4 has all the comments from all telecons and prior Sessions included.
     4. LB236 Comment AdHoc Groups Status



* + - 1. EDITOR: Editorial comments from clause 1 to clause 9, plus non-clause specified.
      2. EDITOR2: Editorial comments from clause 10 to the end.
      3. GEN: Technical comments from clause 1 to clause 8, plus, non-clause specified.
      4. MAC: Technical comments from clause 9 to clause 11
      5. PHY: Technical comments from clause 12 to the end.
  1. **Review CID 2654 (MAC)** – Mark RISON
     1. Review comment
     2. On the path for Insufficient detail.
  2. **Review doc 11-18-2165 CIDs 2051, 2670** – Assaf KASHER (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-2165-04-000m-mac-addr-change-scrambler-reset.docx>
     2. CID 2051 and 2670 (PHY)
        1. Review Comments
        2. Review changes since last time the submission was presented
        3. Discussion on the use of TXVECTOR.
        4. Clause 17 scrambler is used by many PHY, but the TXVECTOR is not used by some PHYs, so it has to be fixed in the respective PHYs.
        5. If we are random, then a random is random. But it needs a new random for TXVECTOR use.
        6. Discussion on the use of a standard Seed or not.
        7. There was more disagreement on the wording for the scrambler usage and TXVECTOR.
        8. For now, we will reject the comments with a reject reason for non-consensus.
        9. Mark the CIDs as Rejected – Ready for Motion
  3. **Review doc 11-19/1518r0 -** Payam TORAB (Facebook)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1518-00-000m-dmg-channel-switch-announcement.docx>
     2. CID 2105 (MAC)
        1. Review Comment
        2. Review proposed changes
        3. Discussion on Channel Switch Announcement element and Extended Channel Switch Announcement element.
        4. Review D2.4 draft version for page 1168.Line 45 needs to add “PCP” to the list of items using the elements.
        5. Add a definition to the “Notes” for Extended Channel Switch Announcement for order 23 to include “is defined in 9.4.2.52.”
        6. In 9.4.2.18, the addition of the “non-DMG” needs to be added to page 1009 L34 as well to make it consistent with the first paragraph.
        7. Proposed Resolution: CID 2105 (MAC): REVISED (MAC: 2019-09-16 07:26:59Z) - Incorporate the changes shown in 11-19/1518r1 (<https://mentor.ieee.org/802.11/dcn/19/11-19-1518-01-000m-dmg-channel-switch-announcement.docx>), which makes changes in the direction requested by the commenter.
        8. No objection - Mark Ready for Motion
  4. **Review doc 11-19/1195r8** Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1195-08-000m-assorted-crs.docx>
     2. CID 2429, 2520 and 2664 (all MAC):
        1. Review comment
        2. Discussion on the deleting of sentence “CW[AC] shall be set to SWmin[AC]”.
        3. Update to R9 that would have the sentence deleted.
        4. This would be ready for Motion for Wednesday.
        5. Discussed the consistent use of having “CW[AC], QSRC[AC] and if applicable, QSDRC[AC}” in different locations.
        6. Proposed Resolution for 2520 will be a rejection, and the other two will be a revised with the changes reviewed.
        7. Question on the “<Deprecate MIB variable dot11LongDEIRetryLimit per the standard procedure.>”? the editor will do the right things but need a rationale for the reason for deprecation. Add “Instructions to the Editor” prior to the deprecation sentence.
        8. Resolution for CID 2450 discussed.
        9. Proposed Resolution CID 2520 (MAC): REJECTED (MAC: 2019-09-16 07:53:58Z): the referenced counter is a STA counter, as opposed to a frame counter.
        10. Proposed Resolution CID 2429 (MAC): REVISED (MAC: 2019-09-16 08:03:02Z): Incorporate the changes shown in 11-19/1195r9 (<https://mentor.ieee.org/802.11/dcn/19/11-19-1195-09-000m-assorted-crs.docx>) for CID 2429, which make the changes to delete QLDRC
        11. Proposed Resolution CID 2664 (MAC): REVISED (MAC: 2019-09-16 08:03:02Z): Incorporate the changes shown in 11-19/1195r9 (<https://mentor.ieee.org/802.11/dcn/19/11-19-1195-09-000m-assorted-crs.docx>) for CID 2429, which make changes to delete QLDRC.
        12. Mark all 3 CIDs ready for Motion.
     3. CID 2430 and 2434
        1. Concern with the resolution and need to add to agenda again.
     4. CID 2702 (MAC)
        1. Comment that Tomo worked on.
        2. Possible document was 11-19/1189r2.
        3. Review the changes proposed.
     5. CID 2704 (MAC)
        1. Similar issues.
        2. Need more offline review.
        3. Add review of CID 2702 and 2704 as well as 2434, and 2430 to be reviewed Tuesday AM2. (See doc 11-19/1189r2).
  5. **Review doc 1173r15** Michael MONTEMURRO (Blackberry)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1173-15-000m-pwe-in-constant-time.docx>
     2. Review changes made and summarize of the issues it is addressing.
     3. The outstanding issues are the wording of some of the description of the protocol.
     4. Discussion on if the editorial sense of the document is good enough or not.
     5. Disagreement on the use of “element”. Request to change “SAE Hash to Element”.
     6. Discussion on the potential confusion on a change or not change.
     7. Should the “element” usage be FFE?
     8. Consider in 12.4.4.2 and in 12.4.3.2 reword to remove “is not signaled” or “does not signal”. In general, we do not use “signal”.
     9. On page 7, the use of subscript, should just be “X1, X2” instead of having a subscript
     10. On page 8, the list of items are parts of the SSWU(u), and then there is a sentence of “All operations shall be done in constant time.”… what functions are included in this statement.
     11. Discussion on what the scope of “All operations shall be done in constant time”.
     12. Discussion of “the probability of PT taking the value 1 is negligible”. – This is not impactful, and so we will not continue with this argument.
     13. Discussion on the “the salt shall consist of a series of …”.
     14. Discussion on confusion of” length of the digest generated …”
         1. The length of KCK and PMK are 256 when used with the looping method of PWE. then it states the length is different in the next sentence for a different crypto.
         2. The length is based on the crypto used and the table values.
  6. Review the plan for tomorrow.
  7. Recess at 3:40pm

1. **802.11md (REVmd) Meetings – September 2019 IEEE 802 Wireless Interim – Hanoi - Tuesday AM2 10:30-12:30** 
   1. **Called to order** at 10:34 pm by the chair, Dorothy STANLEY (HPE)
   2. **Review patent policy**
      1. No issues noted.
   3. **Review Agenda – 11-19/1374r4**
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1374-04-000m-2019-september-tgmd-agenda.pptx>
      2. Tuesday AM2

