IEEE P802.11  
Wireless LANs

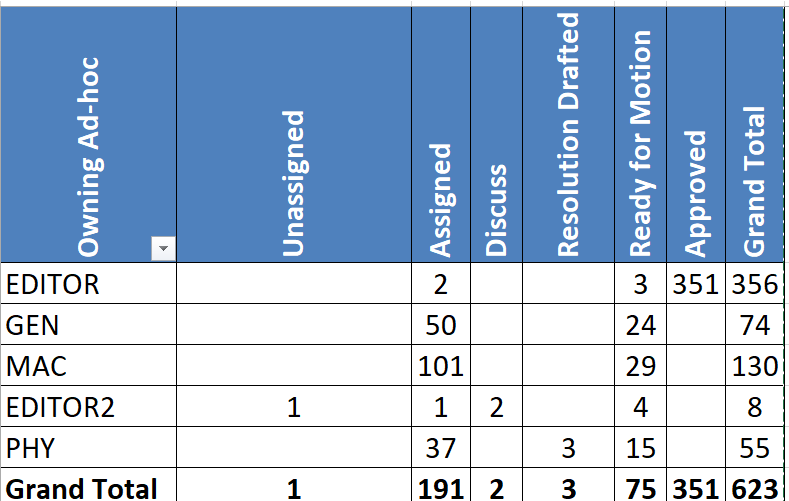
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| Minutes for REVmd - Sept 2018 - Waikoloa | | | | |
| Date: 2018-09-13 | | | | |
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|  |  |  |  |  |

Abstract

Minutes for 802.11md (REVmd) for the 2018 September 802 Wireless Interim in Waikoloa, HI.

R1 – minor corrections from feedback on R0.

1. **802.11md - REVmd – 802 Plenary – Waikoloa, Monday PM1: 13:30-15:30**
   1. **Called to order** at 1:30pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy**
      1. Call for essential patents – No comments.
   3. **Review Participation Slide**
   4. **Review Agenda**:
      1. 11-18/1388r2
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-02-000m-2018-september-tgmd-agenda.pptx>
      2. Monday PM1
2. Chair’s Welcome, Policy & patent reminder
3. Approve agenda
4. Status, Review of Objectives
5. Editor Report
6. Emily QI – CID 1306 11-18-1421
7. Menzo CID 1007 11-18-0930
8. Abhi Patil/Menzo WENTINK CIDs 1278, 1288, 1300 11-18-1350 and CID 1298 in 11-18-1296
9. Mike MONTEMURRO – CIDs 1027, Cid 1028
10. Mark HAMILTON– CID 1286
    * 1. Monday PM2
11. Menzo WENTINK– CID 1505 11-18-1426
12. Carlos CORDEIRO11-18-1324
13. Carlos CORDEIRO11-18-1580 DMG CIDs
14. Mark RISON CIDs in 11-18-1306r3
    * 1. Tuesday AM1
15. Jerome HENRY – CID 1014, 11-18-1446, also 11-18-1447, 11-18-1448
16. Menzo WENTINK - 11-18-1177 – 11ah TXOP
17. Dan HARKINS – 11-18-1479 Parse Commit message
18. Mark RISON CIDs in 11-18-1306r3
19. Comment resolution
    * 1. Tuesday PM1
20. EDCA TXOP AC rules CID 1195 – 11-18-1260, 11-18-1368
21. Sean Coffey 11-18-1573
22. Emily QI – CID 1006 11-18-1364 – Beacon Protection
    * 1. Wednesday PM1
23. Mark HAMILTON– CIDs 1507, 1525, also see 11-18-1306
24. Comment Resolution
    * 1. Wednesday PM2
25. Motions
26. Comment Resolution
    * 1. Thursday PM1
27. Motions
28. Comment resolution
29. Plans for September 2018 – November 2018, Adjourn
30. Adjourn
    * 1. Agenda changes are captured in 11-18/1388r3
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-03-000m-2018-september-tgmd-agenda.pptx>
      2. Request to move some of Thursday PM1 to another time, but not able to move at this time.
      3. After adjustments a motion to approve agenda was made
         1. **Motion W1**: Move to approve Agenda as shown in 11-18/1388r3 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1388-03-000m-2018-september-tgmd-agenda.pptx>>
         2. Moved Edward AU, 2nd: Mike MONTEMURRO
         3. Result W1: No objection to approving the agenda by unanimous consent.
    1. **Overall Status:** 
       1. **LB232 on P802.11REVmd D1.0 Passed with 85% approval, 623 comments**
          1. D1.3 incorporates 11ai, 11ah, 11aj amendments
          2. D1.4 incorporates 11ak amendment
       2. **Since July 2018 meeting**
          1. Continued comment resolution
          2. Held 3 teleconferences, Portland AdHoc meeting
       3. **September 2018 meeting goals (7 timeslots):**
          1. Complete LB232 comment resolution
          2. Plans for Sept – Nov: Recirculation WGLB, comment resolution
          3. Agenda: 11-18-1388
    2. **Editor Report – 11-17/0920r12**
       1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-12-000m-802-11revmd-editor-s-report.ppt>
       2. Review Submission
       3. 11aq Roll-in Status
          1. Completed 11aq roll-in
          2. D1.5 including 11aq roll-in will be posted in one week.
       4. D1.6 will have Hawaii changes
       5. Current Status of Comment Resolution:



* + 1. Question on if the 11ak roll-in items have been completed?
       1. It seems to have an open issue see slide 10 of the backup.
       2. Issue has been addressed and is now closed – (post meeting).
  1. **Review doc 11-18/1421r0** – Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1421-00-000m-lb232-figure-i-updates.doc>
     2. CID 1306 (Editor)
        1. Review Figure I updates.
        2. This figure shows how the various clauses were added and renumbered.
        3. The new clauses and Annex are depicted.
        4. No objection for CID 1306
        5. Proposed resolution: Revised; "Incorporate the text changes in 11-18/1421r0 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1421-00-000m-lb232-figure-i-updates.doc>>. The changes update Figure I to reflect the changes from the incorporated amendments.
        6. No objection – Mark Ready for Motion
  2. **Review doc 11-18/930r0** – Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-0930-00-000m-cid-1007.docx>
     2. CID 1007 (MAC)
        1. Review comment and proposed changes
        2. Proposed Resolution: REVISED (MAC: 2018-09-11 00:02:42Z): At 1748.39 add "-- Extended Compressed BlockAck", which implements what the commenter requested.
        3. No objection – Mark Ready for Motion
  3. **Review Doc 11-18/1350r2** – Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1350-02-000m-resolution-for-cids-1287-1288-1300.docx>
     2. CIDs 1287, 1288, 1300 (all MAC)
        1. Review Comments
        2. Review proposed changes
        3. Describe the change to indicate the bit order and location of I/G bit.
        4. On page 5, make some minor editorial changes. Add “is” after “bit 0” and “bit 47”
        5. Change “section” to “clause” and change “subsequent discussion” to “in this clause”.
        6. Question on if these changes affect the OUI.
           1. See p867.31
           2. MSB/LSB is ok within an octet, but not in a series of bits.
        7. The last page “And” should be “and”
        8. Post an r3 and then we will prepare a motion
        9. Proposed resolution for CID 1287, 1300: CIDs 1287 and 1300 (MAC): REVISED (MAC: 2018-09-11 00:27:28Z): Incorporate the changes in 11-18/1350r3. These changes remove references to MSB and LSB in MAC Addresses, in the direction suggested by the commenter.
        10. Proposed Resolution: 1288: CID 1288 (MAC:) REVISED (MAC: 2018-09-11 00:30:28Z): Incorporate the changes in 11-18/1350r3. These changes clarify the derivation of BSSID(i), in the direction suggested by the commenter.
        11. No objection - Mark Ready for Motion
  4. **Review doc 11-18/1296** Abhishek PATIL (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1296-02-000m-resolutions-to-cid-1298.docx>
     2. This submission was presented at the Portland AdHoc, this version has some changes from a discussion with Mark RISON and will only present those change today.
     3. Review changes to the submission since Portland.
     4. CID 1298 (MAC)
        1. Proposed resolution: REVISED (MAC: 2018-09-11 00:38:00Z): Incorporate the text changes in 11-18/1269r2. The comment is resolved in the direction suggested by the commenter.
        2. No objection – Mark Ready for Motion
  5. **Review PHY CIDs 1028 and 1027** – Mike MONTEMURRO (Blackberry)
     1. CID 1028 (PHY)
        1. Review Comment
        2. Comment was Withdrawn.
        3. Proposed Resolution: REJECTED (PHY: 2018-09-10 21:34:41Z)
        4. Commenter has withdrawn the comment. PV1 frames are negotiated through the use of the Header Compression Frame request/response.
        5. No objection – Mark Ready for Motion
     2. CID 1027 (PHY)
        1. Review Comment
        2. Comment was withdrawn
        3. Proposed Resolution: Rejected (PHY:2018-09-10 21:40:57Z) Commenter has withdrawn the comment. Setting the BPN and Key ID to 0 when the security state is established does not introduce a security vulnerability since a new key would have been negotiated
        4. No objection – Mark Ready for Motion
     3. Only 7 PHY Comments left that do not require a submission
     4. CID 1245 and 1246
        1. Review comment
        2. MIB change requested for a “MAX-ACCESS” from “read-only” to “read-write”
        3. And similar list of MIB variables for CID 1246.
        4. Review the context of the proposed changes.
        5. Will need to bring back later, as the proposed changes include “etc” which is open ended.
  6. **Review doc 11-18/669r5** – Mark HAMILTON(Ruckus/ARRIS)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-0669-05-000m-revmd-mac-comments-assigned-to-hamilton.docx>
     2. CID 1286 (MAC)
        1. Review comment
        2. Review proposed change
        3. Review context
        4. Menzo volunteered to look at this CID.
        5. **Action item #1**: Menzo to look at the issue, and Mark HAMILTON will check with Michael FISCHER.
     3. CID 1338 (MAC)
        1. Review Comment
        2. Proposed Resolution: Accept
        3. No Objection – Mark Ready for motion
     4. CID 1343 (MAC)
        1. Review Comment
        2. Similar change should be also made at P1937.15.
        3. Proposed resolution: REVISED (MAC: 2018-09-11 09:35:04Z): Make the change as proposed, and also make the same change at P1937.15.
        4. No Objection – Mark Ready for Motion
     5. CID 1349 (MAC)
        1. Review Comment
        2. Review context and proposed change
        3. At 11.42.6 has a misspelled timer there also.
        4. Table E-8 and Table E-11 reviewed.
           1. While there are two tables, one is for US/Canada, and one is Europe.
        5. Proposed Resolution: REVISED (MAC: 2018-09-14 03:25:14Z): Incorporate the changes shown in 11-18/669r7 <<https://mentor.ieee.org/802.11/dcn/18/11-18-0669-07-000m-revmd-mac-comments-assigned-to-hamilton.docx>> for CID 1349. These make changes in the direction proposed by the commenter.
        6. No objection – Mark Ready for Motion
  7. **Recess at 3:29pm**

