IEEE P802.11  
Wireless LANs

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| REVmc - BRC Minutes for F2F Aug - Cambridge | | | | |
| Date: 2015-08-21 | | | | |
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|  |  |  |  |  |

Abstract

REVmc - BRC Minutes for F2F Aug – Cambridge 19-21

1. Wednesday- Aug 19, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 1:35pm BST by Dorothy STANLEY
   2. Attendance: Scott Marin (Self)-Webex; Dorothy STANLEY (HP-Aruba); Adrian STEPHENS (Intel); Mark HAMILTON (Ruckus Networks); Graham SMITH (SRT Networks); Jon ROSDAHL (Qualcomm); Mark RISON (Samsung); Edward AU (Marvel)-Webex; Stephen MCCAAN (Blackberry)
   3. Review Patent Policy
      1. No items identified
   4. Review Agenda:
2. Call to order, patent policy, attendance
3. Social items this week
4. Editor report
5. Comment resolution, motions

 Weds 2015-08-19: (All times local Cambridge UK times)

10am-12:00 noon – 11-15-1004 remaining CIDs - Graham Smith, Mark Hamilton CIDs

1:30-3:30pm, Editorial Comments and 11-15-1010 Adrian, and Mark Hamilton CIDs

4-6pm – 11-15-0999 – Dorothy, 11-15-0762 – Mark Rison

* + 1. Discussion on the agenda
    2. Motions scheduled for Friday – plan for Morning
    3. “Next Meeting Planning” added to Friday AM1
  1. Social Plans for this week
     1. Punting tonight
        1. Meet at the Weir at 6:45pm -
        2. Mark RISON to get some water/drink/cakes
        3. 8 participants
     2. BBQ on Thursday at Adrian’s at 7pm
        1. 64 Lambs Lane, Cottenham
        2. 8 participants
  2. Editor Report
     1. All Approved comments have been incorporated into a draft
     2. 600 or so editorial comments edited in 4.01 and other approved comments in 4.02
     3. Review cycle is nearly complete – comments are due on Monday
     4. 17 comments are ready for motion – 11-15/532r13 will have all tabs correctly
     5. Editorials are one major bucket – 115
     6. Editorials rejected & reassigned – 30
     7. Speculative Edited for Review – 2
     8. Speculative Edited – updated resolution – 21
     9. Editorial Style – 93
     10. Editor General Tab – 10
  3. MAC Adhoc Comment Resolution:
     1. Start with “Discuss” grouped CIDs
     2. CID 5035 (MAC)
        1. Review Comment
        2. Assign to Carlos CORDEIRO
     3. CID 5038 (MAC)
        1. Review comment
        2. Assign to Carlos CORDEIRO
        3. See also CID 6583
     4. CID 5109 (MAC)
        1. Review comment
        2. Duplication logic should be added generically
        3. Group Retry (GCR) logic is defined, but not here
        4. May need to check on any new non-compliant conditions
        5. STBC vs non-STBC rule discussion
        6. GCR Duplicate description is in 10.24.16.2
        7. The real question is can the rules for RC1 and RC2 be applied in general to the unicast and group addressed frames
        8. Review the RC rules
        9. Add RC7 and RC8 to the exclude list for both RC1 and RC2
        10. Explicitly make change to make it clear that RC1 and RC2 include group addressed frames.
        11. Proposed Resolution: Revise. Change "A STA receiving frames that are not QoS Data," to "A STA receiving frames (individually or group addressed) that are not QoS Data ," in RC1. Change "A QoS STA receiving an individually addressed QoSData frame," to "A QoS STA receiving an (individually or group addressed) QoS Data frame," in RC2. Add RC7 and RC8 to the exclusion list in RC1. Adding ", and if supported: RC7, RC8" to RC2.
        12. Similar CID 5987 (MAC) – essentially the same comment and use the same resolution for both
        13. No objection – mark ready for motion
     5. CID 5141 (MAC)
        1. Review Comment
        2. Discussion on how the back-off actually works
        3. Draft text changes are not proposed yet
        4. Discussion on access categories
        5. Submission required – and assign to commenter – if no response, then it would become a reject.
        6. Note that this could be more complicated than first thought
     6. CID 5362 (MAC)
        1. Review Comment
        2. Discussion on use of packet in annex N
        3. To fix packet – there are over 400 in the draft
        4. Proposed Resolution: REVISED (MAC: 2015-08-19 10:30:21Z): Replace the cited sentence with"If the TSPEC element is intended for EDCA Admission Control, the Maximum Service Interval field is used to indicate a latency limit, which limits the amount of aggregation (A-MSDU or A-MPDU) used, so that excessive latency does not occur (see N.4.2.1)."
        5. No objection – Mark Ready for motion
     7. CID 5586 (MAC)
        1. Review comment
        2. Discussion on procedure definition
        3. Consider using “the outcome of the IBSS channel switch procedure might not move all STAs.”
        4. See p1646L8
        5. The potential for hidden nodes within an IBSS is more critical, in the infrastructure BSS the AP is able be to be heard by all STAs.
        6. Proposed Resolution: REVISED (MAC: 2015-08-19 10:39:21Z): Replace cited sentence with, "The potential for hidden nodes within an IBSS means that an IBSS channel switch procedure might not move all STAs."
        7. No Objection – Mark Ready for Motion
     8. CID 5587 (MAC)
        1. Review comment
        2. Radar detection discussion
        3. Proposed Resolution: REVISED (MAC: 2015-08-19 10:51:27Z) - Replace the cited sentence with "In some regulatory domains, each STA in an IBSS is required to detect radar and cease transmission, after a required interval, on any channel on which the presence of radar is detected."
     9. CID 5617 (MAC)
        1. Review Comment
        2. Discussion on the proposed text
        3. Discussion on “any” vs “each” vs “a” vs “the”
  4. Recess for lunch until 1:30 BST