* Motions (Telecons, ad-hoc)
* CID 2343 – Youhan KIM
* 11-19-0181 - CID 2186 – Sean COFFEY
* CIDs 2696, 2088, 2694, 2698 - Thomas DERHAM
* 11-19-1189 CIDs (2702, 2704) Menzo WENTINK
* 11-19-551 - MAC CIDs– Mark HAMILTON
  + 1. Change order to have Motions last rather than first.
    2. No objection proceeds with modified agenda
  1. **Review doc 11-19/1527r0** Youhan KIM (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1527-00-000m-lb236-cid-2343.docx>
     2. CID 2343 (MAC)
        1. Review comment
        2. Discussion on the way the 80Mhz vs 160 MHz operation.
        3. Propose Resolution: REJECTED (MAC: 2019-09-17 03:38:34Z): In Clause 21, 80+80 MHz is described as two 80 MHz segments each having separate RF carriers. For example, Equation (21-11) in D2.4 is the transmitted signal, where each segment has a distinct carrier frequency of f\_{c}^{(i\_seg)}. Hence, each 80 MHz segment of 80+80 has DC subcarriers.
        4. No objection Mark Ready for Motion
  2. **Review doc 11-19/181r3** Sean COFFEY (Realtek)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0181-03-000m-reduced-capability-ht-devices.pptx>
     2. CID 2186 (PHY)
        1. Review Comment
        2. Review Changes to submission since last presented on the August telecons.
        3. Discussion on the rationale for the updates and the goal of the proposal.
        4. Discussion on the benefits of the proposal
        5. Proposed Resolution: REVISED (PHY: 2019-09-17 03:59:11Z) - Incorporate the changes shown on slides 10-21 in the document 11-19/0181r4 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0181-04-000m-reduced-capability-ht-devices.pptx>> which makes changes in the direction suggested by the commenter.
        6. No objection – Mark Ready for Motion
  3. **Review CIDs 2696, 2088, 2694, 2698 - Thomas DERHAM** 
     1. CID 2696 (MAC)
        1. Review comment
        2. After discussion, it is proposed to reject the comment.
        3. Proposed resolution: REJECTED (MAC: 2019-09-17 04:04:07Z): The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
        4. No objection – Mark Ready for Motion
     2. CID 2088 (MAC)
        1. Review status of CID 2088
        2. The intent is to approve resolution as noted in 11-19/556r4.
        3. This is the resolution currently ready for motion.
        4. Proposed Resolution: REVISED (MAC: 2019-09-16 04:18:27Z): Delete “maximum” in each of the following locations: 9.4.2.16 p996 line 58, 11.10.12 p2285 line 24, 15.4.5.6 p2853 line 37, 15.4.5.7 p2853 line 42, 16.3.7.5 p2883 line 31, 16.3.7.6 p2883 line 36, 17.3.9.5 p2921 line 38 and line 39, 17.3.9.6 p2921 line 45 and line 46, 18.4.7.4 p2944 line 12, 18.4.7.5 p2944 line 17, 19.3.18.4 p3025 lines 32 and 33, 19.3.18.6 p3026 line 18, 20.3.3.2.1 p3060 line 59, 20.3.3.3 p3061 line 9, 21.3.17.3 p3200 line 44, 22.3.17.3 p3277 line 58, 23.3.16.3 p3381 line 35, 24.3.3.2.1 p3424 line 36, 24.3.3.3 p3424 line 46, 25.3.2.3.1 p3453 line 60, 25.3.2.3.3 p3454 line 9. Replace “maximum allowable deviation” with “tolerance” in 22.3.17.3 p3277 line 53.
     3. CID 2694 (MAC)
        1. Review status
        2. Proposed Resolution: REJECTED (MAC: 2019-09-17 04:05:36Z) - The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
        3. No objection – Mark Ready for Motion
     4. CID 2698 (MAC)
        1. Review Status
        2. After discussion offline, there may be some issues not completely addressed. This is better to reject for now.
        3. Proposed Resolution: REJECTED (MAC: 2019-09-17 04:06:56Z): The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
        4. No objection – Mark Ready for Motion
     5. CID 2689 (PHY)
        1. More discussion is required.
        2. Discussion to Revert the prior agreement.
        3. We will Change to reject - the commenter has withdrawn the comment.
        4. Commenter has Requested to withdraw the comment.
        5. Proposed resolution: REJECTED (PHY: 2019-09-17 04:08:14Z) - The commenter has withdrawn the comment.
        6. Mark Ready for Motion
  4. **Review 11-19/1189r2** Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1189-02-000m-resolutions-to-comments-on-channel-center-frequency.docx>
     2. The R2 document is from Tomoko ADACHI (Toshiba).
     3. The presentation included changes from Menzo that will become R3
     4. CID 2702 (MAC) and 2704 (MAC):
        1. Review comments
        2. Review the proposed changes.
        3. Discussion on if that the requested information is in the table.
        4. Discussion on the center frequency.
        5. Review table 11-24. “where does this table refer to table 9.273”
        6. Still a bit more work to be done on these CIDs – assign to Wednesday PM2
  5. **Review doc 11-19-551r16** - MAC CIDs– Mark HAMILTON
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0551-16-000m-revmd-lb236-comments-assigned-to-hamilton.docx>
     2. CID 2562 (MAC)
        1. Review Comment
        2. Review Proposed changes
        3. Proposed Resolution: Accept
        4. No objection – Mark Ready for Motion.
     3. CID 2376 (MAC)
        1. Review Comment
        2. Proposed Resolution: Rejected. Some uses of the phrase “relay STA” are referencing a DMG relay. So, the global replace is incorrect
        3. No objection – Mark Ready for Motion
     4. CID 2616 (MAC)
        1. Review comment
        2. Proposed resolution: Accept
        3. No objection – Mark Ready for Motion
     5. CID 2692 (MAC)
        1. Review Comment
        2. Review discussion on the CID.
        3. Discussion on the proposed change.
        4. Concern on possible inconsistency in c and d. Add to D “Dot11SSIDListActiveated is true and”.
        5. Discussion on the basic access procedure.
        6. Discussion on adding “parameter” after “SSID List”.
        7. Review some editorial changes see R17.
        8. The differences between c and d are reduced.
        9. Discussion on last sentence in d – may need something in the future, but it is sufficient for now.
        10. Proposed Resolution: Revised; Incorporate the changes for CID 2692 in doc 11-19/551r17 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0551-17-000m-revmd-lb236-comments-assigned-to-hamilton.docx> > which makes the changes in the direction suggested by the commenter.
        11. No objection – Mark Ready for Motion.
     6. CID 2340 (MAC)
        1. Review Comment
        2. This was a CID that was to be checked, this was done.
        3. Proposed Resolution: Accept
        4. No Objection – Mark Ready for Motion
     7. CID 2237 (MAC)
        1. Review Comment
        2. Discussion on the change being proposed.
        3. Discussion on the last sentence being proposed being added or not.
        4. More discussion will need to be done on this one.
  6. **Motions:** 
     1. **Motion HV2:** Previous Minutes
        1. **Approve the minutes of**
* July meeting minutes: 11-19/1008r1:
  + <https://[mentor.ieee.org/802.11/dcn/19/11-19-1008-01-000m-minutes-for-revmd-july-2019-vienna.docx](https://mentor.ieee.org/802.11/dcn/19/11-19-1008-01-000m-minutes-for-revmd-july-2019-vienna.docx)>
* Teleconference and ad-hoc minutes:
  + July-Sept Telecon Minutes: 11-19/1382r6:
    - https://[mentor.ieee.org/802.11/dcn/19/11-19-1382-06-000m-tgmd-2019-july-august-september-teleconference-minutes.docx](https://mentor.ieee.org/802.11/dcn/19/11-19-1382-06-000m-tgmd-2019-july-august-september-teleconference-minutes.docx)
  + July 11 Telecon Minutes: 11-19/1238r1:
    - https://[mentor.ieee.org/802.11/dcn/19/11-19-1238-01-000m-telecon-minutes-for-revmd-july-11.docx](https://mentor.ieee.org/802.11/dcn/19/11-19-1238-01-000m-telecon-minutes-for-revmd-july-11.docx)
  + AdHoc - Toronto: 11-19/1450r0
    - <https>[://mentor.ieee.org/802.11/dcn/19/11-19-1450-00-000m-minutes-for-revmd-aug-2019-toronto.docx](https://mentor.ieee.org/802.11/dcn/19/11-19-1450-00-000m-minutes-for-revmd-aug-2019-toronto.docx)
      1. Moved: Michael Montemurro
      2. Seconded: Emily QI
      3. **Result for HV2**: Approved by Unanimous consent. Motion passes
    1. **Motion #124** – GEN CIDS: July Plenary, Telecons and Ad-Hoc
       1. Approve the GEN comment resolutions in <https://mentor.ieee.org/802.11/dcn/19/11-19-0449-12-000m-revmd-lb236-gen-comments.xls> :

“GEN Motion Vienna Thursday” tab - 4 CIDs

“GEN Motion Telecon- July 30” tab - 3 CIDs

“GEN Motion Telecon - Aug 2 – 9” tab - 4 CIDs

“GENMotionTeleconAugToronto” tab - 11 CIDS

“GEN Motion Telecon - Sept 3” tab - 2 CIDs

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Jon ROSDAHL
      2. Seconded: Emily QI
      3. **Result of #124**: 13-0-0 Motion Passes
    1. **Motion #125 GEN CID 2606**
       1. Approve the (GEN) comment resolution in 11-19/0449r12 <https://[mentor.ieee.org/802.11/dcn/19/11-19-0449-12-000m-revmd-lb236-gen-comments.xls](https://mentor.ieee.org/802.11/dcn/19/11-19-0449-12-000m-revmd-lb236-gen-comments.xls)> in the following tab:

GEN Motion Present - CID 2606- Single CID requested for separate motion- Present vs included - updated resolution

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Jon ROSDAHL
      2. Seconded: George CALCEV
      3. Result of #125; 15-0-0 Motion Passes
    1. **Motion #126 GEN CID 2604**
       1. Approve the (GEN) comment resolution in 11-19/449r12: <<https://mentor.ieee.org/802.11/dcn/19/11-19-0449-12-000m-revmd-lb236-gen-comments.xls>> in the following tab:

GEN Motion Telecon – CID 2604 - Single CID requested for separate Motion - deletes "successful[ly]“

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Mark RISON
      2. Seconded: Graham SMITH
      3. **Result #126:** Motion passes with Unanimous consent
    1. **Motion #127** **MAC CIDS: July Plenary, telecon/ad-hoc**
       1. Approve the (MAC) comment resolutions in 11-17/0927r49 <[**https://mentor.ieee.org/802.11/dcn/17/11-17-0927-49-000m-revmd-mac-comments.xls**](https://mentor.ieee.org/802.11/dcn/17/11-17-0927-49-000m-revmd-mac-comments.xls)**>** in the Motion MAC-AE tab; except for CID 2099 and 2100 – (77 CIDs) and incorporate the indicated changes into the TGmd draft.
       2. Moved: Mark HAMILTON
       3. Seconded: Menzo WENTINK
       4. Results for #127: No objection – Unanimous Approval – motion passes
    2. **Motion #128 - MAC CIDS: 2071, 2070 and 2066 Beam tracking**
       1. Approve the (MAC) comment resolutions in 11-17/0927r49 <<https://mentor.ieee.org/802.11/dcn/17/11-17-0927-49-000m-revmd-mac-comments.xls> on the Motion MAC-AG TAB; 3CIDs

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Michael Montemurro
      2. Seconded: Menzo WENTINK
      3. Results for #128: No objection – Unanimous Approval – Motion Passes.
    1. **Motion #129: MAC CID: 2472 “at TBTTs”**
       1. Approve the (MAC) comment resolutions in <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-49-000m-revmd-mac-comments.xls> on the Motion MAC-AF tab;

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Mark HAMILTON
      2. Seconded: Emily QI
      3. **Results for #129**: No objection – Unanimous Approval – Motion Passes
  1. We are at time – move remaining motions to Wednesday.
     1. Request to add a topic on spelling of “co-located”.
     2. No submission is available, but we can talk about it later if one is made.
  2. **Recess at 12:31pm**

1. **802.11md (REVmd) Meetings – September 2019 IEEE 802 Wireless Interim – Hanoi – Wednesday PM1 13:30-15:30** 
   1. **Called to order** at 1:30 pm by the chair, Dorothy STANLEY (HPE)
   2. **Review patent policy**
      1. No issues noted.
   3. **Review Agenda – 11-19/1374r5**
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1374-05-000m-2019-september-tgmd-agenda.pptx>
      2. **Wednesday PM1**

* 11-19-1444 – Edward AU – MEC Review
* 11-19-551 – CIDs 2237, 2075, 2201, 2246, 2325, 2324 – Mark HAMILTON
* Carlos Cordeiro/Payam TORAB CIDs (2079, 2080, 2084, 2098, 2611, 2634, 2636, 2637, 2099, 2100)
* 11-19-1620 CIDs 2123, 2124, and 2125 Emily Qi
* Motions (PHY, additional, Mon, Tues, insufficient detail)
  + 1. No objection – Agenda approved
  1. **Review 11-19/1444r4** Edward AU (Huawei).
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1444-04-000m-proposed-changes-re-ieee-sa-mec-comment-related-to-draft-2-1-of-ieee-p802-11revmd.docx>
     2. Review MEC report.
     3. Good report – some items for the Editor to take action on.
     4. A Motion to adopt the proposed response will be made later this time slot.
  2. **Review 11-19/551r17** Mark HAMILTON
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0551-17-000m-revmd-lb236-comments-assigned-to-hamilton.docx>
     2. CID 2075 (MAC)
        1. Review Comment.
        2. Review the discussion.
        3. Subclause 11.36 is the “Quieting adjacent DMG BSSs” feature.
        4. Discussion on the need for the feature.
        5. Discussion on if no one is using the feature, then we should deprecate the feature.
        6. Timing of potential changes would be better served some other time.
        7. Proposed Resolution: Rejected.

While the referenced mechanism does not provide authentication of the request, Clause 11.36 does not require the responder AP to accept the request. The responder AP will need to reply to the request, but it can reject the request for any reason, including any implementation specific condition (e.g., a vendor deciding not to accept any such request or a vendor deciding to accept a subset of requests based on a vendor-specific mechanism of AP coordination).

Note to the commenter: the TG also discussed the option of deprecating the feature.

* + - 1. No objection - Mark Ready for Motion
    1. CID 2201 (MAC)
       1. Review Comment
       2. Review discussion.
       3. Proposed Resolution: Accept
       4. No objection – Mark ready for Motion
    2. The remaining CIDs in the document are insufficient details described CIDs.
    3. CID 2246 (EDITOR2)
       1. Review comment
       2. Reject for Insufficient detail
       3. No objection – Mark ready for Motion
    4. CID 2324 (MAC) and CID 2325 (MAC)
       1. Review comment
       2. Reject 2324 (MAC) for insufficient detail.
       3. Reject CID 2325 (MAC) for insufficient information.
       4. Mark ready for Motion
    5. CID 2237 (MAC)
       1. This was nearly closed up yesterday.
       2. We had some final changes that were included in a doc we cannot find at the moment. We will continue on and come back to it later.
  1. **Review 11-19/1508r0** – Payam TORAB (Facebook)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1508-00-000m-lb236-cids-2079-2080-2098.docx>
     2. CID 2079, 2080 (MAC)
        1. Review comment
        2. In the first paragraph of 11.1.3.1, the text has been there for a long time. The interface between the MAC and PHY and the wireless medium is the antenna, so antenna should not be removed.
        3. Change WM with Antenna Connector.
        4. Change last sentence to “Timestamp field appears at the antenna connector.”
        5. Correct note typos and changed the end to “the transmit antenna connector”.
        6. Remove “to ensure” in the note.
        7. Change to “In order that the value of the Timestamp field matches…”
        8. Proposed Resolution: REVISED (MAC: 2019-09-18 07:25:54Z): Incorporate the changes for CID 2079 and CID 2080 in 11-19/1508r1 <<https://mentor.ieee.org/802.11/dcn/19/11-19-1508-01-000m-lb236-cids-2079-2080-2098.docx>> which makes the changes suggested by the commenter.
        9. No objection – Mark Ready for Motion
     3. CID 2098 (MAC)
        1. Review Comment
        2. Review Discussion.
        3. Review the changes proposed.
        4. Discussion on the use of “sectors available”.
        5. Discussion on the use of “various spatial directions” vs “sectors”.
        6. Change to “various sectors”.
        7. Proposed Resolution: REVISED (MAC: 2019-09-18 07:28:23Z): Incorporate the changes for CID 2098 in 11-19/1508r1 (<https://mentor.ieee.org/802.11/dcn/19/11-19-1508-01-000m-lb236-cids-2079-2080-2098.docx>) which makes the changes in the direction suggested by the commenter.
        8. No objection – Mark Ready for Motion
  2. **Review document: 11-19/1195r12** Payam TORAB
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1195-12-000m-assorted-crs.docx>
     2. Menzo WENTINK (Qualcomm) primary author
     3. CID 2099 (MAC) and 2100 (MAC):
        1. Review comment
        2. Found text in a note that was believed to be normative, but the note was determined to just be wrong and Note 2 should be removed.
        3. Discussion on the format of the resolution.
        4. Discussion on the SP constraints.
        5. Proposed Resolution: Resolution: Starting at 1904L9 to p1904.19 in draft 2.4, revise the text as following

“b) Error recovery: For TXOPs, the RD initiator may transmit its next PPDU when the CS mechanism (see 10.3.2.1 (CS mechanism)) indicates that the medium is idle at the TxPIFS slot boundary (see Figure 10-26 (EDCA mechanism timing relationships)). For SPs, the RD initiator may transmit its next PPDU no sooner than PIFS following its last PPDU transmission. Transmission is a continuation of the current TXOP or SP.