1. **802.11md - REVmd – 802 Plenary – Waikoloa, Monday PM2: 16:00-18:00**
   1. **Called to order** at 4:00pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy**
      1. No issues
   3. **Review doc 11-18/1426r1** Menzo WENTINK (Qualcomm)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1426-01-000m-cid-1505.docx>
      2. CID 1505 (MAC)
         1. Review comment
         2. Review rules for limits
         3. QSRC[AC] reset rules are not clear.
         4. QLRC[AC] reset rules are not clear either.
         5. Review proposed resolution which modifies text to use only one retry counter.
         6. Question on the BS calculation – how to select the minimum value of 12 rather than any number.
         7. Discussion on the setting of BSmax[AC].
         8. Discussion on what to call the replacement for “short retry counter and long retry counter” (per MSDU, A-MSDU or MMPDU) and QSRC and QLRC.
         9. Discussion on having the default minimum per AC should be something other than “which shall be larger than 12”.
         10. Need to have a bit more clarity in the text to continue.
         11. Agreement that it is a mess.
   4. **Review doc 11-18/1324r4** Carlos CORDEIRO(Intel)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1324-04-000m-fixes-to-multi-band-operations.docx>
      2. Abstract: Among other things, this contribution fixes the OCT figure and primitives, which were correct in 802.11ad-2012, but were incorrectly modified in 11mc. There are no CIDs related to this contribution.

All the changes are related to 11md D1.2.

* + 1. Review submission
    2. Review proposed changes
    3. Discussion on why the changes were made in REVmc from TGad and not sure why. Would like to understand why the change was made.
    4. Will bring for motion later this week.
  1. **Review doc 11-18/1580r0** Carlos CORDEIRO(Intel)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1580-00-000m-resolution-to-dmg-cids.docx>
     2. CID 1493 (MAC)
        1. Review comment
        2. Proposed Resolution: ACCEPTED (MAC: 2018-09-11 03:45:01Z)
        3. No objection – Mark Ready for Motion
     3. CID 1314 (MAC)
        1. Review comment
        2. Proposed Resolution: REJECTED (MAC: 2018-09-11 03:47:07Z): The concepts of the source of an allocation (SP, or CBAP) and the source of a TS (the transmitter of the TSPEC) are different. The current text is not in error.
        3. No Objection – Mark Ready for Motion
     4. CID 1312 (MAC)
        1. Review comment
        2. Deleting “non-ap” in table 9-159 corrects the identified problem.
        3. Proposed Resolution: REVISED (MAC: 2018-09-11 03:51:50Z): Delete "non-AP" from the first two "DMG BSS:" rows of Table 9-151 (two occurrences).
        4. No objection – Mark Ready for Motion
     5. CID 1310 (MAC)
        1. Review Comment
        2. Reference – 10.40.4 – p1922 D1.4 and 10.40.6.7 – p1935 D1.4
        3. Review the proposed change, but it is unrelated to the comment specifically.
        4. This comment should be rejected, but the issue should address the editorial issue separately.
        5. Plan to reject the Comment, but we need to have a specific response to the commenter.
        6. From the discussion:

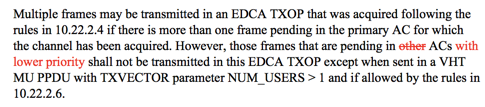
1. The case when a destination STA initiates a frame exchange in an SP is given in 10.37.6.7 (Service period recovery). This is further explicitly elaborated in the third paragraph of 10.37.6.2 which states “Except when transmitting a frame as part of the SP recovery procedure (10.37.6.7 (Service period recovery)) or transmitting a response to the source DMG STA or transmitting a PPDU as part of an RD response burst (10.29 (Reverse direction protocol)), the STA identified by the Destination AID field in the Extended Schedule element should be in the receive state for the duration of the SP in order to receive transmissions from the source DMG STA.” Thus, simply removing the case of the destination STA as proposed by the commenter would not be correct.
2. With respect to the proposed changes by the commenter:
   1. The proposal to delete “or destination” from P1803L22 is incorrect given (a) above. Note that the text has an explicit reference to section 10.37.6.2, which further references 10.37.6.7 as noted above.
   2. The proposed changes to section (**10.37.6.6 DMG protected period**) are not correct. As the third paragraph states “Both the source DMG STA and destination DMG STA of an SP are owners of the DMG protected period”. Essentially, both STAs are required to create a protected SP. In fact, the paragraph quoted by the commenter in 10.37.6.6.1 alludes to this very fact, since both source and destination STAs are required to perform a frame exchange (RTS/CTS) to establish the protected period. So, essentially, both STAs create the SP.
      * 1. The change proposed in the submission will be made separately.
        2. **ACTION ITEM #2:** Dorothy STANLEY will prepare motion for the separate change.
   3. **Recess at 6:07pm**.
3. **802.11md - REVmd – 802 Plenary – Waikoloa, Tuesday AM1: 8:00-10:00**
   1. **Called to order** at 8:03 by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy** and give attendance reminders
      1. No issues noted
   3. **Agenda Review**
      1. Review AM1 and PM1 agenda
      2. See 11-18/1388r4
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-04-000m-2018-september-tgmd-agenda.pptx>
      3. Add doc 11-18/1369 – CID 1100, 1102, 1104 to Wednesday PM1
      4. Request to hold a motion during Tuesday PM1 timeslot on 11-18/1583.
         1. See slide 15 in 11-18/1388r4 for prepared motion.
      5. Note other motions are prepared for Wednesday, and in the deck also has a draft motion for this week’s work.
      6. Updated Agenda will be 11-18/1388r5
   4. **Review doc 11-18/1446** Jerome HENRY (Cisco)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1446-00-000m-resolution-of-lb232-cid1014.docx>
      2. CID 1014 (PHY)
         1. Review history of Mapping of DSCP to 802.11 UP and AC mapping
         2. From the Discussion:

Annex R3.1 presents two example DSCP to UP (and vice versa) mappings, one for GSMA networks, another one for example enterprise networks. The group noted that the reference documents (GSMA IR34, RFC 8325) were subject to change as their recommendation follow evolving practices. It might not be the task of IEEE 802.11 to simply duplicate these recommendations, especially as guidance over L3 mapping is not core to 802.11. Accordingly, it is better to remove the example mapping, and point instead to the source of the examples (GSMA and IETF documents), noting that updates to these documents will be documented directly on the relevant document source.