1. Wednesday- Aug 19, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 1:35pm BST by Dorothy STANLEY
   2. **Notes by Mark – Thanks for taking notes**
   3. Editor Comments
   4. **Editorial review comments (Adrian)**:
      1. CID 6836 (EDITOR)
         1. Was approved by motion.
         2. CID 6368 has a resolution in contradiction
         3. Suggest using the 6368 resolution for 6836, undoing the moved resolution.
         4. Revised: REVISED (EDITOR: 2015-08-19 12:46:53Z) - Change headings of 8.2.4.1.x, x>1 subclauses to include "subfield". Change any references to "<y> field" to "<y> subfield", where <y> is one of the name of the fields defined in 8.2.4.1.
         5. (Note to editor, same resolution as for CID 6368.
         6. Ready for motion.
      2. CID 6097 (EDITOR)
         1. Needs corrections to subclause references, as references in updated Std 802 are different.
         2. Discussion about how to track this sort of issue found by the Editor.
         3. We want to be sure the resulting “set” of resolutions is clear, without needing to represent the ordering of how those are applied.
         4. Agreed it might be easiest to let a ballot cycle happen in-between. Or, word the motion carefully, to make it all very clear.
         5. So, result is no change on this CID, at this time.
      3. CID 5959 (EDITOR)
         1. Adrian found this one, as a technical question about the agreed changes (in 11-15/653r2)
         2. Agreed to handle the change of which MIB attribute is referenced (the first Editor’s comment) through comment (if any) on the next ballot round.
         3. Adrian will contact Matthew FISCHER and ask about the <ANA> item.
         4. Adrian will contact Matthew about the need for the MIB conformance item.
         5. Adrian will also contact Matthew about the equation formatting.
         6. Adrian will add Editor’s Notes to the draft, absent Matthew providing a submission to address these.
      4. CID 5184 (EDITOR)
         1. The new row being added was not fully specified. So, Adrian is trying to guess what to put in. And, in particular, where to put it (that is, what ID to use).
         2. The problem is the subelement IDs and element IDs are designed to match (where appropriate), by convention.
         3. Another problem is that there are very few element IDs left, so it is hard to pick a subelement ID that both fits the convention, and fits within the (already full) element ID space (or doesn’t hurt anything or cause confusion, at least).
         4. Will leave Adrian’s choices, as is, and let future ballot rounds fix up anything someone doesn’t like.
         5. Likewise, the Editor’s Notes in 10.11.10.3. These can be commented in the next ballot. Adrian will mention to Carlos to provide a pre-emptive submission, if he desires.
      5. CID 5063 (EDITOR)
         1. No BRC review needed. This is sensible coincidence. Adrian will let Emily know.
      6. CID 5010 (EDITOR)
         1. Another resolution that adds a MIB attribute without a compliance statement.
         2. Adrian will contact the submission author.
      7. CID 6528 (EDITOR)
         1. Comment that “network” and “BSS” are not synonyms (at least not everyone agrees they are).
         2. Suggest to reject, that the comment fails to identify a specific issue or changes (stock wording).
         3. Mark RISON would like this assigned to him, submission required. Agreed.
      8. CID 6517 (EDITOR)
         1. Suggest we reject this one, as no consensus from Straw Poll, and we’ve timed out.
         2. REJECTED: The cited text is clear as it stands.
         3. Ready for motion.
      9. CID 6695 (EDITOR)
         1. The existing wording came from an agreement within ARC.
         2. ARC is currently discussing overall wording, again, and can consider this.
         3. REJECT: The first sentence talks about the type of variable of the MIB attribute, while the second sentence talks about how the value of this MIB attribute is determined. It is not a duplication.
         4. Ready for motion.
      10. CID 6193 (EDITOR)
          1. Proposal is to accept the comment, but the Editor felt this was technical, and needed review.
          2. Agreed with the proposed, accept.
          3. ACCEPTED.
          4. Ready for Motion.
      11. CID 6348 (EDITOR)
          1. Agree to the change.
          2. Noted, however, that this NOTE seems to be making a normative exception, that is not clear from the normative text. Someone could bring this as a new comment or submission, separately.
          3. ACCEPTED.
          4. Ready for motion.
      12. **END Mark Notes – Thanks again**
   5. MAC AdHoc Comment Resolution
      1. Return to where we left off prior to lunch
      2. CID 5617
         1. Discussion on proposed text changes
         2. Proposed Resolution: REVISED (MAC: 2015-08-19 14:02:09Z) - Replace "The fields in the Channel Switch Announcement shall be set to the values identical to those in the received Channel Switch Announcement frame. The fields in the Mesh Channel Switch Parameters element shall be set to the values identical to those in the received Mesh Channel Switch Parameters element, except for the Time To Live field, Initiator field and the Transmit Restrict subfield of the Flags field." with: "The Channel Switch Mode and New Channel Number fields in the transmitted Channel Switch Announcement element(s) are set to the same values as in the received Channel Switch Announcement element. The Channel Switch Count field is set to indicate the time remaining until the channel switch, as specified in 8.4.2.18. The Reason Code and Precedence Value fields in the transmitted Mesh Channel Switch Parameters element(s) are set to the same values as in the received Mesh Channel Switch Parameters element. The Time to Live and Flags fields are set as specified in 8.4.2.102”
         3. No objection- Mark Ready to motion
      3. CID 5623 (MAC)
         1. Review Comment
         2. Similar comment CID 6319 – already resolved.
         3. Page 1649 - Line 17 and line 21 have both been done in CID 6319
         4. Proposed resolution: Revised: At 1649.17, replace “behavior limits set of 16” with “behavior limits set of DFS\_50\_100\_Behavior”.

At 1649.17, replace “behavior limits set of 16” with “behavior limits set of DFS\_50\_100\_Behavior”. At 1649.21, replace “includes the value 16;” with “includes the value DFS\_50\_100\_Behavior;”.