NOTE—Error recovery of the RDG mechanism is the responsibility of the RD initiator.”

* + - 1. Discussion on needing to add “Non-SP” and “DMG SPs” in the right places.
      2. We need to have more work offline for these and come back later.
  1. **Review doc 11-19/1620** Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1620-01-000m-lb236-proposed-resolutions-for-cid-2123-2124-and-2125.doc>
     2. CID 2123 (MAC)
        1. Review Comment
        2. Reviewed the discussion.
        3. Discussion on changing the bulleted list.
        4. “A Non-QoS STA shall have outstanding at any time:

- no more than one MSDU from any particular SA, and

- no more than one MMPDU

transmitted in one or more MPDUs with a particular RA.”

* + - 1. The changes do not change the note.
      2. Proposed resolution: (MAC): REVISED (MAC: 2019-09-18 07:54:25Z): Change

"A non-QoS STA shall not have outstanding at any time more than:

— one MSDU from any particular SA

— one MMPDU

transmitted in one or more MPDUs with a particular individual RA."

to

"A non-QoS STA shall have outstanding at any time:

— no more than one MSDU from any particular SA, and

— no more than one MMPDU

transmitted in one or more MPDUs with a particular individual RA."

* + - 1. No objection – Mark Ready for Motion
    1. CID 2124 (MAC)
       1. Review comment
       2. Similar to the previous comment.
       3. Proposed Resolution: REVISED (MAC: 2019-09-18 09:44:07Z) - At 1794.25 to 1794.35 (of D2.4), change:

For frames that are not sent within the context of a block ack agreement, a QoS STA shall not have outstanding at any time more than:

— one MSDU or A-MSDU for each TID from any particular SA

— one MMPDU

transmitted in one or more MPDUs with a particular individual RA.

to:

For frames that are not sent within the context of a block ack agreement, a QoS STA shall have outstanding at any time:

— no more than one MSDU or A-MSDU for each TID from any particular SA, and

— no more than one MMPDU

transmitted in one or more MPDUs with a particular individual RA.

* + - 1. No objection – Mark Ready for Motion
    1. CID 2125 (MAC)
       1. Review comment
       2. Review Discussion
       3. Proposed Resolution: Reject.

Reason: There is no conflict between the cited text in 10.5 and 10.7.

For MSDU transmission (10.7), a non-QoS STA shall not have outstanding at any time more than one MSDU......

For receiving, a STA shall support the concurrent reception of fragments multiple MSDUs or MMPDUs.

As noted at D2.0, 1740.56 (D2.4, 1763.56), those MSDUs or MMPDUs might be from different peers (e.g., in an IBSS or MBSS). The other situation is that the frames might be MSDUs from different SAs, even though they are from the same TA (peer).

* + - 1. No objection – Mark Ready for Motion
  1. **MOTIONS:**
     1. **Motion #130** – **PHY, CIDS July Plenary, Telecon/Ad-Hoc**
        1. Approve the (PHY) comment resolutions in the

“PHY Motion H” tab (28 CIDs) in 11-19/156r13 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0156-13-000m-lb236-revmd-phy-sec-comments.xlsx>>

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Edward AU
      3. **Result for Motion #130**: 15-0-2 Motion passes
    1. **Motion #131** - **PHY CID 2685**
       1. Approve the (PHY) comment resolution in the “MACAddrPolicy”, tab in 11-19/156r13 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0156-13-000m-lb236-revmd-phy-sec-comments.xlsx>>

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Stephen MCCANN
      2. Seconded: Antonio DE LA OLIVA
      3. **Result for Motion #131:** No Objection to Motion Passes Unanimously.
    1. **Motion #132 – PHY CID 2630 Operating class changes (rejected)**
       1. Approve the (PHY) comment resolution in the

“Motion-OpClass”, tab in 11-19/156r13 <[https://](NULL)[mentor.ieee.org/802.11/dcn/19/11-19-0156-13-000m-lb236-revmd-phy-sec-comments.xlsx](https://mentor.ieee.org/802.11/dcn/19/11-19-0156-13-000m-lb236-revmd-phy-sec-comments.xlsx)>

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Stephen PALM
      3. **Result for Motion #123**: 15-1-2 Motion Passes
    1. **Motion #133 – CID 2186 Reduced capability PHY**
       1. Approve the resolution of CID 2186 (PHY) as Revised, with a resolution of Incorporate the changes shown in slides 11-23 in the document 11-19/181r5 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0181-05-000m-reduced-capability-ht-devices.pptx> > which makes changes in the direction suggested by the commenter.
       2. Moved: Sean COFFEY
       3. Seconded: Michael MONTEMURRO
       4. **Result for Motion #133**: 12-0-4 Motion Passes.
       5. Note that there is a sequence number in the MIB that needs corrected. Mark RISON will bring for a motion tomorrow.
    2. **Motion #134** **Editor, Editor(2) CIDs July Plenary, telecon/ad-hoc**
       1. Approve the (Editor) comment resolutions in the

“Motion-EDITOR-O” in 11-19/142r10 <https://[mentor.ieee.org/802.11/dcn/19/11-19-0142-10-000m-revmd-wg-lb236-comments-for-editor-ad-hoc.xls](https://mentor.ieee.org/802.11/dcn/19/11-19-0142-10-000m-revmd-wg-lb236-comments-for-editor-ad-hoc.xls) >

“Motion-EDITOR2-J”in 11-19/143r13 <https://[mentor.ieee.org/802.11/dcn/19/11-19-0143-13-000m-revmd-editor2-lb236-comments.xlsx](https://mentor.ieee.org/802.11/dcn/19/11-19-0143-13-000m-revmd-editor2-lb236-comments.xlsx) >

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Emily QI
      2. Seconded: Edward AU
      3. **Result for motion #134:** 16-0-1 Motion Passes.
    1. **Motion #135 – Editor CID 2041 related**
       1. Incorporate the changes shown under CID 2041 in document 11-19/1286r1 <<https://mentor.ieee.org/802.11/dcn/19/11-19-1286-01-000m-lb236-some-xdmg-phy-cids.docx>> into the TGmd draft.
       2. Moved: Emily QI
       3. Seconded: Michael MONTEMURRO
       4. Discussion – the resolution for CID 2041 was made before, and the changes given in R1 are just additional changes not directly tied to CID 2041.
       5. **Result for Motion #135**: No objection to pass with Unanimous consent.
    2. **Motion #136** **- Additional tech changes in 11-19-856**
       1. Incorporate the changes shown under “Proposed technical changes” under “Stand-alone changes re optional subelements” in 11-19/0856r10 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0856-10-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx>> into the TGmd draft.
       2. Moved: Mark RISON
       3. Seconded: Graham SMITH
       4. Result for Motion #136: Unanimous Consent – without objection
    3. **Motion #137 – PWE in constant time**
       1. Incorporate the text changes indicated in 11-19/1173r18 <https://[mentor.ieee.org/802.11/dcn/19/11-19-1173-17-000m-pwe-in-constant-time.docx](https://mentor.ieee.org/802.11/dcn/19/11-19-1173-18-000m-pwe-in-constant-time.docx)> into the TGmd draft.
       2. Moved: Michael MONTEMURRO
       3. Seconded: Jon ROSDAHL
       4. Result for Motion #137: 16-1-0 Motion Passes.
    4. **Recess at 3:35pm**

1. **802.11md (REVmd) Meetings – September 2019 IEEE 802 Wireless Interim – Hanoi – Wednesday PM2 16:00-18:00** 
   1. **Called to order** at 4:04 pm by the chair, Dorothy STANLEY (HPE)
   2. **Review patent policy**
      1. No issues noted.
   3. **Review Agenda – 11-19/1374r5**
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1374-05-000m-2019-september-tgmd-agenda.pptx>
      2. **Wednesday PM2**

* CIDs 2300, 2388 - Graham SMITH
* CID 2678 – Jiamin CHEN
* 11-19-0856 -CIDs 2620, 2621, 2622 – Mark Rison
* 11-19-1189 CIDs (2702, 2704) Menzo WENTINK
* 11-19-306, 11-19-1561, 11-19-1562, 11-19-1564 Matthew FISCHER
* Carlos Cordeiro/Payam TORAB CIDs (2079, 2080, 2084, 2098, 2611, 2634, 2636, 2637, 2099, 2100)
* 11-19-1561, 11-19-1562, 11-19-1564 Matthew FISCHER
  + 1. CID 2634 need to add to Mark RISON and remove from Carlos et. al.
    2. No other changes, approved Agenda
  1. **Review doc 11-19/574r5** Graham SMITH (SRTechnologies)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0574-05-000m-resolutions-for-backoff-and-obsolete-comments-d2.docx>
     2. CID 2300 (MAC)
        1. Review context of changes.
        2. See figure 10-17 and figure 10-6.
        3. Fix up the missed changes from last time this was presented.
        4. Discussion on the changes to the figures.
        5. Proposed Resolution: CID 2300 (MAC): REVISED (MAC: 2019-09-18 09:11:24Z): Reference to D2.4

At 1716.18 (10.3.1) change “random backoff time” to random backoff count”.