* + - 1. Discussion on what is being removed and what is no longer going to be specified. – DSCP to UP/AC mappings as well as Application Class to the UP/AC classifications.
      2. Annex R is Informative, so removal would not affect the normative behavior
      3. Proposed Resolution: REVISED (PHY: 2018-09-11 18:20:27Z) - Incorporate the change given in 11-18/1446r0 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1446-00-000m-resolution-of-lb232-cid1014.docx>> These changes remove the out of date tables.
      4. No objection – Mark ready for Motion
  1. **Review document 11-18-1447** - Jeorme HENRY (Cisco)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1447-01-000m-802-1q-2003-2011-in-802-11.pptx>
     2. Abstract: During discussion on resolution of LB232 CID 1014, observations were made that 802.11 sometimes references 802.1Q, and sometimes references a particular version of 802.1Q (2003 and 2011). Participants debated the merit of reducing cross reference complexity by only referring to the general 802.1Q (and avoiding dependence on superseded Standards) This submission examines this possibility
     3. Review submission
     4. Discussion of proposal for marking Classifier Type 2 as deprecated.
        1. “For Classifier Type 2, the Classifier Parameter is the IEEE 802.1Q-2003 VLAN Tag TCI. The endianness of the IEEE 802.1Q VLAN TCI field is as defined in IEEE Std 802.1Q for the VLAN Tag TCI. The Frame Classifier field for Classifier Type 2 is defined in Figure 9-303 (Frame Classifier field of Classifier Type 2). Classifier Type 2 is deprecated.” (p 1105)
     5. Discussion of removal of the specific year and clause of the transmission selection procedures.
        1. “*For each EDCAF, an MSDU, A-MSDU, or MMPDU is selected for transmission using the transmission selection procedures defined in ~~8.6.8 of~~ IEEE Std 802.1Q-~~2011~~ using two queues, the primary and alternate.” (p 1667)*
     6. Discussion of removing the year and the specifics from the text.
     7. No objection to the proposals and would look for an update with the editor instructions to be used in a motion later.
  2. **Review doc 11-18-1448** Jerome HENRY (Cisco)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1448-00-000m-discussion-on-802-1d-in-802-11.pptx>
     2. Abstract: During discussion on resolution of LB232 CID 1014, observations were made that 802.11 sometimes references 802.1D, which diverges from 802.1Q Participants debated whether 802.1D was necessary for 802.11
     3. This submission explores the relationship between 802.1D and 802.11 and proposes a migration model.
     4. Review submission
     5. Review proposed changes:
        1. The QoS facility supports eight priority values, referred to as *UPs*. The values a UP may take are the integer values from 0 to 7. A higher UP is reflective of a higher priority intent ~~and are identical to the IEEE 802.1D~~~~TM~~ ~~priority tags~~. An MSDU with a particular UP is said to belong to a traffic category (TC) with that UP. The UP is provided with each MSDU at the medium access control service access point (MAC SAP) either directly, in the UP parameter, or indirectly, in a TSPEC or SCS Descriptor element designated by the UP parameter.
     6. Discussion on the order of the UP that has 0 higher than 1 and 2, does that cause an issue with possibly changing the order.
        1. Issue with 1 and 0 staying in the right order.
     7. Discussion of the “A higher UP is reflective of a higher priority intent”. With 0 having a higher priority than 1, then this sentence is not accurate, and we may want to just reference the table in 10-1 and not say anything specifically in clause 5 about the relative order.
     8. Proposal 2 removed the reference to 802.1D and the specific 802.1D designation.
     9. Discussion on what should be done to ensure definition of VI, VO, A\_VO etc as the WG has thought these were defined in 802.1D. Also define Best Effort (BE) and Background (BK).
        1. There are only 4 on air priority classes.
        2. The differences in the wireless channel access is so small, that more differential definitions is going to be hard to do.
        3. The last column in the table 10-1 is informative
     10. Proposal 3: Remove Annex R references in 802.1D
     11. Ran out of time while reviewing the references to 802.1D bridging vs 802.1Q bridging.
  3. **Review doc 11-18-1177** – 11ah TXOP – Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1177-01-000m-802-11ah-txop-limits.docx>
     2. Review submission
        1. The main Comment: For 802.11ah non-sensor STAs the default TXOP limit value for each AC is defined in Table 9-146. This value is the same as the values for IEEE 802.11ac and is not suitable for the lower data rates of 802.11ah. For example, the TXOP limit for best effort traffic does not allow sufficient time for a non-sensor STA to transmit either TCP packets or ping packets using MCS10.
     3. Proposed change is to add a column in Table 9-156.
     4. The change would need some exceptions for the slot time.
     5. 15.008ms is the time limit that would give 11ah a reasonable compromise to operation limits.
     6. Discussion on the exception for the fragments, the fragment limit of 600 octets was a question that did not have a ready answer. So, the plan would be to change the 600 to 256 and then see if David is ok with the adjustment, and if so, we can look to motion R2 of the document later in the week.
  4. **Review doc 11-18-1479** Parse Commit message - Dan HARKINS (HPE)–
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1479-01-000m-parsing-a-commit-message.docx>
     2. Abstract: The introduction of the password identifier to SAE introduces some parsing challenges when multiple, optional components may be part of the frame. This submission suggests a procedure to ensure that the frame can be properly and unambiguously parsed.
     3. Review submission
     4. Proposed new text: “

Anti-clogging tokens, password identifiers, and Vendor specific additions may be optionally present in a received Commit message. Since the size of the scalar and Element are determined by the group field, any anti-clogging token present will be of a size determined by the recipient, and the Password Identifier is an IE with a well-defined prefix, the Commit message can be unambiguously parsed using the following technique:

1. Compute the following values:
   1. Base length is the sum of the length of the group, the length of the scalar, and the length of the Element
   2. Token length is the size of a requested anti-clogging token
2. If the length of the Commit message equals the base length there is no token, no password identifier, and no Vendor specific additions;
3. If the length of the Commit message is greater than the base length but less than the sum of the base length and token length and a Password Identifier IE follows the Element, there is a password identifier and no token. If a Password Identifier IE does not follow the Element or the length of the Commit message indicates there are additional octets following the Password Identifier IE, there are Vendor specific additions.
4. If the length of the Commit message is greater than the sum of the base length and the token length and a Password IE follows the Element, there is a password identifier and a token. If a Password Identifier IE does not follow the Element or the length of the Commit message indicates there are additional octets following the Password Identifier IE, there are Vendor specific additions. “
   * + 1. Discussion of use of If without a “then” request to ask for adding “then”
       2. Is there a way to mark this new text as informative?
          1. This is a discussion of what is normative vs informative.
          2. Use of NOTE could indicate that it is informative.
          3. Careful use of capitalization would need to be done for Element vs element.
          4. Use of field names need “field” after the capitalization of the field name.
   1. We have 9 minutes left.
   2. **Review Agenda issues**
      1. required for Tuesday PM1 presentations.
         1. Guido – 11-18/1260 –
         2. Jerome – 11-18/1368 --
         3. Sean -- 11-18/1583 – (Potential motion as well)
         4. Emily – 11-18/1364 –
      2. Reminder that during Wednesday PM2 Motions are expected.
   3. **Notice from Editors** –
      1. Draft 1.5 has been posted with all roll-ins completed including 11ak and 11aq
   4. **Discussion on the timeline** and plan going forward.
      1. Currently shows Sept 2020
      2. Can we move the sponsor ballot process going faster? Then we could pull the completion in faster.
      3. It will all be determined by the number of comments received.
   5. **Recess at 10:02am**
5. **802.11md - REVmd – 802 Plenary – Waikoloa, Tuesday PM1: 13:30-15:30**
   1. **Called to order** at 1:30pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Reminder of Patent Policy**
      1. No issues noted
   3. **Agenda Review** – 11-18/1388r5
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-05-000m-2018-september-tgmd-agenda.pptx>
      2. Tuesday PM1
         1. EDCA TXOP AC rules CID 1195 –
            1. Guido HIERTZ 11-18-1260,
            2. Jerome HENRY 11-18-1368
         2. Sean Coffey 11-18-1583
         3. Emily QI – CID 1006 11-18-1364 – Beacon Protection
         4. Youhan KIM CID
      3. Request to change:
         1. Youhan KIM asked to add a CID issue to the agenda
      4. Approve agenda as shown without objection.
   4. **Review doc 11-18/1260r0** -- Guido HIERTZ (Ericsson)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1260-00-000m-resolution-to-cid-1195.docx>
      2. Introduction of topic by reviewing a presentation that was presented before in doc 11-18/810r1 – Guido HIERTZ (Ericsson)
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-0810-01-000m-cid-1195.pptx>
      3. Review the 11-18/1260 proposed changes.
      4. Abstract: This document introduces normative text based on discussions during a TGmd teleconference reviewing 11-18/810. This submission also intends resolving CID 1195.
      5. Discussion on the modification of 10.24.2.7 sharing an EDCA TXOP.
      6. Discussion on the backoff calculation components.
      7. Discussion on why these changes are not a good idea, adding high priority packets to low priority queues would not provide a meaningful gain. Adding low priority traffic to higher priority queues could cause harm and may cause issues. The overhead calculations do not seem correctly assessed.
      8. Discussion on how the efficiency could improve by not leaving open portions in the TXOP, and if you don’t put all the management frames in the voice quality, then that may help get the information out sooner, and could use the remaining time left to avoid collisions. – The argument is that there may not be a meaning gain by invoking these rules. There was not consensus on if the value was meaningful or not and if collisions or latency was more impacted. Avoiding backoff was the concern that was being addressed.
      9. Discussion on the concern of backoff, latency and efficiency.
      10. Discussion on the value of fairness and not “cheating” to use the TXOP that is not the priority level assigned.
      11. Support for allowing High Priority to Low Priority was ok, but not the other way around.
      12. Discussion on how to improve the efficiency of the standard by using a secondary access priority. How strict the rules are is what is the point of concern.
      13. Finding ways to improve efficiency is the goal, how we achieve that is still being debated.
   5. **Review doc 11-18/1368r2** Jerome HENRY (Cisco)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1368-02-000m-cid-1195-resolution.pptx>
      2. Abstract: This submission discusses CID 1195 of LB 232 and suggests a different solution from 18/810r1. Instead of allowing any AC to borrow the TXOP time of any other AC, only allow a higher AC to borrow TXOP time from a lower AC
      3. Review Submission
      4. Another view of possible improvements for TXOP usage.
      5. Summary of the two presentations:
         1. CID 1195 (MAC): Reviewed https://mentor.ieee.org/802.11/dcn/18/11-18-1260-00-000m-resolution-to-cid-1195.docx. (Guido HIERTZ). Proposed text changes to specify and allow TXOP sharing. Text currently allows sharing a TXOP with additional frames of any AC.
         2. CID 1195 (MAC) Reviewed https://mentor.ieee.org/802.11/dcn/18/11-18-1368-02-000m-cid-1195-resolution.pptx (Jerome HENRY). Argues that only frames of a higher priority queue should be allowed to do sharing.
      6. Proposed change:



* + 1. Discussion on the value of this small change and the return on the effort to make the TXOP more efficient. Not all agreed that the BE packet is going to get fairness in this scheme and the tail end may not be sufficient improvement.
    2. The only time that this can be used is only with your own BE queue.
    3. TXOP is the poor man’s HCCA. It existed in spite of being almost useless now that we have aggregation. And when you police yourself, then you cannot trust the others in the network. After many devices were tested, the TXOP limits were not met as specified. A proposal to use aggregation instead of TXOP was offered.
    4. The option to allow a higher priority to use a lower is still being looked at as an option, but the use of Lower priority in a higher category is not an option we are considering now.
  1. **Review doc 11-18/1583r1** – Sean COFFEY (Realtek)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1583-01-000m-mandatory-protection-mechanisms.pptx>
     2. Abstract: In most cases, the decision on whether or not to use protection mechanisms (RTS/CTS, CTS-to-Self) is left to individual STAs or (in ax) to the AP.