* + - 1. No objection – Mark Ready for motion
    1. CID 5885, 5887, 5888, 5889, 5890 (MAC)
       1. Change assignment – Sigurd SCHELSTRAETE
       2. We had these ready for motion in June
       3. Pulled from the motion in the last June Telecon
       4. Not sure why – propose to reinstate the proposed resolution.
       5. Proposed resolution to CIDs 5885, 5887, 5888, 5889, 5890 (MAC): Revised: Incorporate the changes in 11-15/760r2(<https://mentor.ieee.org/802.11/dcn/15/11-15-0760-02-000m-some-initial-sb-comment-resolutions.docx>) as shown for “Proposed resolutions to CIDs 5885, 5887, 5888, 5889, 5890” and delete lines 1311.48 through 1311.55
       6. No objection – Mark Ready for motion
    2. CID 5896 (MAC)
       1. Assign to Sigurd SCHELSTRAETE and have changes in 11-15/760r3 be presented
    3. CID 5886 (Editor)
       1. Done and dusted – no action today
    4. CID 6081(MAC)
       1. Review comment
       2. Review proposed Change
  1. Recess at 3:30pm

1. Wednesday- Aug 19, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 4:02pm BST
   2. Reminder about Patent Policy
      1. No issues noted
   3. Resume MAC AdHoc Comment Resolution
      1. CID 6081
         1. Continue the discussion on the proposed text
         2. It was thought that more thought would be done and a final proposal brought back later.
   4. 11-15/999 Dorothy STANLEY
      1. CID 5168 (MAC)
         1. Review Comment
         2. Had discussed on prior Telecon.
         3. Reviewed feedback received
         4. Table 8.122 title change question
         5. Check on the encoding rules
         6. Proposed resolution: Revised incorporate the changes in 11-15/999r3 for CID 5168
         7. No objection - Mark ready for Motion
      2. CID 6349 (MAC)
         1. Review the Comment
         2. Was pulled from a motion previously
         3. Minor nits that needed to be corrected.
         4. Proposed resolution: Revised incorporate the changes in 11-15/999r3 for CID 6349
         5. No objection - Mark ready for Motion
      3. CID 6398 (MAC)
         1. Review Comment
         2. Was pulled from a motion previously.
         3. The cited text is very old – was in 2007 standard
         4. WEP is deprecated.
         5. Discussion on if the “note” in the figure should be deleted, or have the “note” referred back to it.
         6. Straw Poll:
2. Delete “note”
3. Reject comment as initially proposed
4. Improve the reference to the existing Note:
   * + - 1. Results 2-4-0
         2. Reject as originally proposed
       1. Proposed Resolution: **Rejected;** WEP has been deprecated and the BRC has decided to not make any changes to it.
       2. No objection – Mark Ready for Motion
     1. CID 6511 & 6183
        1. Review Comments
        2. These had been pulled from a prior motion
        3. Propose to proceed with the text as in the cited document, sentence statement is accurate.
        4. Review the proposed changes of why it was pulled.
        5. For CID 6511 (MAC): Proposed Resolution: Revised; at cited location, Change “KDF-X” to “KDF-Hash-Length”

Note to editor: This change is also made in <https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx>

* + - 1. No objection – mark ready for motion
      2. For CID 6183: Proposed Resolution: Revised; incorporate the text changes in 11-15-0764r5 (<https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx> ) for section 13.5.7.
      3. Review concerns of why it was pulled from motion
      4. No objection for now, mark ready for motion (again).
    1. CID 6184 & 6275 (MAC)
       1. Review comment
       2. Was pulled from a prior motion
       3. **Discussion:** Sections identified in the prior CID 6184 resolution (noting the error in the resolution in document numbers: 11-15/076r2 (https://mentor.ieee.org/802.11/dcn/15/11-15-0764-02-000m-resolution-of-some-security-comments.docx) are:11.6.9.2, 11.3.5.4, 11.3.4.3.2, and 11.3.4.2.2.

This list is not complete.

11-15-0764 also includes changes in:

8.4.2.24.3

11.6.1.7.3 – called out in proposed resolution to CID 6275

11.6.1.7.4

11.6.1.7.5

11.6.1.7.5

11.10.2

13.5.7 – changes incorporated by CIDs 6511 and 6183

* + - 1. Introduction of “Hash” (CID 6275) and the corresponding changes for where it is referenced (KDF – CID 6184) affect all of the listed sections; changes are relevant to both comments
      2. Review the changes that were made to 11-15/076r5
      3. Proposed Resolution: **Revised** Incorporate the text changes in 11-15-0764r5 (<https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx> ) for sections

11.6.9.2, 11.3.5.4, 11.3.4.3.2, 11.3.4.2.2,

8.4.2.24.3

11.6.1.7.3

11.6.1.7.4

11.6.1.7.5

11.6.1.7.5

11.10.2 and

13.5.7

Note to editor: this includes all changes in 11-15-0746r5 except for section 11.7.9 which is included by resolution to CID 6421

* + 1. CID 6510 (MAC) and 6509 (MAC)
       1. Review comment
       2. For CID 6509:Proposed resolution: RevisedAt 1881.08 change from”KDF-z” to “KDF-Hash-Length”where “Length” is italicNote to editor: This change is also made in <https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx>
       3. For CID 6510: Proposed Resolution: RevisedAt 1883.24 change from”KDF-z” to “KDF-Hash-Length” where “Length” is italic Note to editor: This change is also made in <https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx>
    2. CID 6365 (MAC) and 6364 (MAC)
       1. Review comments
       2. **Discussion:** It is unclear that there is any need to make the change proposed by the commenter. There is no technical error in the current text.
       3. Proposed resolution for **CID 6364: Rejected;** The text is clear as written; the comment does not identify an issue to be addressed.
       4. Proposed resolution for **CID 6365: Rejected;** The text is clear as written; the comment does not identify an issue to be addressed.
       5. Similar CID 6366 – which was assigned to Mark RISON
       6. The cited location for all 3 CIDs is the same location –
       7. CIDs are the same, but there are 3 different proposals to the same question.
       8. Concern that CIDs marked as Editorial, but should have been a Technical CID.
       9. Assign 6365 and 6364 (MAC) to Mark RISON
       10. Assign 6366 (Editor) to Mark RISON and Transfer to MAC AdHoc
    3. CID 6367 (MAC)
       1. Review comment
       2. **Discussion:** Propose to remove dashes, and change text to a descriptive phrase
       3. **Proposed resolution: Revised;** At 1880.57 change:”*base* = new-random-number” to “base = a new random number”

Note to editor: This change is also made in <https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx>

* + 1. CID 6023 (GEN)
       1. Review comment
       2. Discussion on the two proposals.
       3. Do we need definition of “blah blah” STA in 3.2?
    2. Proposed resolution: REJECTED (GEN: 2015-08-19 16:36:43Z) An HT STA is described in Clause 4.3.11
    3. CID 6295 (MAC)
       1. Review Comment
       2. Mark Submission required – assign to Mark RISON
    4. CID 5062 (MAC)
       1. Review Comment
       2. **Proposed resolution: Revised;** At 3488.7 change:

“The pass-phrase mapping defined in this subclause uses the PBKDF2 method from PKCS #5 v2.0 [B54].

