IEEE P802.11  
Wireless LANs

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| REVmc BRC July 8 and 15 Telecon Minutes | | | | |
| Date: 2016-07-08 | | | | |
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Abstract

Minutes for the IEEE 802.11 REVmc BRC Telecons

R0 = July 8th telecom minutes

1. REVmc BRC Telecon July 8th 2016
   1. **Called to order** at 10:04am ET by the chair, Dorothy STANLEY (HPE)
   2. **Patent Policy** Reviewed
      1. No issues noted
   3. **Attendance**: Dorothy STANLEY (HPE), Jon ROSDAHL (Qualcomm), Adrian STEPHENS (Intel); Emily QI (Intel); Hasan YAGHOOBI (Intel); Kazayuki SAKODA (Sony); Graham SMITH (SR Technologies); Osama ABOUL-MAGD (Huawei); Sigurd SCHELSTRAETE (Quantenna); Thomas HANDTE (Sony); Mark HAMILTON (Ruckus) Jinjing JIANG (Marvell); Mark RISON (Samsung); Menzo WENTINK (Qualcomm);
   4. **Review Agenda**
      1. Approved agenda:
         1. Call to order, attendance, and patent policy
         2. Editor report 11-13-95r31
         3. Comment resolution:
            1. 11-16-820 Adrian STEPHENS,
            2. 11-16-824 Graham SMITH,
            3. 11-16-823 Kazayuki SAKODA
         4. July EC Report and Revcom approval plan
         5. AOB – additional teleconferences
         6. Adjourn
   5. **Editor Report** – 11-13/95r31 – Adrian STEPHENS (Intel)
      1. <https://mentor.ieee.org/802.11/dcn/13/11-13-0095-31-000m-editor-reports.pptx>
      2. Review updated presentation
      3. 334 New Comments for 2nd Recirculation
      4. 62 comments have Resolution drafted – 3 need extra review
      5. Expected 43 days if we resolve on the same rate as before.
         1. Resolve SB2, 15-day Recirc (SB3-D7), then 10 day Recirc (SB4 – D7)
         2. Only 26 days to make the Aug 5th deadline.
   6. **Review Doc 11-16/820r1** Adrian STEPHENS (Intel)
      1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0820-00-000m-sb2-stephens-resolutions.doc>
      2. CID 8074 (GEN)
         1. Review comment
         2. Review proposed change – P203.53
         3. Proposed Resolution: Accepted
         4. No Objection – Mark Ready for Motion
      3. CID 8085 (GEN)
         1. Review Comment
         2. Review Proposed change – P3163.50 and P3164.6
         3. ACTION ITEM #1: KAZ to research the need for two variables
         4. Will review next week.
      4. CID 8090 (GEN)
         1. Review Comment
         2. Proposed Resolution: Accepted
         3. No Objection – Mark Ready for Motion
      5. CID 8186 (GEN)
         1. Review Comment
         2. Inconsistency noted in cases cited.
         3. Special value 255 indicates multiple antennas
         4. Proposed Resolution: Revised; Change 256 to 254 at 2215.4, 2215.26 and 2254.64; Change 255 to 254 at 3239.60 and 3248.60

These changes make the changes requested by Commenter.

* + - 1. No Objection – Mark Ready for Motion
    1. CID 8187 (GEN)
       1. Review Comment
       2. Review location at P2254.61
       3. Review Page 2270.60 which uses 0-255
       4. Proposed Resolution: Revised; At 2254.61 change 256 to 254.

In reply to the commenter, the comment provides no justification for allowing the use of “0” as a lower bound, neither does explain that this would mean in this context.

* + - 1. Discussion on the changes could allow more comments in the next round, and as these two CIDs are really out of scope.
      2. Change the Proposed resolution for this CID and for CID 8186
      3. Proposed Resolution for CID 8187(GEN) and CID 8186(GEN): Rejected. The comment is out of scope: i.e., it is not on changed text, text affected by changed text or text that is the target of an existing valid unsatisfied comment.
      4. No Objection – Mark Ready for Motion
    1. CID 8057 (MAC)
       1. Review comment
       2. Review discussion
       3. Case 3 is covered on the subsequent section on the cited page.
       4. Discussion on where to put this new sentence.
       5. Proposed Resolution: REVISED (MAC: 2016-07-08 14:52:12Z):. At 1585.24 after “or lifetime limit.” insert the following new sentence: “If the AP does not receive a Block Ack frame in response to an A-MPDU that contains one or more individually addressed Data frames that require acknowledgment containing all or part of an MSDU or A-MSDU sent with the EOSP subfield equal to 1 it shall retransmit at least one of those frames at least once within the same SP, subject to applicable retry or lifetime limit.”
       6. No objection – Mark Ready for Motion
    2. CID 8078 (MAC)
       1. Review comment
       2. Discussion on the “order”
       3. Possible to have this CID rejected due to scope.
       4. After more discussion, determined group willing to accept the proposed resolution.
       5. Proposed Resolution: REVISED (MAC: 2016-07-08 14:58:49Z): At 562.35 replace “Each figure in Clause 9 (Frame formats) depicts the fields/subfields as they appear in the MAC frame and in the order in which they are passed to the physical layer (PHY), from left to right.” with: “Each figure and table in Clause 9 (Frame formats) … from left to right and then from top to bottom”
       6. No Objection – Mark Ready for Motion
    3. CID 8128 (MAC)
       1. Review Comment
       2. Discussion on the specific changes.
       3. Proposed Resolution: REVISED (MAC: 2016-07-08 15:02:05Z):. At 562.35: replace “fields” with “components (e.g., fields, subfields, elements and subelements)”