There is one major exception, in which use of a protection mechanism is required: whenever any (even one) NonERP STA is associated in the BSS (whether or not it has any data to transmit, and whether or not it is in a sleep mode), all transmissions in the BSS must be preceded by a protection mechanism in NonERP format.

This makes no sense. This decision should be left to the AP, which can best manage its own BSS. The necessary change to accomplish this is straightforward to make.

CIDs addressed: 1589 (which has a much different Proposed Change)

* + 1. Review submission
    2. Review Proposal One and Two.
    3. Discussion on the value of making the changes proposed.
    4. Protecting the 11b devices may be overly protective, but some find value in this being done and the powersaving considerations are still very concerning factor.
    5. Phasing out the use of this protection may be a cost savings to the system as a whole. There may be times when an 11-b only device is not able to associate to some APs. The use of protection mechanisms like RTS/CTS or long preambles at 1Mb/s may not always help the device transmitting or the hidden node that cannot hear all the packet anyway.
    6. Discussion the ramification of proposal 1 and proposal 2.
    7. The protection of 11G was the purpose of the protection mechanism that was added. While this may be true, it also protects the 11b transmissions as well. The devices do not see the traffic in some cases and the reduction of range in the OFDM case, and the protection for the 11b device should be there for the low periodicy of a device like a doorbell that is not pressed very often. The collisions of an 11b device transmitting while an OFDM is transmitting.
    8. Straw Poll:

Which option do you prefer?

1. Make the change in (or along the lines of) proposal 1

2. Make a change along the lines of proposal 2

3. Make a change along the lines of either proposal

4. Make no change

* + - 1. Results: 5 – 6 – 8 – 10
    1. The CID that was listed in the Abstract did not seem to be the correct number.
    2. **ACTION ITEM #3:** Sean Coffey to research to get the correct CID number to align with the discussion Tuesday PM1 and 11-18/1583r1.
  1. **Review doc 1364r3** Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1364-03-000m-proposed-resolution-for-cid-1066.doc>
     2. CID 1066 (GEN)
        1. Abstract: This document provides comment resolutions for LB232 CID 1066. The document is based on REVmd D1.1 by default, otherwise specified.

This document also proposed a new field “RSN Capabilities Extension” because there is no capability bit available in the “RSN Capabilities” field.

* + - 1. Review comment and history of discussion.
      2. See doc 11-18/0865r3 as the PowerPoint explanation document.
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-0865-03-000m-beacon-protection.ppt>
      3. Review proposed changes.
      4. Discussion on the lack of retry for a broadcast frame. The retry description is in the unchanged text.
      5. Discussion on the possibility that the security weakening when retransmitting bits that allow a way to detect values in the MIC use fields and we should not mark the TSF. The issue is if the masking is being done in hardware or software.
      6. Discussion on if any implementations have been created to ensure these changes will work as advertised. The question of backward compatibility and if a legacy device would still see this as a beacon or another capability carrying packet.
      7. Straw Poll
         1. Support the proposed resolution for CID 1066:

A Yes

B No

C Abstain

* + - 1. Results 6 – 2 – 10
      2. A separate motion will be prepared for the resolution.
      3. Proposed Resolution: REVISED (GEN: 2018-09-12 01:19:52Z) Incorporate the changes defined in doc 11018/1364r3 <https://mentor.ieee.org/802.11/dcn/18/11-18-1364-03-000m-proposed-resolution-for-cid-1066.doc> which addresses the comment and defines beacon protection.
      4. Mark Ready for Motion
  1. **Review doc 11-18/1597r0** - Youhan KIM
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1597-00-000m-lb232-cid1309.docx>
     2. CID 1309 (PHY)
        1. Review comment
        2. Proposed Resolution: **Revised**. Agree with the commenter that “segment” is not the appropriate term. The correct terminology is “frequency subblock”.

Instruction to TGmd Editor: At D1.4 P3147L49, change “upper and lower 80 MHz segments of a 160 MHz of 80+80 MHz” to “upper and lower 80 MHz frequency subblocks of a 160 MHz or 80+80 MHz”. (Note the typo change of “of” to “or”.)

* + - 1. No objection – Mark Ready for Motion
  1. **Recessed at 3:31pm**

1. **802.11md - REVmd – 802 Plenary – Waikoloa, Wednesday PM1: 13:30-15:30**
   1. **Called to order** 1:35pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Reminder of Patent Policy**
      1. No issues
   3. **Review agenda 11-18/1388r7**
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-07-000m-2018-september-tgmd-agenda.pptx>
      2. Review schedule
      3. See R8 for updates.
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-08-000m-2018-september-tgmd-agenda.pptx>
   4. **Review doc 11-18/1369r2** – Mark HAMILTON(Ruckus/ARRIS)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1369-02-000m-alternative-comment-resolution-for-extended-element-id.docx>
      2. Review history of submission
      3. Element IDs – Table 9-87
      4. Element ID Extension column was added, and now causes some confusion.
      5. Element ID = 255 then Element ID Extension has a valid value.
      6. We have had several discussions on whether to have one table or two tables or how to describe when the Element ID Extension is present.
      7. Review the proposal for changes to Table 9-87 and the text immediately after the table.
      8. Discussion on how the proposed solution now looks.
      9. Suggestions on what the name should be in the entry for 255. “Element ID Extension present” instead of “Used for elements that contain an Element ID Extension Field”
      10. CID 1100, 1102, 1104 (MAC)
          1. Proposed resolution: REVISED (MAC: 2018-09-13 00:11:22Z): Reorganize 9.4.2.1 following the instructions in https://mentor.ieee.org/802.11/dcn/18/11-18-1369-03-000m-alternative-comment-resolution-for-extended-element-id.docx.

These changes:

* Correct the error where the Element ID Extension field is described as optional
* Remove redundancy and clarify the format description
* Correct errors identified in CIDs 1102 and 1104 in the direction proposed by the commenter.
  + - 1. Mark Ready for Motion
  1. **CID 1241** – Stephen MCCAAN (Blackberry)
     1. CID 1241 (MAC)
        1. Review comment
        2. Describe the history of the ANQP and how ANQP Query came to be.
        3. Proposed resolution: ACCEPTED (MAC: 2018-09-13 00:04:17Z)

Note to commenter: The ANQP protocol is a request/response protocol. The information exchanged in the protocol is referred to as ANQP Request and ANQP response.

The ANQP protocol runs on top of GAS. GAS request and response frame include Query and Response information.

* + - 1. No objection - Mark Ready for Motion
  1. **Review doc 11-18/1300r1** – Yongho SEOK (MediaTek)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx>
     2. CID 1074 (MAC)
        1. Review comment
        2. Review proposed changes
        3. Proposed resolution: REVISED (MAC: 2018-09-13 00:19:04Z): Incorporate changes as shown in the as specified in https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx. Which resolves in the direction of the commenter.
        4. Mark Ready for Motion
     3. CID 1075 (MAC)
        1. Review comment
        2. Review Proposed changes
        3. Proposed resolution: REVISED (MAC: 2018-09-13 00:20:31Z): Incorporate changes as shown in the as specified in https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx. Which resolves in the direction of the commenter.
        4. Mark Ready for Motion
     4. CID 1082 (MAC)
        1. Review comment
        2. Review Proposed changes
        3. Proposed resolution: REVISED (MAC: 2018-09-13 00:20:31Z): Incorporate changes as shown in the as specified in https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx. Which resolves in the direction of the commenter.
        4. Mark Ready for Motion
     5. CID 1112 (MAC)
        1. Review comment
        2. Review Proposed changes
        3. Proposed resolution: REVISED (MAC: 2018-09-13 00:20:31Z): Incorporate changes as shown in the as specified in https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx. Which resolves in the direction of the commenter.
        4. Mark Ready for Motion
     6. CID 1073 (MAC)
        1. Review Comment
        2. Review comment
        3. Review Proposed changes
        4. Discussion on the use of the dot11PageSlicingImplemented equal to true.
        5. The proposed change seems to have addressed the negative, but not the positive side.
        6. Need to discuss a bit more.
        7. MAC AdHoc notes: Not done. Work off-line to make this similar to existing style.
        8. **ACTION ITEM #4:** Youngho, Mark H, and Jon to work offline to resolve the wording for the dot11PageSlicingImplemented set to true case in ***subclause 10.47***.
     7. CID 1261 (MAC)
        1. Review Comment
        2. Review proposed changes
        3. Discussion on the capitalization of some words may need to be adjusted.
        4. Discussion on the complexity of the sentence.
        5. Proposed resolution: REVISED (MAC: 2018-09-13 00:40:07Z): Incorporate changes as shown in the as specified in 11-18/1300r1 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx>>. Which resolves in the direction of the commenter.
        6. Mark Ready for Motion
     8. CID 1262 (MAC)
        1. Review comment
        2. Review proposed changes
        3. Adding a comma helps clean up the proposed changes.
        4. Proposed resolution: REVISED (MAC: 2018-09-13 00:43:28Z): Incorporate changes as shown in the as specified in https://mentor.ieee.org/802.11/dcn/18/11-18-1300-02-000m-s1g-related-mac-comment-resolutions.docx. Which resolves in the direction of the commenter.
        5. No objection Mark ready for motion
  2. **Review doc 11-18/1654r0** – Xiaofei WANG (Interdigital)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1654-00-000m-cr-for-cid-1263.docx>
     2. CID 1263 (MAC)
        1. Review comment
        2. Review proposed changes
        3. The “for the STAs satisfying the following conditions:” then the conditions are not able to both be true. Need to change to “…one of the following…”
        4. Discussion on how often the refresh can be done.
        5. This change was discussed in 11ah, but the change was not made then and the thought by the commenter that they could bring later during the revision.
        6. Discussion on the possible progress of the discussion to resolve this CID.
        7. This is a real problem that will need more thought to resolve. Addition review is requested to continue working with Xiaofei.
        8. We can plan to discuss further on a telecon
        9. Note that in document 11-18/1300 it had proposed a reject for this CID. This submission is proposing an alternate suggestion, but it needs more work off-line.
  3. **Review MAC CIDs S1G CIDS**– Mark HAMILTON(Ruckus\ARRIS)
     1. Assign the following S1G CIDS to Menzo for further processing:
        1. 1073, 1088, 1090, 1110, 1122, 1123, 1124, 1126, 1128, 1142, 1143, 1263, 1267
  4. **Review doc 11-18/1306r4** – Michael MONTEMURRO (Blackberry) / Mark HAMILTON(Ruckus/ARRIS)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1306-04-000m-resolutions-for-some-comments-on-11md-d1-0-lb232.docx>
     2. Version 4 has been created and posted by Mike M and Menzo W.
     3. CID 1465 (MAC)
        1. Review comment (See page 32)
        2. Only one change needed from R3 proposed resolution: change “DA” to destination” which is highlighted in yellow.
        3. Discussion on if the change should include a “a” before “group destination” not worth it to revise the document again.
        4. Proposed resolution: CID 1465 (PHY) Make the changes shown under “Proposed changes” for CID 1465 in 11-18/1306r4 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1306-04-000m-resolutions-for-some-comments-on-11md-d1-0-lb232.docx>>, which change the references from RAs to DAs.
           1. No Objection Mark Ready for Motion
        5. CID 1480 (PHY)
           1. Review comment
           2. It has been resolved (See PHY Motion F tab in PHY comment file). Resolved August 1 telecon.
  5. **Recessed at 3:28pm**