*PSK* = PBKDF2(*PassPhrase*, *ssid*, *ssidLength*, 4096, 256)”

To

“The pass-phrase mapping defined in this subclause uses PBKDF2 as defined in RFC 2898 section 5.2.[Bxx]

*PSK* = PBKDF2(*PassPhrase*, *ssid*, 4096, 256/8)”

And add a reference to IETF RFC 2898 in Annex A and delete the reference to B54.

And Delete clause M.4.2.

And in M4.3, delete 3490 lines 1, 7, and 14 (SSIDLength definitions).

And Delete 3488.21 “

Change “Password” to “Passphrase in M.4.3

* + - 1. Think on this one and start here when we talk about this CID next time.
      2. There is some “consistency changes” that need to be looked at…is it “PassPhrase” or “Passphrase” to be consistent
      3. The Pseudo code should be consistent
      4. More changes noted in 11-15/999r3
      5. We will revisit CID later
  1. Plan for Tomorrow
     1. Start time 10am
     2. 10-12:00 – Start on CIDS for Menzo if he dials in, otherwise start on 11-15/0762 Mark RISON
     3. 1:30-3:30 – 11-15/1004 remaining CIDs – Graham Smith and MAC AdHoc CIDs – Mark Hamilton
     4. 4-6 Adrian and Mark Rison CIDs
  2. Recess at 6:02pm

1. Thursday- Aug 20, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 10:00 am BST by Dorothy STANLEY
   2. Attendance: Scott Marin (Self)-Webex; Dorothy STANLEY (HP-Aruba); Adrian STEPHENS (Intel); Mark HAMILTON (Ruckus Networks); Graham SMITH (SRT Networks); Jon ROSDAHL (Qualcomm); Mark RISON (Samsung); Stephen MCCAAN (Blackberry)
   3. Patent Policy Review
      1. No items
   4. Social –
      1. Thanks to Samsung (Mark R) for sponsoring the Punting Social and to Adrian for organizing the event
   5. Updated Agenda for Thursday:
2. 10-12:00, CIDs 5965, 5966, 5967, 5968 – Menzo WENTINK,

11-15-0762 Mark Rison

1. 1:30-3:30 – 11-15-1004 remaining CIDs - Graham Smith ,

MAC AdHoc CIDs Mark Hamilton

1. 4-6 –11-15-1010 – CID 5062, 11-15-1010 - Adrian,
   * 1. CIDs - Mark Rison
   1. Comment resolution –
      1. Menzo was not on call
   2. Review11-15-0762r6 – Mark RISON
      1. Today’s discussion and changes will be incorporated in R7
      2. CID 6075, 6563, 6562 (MAC)
         1. Review comments and proposed changes
         2. Yellow text still being discussed and considered
         3. Discussion on IBSS PM mode
         4. Discussion on the MIB Variable dot11BSSBroadcasstNullCount
            1. Should it be removed? Changed to Internal variable
         5. Plan to have text that is motion able on next week’s Telecon –
         6. ACTION ITEM: Mark RISON - finalize text and get feedback prior to representing
      3. CID 6214 (GEN), 6215 (EDITOR), 6216 (EDITOR), 6305 (GEN), 6306 (GEN)
         1. Review comments
         2. Something to add is Tx NAV (see CID 5154)
         3. No objection to the direction
         4. Need more work to bring back at a later time (Post Thailand)
      4. CID 6482 (MAC), 6496 (MAC) and 6480 (GEN)
         1. All relate to “AirDelay”
         2. Plan to motion during Sept 2015 Interim (Thailand)
         3. Question on if “at the antenna connector” should be added?
         4. ACTION ITEM: Mark RISON: Send e-mail to highlight the question
      5. CID 6506 (GEN)
         1. An email had been sent to ask for feedback
            1. No items noted
         2. Question on if “detects” or other verb would be better
         3. Indicate – tends to suggest an indicate function, so a better verb should be used.
         4. “Detect” maybe best as it also matches the variable names
         5. Change “indicate” to “detect” as appropriate
         6. Plan to motion during Sept 2015 Interim (Thailand)
         7. Need to address the comment specifically
      6. CID 6583 (MAC)
         1. Review comment –
         2. When do we reuse reserved fields?
         3. Query Response Length Limit –
         4. The paragraph at 963.53 should be broken out for request and response
         5. ACTION ITEM: Stephen MCCANN – provide split paragraph for request and response and in the response the field would be reserved.
         6. In general the use of reserved is still under consideration.
         7. Straw Poll Conditional use of reserved:
            1. Is it ok to define a field reserved in conditional usage?
            2. Results: Yes -7 No – 1
         8. Continue reviewing proposed changes
         9. Discussion on when the field can be non-zero
         10. If Transmitter sets some bits to non-zero would be non-compliant if the rule is that they are reserved.
         11. When a field is “reserved” the Transmitter should send a zero, and Receiver should ignore
         12. For the specific case under discussion, the bits are not transmitted as the nonce is created on reception side.
         13. Change name of field “Reserved” – to “Zeros”
         14. Proposed Resolution: Revised –Make the changes shown under “Proposed changes” for CID 6583 in 11-15/762r7 which address the comment (including some missing instances of reserved quanta) as far as it pertains to MAC clauses.
         15. No objection – mark ready for motion – expect to motion on next telcon
      7. CID 6375 (MAC) 6376 (EDITOR) 6377 (MAC)
         1. Review comments
         2. Discussion on how the MLME deals with states
         3. SME can read a MLME state variables and MLME can read/write them.
         4. How the SME determines the state of the MLME is not well defined.
         5. Page 1587.38 indicates that the SME can read the state variable.
         6. Discuss MLME SAP vs MIB variable use
         7. Discuss Security Policy consistency usage discussed
         8. Discussion on 10.14 SA Query procedures – discussion on changing from “may” to “should”
         9. Expect to motion proposed changes either next week or at Sept Interim Mtg in Thailand
         10. ACTION ITEM: Mark RISON – Send remaining Questions to Jouni and Dorothy to try to get answers by early next week for motion next Telecon, else we will deal with in Thailand.
   3. Plan for afternoon
      1. Review draft agenda
   4. Recess at 12:00pm
2. Thursday- Aug 20, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 1:35pm BST by Dorothy STANLEY
   2. Review Agenda:
      1. Graham SMITH and Mark HAMILTON prepared CIDs
   3. Review doc 11-15/1004r4 – Graham SMITH
      1. CID 5227 (GEN)
         1. Review Comment
         2. To introduce the counter we would need a submission.
         3. Simple to add, but not a problem to be solved.
         4. What would it be used for? Does this trigger stats reports, flag issue? Etc.
         5. Proposed Resolution: REJECTED (GEN: 2015-08-20 12:46:39Z) The existing text does not mention the requirement to count MIC errors for unicast MMPDUs. It does for BIP. Adding such a new requirement would require a proposal and details. Comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
         6. No Objection – Mark ready for Motion
      2. CID 6031 (MAC)
         1. Review comment
         2. After discussion an action item for further discussion given
         3. ACTION ITEM: Graham to contact commenter for more detailed context to understand what was trying to be conveyed as the problem.
         4. Expect to bring up on the Telecon next week.
         5. Proposed Resolution: CID 6031: REJECTED (MAC: 2015-08-20 14:26:45Z): The text is unambiguous. The primitive being compared is correct and also compared in the prior list items.
         6. No objection – Mark Ready for Motion for 28 August Telecon.
      3. CID 6046 (MAC)
         1. Review Comment
         2. See 981.34 for context
         3. Proposed Resolution: REVISEDThe term TX-RX Report is used as a ‘shorthand’ term for part of an MCCAOP Advertisement element and such usage can be seen throughout subclause 9.23.3.7.2. It does not refer to the contents of a period.