In Figure 10-6

P1719 change “Backoff Time” to "Backoff"

change “Select backoff time” to “Select backoff count”

In Figure 10-17

P1752 change “Backoff Time” to "Backoff"

change “Select backoff time” to “Select backoff count”

At P1753.41, change "backoff time" to "backoff count".

At P2273.64, change "backoff time" to "backoff count".

* + - 1. No objection – Mark Ready for Motion
    1. CID 2388 (MAC)
       1. Review comment
       2. Proposed Resolution: ACCEPTED (MAC: 2019-09-18 09:19:59Z): Note to editor, this change is also made as part of the resolution to CID 2300.
       3. No objection – Mark Ready for Motion
  1. **Review doc 11-19/856r11** Mark RISON (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0856-11-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx>
     2. CID 2620, 2621, 2622 (MAC)
        1. Review Comments
        2. It is asserted that AntennaID and DMG AntennaID are unique different.Review changes where AntennaID is supposed to be DMG AntennaID.
        3. Review related changes.
        4. Proposed Resolution for CIDs 2620, 2621, 2622 (MAC):: REVISED (MAC: 2019-09-18 09:28:52Z): Incorporate the changes in 11-19/0856r11 (https://mentor.ieee.org/802.11/dcn/19/11-19-0856-11-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx), which adjust the wording for the different definitions of DMG and non-DMG antennas, and fix a few issues additionally introduced by CMMG.
        5. No objection – Mark Ready for Motion
     3. CID 2634 (MAC)
        1. Review Comment
        2. Discussion: The Multi-band element is huge. We should not be using this to carry just three octets of information.
        3. Review proposed changes.
        4. Review figure 11-53 there is another one to fix up.
        5. A Review of the text will need to be done and brought back.
  2. **Review doc 11-19/1034r4** – Michael Montemurro (Blackberry)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1034-04-000m-proposed-resolutions-for-11aj-related-comments-in-revmd-lb236.doc>
     2. Primary Authors: Jaimin CHEN (HiSilicon) and Shiwen HE (SEU)
     3. CID 2678 (PHY)
        1. Review comment
        2. Review proposed resolution.
        3. Suggestion to have Solomon review the changes.
        4. The proposed sentence starting with “The Dynamic Bandwidth Control Element is present in….” should not be added. We have removed this form of sentence in the past.
        5. Solomon had a proposed change had similar construct that was not desired.
        6. There is a similar issue in CID 2107 – which was marked rejected for insufficient information.
        7. There is issue in the table having a reference that is different from the normal pattern used in that table. (see 26).
        8. We will assign CID 2678 and CID 2107 to Payam for more discussion. Otherwise they both will be rejected.
  3. **Review doc 11-19/1189r4** Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1189-04-000m-resolutions-to-comments-on-channel-center-frequency.docx>
     2. CID 2702 (MAC)
        1. Review comment
        2. Review proposed changes
        3. Change “uses” to “is”.
        4. Proposed Resolution: REVISED (MAC: 2019-09-18 10:03:07Z):

In Table 9-272, insert "When the Channel Width subfield of the VHT Operation element is 2 or 3 (deprecated), the channel center frequency is defined in Table 11-25 (Setting of Channel Center Frequency Segment 0, Channel Center Frequency Segment 1, and Channel Center Frequency Segment 2 subfields)." as shown in document 11-19/1189r5 for CID 2702.

* + - 1. No objection – Mark Ready for Motion
    1. CID 2704 (MAC)
       1. Review Comment
       2. Proposed Resolution: REJECTED (MAC: 2019-09-17 15:06:56Z) - The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
       3. No objection – Mark Ready for Motion
  1. **Review doc 11-19/1195r12** Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1195-12-000m-assorted-crs.docx>
     2. CID 2429 (MAC) and 2664 (MAC)
        1. Review comments
        2. Review the proposed changes.
        3. Discussion on the removal of QSDRC and QLRSC.
        4. Proposed resolution for CID 2429 (MAC): REVISED (MAC: 2019-09-16 08:03:02Z): Incorporate the changes shown in 11-19/1195r12 (https://mentor.ieee.org/802.11/dcn/19/11-19-1195-12-000m-assorted-crs.docx) for CID 2429, which make the changes to delete QLDRC and QSDRC, as requested.
        5. Proposed Resolution for CID 2664 (MAC): REVISED (MAC: 2019-09-16 08:03:02Z): Incorporate the changes shown in 11-19/1195r12 (https://mentor.ieee.org/802.11/dcn/19/11-19-1195-12-000m-assorted-crs.docx) for CID 2429, which make changes to delete QLDRC and QSDRC.
        6. Mark Both CIDs Ready for Motion
  2. **Review status of remaining CIDs**
     1. Carlos/Payam have left 2099, 2100, 2107, 2678.
     2. CID 2084 – From Carlos and assigned to Carlos.
     3. CID 2611 – from Mark RISON and assigned to Carlos. – OCT tunnel
     4. CID 2636 – from Mark RISON and assigned to Carlos – OCT tunnel
     5. CID 2637 – from Mark RISON and assigned to Carlos – OCT tunnel
  3. **Review doc 11-19/1195r13** Payam TORAB (Facebook)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1195-13-000m-assorted-crs.docx>
     2. CID 2099 (MAC)
        1. Review comment
        2. Review the proposed resolution updates
        3. Proposed Resolution for CID 2099 (MAC): REVISED (MAC: 2019-09-18 10:23:53Z): In draft 2.4, revise P1904L9 through P1904L19 as following

b) Error recovery: For TXOPs and non-DMG SPs, the RD initiator may transmit its next PPDU when the CS mechanism (see 10.3.2.1 (CS mechanism)) indicates that the medium is idle at the TxPIFS slot boundary (see Figure 10-26 (EDCA mechanism timing relationships)). For DMG SPs, the RD initiator shall not transmit its next PPDU earlier than PIFS following its last PPDU transmission. Transmission is a continuation of the current TXOP or SP.

NOTE—Error recovery of the RDG mechanism is the responsibility of the RD initiator. :

* + - 1. Mark Ready for Motion
    1. CID 2100 (MAC)
       1. Review comment
       2. Review the proposed text changes.
       3. Proposed Resolution: CID 2100 (MAC): REVISED (MAC: 2019-09-18 10:25:28Z):

The NOTE is indeed not normative (is informative). RD operation rules are clearly defined in 10.30. We change “has to” to avoid confusion.

In draft 2.4, revise P1905L43 through P1905L45 as following,

“NOTE—If the RD responder transmits a PPDU that expects a transmission by the RD initiator after SIFS and no such transmission is detected, the RD responder does not retry the exchange before either another RDG or its own TXOP or SP.”