1. **802.11md - REVmd – 802 Plenary – Waikoloa, Wednesday PM2: 16:00-18:00**
   1. **Called to order** at 4:01pmby the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy**
      1. No issues noted.
   3. **Review Agenda** for this meeting slot:
      1. **Wednesday PM2:**
2. Motions
3. Edward AU –11-18-1000, CIDs 1129, 1130
4. Marc EMMELMANN –11-18-1609 through 11-18-1615 11ai CIDs
5. Mike MONTEMURRO – CID 1284, 1600, 1601, 1602
6. Mark HAMILTON - 11-18-1669 MAC CIDs
7. Comment Resolution
   * 1. Add Edward AU 11-18/1566, CID 1095
     2. Add CID 1180 – Chris HANSEN
     3. Add doc 11-18/1636 – Kaz SAKODA
     4. Move Mike MONTEMURRO to the end to allow others to go this slot.
     5. No objection to the updated proposed agenda
   1. Motions:
      1. **Motion W2: Previous Minutes**

Approve the minutes of July 2018 meeting: <https://mentor.ieee.org/802.11/dcn/18/11-18-1066-00-000m-minutes-for-revmd-july-2018-san-diego.docx>

July-August teleconferences: <https://mentor.ieee.org/802.11/dcn/18/11-18-1360-00-000m-minutes-revmd-july-telecon.docx> and <https://mentor.ieee.org/802.11/dcn/18/11-18-1401-01-000m-minutes-revmd-august-telecon.docx>

Portland ad-hoc meeting: <https://mentor.ieee.org/802.11/dcn/18/11-18-1361-00-000m-minutes-revmd-adhoc-july-august-2018-portland-or.docx>

* + - 1. Moved: Jon ROSDAHL
      2. Seconded: Michael MONTEMURRO
      3. Result Motion W2: Unanimous Consent.
    1. **Motion 68 – San Diego, Teleconference, ad-hoc CIDs**

Approve the comment resolutions in the

“Motion EDITOR E” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0657-05-000m-revmd-wg-lb232-comments-for-editor-ad-hoc.xls>

“Motion-EDITOR2-D” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0619-08-000m-revmd-editor2-lb232-comments.xlsx>

“Motion MAC-S” and “Motion MAC-T” tabs in [https://](https://mentor.ieee.org/802.11/dcn/17/11-17-0927-19-000m-revmd-mac-comments.xls)[mentor.ieee.org/802.11/dcn/17/11-17-0927-19-000m-revmd-mac-comments.xls](https://mentor.ieee.org/802.11/dcn/17/11-17-0927-22-000m-revmd-mac-comments.xls)

“PHY Motion F” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0670-09-000m-lb232-revmd-phy-sec-comments.xls>

“Gen Motion AdHoc” and “Gen Motion Aug Telcon” tabs in <https://mentor.ieee.org/802.11/dcn/18/11-18-0614-02-000m-revmd-lb232-gen-comments.xls>

and incorporate the indicated changes into the TGmd draft.

* + - * 1. Moved: Jon ROSDAHL
        2. Seconded: Emily QI
        3. **Result Motion #68: 25-0-0 Motion Passes**
    1. **Motion #69** - **DMG Editorial clarification**

*Change the second paragraph in 10.37.6.2 (D1.4) as follows*

An SP allocation that is not an obsolete allocation is assigned to the source DMG STA identified in the Source AID subfield in an Allocation field that is not an obsolete allocation within the Extended Schedule element.

* + - 1. Moved: Carlos CORDEIRO
      2. Seconded: Emily QI
      3. **Result of Motion #69:** Unanimous Consent – motion passes
    1. **Motion #70 - Multiband Operation edits**

Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/18/11-18-1324-05-000m-fixes-to-multi-band-operations.docx> into the TGmd draft.

* + - 1. Moved: Carlos CORDEIRO
      2. Seconded: Michael MONTEMURRO
      3. **Result Motion #70:** Unanimous Consent – Motion Passes
    1. **Motion #71– 11-18-1447 edits**

**Incorporate the following changes into the TGmd draft:**

(D1.4) At 1105.50 At the end of the paragraph, insert “Classifier Type 2 is deprecated”

(D1.4) At 1667.52 Change from “IEEE Std 802.1Q-201” to “IEEE Std 802.1Q “

(D1.4) In the notes beginning at 2196.58, delete “Clause 35 of” (2x), “C.3 of” (1x) and delete “-2011” (3x)

* + - 1. Moved: Edward AU
      2. Seconded: Mark HAMILTON
      3. **Result Motion #71: Unanimous Consent – Motion Passes**
    1. **Motion #72– 11ah TXOP limits**

Incorporate the changes in https://mentor.ieee.org/802.11/dcn/18/11-18-1177-02-000m-802-11ah-txop-limits.docx into the TGmd draft.

* + - 1. Moved: Menzo WENTINK
      2. Seconded: Michael MONTEMURRO
      3. **Result: Motion #72**: Unanimous Consent – Motion Passes
    1. **Motion #73 – Parse Commit message edits**

Incorporate the changes in 11-18/1479r2 <https://mentor.ieee.org/802.11/dcn/18/11-18-1479-02-000m-parsing-a-commit-message.docx> into the TGmd draft.

* + - 1. Moved: Dan HARKINS
      2. Seconded: Michael MONTEMURRO
      3. Result Motion #73: Unanimous Consent – Motion Passes
    1. **Motion #74 – Beacon Frame protection**
       1. “Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/18/11-18-1364-04-000m-proposed-resolution-for-cid-1066.doc> into the TGmd draft. These changes define a new Beacon frame protection capability.”
       2. Moved: Emily QI
       3. Seconded: Nehru BHANDARU
       4. Discussion:
          1. There is a concern that there is some outstanding objections that have not been resolved. Request more time.
          2. **Motion #74a:** Motion to Table

Moved Menzo WENTINK, 2nd: Youhan KIM

**Results of Motion to Table:** 11-13-9 Motion Fails.

* + - * 1. Statement of support of the motion was made. And statements of objection to the motion to allow for more discussion to occur.
        2. Question to understand the reasons for the objection. Masking the timestamp may help, but the main concern was significant complexity to beacon offload. Previous complaints with the author is still outstanding.
        3. Not everyone believes that there is a complexity question.
        4. A Delay to November should not materially affect the results.
        5. The Mover and 2nd of the motion would like to proceed with the motion.
        6. If there is no complexity, then the argument for delay would not be made.
      1. **Result Motion #74:** 13-12-8 Motion Fails
    1. **Motion #75 – Waikoloa CIDs**

Approve the comment resolutions in the

“Motion EDITOR F” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0657-06-000m-revmd-wg-lb232-comments-for-editor-ad-hoc.xls>

“PHY Motion G” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0670-10-000m-lb232-revmd-phy-sec-comments.xls>

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Edward AU
      3. Discussion: None
      4. **Result Motion #75:** Unanimous Consent – Motion Passes
  1. **Review doc 11-18/1000r0** – Edward AU (Huawei)
     1. CID 1129 and 1130 (EDITOR2)
        1. Review comment
        2. Proposed Resolution: Revised; Incorporate the changes in 11-18/1000r0 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1000-00-000m-resolutions-to-cids-1129-and-1130.docx>> which resolves the comment in the direction of the commenter.
        3. No objection - Mark ready for motion:
  2. **Review doc 11-18/1609r0** Marc EMMELMANN
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1609-00-000m-lb232-cid1243.docx>
     2. CID 1243 (MAC)
        1. Review comment
        2. Proposed Resolution: ACCEPTED (MAC: 2018-09-13 03:15:25Z)
        3. Mark Ready for Motion
  3. **Review doc 11-18/610r1** Marc EMMELMANN
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1610-01-000m-lb232-cid1334-1335.docx>
     2. CID 1334 and 1335
        1. Proposed resolution REJECTED (MAC: 2018-09-13 03:01:59Z): Cls. 11.45.5.3 specifies the criteria in order to proceed with FILS, i.e. a non-AP STA has to satisfy each and every “condition”.

Those conditions are given as part of the DILS element referenced in Cls. 11.45.5.3. This element defines conditions via the FILS User Priority (field) and MAC Address Filter (field). The description of those fields explains how to interpret the contents of the fields and how to determine if the condition specified via the field is “true”.