Edit P 1352 L 30 to 37 as follows:

* TX-RX report: an MCCAOP Reservation field contained in the TX-RX Periods Report field of an MCCAOP Advertisement element
* Broadcast report: an MCCAOP Reservation field contained in the Broadcast Periods Report field of an MCCAOP Advertisement element
* Interference report: an MCCAOP Reservation field contained in the Interference Periods Report field of an MCCAOP Advertisement element

Note to editor (addition of “Advertisement”

* + - 1. No Objection Mark ready for Motion -
    1. CID 6870 (MAC)
       1. Review Comment
       2. Proposed Resolution: Revised; Change text P1440 L53:From “Address 3 and Address 4 correspond to the destination end station and the source end station of a mesh path.”To“Address 3 and Address 4 correspond to the destination mesh STA and the source mesh STA of a mesh path.”
       3. No Objection Mark ready for Motion -
    2. CID 6877 (GEN)
       1. Review comment
       2. Proposed Resolution: REVISED (GEN: 2015-08-20 13:29:37Z) Page 819 insert as the first sentence at line 25 the following:
       3. "The OUI field contains an organizationally unique identifier OUI or CID."
       4. No Objection – Mark Ready for Motion
    3. CID 6896 (GEN) 6897 (GEN) 6898 (GEN)
       1. Review Comment
       2. This had been addressed and ready for Motion in June, but had not been marked ready for motion, so it was reassigned to Graham.
       3. After a lengthy discussion an updated proposal for this CID was determined.
       4. Updated Proposed Resolution for 6896: REVISED (GEN: 2015-08-20 14:34:23Z) Page 921 line 42 Change "an organizationally unique identifier" to "an organization identifier"
       5. Updated Proposed Resolution for 6897: REVISED (GEN: 2015-08-20 14:37:11Z) Page 1106 L32-Change "an organizationally unique identifier" to "an organization identifier"
       6. Updated Proposed Resolution for 6898: REVISED (GEN: 2015-08-20 14:39:09Z) P1120 L62-Change "an organizationally unique identifier" to "an organization identifier"
       7. No objection – Mark all three comments ready for motion,
    4. Other Concept that came after resolving CID 6031 – “What to hold”?
       1. Discussion on the use of “Hold”
       2. “Conditions hold” vs “conditions are true”
       3. “Obtain” may be the word that would be replaced.
    5. Status of this document – one CIDs open – CID 5226 and CID 6031 to be checked and expect motion to be on 28 Aug.