* + - 1. Mark Ready for Motion
    1. CID 2107 (GEN)
       1. Review comment
       2. See doc 11-19/1603r0 for supporting information.
          1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1603-00-000m-elements-and-frames-cid-2107.pptx>
       3. There is a straw poll proposed and it will be assigned to the agenda for Thursday.
  1. **Review doc 11-19/306r6** Mathew FISCHER (Broadcom)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0306-06-000m-temporary-limited-connection.docx>
        1. CID 2656 (MAC)
        2. Review changes since last presented.
        3. Review proposed changes.
        4. The red text should be moved to the discussion.
        5. A new revision will need to be posted.
        6. Discussion on the changes to BlockAck vs using Management frame.
        7. Discussion on the reasons for making changes to the BlockAck.
        8. Proposed Resolution for CID 2656 (MAC): REVISED (MAC: 2019-09-18 10:43:22Z) - Incorporate the changes in 11-19/0306r7 (https://mentor.ieee.org/802.11/dcn/19/11-19-0306-07-000m-temporary-limited-connection.docx), which adds a mechanism as requested.
        9. Mark Ready for Motion- Put it on a separate tab for consideration.
  2. **Review doc 11-19/551r18 Mark HAMILTON**
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0551-18-000m-revmd-lb236-comments-assigned-to-hamilton.docx>
     2. CID 2237 (MAC)
        1. Review Comment
        2. Review status from last discussion yesterday.
        3. Proposed Resolution for CID 2237 (MAC): REVISED (MAC: 2019-09-17 14:15:20Z): Change the sentence, "In an HT PPDU, the final A-MPDU subframe is not padded." to "In an HT or DMG PPDU, the final A-MPDU subframe is not padded."

After that sentence, add, "In a VHT or S1G PPDU, padding is added as described below."

Change "The EOF Padding field is shown in Figure 9-961 (EOF Padding field format). This is present only in a VHT PPDU." by adding "or S1G PPDU", such that it ends, "only in a VHT or S1G PPDU."

Change "In a VHT PPDU, the following padding is present" to "In a VHT or S1G PPDU, the following padding is present."

* + - 1. Mark Ready for Motion
  1. **Review Open Comment status**
     1. Carlos – 2081, 2611, 2636, 2637
     2. Mark R – CID 2634
     3. Payam – 2107, 2678
  2. Revisit request 2434, 2430
     1. About deleting LRC/SLRC,
     2. Motioned already and rejected for insufficient detail.
     3. Do not need to discuss.
  3. **Recess at 6:02pm**

1. **802.11md (REVmd) Meetings – September 2019 IEEE 802 Wireless Interim – Hanoi – Thursday AM2 10:30-12:30** 
   1. **Called to order** at 10:30 am by the chair, Dorothy STANLEY (HPE)
   2. **Review patent policy**
      1. No issues noted.
   3. **Review Agenda 11-19/r1374r6**
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1374-06-000m-2019-september-tgmd-agenda.pptx>
      2. No objection to agenda
      3. **Thursday AM2**

* Carlos CORDEIRO/Payam TORAB CIDs (2084, 2611, 2636, 2637)
* 11-19-0856 – CID 2634 – Mark RISON
* CID 2678 – Might be related to Payam TORAB CIDs
* Direction of CID 2107 – Payam TORAB
* 11-19-1561, 11-19-1562, 11-19-1564 Matthew FISCHER
  + 1. Carlos has left, we will go through them as a group.
  1. **Review CID 2611 (MAC)**
     1. The text that is being proposed to delete is similar but not exact copy of the text affected by M70.
     2. Compare of D2.0 and D2.4 Text to determine the differences.
        1. There are changes from D2.0 and D2.4 that have been made.
        2. Note the first paragraph cited has “indication” and the second has “confirm”.
     3. Review Fig 11-52 – the NT-MLME to SME exchange is either a MLME-<primitive>.indication or MLME-<primitive>.confirm. So is this described in the standard correctly.
     4. Mapped the figure to the text.
     5. We need to have a way to talk about the top half of the figure from the bottom half of the figure.
     6. We should add request/response to the Tunneled figure.
        1. Add “carrying a request MMPDU”
        2. Add “carrying a response MMPDU”
        3. An alternate would be to add Initiator vs Responder.
        4. We could add “tunneled” to make it more unambiguous.
        5. Discussion on if this helps or not.
        6. While this may not be perfect, it may be enough to address the specific comment.
     7. Prepare Motion – CID 2611
        1. Resolve CID 2611 as REVISED with a resolution of

At P2483L18, (#2200)An NT-MLME receiving an MLME-OCTunnel.indication primitive \_carrying a request tunnelled MMPDU\_ shall

At 2484.14 (#2200)An NT-MLME receiving an MLME-OCTunnel.indication primitive \_carrying a response tunnelled MMPDU shall\_

At 2484.16, change “Processes” to “Process”

At 2484.18, change “Generates” to “Generate”

* + 1. Mark Ready for Motion
  1. **Review CID 2636 (MAC)**
     1. Review comment
     2. Similar issue but further into the flow of the diagram.
     3. See D2.4 p24824.54 and D2.4 p2483.60.
     4. Add “with a request tunneled MMPDU” and “with a response tunneled MMPDU shall” respectfully.
     5. At D2.4 p2484.1 change “issues” to “shall issue”
     6. Prepare Motion for CID 2363
        1. **Resolve CID 2636 as REVISED with a resolution of**

**At D2.4 2482.54, "A TR-MLME receiving an MLME-OCTunnel.request primitive with a request tunnelled MMPDU shall transmit an On-channel Tunnel”**

**At D2.4 2483.60 "A TR-MLME receiving an MLME-OCTunnel.request primitive with a response tunnelled MMPDU shall transmits an On-channel Tunnel Request”**

**At D2.4 2484.1 change “the TR-MLME issues “ to “the TR-MLME shall issue”**

* + 1. Mark Ready for Motion
  1. **Review CID 2637 (MAC)**
     1. Review comment
     2. Similar to the previous two.
     3. Make the same effect change here as well.
     4. Add at D2.4 p2483.8 - “carrying a request tunneled MMPDU” and D2.4 p2485.5 “carrying a response tunneled MMPDU shall”.
     5. At D2.4 p2484.10 change “is” to “shall be”
     6. Prepare Motion text for CID 2637
        1. **Resolve CID 2637 as REVISED with a resolution of**

**At D2.4 P2483.8 "A TR-MLME receiving an On-channel Tunnel Request frame carrying a request tunnelled MMPDU shall generate an MLME-OCTunnel.indication primitive**

**At D2.4 P2484.5 "A TR-MLME receiving an On-channel Tunnel Request frame carrying a response tunnelled MMPDU shall generates an MLME-OCTunnel.indication primitive**

**At D2.4 P2484.10 From “The MLME-OCTunnel.indication primitive is generated” to “The MLME-OCTunnel.indication primitive shall be generated”**

* + 1. Mark Ready for Motion.
  1. **Review doc 11-19/1688r0 Payam TORAB (Facebook)**
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1688-00-000m-no-brp-setup-phase-without-mid-and-bc.docx>
     2. CID 2084 (MAC)
        1. Review Comment
        2. Review Proposed Changes.
        3. Proposed Resolution for CID 2084 (MAC): REVISED (MAC: 2019-09-19 04:32:26Z): Incorporate the changes indicated in 11-19/1688 (<https://mentor.ieee.org/802.11/dcn/19/11-19-1688-00-000m-no-brp-setup-phase-without-mid-and-bc.docx>), which resolve the comment in the direction suggested by the commenter.
        4. No objection – Mark Ready for Motion
        5. Separate Motion Prepared.
  2. **Review doc 11-19/856r12** Mark RISON (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-0856-12-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx>
     2. CID 2634 (MAC)
        1. Review comment
        2. Review updated changes from last time it was presented.
        3. Some time to review the change was requested yesterday, so a call to see if there were any outstanding items to change. – no one noted any further changes.
        4. Proposed Resolution for CID 2634 (MAC): REVISED (MAC: 2019-09-18 09:38:28Z): Make the changes shown under “Proposed changes” for CID 2634 in 11-19/0856r12 (<https://mentor.ieee.org/802.11/dcn/19/11-19-0856-12-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx>), which introduce an OCT Source element to ensure unnecessary octets are not transmitted.
        5. Mark Ready for Motion
        6. Separate Motion Prepared.
  3. **Last CID 2678 (MAC)**
     1. Review comment
     2. Comment from Solomon and assigned to Jaimen CHEN.
     3. Doc 11-19/1034r4 reviewed before.
        1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1034-04-000m-proposed-resolutions-for-11aj-related-comments-in-revmd-lb236.doc>
     4. There was objection to take the full change as documented, but we may be able to update the document to have a solution we can agree on.
     5. Prepare an R5.
        1. Delete the reference on page 27 in the table for item 26. And add “if dot11OpportunisticTransmissionActivated is true; otherwise not present.”
        2. On page 25 where there is a sentence changed, it should be better to just delete the sentence.
        3. Change” CDMG non-AP and non-PCP STA” to ”non-AP and non-PCP CDMG STA”
     6. Proposed resolution: REVISED (MAC: 2019-09-19 06:48:44Z): Make the changes shown for CID 2678 in 11-19/1034r5 (<https://mentor.ieee.org/802.11/dcn/19/11-19-1034-05-000m-proposed-resolutions-for-11aj-related-comments-in-revmd-lb236.doc>.)
     7. Mark Ready for Motion
     8. This is the last CID that did not have prepared Resolution.
  4. **Review doc 11-19/1603r0** Payam TORAB (Facebook)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1603-00-000m-elements-and-frames-cid-2107.pptx>
     2. CID 2107 (GEN)
        1. Review comment
        2. From Slide 2 discussion:

"Text is inconsistent when it comes to defining which elements can be carried in which frames: Element definitions sometimes list all frames that can include them, sometimes have an incomplete list, and sometimes do not specify any frame. And of course we have the frame definitions that naturally need to list all the elements they can carry.

So, there are two databases that need to be kept in sync because they represent the same information,

list of elements in a given frame, and

list of frames that can carry a given element

The group should decide one of these paths,

(1) Keep both (a) and (b), and maintain both for consistency, not a small task, but adds value (how much value subjective).

(2) Keep (a) only, and get rid of (b) altogether.

In this day and age, a search function in a pdf file is the way to find the frames that can carry an element, so (1) adds value, although not as much as the past. If group decides (1) for added convenience and easier lookup, the entire spec - specifically all elements - needs to be examined, end edited in a consistent way, e.g., a standard form paragraph at the beginning or end of each element section, to list all frames that can include the element.

If the group decides (2), list of frames in element definition sections should be removed, and there will not be a second representation to maintain moving forward."

* + - 1. Review examples in presentation.
      2. Proposal from Slide 4: Maintaining the list of frames that can carry the element in the element definition is a process prone to error and with high cost of maintenance

We propose Option 2 in CID 2107 – eliminating list of frames from element definition

* + - 1. Objection to listing Mark RISON as an author. He requested his name be removed from the author list.
      2. Discussion on the value of implementing the proposal.
      3. Discussion on the “database”, a place to define the list elements and where the elements are contained.
      4. Possible Straw Polls:
         1. Referring to following databases,

(a) list of elements in a given frame, and

(b) list of frames that can carry a given element

* + - * 1. The 802.11 specification can follow one of these two paths

(1) Keep both (a) and (b), and maintain both for consistency

(2) Keep (a) only and eliminate (b)

* + - 1. Straw Poll: What is your preferred option?
         1. Option 1: 0
         2. Option 2: 10
         3. No preference: 4
      2. The Second Straw poll was not considered.
      3. A submission that explicitly details the locations and details the proposed changes would be needed for implementing any possible changes.
      4. The existing Proposed Resolution for CID 2107 (GEN) will remain as it was prepared for a lack of details.
  1. **Review doc 11-19/1561r3** Mathew FISCHER (Broadcom)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1561-03-000m-vht-lo-leakage-requirement.pptx>
     2. VHT LO Leakage Specification.
     3. Abstract:
* VHT LO Leakage limits are unrealistic when accounting for reduced TX power situations
* Other proposed amendments account for reduced total TX power in a manner that is realistic
* This document proposes a relaxation of the VHT LO Leakage limits under certain conditions
  + 1. Review submission
    2. Discussion on if these changes were needed for HE. But not in draft yet.
    3. Discussion if this relaxes or not the requirement or if this would violate regulatory requirements. It was asserted that this would not be a regulatory related change.
    4. As there was not very much opposition, a motion could be prepared similar to the straw poll for consideration later.
    5. Straw Poll #1 ☹
       1. Do you support the proposed change to Draft P802.11REVmd\_D2.4
* 21.3.17.4.2 Transmit center frequency leakage (slide 8)
* 19.3.18.7.2 Transmit center frequency leakage (slide 9)
* 17.3.9.7.2 Transmitter center frequency leakage (slide 10)

as described in 11-19-1561-03-000m-VHT-LO-Leakage-Requirement?

YES / NO / ABS

* + - 1. The Straw poll was not run, but it is the model for the motion.
    1. There was a request for some review by some that may not be here.
    2. Question on TVHT that may need a similar change applied.
       1. 11n, 11a, 11ac are all the same band. The TVHT may or may not be required there is not a certainty. The separate band may need a change but can be made at a later time.
    3. Alternatively, some believe that there is concern that this change should not be rushed at this time.
  1. **Review Agenda for this afternoon**
     1. All CIDs have been processed.
     2. All CID AdHocs to update and have reported
  2. **Recess at 12:29pm**

1. **802.11md (REVmd) Meetings – September 2019 IEEE 802 Wireless Interim – Hanoi – Thursday PM1 13:30-15:30** 
   1. **Called to order** at 1:35 pm by the chair, Dorothy STANLEY (HPE)
   2. **Review patent policy**
      1. No issues noted.
   3. **Review Agenda 11-19/1347r8**
      1. [**https://mentor.ieee.org/802.11/dcn/19/11-19-1374-08-000m-2019-september-tgmd-agenda.pptx**](https://mentor.ieee.org/802.11/dcn/19/11-19-1374-08-000m-2019-september-tgmd-agenda.pptx)
      2. **No adjustments made.**
   4. **Motions:** 
      1. **Motion #138– MEC Comments**
         1. Incorporate the text changes indicated in <https://mentor.ieee.org/802.11/dcn/19/11-19-1444-04-000m-proposed-changes-re-ieee-sa-mec-comment-related-to-draft-2-1-of-ieee-p802-11revmd.docx>
         2. Moved: Michael MONTEMURRO
         3. Seconded: Menzo WENTINK
         4. **Results for Motion #138**: 11-0-1 Motion passes
      2. **Motion #139 - September Meeting CIDs**
         1. Approve the comment resolutions in the

“Motion MAC-AH” (Mon/Tues) and Motion MAC-AI (Weds) tab in <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-51-000m-revmd-mac-comments.xls>

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Menzo WENTINK
      2. Seconded: Stephen MCCANN
      3. **Result for Motion #139**: Unanimous Consent, Motion approved without objection
    1. **Motion #140 -** **CID 2656 – Temporary Limited Connection**
       1. Approve the comment resolution for CID 2656 in the

“Motion MAC-AJ” tab in <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-51-000m-revmd-mac-comments.xls>

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Stephen PALM
      2. Seconded: Stephen MCCANN
      3. Discussion:
         1. Discussion on the alternatives to this propose resolution. Using Action Frame rather than 2 bits in the Block-Ack Frame.
         2. Discussion on if Block-Ack could be aggregated with an Action Frame is possible and could be used.
         3. Discussion on if the interference detection could be reported sooner with Block-Ack or not. The Proposal is thought to be compatible with existing devices.
         4. Discussion on the penalty of using a Action-NoAck, and we may have a reason for this proposal.
         5. Discussion on possible benefits of packing this in the Block-Ack to allow quicker response time (already in the TXOP for example.)
      4. **Results for Motion #140: 6-6-6 -- Motion does not pass.**
    1. **Motion #141 – CID 2656 – Temporary Limited Connection**
       1. Resolve CID 2656 as “REJECTED (MAC: 2019-09-19 06:57:25Z) - "The proposal in 11-19/0306r7 (<https://mentor.ieee.org/802.11/dcn/19/11-19-0306-07-000m-temporary-limited-connection.docx>) was considered and no consensus was reached to adopt the given proposal. Concerns raised included use of the block ack mechanism for signaling, with limited ability to convey the nature and duration of the interference. Points in favor of the proposal were the immediate nature of the indication, and low overhead. “
       2. Moved Michael MONTEMURRO
       3. 2nd Menzo WENTINK
       4. **Result for motion #141**: 15-0-4 Motion Passes
    2. **Motion #142 - Insufficient Detail CIDs**
       1. Approve the comment resolutions in the