* + - 1. No Objection Mark ready for motion
  1. **Review document 1611r1** Marc EMMELMANN
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1611-01-000m-lb232-cid1336.docx>
     2. CID 1336 (MAC)
        1. Review Comment
        2. Proposed Resolution: REVISED (MAC: 2018-09-13 03:06:40Z):

In the paragraph cited in the comment, at D1.4 P1343 L2:

Replace:

“Of fast initial link setup category (FILSC) Information priority condition”

With:

“the MAC Address Filter field or the FILS User Priority field”

* + - 1. No Objection - Mark Ready for Motion
  1. **Review doc 1612r1** Marc EMMELMANN
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1612-01-000m-lb232-cid1337.docx>
     2. CID 1337 (MAC)
        1. Review comment
        2. Proposed resolution: ACCEPTED (MAC: 2018-09-13 03:10:59Z)
        3. No Objection – Mark Ready for Motion
  2. **Review doc 16113r1** Marc EMMELMANN
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1613-01-000m-lb232-cid1542.docx>
     2. CID 1542 (MAC)
        1. Review Comment
        2. Proposed Resolution: REJECTED (MAC: 2018-09-13 03:12:06Z): The comment aims at mandating to assign a gateway whenever a STA is assigned an IP address. This is conceptually not required. A STA, e.g. in a purely local network environment, may be assigned an IP address without requiring a gateway address.
        3. No objection - Mark Ready for Motion
  3. **Review doc 11-18/1614r1** Marc EMMELMANN

<https://mentor.ieee.org/802.11/dcn/18/11-18-1614-01-000m-lb232-cid1543.docx> oc 11-18/1614r1 Marc EMMELMANNonMANe the changes in 11-18/1000r0 wich resolves the comment in the direction of the commenter

* + 1. CID 1543 (MAC)
       1. Proposed Resolution: REJECTED (MAC: 2018-09-13 03:13:40Z): The comment does highlight a valid case in which the source MAC address is not required. Though, the FILS HLP Container element is reused in other situations, in which the source address field is required. Instead of defining another (new) element, the existing is reused (e.g. see D1.4 P 2461 L55).
       2. No objection – Mark Ready for Motion
  1. **Review Doc 11-18/1615r0** Marc EMMELMANN
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1615-00-000m-lb232-cid1544.docx>
     2. CID 1544 (MAC)
        1. - Reviewed the comment and proposed change.
        2. - Agree the cited text is missing the S1G case.
        3. - Proposed resolution ACCEPTED.
        4. No objection - Mark Ready for Motion
  2. **Review Doc 11-18/1566**r0 Edward AU (Huawei):
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1566-00-000m-proposed-resolution-for-cid-1095.docx>
     2. CID 1095 (EDITOR2)
        1. - Reviewed the 11.1.3.8 text, for use of dot11MuiltiBSSIDImplemented
        2. - for WNM STA, dot11WirelessManagementImplemented must be true.
        3. - But without that sentence, a STA could do MultiBSSID and might not be WNM. The commenter claims that a STA must be WNM to do MuiltiBSSID, but without this sentence, where else is that said?
        4. - Edward will investigate further, off-line.
  3. **Review Doc 11-18/1651r0** for CID 1180 Chris HANSEN (Peraso)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1651-00-000m-resolution-to-cid-1180.docx>
     2. CID 1180 (EDITOR2)
        1. - Comment is that there are "magic numbers" in a table that could be references to another table that already has those numbers.
        2. - Commenter is generally correct.
        3. - But the "(64)" in the Proposed Change should be removed.
        4. - The suggested resolution proposes the Proposed Change in effect, but with the "(64)" removed, and this updates the Table number to match D1.5.
        5. Edward will prepare the resolution in his database to match the above.
        6. Proposed Resolution: REVISED (EDITOR2: 2018-09-13 03:32:55Z) Incorporate the changes in 11-18/1651r0 at <https://mentor.ieee.org/802.11/dcn/18/11-18-1651-00-000m-resolution-to-cid-1180.docx>.
        7. - Mark Ready for motion
  4. **Review Doc11-18/1636r3** - CIDs1245, 1246, 1247 (PHY) Kaz SAKODA (Sony)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1636-03-000m-suggested-resolution-to-mib-comments.docx>
     2. - Not clear these MIB attributes are needed or used. But rather than try to remove them all, just fixed the obvious problem.
     3. - CID 1247 (PHY):
        1. suggest two changes, to add "Table" to the name, and change the type to read-write.
        2. - There might be text that references this attribute, but not by name, so agree to keeping it, to be safe.
        3. - Proposed Resolution: REVISED (PHY: 2018-09-13 03:37:38Z) - Incorporate the changes in [https://mentor.ieee.org/802.11/dcn/18/11-18-1636-03-000m-suggested-resolution-to-mib-comments.docx indicated for CID 1247](https://mentor.ieee.org/802.11/dcn/18/11-18-1636-03-000m-suggested-resolution-to-mib-comments.docx%20indicated%20for%20CID%201247).
        4. - Mark Ready for Motion
     4. CID 1246 (PHY):
        1. - Compared to recent ARC recommendations that the MAX-ACCESS refers to whether they are written (or read) by an external entity.
        2. So, only made changes where needed per that rule.
        3. - That resulted in only two changes.
        4. - Would be good to note the ARC recommended practice to the commenter, as part of the resolution.
        5. - Proposed Resolution: REVISED (PHY: 2018-09-13 03:42:11Z) - Incorporate the changes in 11-18/1636r3 <<https://mentor.ieee.org/802.11/dcn/18/11-18-1636-03-000m-suggested-resolution-to-mib-comments.docx> > indicated for CID 1246. The changed MIB variables are written by an external entity as per the ARC guidelines.
        6. - Mark Ready for Motion
     5. CID 1245 (PHY):
        1. - Similar to CID 1246, change the ones that are written by an external entity.
        2. - Proposed Resolution: REVISED (PHY: 2018-09-13 03:42:11Z) - Incorporate the changes in https://mentor.ieee.org/802.11/dcn/18/11-18-1636-03-000m-suggested-resolution-to-mib-comments.docx indicated for CID 1245. The changed MIB variables are written by an external entity as per the ARC guidelines.
        3. - Mark Ready for Motion
  5. **Review CIDs 1284, 1600, 1601, 1602**- Mike MONTEMURRO (Blackberry)
     1. CID 1284 (GEN):
        1. - Comment request is to add a bit in Beacons that indicates that SAE is using passwords with identifiers, but the same Beacon can have a mixture of these
        2. - The Proposed Change won't work.
        3. - The user should already know if their password needs an identifier, so this doesn't seem necessary either.
        4. – Discussion of possible rejection
        5. - Reviewed the Draft text in 12.4.3, and the text that REVmd has added.
        6. - For an infrastructure STA to access an AP, it must be provisioned with a password (for PSK) and if an identifier is used, then the identifier is also provisioned. That is known by the user of the STA and can be set up correctly as part of the configuration.
        7. - Proposed Resolution: REJECTED (PHY: 2018-09-13 01:05:01Z) Using a password identifier is not a binary decision. APs must be able to support an identifier on some PSKs and not on others. In fact, some PSKs without an identifier could be bound to a particular MAC address or be shared using the wildcard MAC address. Having a single bit to signal to a STA that an identifier is needed is not possible. The user behind the STA will know whether a password identifier is needed when he or she gets the password-- if there is also an identifier then it is needed, if there isn't then it's not.
        8. Mark Ready for motion
     2. CID 1600 (PHY):
        1. - The commenter has decided to withdraw this comment.
        2. - Captured the commenter's rationale for the withdrawal, in the resolution response.
        3. – Proposed Resolution: REJECTED (PHY: 2018-09-11 21:52:54Z) - The commenter has withdrawn the comment, based on the following rationale. Before the current definitions can be changed, there must be a comprehensive new definition for how CCA would work. It is not at all straightforward to produce a clean definition that covers all relevant cases, especially issues related to multipath channels, other channel traffic, and time-varying signal and interference levels, and no such definition has been developed so far. The comment is withdrawn for this letter ballot.
        4. – Mark Ready for Motion
     3. CID 1601 (PHY), CID 1602 (PHY):
        1. Same as CID 1600 (PHY), above
        2. Proposed Resolution for CID 1601: REJECTED (PHY: 2018-09-11 21:53:15Z) The commenter has withdrawn the comment, based on the following rationale. Before the current definitions can be changed, there must be a comprehensive new definition for how CCA would work. It is not at all straightforward to produce a clean definition that covers all relevant cases, especially issues related to multipath channels, other channel traffic, and time-varying signal and interference levels, and no such definition has been developed so far. The comment is withdrawn for this letter ballot.
        3. Proposed Resolution: for CID 1602: REJECTED (PHY: 2018-09-11 21:53:46Z) - The commenter has withdrawn the comment, based on the following rationale. Before the current definitions can be changed, there must be a comprehensive new definition for how CCA would work. It is not at all straightforward to produce a clean definition that covers all relevant cases, especially issues related to multipath channels, other channel traffic, and time-varying signal and interference levels, and no such definition has been developed so far. The comment is withdrawn for this letter ballot.
  6. **Review doc 11-18/1300r2** Yongho SEOK (Media Tek Inc.)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1300-02-000m-s1g-related-mac-comment-resolutions.docx>
     2. CID 1073 (MAC)
     3. - Bringing this back after off-line work, per the action item from today's PM1.
     4. - Reviewed the new proposed change.
     5. - No comments or concerns.
     6. - Proposed resolution: Revised; Incorporate the changes as shown for CID 1073 in 11-18/1300r2 < <https://mentor.ieee.org/802.11/dcn/18/11-18-1300-02-000m-s1g-related-mac-comment-resolutions.docx> > which makes the change in the direction suggested by the commenter.
     7. – Mark Ready for motion.
  7. We are out of time, will move Mark Hamilton document 11-18-1669 to tomorrow PM1
  8. **Recess** until tomorrow PM1 at 6:02pm

1. **802.11md - REVmd – 802 Plenary – Waikoloa, Thursday PM1: 13:30-15:30**
   1. **Called to order** 1:34pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy** and give Attendance reminders
      1. No issues noted
   3. **Review Agenda** 11-18/1388r9
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-09-000m-2018-september-tgmd-agenda.pptx>
      2. Add document number for Michael FISCHER 11-18-1660
      3. Move Jerome HENRY to telecon
      4. Will Review EDCA TxOP AC Rules CID 1195 11-18/1260r2 by Menzo on behalf of Guido
      5. No additional items –
      6. No objection to the displayed agenda (see R10)
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-10-000m-2018-september-tgmd-agenda.pptx>
   4. **Motions:** 
      1. **Motion #76 – Waikoloa CIDs – 2**

Approve the comment resolutions in the

“Motion-EDITOR2-E” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0619-09-000m-revmd-editor2-lb232-comments.xlsx>

“PHY Motion H” tab in <https://mentor.ieee.org/802.11/dcn/18/11-18-0670-11-000m-lb232-revmd-phy-sec-comments.xls> except CID 1284

“Motion MAC-U” tab in <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-24-000m-revmd-mac-comments.xls>

and incorporate the indicated changes into the TGmd draft.