1. Thursday- Aug 20, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 4:00 pm BST by Dorothy STANLEY
   2. Patent Policy reviewed
      1. No items identified
   3. Review Agenda:
2. 11-15/1010 – Adrian STEPHENS
3. CID 5062 – Dorothy STANLEY
4. 11-15/0762 – Mark RISON
   * 1. No changes to the agenda
   1. Review Doc 11-15/1010r1
      1. Changes from today’s discussion will be in R2
      2. CID 5046 (GEN)
         1. Review Comment – note that the comment is found in the AdHoc notes field due to an error in importing the Comment.
         2. Reviewed the list of changes
         3. Concern on “dot11APGeospatialLocation”
            1. dot11APLCITable is correct table replacement
            2. dot11APCivicLocation change to dot11APCivicLocationTable
            3. The inconsistency in the text vs MIB was the intent of the changes proposed here.
            4. ACTION ITEM: Stephen McCaan/Mark Hamilton – will provide a comment to change the MIB and text to provide the correct labelling.
         4. CID 5022 and 6208 (GEN) relate to dot11BeaconRssiEntry
            1. 11-14/921r3 is the submission that added Beacon RSSI Entry
            2. Assign 5022 and 6208 to Youhan KIM
         5. Change dot11BSSTTransitionManagementActivated to dot11BSSTTransitionActivated
         6. Change dotGDDActivated to dot11GDDActivated
         7. dot11LsigTxopProtectionOptionalImplemented changes to dot11LSigTxopProtectionOptionalImplemented
         8. dot11MultidomainCapabilityActivated to dot11MultiDomainCapabilityActivated
         9. dot11MulitpleRetryCountThreshhold is in a MIB comment that has more changes that could be made
         10. change dot11NonAPStationHCCA-HEMMSDUCount to dot11NonAPStationHCCAHEMMSDUCount
         11. p2865.59 – dot11RMMeasurementPilotCapability – change to dot11RMMeasurementPilotActivated
         12. need to globally change to dot11RSNAConfigNumberOfPTKSAReplayCounters (3 instances – uppercase ”of”)
         13. Question on CID 5047 (MAC) –
             1. Check to see if it is related to CID 5046
             2. Proposed Resolution: Revised Make changes under CID 5047 in 11-15/1010r2
         14. Proposed Resolution: REVISED (GEN: 2015-08-20 16:36:41Z) Incorporate the changes for CID 5046 in 11-15/1010r2.- corrects the spelling errors
      3. CID 6788 (Editor)
         1. Review Comment
         2. Discussion on some possible alternative changes
         3. At 26.08 – bufferable unit definition discussion
            1. What things can be buffered…
            2. Can a compromise to add a note be workable?
5. Yes
   * + - 1. End of time – start here when we get back to this submission.
   1. CID 6094 (MAC)
      1. Assign to Stephen MCCANN
      2. Ongoing discussion – expect to be ready for Sept 2015 Interim in Thailand
   2. CID 6331 (MAC)
      1. Assign to Stephen MCCANN/Mark HAMILTON
   3. CID 6355 (MAC)
      1. Assign to Stephen MCCANN/Mark HAMILTON
   4. CID 5395 (MAC)
      1. Assign to Stephen MCCANN
   5. CID 5072 (MAC)
      1. Assign to Stephen MCCANN
   6. CID 5010 (Editor)
      1. Was returned from editors when implementing.
      2. Solomon has responded to the concern, and we will review his proposed changes and update the proposed resolution and take action on it on Friday.
   7. CID 5310 (Editor)
      1. Will discuss tomorrow.
   8. Recess at 6:01pm
6. Friday- Aug 21, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 10:00 am BST by Dorothy STANLEY
   2. Attendance: Scott Marin (Self)-Webex; Dorothy STANLEY (HP-Aruba); Adrian STEPHENS (Intel); Mark HAMILTON (Ruckus Networks); Graham SMITH (SRT Networks); Jon ROSDAHL (Qualcomm); Mark RISON (Samsung); Edward AU (Marvel)-Webex;
   3. Patent Policy Review
      1. No items
   4. Social
      1. Thanks to Adrian for the BBQ last evening
      2. Great Food and Company
   5. Review Agenda:
      1. Next Meeting planning
      2. CID 5010
      3. Mark Hamilton CIDs,
      4. Motions (11:30)
   6. Next Meeting planning
      1. Next Face to Face – Sept Interim – Bangkok
      2. Schedule Telecon for Sept 25, Oct 2 and potentially Oct 9
      3. Face to Face in Oct
         1. WFA is in Oct 19-23
         2. Possibilities week of Oct 5 or 12
            1. Week Oct 5th – Cambridge – no WBA overlap, No Jon?
            2. Week Oct 12th Bay area - WBA overlap – some Mark H.?- 2weeks travel – Mark Rison dial in only
            3. Week Oct 12th Cambridge – WBA overlap -
            4. Week Oct 12th Salt Lake – WBA overlap
            5. Oct 17,18,19 Budapest – (20-21-22 WFA) 6 intense days – Mark H may not make until Sunday
            6. Also maybe Sept 30, Oct 1,2
            7. Oct 16, 17, 18 instead to gain a day off between WFA
         3. StrawPoll: which days works?
            1. Vote for 3
            2. Top pick was week Oct 12 in Cambridge

This is week prior to WFA in Budapest

* + - 1. Mark RISON to host at Samsung Oct 14,15,16 in Cambridge
         1. Find meeting room for 6-10, Video (VGA/HDMI), Dial-out for Bridge – use WebEx for sharing screen as well.
         2. More detail will come later.
  1. MAC AdHoc CIDS
     1. CID 6235 (MAC)
        1. Review Comment
        2. Discussion on MCS rate set
        3. CID 6587 should be considered together with CID 6235
        4. Discussion on getting this CID resolved
        5. MCS is a vernacular term in this cited case
        6. Refer to p33.55 for context
        7. Assign to Adrian
        8. AdHoc Notes - See CID6587
     2. CID 6588 (MAC)
        1. We can dispatch this one now
        2. Proposed Resolution: Rejected – The term MCS is sufficiently descriptive and is a recognized as a vernacular term (see P33.55).
        3. No objection – Mark Ready for Motion
     3. CID 6587 (MAC)
        1. Agree in principle, but a submission is required to resolve.
        2. Assign to Adrian
        3. For AdHoc Notes: MAC: 2015-08-21 10:09:37Z: BRC accepts in principle. Submission required to identify specific usages (with global search-and-replace is fine) and changes. Note, include "Basic MCS set" as well as "Supported MCS" and so forth.
     4. CID 6289 (MAC)
        1. Review comment
        2. Discussion on changing “Duration/ID” vs “Duration”
        3. Can we change figures on the frames to have only ID or Duration?
        4. AID vs ID question
        5. Possible to change 147 instances of “Duration/ID” to “Duration” or “AID” depending on context is one option
        6. The general problem could be addressed by global replace to “Duration/ID” to “Duration”, but there is a small subset that would need to be corrected to be “AID”
        7. Where the Frame format has a Duration, you could have the Duration field, and where you have an ID, then you could reference the Duration/ID clause to have the definition
        8. PS-Poll always has AID
        9. Can we find a case that is a variable as to being one or the other, or is it always one or the other depending on the frame?
        10. Agreement on the direction, but we will need a submission to correct this.
            1. Notes to AdHoc for CID
            2. Long discussion on what we thought was concensus need to revisit
            3. MAC: 2015-08-21 10:39:21Z: BRC discussed on a direction:- Add text near Fig 8-1, and in 8.2.5 to explain (if it doesn't already) that this field is used in different ways in different contexts.- Call it "Duration/AID" (when it is both, like in and near Fig 8-1).- Call it only "Duration" or "AID" in all other cases- Fix all text to reference it as only "Duration" or "AID" (except near Fig 8-1, as necessary)Did not reach consensus (quite).
        11. Assign to Mark RISON
  2. Motions
     1. **Motion #147**