“GEN Insufficient Information” and “GEN Assigned CID” tabs in 11-19/0449r14 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0449-14-000m-revmd-lb236-gen-comments.xls>>

“Insufficient Detail” tab in 11=19/0927r51 <[https://mentor.ieee.org/802.11/dcn/17/11-17-0927-51-000m-revmd-mac-comments.xls>](https://mentor.ieee.org/802.11/dcn/17/11-17-0927-51-000m-revmd-mac-comments.xls%3e%20)

“Insufficient Details” and “PMKSA-Motion” tabs in 11-19/0156r13 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0156-13-000m-lb236-revmd-phy-sec-comments.xlsx>>

* + - 1. Moved: Mark HAMILTON
      2. Second: Michael MONTEMURRO
      3. **Results for Motion #142:** 17-0-1 Motion Passes
    1. **Motion #143 – CID 2611**
       1. Resolve CID 2611 as REVISED with a resolution of

At P2483L18, (#2200)An NT-MLME receiving an MLME-OCTunnel.indication primitive carrying a request tunnelled MMPDU shall

At 2484.14 (#2200)An NT-MLME receiving an MLME-OCTunnel.indication primitive carrying a response tunnelled MMPDU shall

At 2484.16, change “Processes” to “Process”

At 2484.18, change “Generates” to “Generate”

* + - 1. Moved: Mark HAMILTON
      2. Seconded: Michael MONTEMURRO
      3. **Result for Motion #143**: Unanimous Consent – No objection – Motion Passes
    1. **Motion #144 – CID 2636**
       1. Resolve CID 2636 as REVISED with a resolution of

At D2.4 2482.54, "A TR-MLME receiving an MLME-OCTunnel.request primitive with a request tunnelled MMPDU shall transmit an On-channel Tunnel”

At D2.4 2483.60 "A TR-MLME receiving an MLME-OCTunnel.request primitive with a response tunnelled MMPDU shall transmits an On-channel Tunnel Request”

At D2.4 2484.1 change “the TR-MLME issues “ to “the TR-MLME shall issue”

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Stephen PALM
      3. **Result for motion #144:** Unanimous Consent – No objection – Motion Passes
    1. **Motion #145 – CID 2637**
       1. Resolve CID 2637 as REVISED with a resolution of

At D2.4 P2483.8 "A TR-MLME receiving an On-channel Tunnel Request frame carrying a request tunnelled MMPDU shall generate an MLME-OCTunnel.indication primitive

At D2.4 P2484.5 "A TR-MLME receiving an On-channel Tunnel Request frame carrying a response tunnelled MMPDU shall generates an MLME-OCTunnel.indication primitive

At D2.4 P2484.10 From “The MLME-OCTunnel.indication primitive is generated” to “The MLME-OCTunnel.indication primitive shall be generated”

* + - 1. Moved: Stephen MCCANN
      2. Seconded: Mark RISON
      3. **Result for Motion #145**: Unanimous Consent – No objection – Motion Passes
    1. **Motion#146 – CID 2084**
       1. Resolve CID 2084 as REVISED with a resolution of

Incorporate the changes indicated in 11-19/1688r2 https://[mentor.ieee.org/802.11/dcn/19/11-19-1688-02-000m-no-brp-setup-phase-without-mid-and-bc.docx](https://mentor.ieee.org/802.11/dcn/19/11-19-1688-02-000m-no-brp-setup-phase-without-mid-and-bc.docx) , which resolve the comment in the direction suggested by the commenter.

* + - 1. Moved: Payam TORAB
      2. Seconded: Chris HANSEN
      3. **Result for Motion #146:** Unanimous Consent – No objection – Motion Passes
    1. **Motion #147 – CID 2634**
       1. Resolve CID 2634 as REVISED with a resolution of

Make the changes shown under “Proposed changes” for CID 2634 in <https://mentor.ieee.org/802.11/dcn/19/11-19-0856-12-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx> which introduce an OCT Source element to ensure unnecessary octets are not transmitted.

* + - 1. Moved: Mark RISON
      2. Seconded: Menzo WENTINK
      3. **Result for Motion #147:** Unanimous Consent – No objection – Motion Passes
    1. **Motion #148 – CID 2678**
       1. Resolve CID 2678 as REVISED with a resolution of

Make the changes shown for CID 2678 in 11-19/1034r5 <<https://mentor.ieee.org/802.11/dcn/19/11-19-1034-05-000m-proposed-resolutions-for-11aj-related-comments-in-revmd-lb236.doc>>.

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Menzo WENTINK
      3. Results for Motion #148: Unanimous Consent – No objection – Motion Passes
    1. **Motion #149:** **Motion – VHT LO Leakage**
       1. Incorporate the text changes in slides 8,9 and 10 in <https://mentor.ieee.org/802.11/dcn/19/11-19-1561-04-000m-vht-lo-leakage-requirement.pptx> into the TGmd draft
       2. Moved: Matthew FISCHER
       3. Seconded: Jeff JONES
       4. Discussion:
          1. A Concern that the motion is coming without sufficient review was expressed.
       5. **Results for Motion #149**: 14-1-4 Motion Passes
    2. **Motion** – Additional editorial changes in 11-19-856.
       1. The material is not ready for a motion.
    3. **Motion #150** – **Recirculation WGLB**
       1. Having approved changes to P802.11REVmd D2.0 as defined in 11-19-1374r9, 11-18/611r24, 11-17/0927r51, 11-19/156r13, 11-19/449r14, 11-19/142r10 and 11-19/143r13, instruct the editor to prepare P802.11REVmd D3.0 and

Approve a 15 day Working Group Technical Letter Ballot asking the question “Should P802.11REVmd D3.0 be forwarded to Sponsor Ballot?”

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Stephen PALM
      3. **Result for Motion #150**: 15-0-0 – Motion Passes
    1. Thanks to everyone for getting to this point.
  1. **Review doc 11-19/1562** – Matthew FISCHER
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1562-00-000m-all-sta-crs-mcs-negotiation.docx>
     2. Abstract:

Proposed language to expand use of Control Response MCS Negotiation from S1G to all STA types.

The proposed changes are not based on any CID from any LB of any TGmd draft.

Changes are referenced to TGmd D2.4.

* + 1. Review Submission
    2. Discussion on how many times the negotiations should occur.
    3. This is a Management action frame exchange.
    4. Discussion on the S1G coverage.
    5. Discussion on how to drop down MCS levels in VHT.
    6. Question on Spatial Streams usage and if the change of Spatial Streams may warrant a different MCS.
    7. Discussion on usage of MCS in DMG and the rules that are defined.
    8. Matthew will continue to revise the document based on feedback.
  1. **Review Document 1564** – Matthew FISCHER (Broadcom)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1564-00-000m-originator-block-ack-state.docx>
     2. Abstract:

Proposed language to modify some confusing text in the description of the originator behaviour in the BlockAck section.

The proposed changes are not based on any CID from any LB of any TGmd draft.

Changes are referenced to TGmd D2.4.

* + 1. Clarifies block ack state
    2. Review Submission
  1. **Plans for September to November**
     1. Expectations:
        1. Editors expect 3 weeks to prepare D3.0. – Oct 11
        2. Expect the Ballot to start on Oct 14 or so
        3. Expect the Ballot to close on the 30 Oct.
        4. If we receive no comments, we are done.
        5. If we have comments, then we have to recirculate again.
        6. If we get comments but make no changes, then a recirc would still be required.
        7. If we get Comments and make changes, then we have at least 2 recirculation.
        8. We will request 802 EC approval (conditional or unconditional as appropriate) in November.
     2. Schedule 1conference calls.
        1. November 1, 2019 10 ET 2 hrs.
     3. Next AdHoc Plan:
        1. Estimated February 2020
  2. **Moved to Adjourned**
     1. Moved: Jon ROSDAHL
     2. Second: Sean COFFEY
     3. Results: No objection – Motion Passes
  3. **THANKS to all for their participation and assistance.**
  4. **Adjourned 3:06pm**

**References:**