* + - 1. Moved: Michael MONTEMURRO
      2. Seconded: Mark HAMILTON
      3. Discussion: None
      4. **Result Motion #76:** 11-0-1 Motion passes
    1. **Motion #77 -- CID 1284**
       1. Resolve CID 1284 as “Rejected” with a resolution of

“REJECTED (PHY: 2018-09-13 01:05:01Z)

Using a password identifier is not a binary decision. APs must be able to support an identifier on some PSKs and not on others. In fact, some PSKs without an identifier could be bound to a particular MAC address or be shared using the wildcard MAC address. Having a single bit to signal to a STA that an identifier is needed is not possible. The user behind the STA will know whether a password identifier is needed when he or she gets the password-- if there is also an identifier then it is needed, if there isn't then it's not.

* + - 1. Moved: Dan HARKINS
      2. Seconded: Stephen McCann
      3. **Results Motion #77:** 5-4-3 Motion Fails
  1. **Review doc 11-18/1660** – Michael FISCHER (NXP)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1660-01-000m-proposed-resolution-to-cid-1548.docx>
     2. Abstract: This document contains a proposed resolution to CID 1548, which pertains to the name and definition of Homogeneous ESS.

The comment is in reference to Draft IEEE P802.11REVmd\_D1.0. The proposed resolution uses the text, page, and line numbering from Draft IEEE P802.11REVmd\_D1.5.

* + 1. CID 1548 (GEN)
       1. Review comment
       2. Review submission discussion
       3. Discussion on the change of HESSID to HPSSID.
       4. HESSID is used in other places outside of 802.11 and some would not like the acronym to change.
       5. So there are several options presented. First was just dropping the “within the same extended service set (ESS)”
       6. The discussion on the options for change.
       7. Discussion on the use of Homogeneous correctly.
       8. The change to the description is an improvement, but the acronym is being used in industry sufficiently to not want to change
       9. Straw Poll
          1. Choice 1: **homogeneous extended service set (ESS):** A collection of basic service sets (BSSs), which may or may not be within the same extended service set (ESS), in which every subscription service provider network (SSPN) or other external network reachable at one BSS is reachable at all of them.
          2. Choice 2: **homogeneous provider service set:** A collection of basic service sets (BSSs), in which every subscription service provider network (SSPN) or other external network reachable at one BSS is reachable at all of them.
          3. Result of straw poll: 6 – 2
       10. Prosed Resolution: REVISED (GEN: 2018-09-14 00:26:49Z)

Change the definition of homogeneous extended service set on page 160, line 20 to read:

**homogeneous extended service set (ESS):** A collection of basic service sets (BSSs), which may or may not be within the same extended service set (ESS), in which every subscription service provider network (SSPN) or other external network reachable at one BSS is reachable at all of them.

* + - 1. No objection - Mark Ready for Motion
      2. Document R2 posted: 11-18/1660r2:
         1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1660-02-000m-proposed-resolution-to-cid-1548.docx>
  1. **Review MAC CID**
     1. CID 1339 (MAC)
        1. MAC: 2018-09-10 18:42:44Z - From May session minutes, "Instruction to Editor: Implement the proposed text update for CID 1339 in https://mentor.ieee.org/802.11/dcn/18/11-18-0879-01-000m-d1-0-vht-related-cids.docx." This text, "includes the codebook side to the list as suggested by the commenter, but also clarifies that there are other parameters involved." Confirm with the group this is ready for motion.
        2. No objection to mark ready for Motion with the revision in the AdHoc file.
        3. Proposed Resolution: REVISED (MAC: 2018-09-14 00:30:27Z): Implement the proposed text update for CID 1339 in 11-18/879r1 <<https://mentor.ieee.org/802.11/dcn/18/11-18-0879-01-000m-d1-0-vht-related-cids.docx>>.
        4. No Objection - Mark ready for Motion
  2. **Review doc 11-18/669r6** Mark HAMILTON(Ruckus/ARRIS)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-0669-06-000m-revmd-mac-comments-assigned-to-hamilton.docx>
     2. CID 1349 (MAC)
        1. Review comment
        2. Proposed resolution Revised incorporate the changes in 11-18/0669r6 < <https://mentor.ieee.org/802.11/dcn/18/11-18-0669-06-000m-revmd-mac-comments-assigned-to-hamilton.docx> >
        3. No objection Mark Ready for Motion
     3. CID 1273 (MAC)
        1. Review Comment
        2. Proposed Resolution: ACCEPTED (MAC: 2018-09-14 03:29:28Z
        3. No objection – Mark Ready for Motion
     4. CID 1569 (MAC)
        1. Review Comment
        2. Discussion on the A/C vs AC vs Mains or similar naming
        3. Question on the POE as a possible issue. Need definition of the power that is being described. Maybe we should include an example of what the power usage is being needed here.
        4. There may be a bigger issue of capability vs is currently having power currently supplied.
        5. This is a bit in a capability field, so is the value set to one if capable, or is it that the device is using the power. The bit is only useful if it is telling if the device is on AC power or not. If it is a capability, then it is not very useful.
        6. Discussion on if this is a capability or not.
        7. Original text:

“The A/C Power subfield indicates whether the STA is capable of obtaining A/C Power. It is set to 1 if the STA is capable of being supplied by AC Power, otherwise it is set to 0.”

* + - 1. Proposed Alternative Change 1):

“The A/C Power subfield indicates whether the STA is using AC Power. It is set to 1 if the STA is supplied by AC Power, including PoE, wall plug, etc.; otherwise it is set to 0.”

* + - 1. Proposed Alternative Change 2):

“The A/C Power subfield indicates whether the STA is capable of using AC Power. It is set to 1 if the STA is capable of being supplied by AC Power, including PoE, wall plug, etc.; otherwise it is set to 0.”

* + - 1. Straw Poll:
         1. Choice option 1 or Option 2)
         2. Results: 4 – 4
      2. Need to check with DMG experts to determine what the intent of this bit when defined.
      3. **ACTION ITEM #5**: Mark HAMILTON to check with DMG experts on the intent of the A/C Power subfield definition.
    1. CID 1536 (MAC)
       1. Review comment
       2. The reference at the end of the cited sentence includes CID 1533, but that is unrelated.
       3. Proposed resolution: ACCEPTED (MAC: 2018-09-14 03:30:35Z)
       4. No objection – Mark ready for Motion
    2. CID 1485 (MAC)
       1. Review Comment
       2. Review proposed Change
       3. Suggestion is to Accept the proposed change
       4. The place to put “group addressed” was questioned.
       5. Make the insertion after “received in”, in the cited sentence
       6. Proposed Resolution: REVISED (MAC: 2018-09-14 03:31:32Z): Insert “group addressed” after “received in”, in the cited sentence
       7. - No objection - Mark Ready for Motion
    3. CID 1415 (MAC)
       1. Review comment
       2. Mark RISON is working on CID 1526 and asked that this CID wait until his presentation is reviewed.
  1. **Review 11-18/1260r2** – Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1260-02-000m-resolution-to-cid-1195.docx>
     2. CID 1195 (MAC)
        1. Review status of discussion
* Current thought is that Frames from a higher priority AC may be included when the primary AC is non-empty and after all frames from the primary AC have been transmitted.
* Frames from a higher or lower priority AC may be included at any time in a VHT or S1G MU-PPDU with TXVECTOR parameter NUM\_USERS > 1 when these frames do not increase the duration of the VHT or S1G MU-PPDU beyond that required for the transmissions of the frames of the primary AC.

The TXOP limit of the primary AC shall apply to a shared TXOP.