Approve the comment resolutions in -The “Motion MAC-AS” and “Motion MAC-AT” tab in <https://mentor.ieee.org/802.11/dcn/15/11-15-0565-14-000m-revmc-sb-mac-comments.xls>

and incorporate the indicated text changes into the TGmc draft.

* + 1. Moved: Adrian STEPHENS 2nd: Graham SMITH
    2. No discussion
    3. Result: 6-0-0 Motion Passes
    4. **Motion #148**

Approve the comment resolutions in -The “Editorials-ready for motion” tab in <https://mentor.ieee.org/802.11/dcn/15/11-15-0532-15-000m-revmc-sponsor-ballot-comments.xls>

and incorporate the indicated text changes into the TGmc draft.

* + - 1. Moved: Adrian STEPHENS 2nd: Graham SMITH
      2. No discussion
      3. Result: 6-0-0 Motion Passes
    1. **Motion #149**

Approve the comment resolutions in -The “Editorialsreadyformotionfromdefer” tab in <https://mentor.ieee.org/802.11/dcn/15/11-15-0532-15-000m-revmc-sponsor-ballot-comments.xls> and incorporate the indicated text changes into the TGmc draft.

* + - 1. Moved: Adrian STEPHENS 2nd: Graham SMITH
      2. No discussion
      3. Result: 5-0-1 Motion Passes
    1. **Motion #150**

Approve the comment resolutions in -The “Gen Aug Conf”, “Gen Waikoloa” and “Gen Cambridge F2F” tabs in <https://mentor.ieee.org/802.11/dcn/15/11-15-0665-05-000m-revmc-sb-gen-adhoc-comments.xlsx> and incorporate the indicated text changes into the TGmc draft.

* + - 1. Moved: Jon ROSDAHL 2nd: Graham SMITH
      2. No discussion
      3. Result: Unanimous consent Motion Passes
  1. Thanks again for Those attending the Social and the meeting
     1. Mark H and Graham S. had to leave at this time
  2. Recess for lunch

1. Friday- Aug 21, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 1:32pm BST by Dorothy STANLEY
   2. Patent Policy Reminder
      1. No issues
   3. Review Agenda:
      1. 1:30-3:30, Motion 151,
      2. 11-15-0762 Mark Rison CIDs (50)
      3. Editor CIDS Adrian (60 mins)
   4. **Motion 151** (check number)

Resolve CID 5010 as –Revised; -Incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/15/11-15-0538-04-000m-beam-tracking-clarification-cid5010.docx> and change the units to “microseconds” {including the “ ”) and delete ”(in unites of 1us)” with editor to adjust case of “initiator Time Limit” if required.

* + 1. Moved: Adrian STEPHENS 2nd: Jon ROSDAHL
    2. No discussion
    3. Result: 4-0-1 Motion passes
  1. Review Doc: 11-15/762r6 Mark RISON
     1. CID 6788 (EDITOR)
        1. Review comment
        2. Related to CIDs 6819, 6299, 6561, 6467
        3. Discussion of removal of “bufferable Management Frame”
        4. Discussion on change “Management Frame” to “MMPDU”
        5. Suggest “a MMPDU carried in one or more X Frames” – more work to identify the specific changes required
        6. The changes proposed do not conflict with Adrian’s proposed changes.
        7. We will need to include both Adrian’s and Mark R’s submission to resolve the comment
        8. Mark R will bring back for proposed resolution later for CID 6788 and the related CIDs for the Telecon Aug 28th
     2. CID 6824
        1. Review comment
        2. Review proposed resolution.
        3. Concern on having Temporal Keys being confused with Temporal Encryption Key and Temporal
        4. Note added to file: One issue is that the definition “temporal key (TK): The combination of temporal encryption key and temporal message integrity code(MIC) key.” is recursive: a TK is a combination of two TKs. Maybe rename the latter two so they are not a “temporal X key”?
        5. More work to be done and will come back later for discussion
     3. CID 6661 (Editor)
        1. Review comment
        2. Review context 1275.55 -
        3. Proposed Resolution: REVISED; Change “attribute values” to “characteristics” at 1275.55. Change “sublayer attribute” to “characteristic” at 1840.1, 1840.8.
        4. No objection – Mark Ready for motion
  2. Review 11-15/1010r3 Adrian STEPHENS
     1. CID 6788 (Editor)
        1. Continue reviewing the proposed changes
        2. Proposed Resolution: Revised; make changes in 11-15-1010r3 under CID 6788 and 11-15/762r7
        3. This is to be reconciled/harmonized for discussion on the Aug 28th Telecon
        4. ACTION ITEM: Mark and Adrian to harmonize – Adrian to take ownership
     2. CID 6676 (GEN)
        1. Needs PHY Input
        2. Assigned to Mark RISON – Changed Comment Group
     3. CID 6314
        1. Review Comment
        2. Proposed Resolution: REVISED (GEN: 2015-08-21 14:09:40Z) Incorporate the change in 11-15/897r2 (https://mentor.ieee.org/802.11/dcn/15/11-15-0897-02-000m-sb-location-related-comment-resolutions-part-2.docx). This defines the term “RF chain”.The term “transceiver” doesn’t need special definition. The dictionary definition applies to 802.11.(Note to editor, this change is also specified for CID 5049).
        3. No objection Mark ready for Motion
     4. CID 6656 (GEN)
        1. Reviewed Comment
        2. Assign to Mark Rison
     5. CID 6410 (GEN)
        1. Review Comment
        2. The left hand of the shift operator does not define what to doe when negative
        3. Assign to Mark Rison
     6. CID 6603 (GEN)
        1. Review Comment
        2. Review Changes
        3. Proposed Resolution: REVISED (GEN: 2015-08-21 14:22:07Z) Revised. Make changes under CID 6603 in 11-15/1010r2 (https://mentor.ieee.org/802.11/dcn/15/11-15-1010-02-000m-revmc-sb0-stephens-resolutions-part-2.doc) These changes adjust the use of "set" according to context to clarify that the set is the list of behavior limits, not a single one of them.
     7. CID 6565 (GEN)
        1. Review comment
        2. Propose to Reject
        3. Page 2227.10 has context of HR PPDU being received.
        4. ACTION ITEM: Mark would like to check on issue and get back to Adrian
     8. CID 6561 (GEN)
        1. Review Comment
        2. Assign to Mark RISON
     9. CID 6677 (GEN)
        1. Review Comment
        2. Assign to Mark RISON
     10. CID 6542 (GEN)
         1. Review comment
         2. Assign to Mark RISON
     11. CID 6657 (GEN)
         1. Review comment
         2. Assign to Mark RISON
     12. CID 6299 (GEN)
         1. Review comment
         2. Assign to Mark RISON
     13. CID 6477 (GEN)
         1. Review Comment
         2. Ran out of time
  3. Recess at 3:30pm