* + 1. Other changes reviewed in the document
    2. The text is not quite complete, but will be worked on between now and Bangkok
  1. **Sept 2018 – Nov 2018 Meeting Planning**
     1. Objectives: Comment resolution
        1. About 150-16 comments are left
        2. About 100 are insufficient detail
        3. There are about 50-60 comments that have to be resolved.
  2. **Conference calls** 
     1. September 28, Oct 5, 12, 19, Nov 2 10am Eastern, 2 hours
     2. **ACTION ITEM #6:** Comment Group Owners to identify the comments that “must” be resolved. Identify the list of those without sufficient detail and those with details to make a plan for resolving as many as possible. Identify the CIDs that the stock reject of insufficient detail is sufficient and put them in one tab.
  3. **Schedule review**
     1. **See slide 13-14**
* **January 2018 – Initial WGLB**
* **November 2018 –D2.0 WGLB Recirculation LB (was Sept)**
* **March 2019 – Form SB Pool (was Feb)**
* **March 2019 – MEC/MDR done**
* **June/August 2019 – Initial SB (was April)**
* **November 2019 – Recirculation SB (was Oct)**
* **March 2020 – Final WG/EC approval (was July 2020)**
* **May 2020 – Revcom/SASB approval (was Sept 2020)**
  + 1. Will update the published timeline
    2. **Next ad-hoc:**
       1. Currently not scheduled –
  1. **Review Availability of 11md D1.0 in the IEEE store**
     1. Draft 1.0 is available for purchase, see <http://www.techstreet.com/ieee/products/vendor_id/7028>
  2. **Chair issued a Thanks for all the hard work!**
  3. **Adjourned 3:32pm**

**References:**

**1. Monday PM1:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-02-000m-2018-september-tgmd-agenda.pptx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-03-000m-2018-september-tgmd-agenda.pptx>
3. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-12-000m-802-11revmd-editor-s-report.ppt>
4. <https://mentor.ieee.org/802.11/dcn/18/11-18-1421-00-000m-lb232-figure-i-updates.doc>
5. <https://mentor.ieee.org/802.11/dcn/18/11-18-0930-00-000m-cid-1007.docx>
6. <https://mentor.ieee.org/802.11/dcn/18/11-18-1350-02-000m-resolution-for-cids-1287-1288-1300.docx>
7. <https://mentor.ieee.org/802.11/dcn/18/11-18-1296-02-000m-resolutions-to-cid-1298.docx>
8. <https://mentor.ieee.org/802.11/dcn/18/11-18-0669-05-000m-revmd-mac-comments-assigned-to-hamilton.docx>
9. <https://mentor.ieee.org/802.11/dcn/18/11-18-0669-07-000m-revmd-mac-comments-assigned-to-hamilton.docx>

**2. Monday PM2:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1426-01-000m-cid-1505.docx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1324-04-000m-fixes-to-multi-band-operations.docx>
3. <https://mentor.ieee.org/802.11/dcn/18/11-18-1580-00-000m-resolution-to-dmg-cids.docx>

**3. Tuesday AM1:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-04-000m-2018-september-tgmd-agenda.pptx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1446-00-000m-resolution-of-lb232-cid1014.docx>
3. <https://mentor.ieee.org/802.11/dcn/18/11-18-1447-01-000m-802-1q-2003-2011-in-802-11.pptx>
4. <https://mentor.ieee.org/802.11/dcn/18/11-18-1448-00-000m-discussion-on-802-1d-in-802-11.pptx>
5. <https://mentor.ieee.org/802.11/dcn/18/11-18-1177-01-000m-802-11ah-txop-limits.docx>
6. <https://mentor.ieee.org/802.11/dcn/18/11-18-1479-01-000m-parsing-a-commit-message.docx>

**4. Tuesday PM1:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-05-000m-2018-september-tgmd-agenda.pptx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1260-00-000m-resolution-to-cid-1195.docx>
3. <https://mentor.ieee.org/802.11/dcn/18/11-18-0810-01-000m-cid-1195.pptx>
4. <https://mentor.ieee.org/802.11/dcn/18/11-18-1368-02-000m-cid-1195-resolution.pptx>
5. <https://mentor.ieee.org/802.11/dcn/18/11-18-1583-01-000m-mandatory-protection-mechanisms.pptx>
6. <https://mentor.ieee.org/802.11/dcn/18/11-18-1364-03-000m-proposed-resolution-for-cid-1066.doc>
7. <https://mentor.ieee.org/802.11/dcn/18/11-18-0865-03-000m-beacon-protection.ppt>
8. <https://mentor.ieee.org/802.11/dcn/18/11-18-1597-00-000m-lb232-cid1309.docx>

**5. Wednesday PM1:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-07-000m-2018-september-tgmd-agenda.pptx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-08-000m-2018-september-tgmd-agenda.pptx>
3. <https://mentor.ieee.org/802.11/dcn/18/11-18-1369-02-000m-alternative-comment-resolution-for-extended-element-id.docx>
4. <https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx>
5. <https://mentor.ieee.org/802.11/dcn/18/11-18-1300-01-000m-s1g-related-mac-comment-resolutions.docx>
6. <https://mentor.ieee.org/802.11/dcn/18/11-18-1654-00-000m-cr-for-cid-1263.docx>
7. <https://mentor.ieee.org/802.11/dcn/18/11-18-1306-04-000m-resolutions-for-some-comments-on-11md-d1-0-lb232.docx>

**6. Wednesday PM2:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1066-00-000m-minutes-for-revmd-july-2018-san-diego.docx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1360-00-000m-minutes-revmd-july-telecon.docx>
3. <https://mentor.ieee.org/802.11/dcn/18/11-18-1401-01-000m-minutes-revmd-august-telecon.docx>
4. <https://mentor.ieee.org/802.11/dcn/18/11-18-1361-00-000m-minutes-revmd-adhoc-july-august-2018-portland-or.docx>
5. <https://mentor.ieee.org/802.11/dcn/18/11-18-0657-05-000m-revmd-wg-lb232-comments-for-editor-ad-hoc.xls>
6. [mentor.ieee.org/802.11/dcn/18/11-18-0619-08-000m-revmd-editor2-lb232-comments.xlsx](https://mentor.ieee.org/802.11/dcn/18/11-18-0619-08-000m-revmd-editor2-lb232-comments.xlsx)
7. [mentor.ieee.org/802.11/dcn/17/11-17-0927-19-000m-revmd-mac-comments.xls](https://mentor.ieee.org/802.11/dcn/17/11-17-0927-22-000m-revmd-mac-comments.xls)
8. [mentor.ieee.org/802.11/dcn/18/11-18-0670-09-000m-lb232-revmd-phy-sec-comments.xls](https://mentor.ieee.org/802.11/dcn/18/11-18-0670-09-000m-lb232-revmd-phy-sec-comments.xls)
9. [mentor.ieee.org/802.11/dcn/18/11-18-0614-02-000m-revmd-lb232-gen-comments.xls](https://mentor.ieee.org/802.11/dcn/18/11-18-0614-02-000m-revmd-lb232-gen-comments.xls)
10. [mentor.ieee.org/802.11/dcn/18/11-18-1324-05-000m-fixes-to-multi-band-operations.docx](https://mentor.ieee.org/802.11/dcn/18/11-18-1324-05-000m-fixes-to-multi-band-operations.docx)
11. <https://mentor.ieee.org/802.11/dcn/18/11-18-1479-02-000m-parsing-a-commit-message.docx>
12. <https://mentor.ieee.org/802.11/dcn/18/11-18-1364-04-000m-proposed-resolution-for-cid-1066.doc>
13. <https://mentor.ieee.org/802.11/dcn/18/11-18-0657-06-000m-revmd-wg-lb232-comments-for-editor-ad-hoc.xls>
14. <https://mentor.ieee.org/802.11/dcn/18/11-18-0670-10-000m-lb232-revmd-phy-sec-comments.xls>
15. <https://mentor.ieee.org/802.11/dcn/18/11-18-1000-00-000m-resolutions-to-cids-1129-and-1130.docx>
16. <https://mentor.ieee.org/802.11/dcn/18/11-18-1609-00-000m-lb232-cid1243.docx>
17. <https://mentor.ieee.org/802.11/dcn/18/11-18-1610-01-000m-lb232-cid1334-1335.docx>
18. <https://mentor.ieee.org/802.11/dcn/18/11-18-1611-01-000m-lb232-cid1336.docx>
19. <https://mentor.ieee.org/802.11/dcn/18/11-18-1612-01-000m-lb232-cid1337.docx>
20. <https://mentor.ieee.org/802.11/dcn/18/11-18-1613-01-000m-lb232-cid1542.docx>
21. <https://mentor.ieee.org/802.11/dcn/18/11-18-1614-01-000m-lb232-cid1543.docx>
22. <https://mentor.ieee.org/802.11/dcn/18/11-18-1615-00-000m-lb232-cid1544.docx>
23. <https://mentor.ieee.org/802.11/dcn/18/11-18-1566-00-000m-proposed-resolution-for-cid-1095.docx>
24. <https://mentor.ieee.org/802.11/dcn/18/11-18-1651-00-000m-resolution-to-cid-1180.docx>
25. <https://mentor.ieee.org/802.11/dcn/18/11-18-1636-03-000m-suggested-resolution-to-mib-comments.docx>
26. <https://mentor.ieee.org/802.11/dcn/18/11-18-1300-02-000m-s1g-related-mac-comment-resolutions.docx>

**7. Thursday PM1:**

1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-09-000m-2018-september-tgmd-agenda.pptx>
2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1388-10-000m-2018-september-tgmd-agenda.pptx>
3. <https://mentor.ieee.org/802.11/dcn/18/11-18-0619-09-000m-revmd-editor2-lb232-comments.xlsx>
4. <https://mentor.ieee.org/802.11/dcn/18/11-18-0670-11-000m-lb232-revmd-phy-sec-comments.xls>
5. <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-24-000m-revmd-mac-comments.xls>
6. <https://mentor.ieee.org/802.11/dcn/18/11-18-1660-01-000m-proposed-resolution-to-cid-1548.docx>
7. <https://mentor.ieee.org/802.11/dcn/18/11-18-1660-02-000m-proposed-resolution-to-cid-1548.docx>
8. <https://mentor.ieee.org/802.11/dcn/18/11-18-0879-01-000m-d1-0-vht-related-cids.docx>
9. <https://mentor.ieee.org/802.11/dcn/18/11-18-0669-06-000m-revmd-mac-comments-assigned-to-hamilton.docx>
10. <https://mentor.ieee.org/802.11/dcn/18/11-18-1260-02-000m-resolution-to-cid-1195.docx>