1. Friday- Aug 21, 2015 REVmc BRC F2F in Cambridge England
   1. Called to order at 1:32pm BST by Dorothy STANLEY
   2. Patent Policy Reminder
      1. No issues
   3. Review Agenda:
      1. Revisit CIDs: 5062, 5310, 6546, 6655, 6508
      2. 11-15/1010r2 – Adrian STEPHENS
   4. Revisit CID
      1. CID 5062 (MAC)
         1. See Document 11-15/999r3
         2. Reference implementation Comment
         3. Review suggested edits
         4. Discussion on the test string having or not having a null-terminating string.
         5. Add a note to indicate no null terminating string
         6. The changes will be in 11-15/999r4
         7. Proposed Resolution: Incorporate the changes in 11-15/999r4 (https://mentor.ieee.org/802.11/dcn/15/11-15-0999-04-000m-sb-cid-resolutions-5167-and-more.docx) for CID 5062 – this change deletes the cited text and replaces M.4.2 with IETF RFC2898.
      2. CID 5310 (EDITOR)
         1. Review comment
         2. Related to CID 5311
         3. Change Assignee to Adrian STEPHENS
      3. CID 6546 (EDITOR)
         1. Review status
         2. Submission required – not assigned yet
         3. Assign to Mark
         4. ACTION ITEM: Adrian STEPHENS to move all unassigned Submission required CIDs to the commenter
      4. CID 6655 (MAC)
         1. This should be assigned to Mark RISON
      5. CID 6508 (MAC)
         1. Assign to Mark RISON
   5. Continue review on 11-15/1010r2
      1. CID 6477 (GEN)
         1. Adrian would like to withdraw his proposed resolution
         2. ACTION ITEM: Dorothy to contact Vinko and Youhan
         3. Assign to Vinko
      2. CID 6467 (GEN)
         1. Assign to Mark RISON
      3. CID 6821 (GEN)
         1. Review comment
         2. Discussion on p2535 – vs p2481l60.
         3. Can you use SU transmission with 8 antennas is the question.
         4. Assign to Vinko
      4. CID 6456 (GEN)
         1. Review comment
         2. Similar issue with CID 6455
         3. Propose to revisit the resolution
         4. Monotonically changes to reviewed (change to “strictly”)
         5. Changes in the Deprecated sections should not be done
         6. Review proposed changes
         7. Propose Resolution: REVISED (GEN: 2015-08-21 15:48:41Z) Revised. Make changes under CID 6456 in 11-15/1010r3 (https://mentor.ieee.org/802.11/dcn/15/11-15-0999-03-000m-sb-cid-resolutions-5167-and-more.docx). These changes revise the use of "monotonically" throughout the standard as necessary according to its interpretation as a change in a consistent direction, or no change.
         8. Make same resolution for CID 6455 (EDITOR)
         9. No objection – mark both CIDs ready for motion
   6. Next Telecon on Aug 28th
      * 1. Note Jon will be traveling and not on call
        2. Request for Location CIDs
        3. CID 5226 – last of Grahams
        4. CID 6565 status –
        5. Plan to Motion CIDs 5226, 6583, 6031, 6075, 6563
   7. Adjourn at 5:01pm

**References:**

Wednesday:

<https://mentor.ieee.org/802.11/dcn/15/11-15-0532-13-000m-revmc-sponsor-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0760-02-000m-some-initial-sb-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0764-02-000m-resolution-of-some-security-comments.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0764-05-000m-resolution-of-some-security-comments.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1010-00-000m-revmc-sb0-stephens-resolutions-part-2.doc>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1010-01-000m-revmc-sb0-stephens-resolutions-part-2.doc>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1010-02-000m-revmc-sb0-stephens-resolutions-part-2.doc>

Thursday:

<https://mentor.ieee.org/802.11/dcn/15/11-15-0532-14-000m-revmc-sponsor-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0762-06-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1004-03-000m-resolutions-for-comments-assigned-to-gs.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1004-04-000m-resolutions-for-comments-assigned-to-gs.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1004-05-000m-resolutions-for-comments-assigned-to-gs.docx>

Friday:

<https://mentor.ieee.org/802.11/dcn/15/11-15-0532-15-000m-revmc-sponsor-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0762-07-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0762-06-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0999-03-000m-sb-cid-resolutions-5167-and-more.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1010-02-000m-revmc-sb0-stephens-resolutions-part-2.doc>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1010-03-000m-revmc-sb0-stephens-resolutions-part-2.doc>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0665-05-000m-revmc-sb-gen-adhoc-comments.xlsx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0565-14-000m-revmc-sb-mac-comments.xls>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0538-04-000m-beam-tracking-clarification-cid5010.docx>