At 562.36: replace “the fields/subfields” with “the components”

* + - 1. No objection - Mark Ready for Motion
    1. CID 8133 (MAC)
       1. Review Comment
       2. Straw Poll – in favor in of changing prior sentence also – 4 yes
    2. Proposed Resolution: REVISED (MAC: 2016-07-08 15:04:46Z): Make changes as shown in 11-16/820r1 (<https://mentor.ieee.org/802.11/dcn/16/11-16-0820-01-000m-sb2-stephens-resolutions.doc>), for CID 8133. These effect the intent of the comment and improve the previous sentence for consistency.
       1. No Objection Mark Ready for Motion
    3. CID 8140 (MAC)
       1. Review Comment
       2. Review discussion
       3. Discussion on why the proposed change is correct.
       4. Proposed Resolution: ACCEPTED (MAC: 2016-07-08 15:14:35Z)
       5. No Objection – Mark Ready for Motion
    4. CID 8199 (MAC)
       1. Review Comment
       2. Review Discussion
       3. Proposed Resolution: REJECTED (MAC: 2016-07-08 15:18:27Z): The comment is out of scope: i.e., it is not on changed text, text affected by changed text or text that is the target of an existing valid unsatisfied comment.
       4. No Objection – Mark Ready for Motion
    5. CID 8059 (GEN)
       1. Review Comment
       2. Should be moved the CID to “Security” and assign to Jouni
    6. CID 8082 (GEN)
       1. Assign to Carlos CORDEIRO
    7. CID 8137 (GEN)
       1. Review Comment
       2. Review discussion
       3. Previous discussion ARC reviewed.
          1. Scoreboarding was assigned similar to a simple Block ACK and so any frame would be ACK
       4. Discussion on the location of where the duplicate detection would need to appear relative to the Scoreboarding.
       5. Moving where the Scoreboarding is located discussed.
       6. Forging a frame at the Scoreboarding is no different than a forged frame at the simple ACK.
       7. Discussion on how a possible attack would be different than a sequence number attack.
       8. Ran out of time, so we will not resolve at this time.
          1. Proposed Resolution: Revised.

1. Remove the brace graphic and adjacent text “The ‘MPDU Decryption and Integrity (optional)’ and ‘Block Ack Buffering and Reordering’ processes may be performed in either order (RX)”
2. Move the “MPDU Encryption (TX) / Decryption (RX) and Integrity (optional)” block to be below the row that includes “Block Ack Scoreboarding”
3. Add “\*\*” after the text in the following boxes
   1. Block Ack Buffering and Reordering
   2. Duplicate Detection
   3. Block Ack Scoreboarding
   4. MPDU Encryption …

4. Add a note in the region to the right containing: “\*\* These processes might be performed in an implementation in any relative order, with different implications for performance and possible vulnerability to certain denial of service attacks.”

* + - 1. More discussion will need to be done.
    1. Note Security Related CIDs will be assigned to Jouni
    2. Question on if there was a new ARC conference call soon – answer no, but we could set up another BRC call on this topic if needed. Remember to use the reflector for more discussion.
  1. **Review document – 11-16/824r1** – Graham SMITH (SR Technologies)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0824-00-000m-resolution-for-cids-8083-8251-8127-8269-8270.docx>
     2. CID 8083 (GEN)
        1. Review Comment
        2. Proposed Resolution: Accept
        3. No objection – Mark Ready for Motion
     3. CID 8251 (MAC)
        1. Review Comment
        2. Discussion on use of May/Might.
        3. Proposed Resolution: CID 8251 (MAC): REVISED (MAC: 2016-07-08 15:34:53Z): At 1377.62 and 1377.63 change "may" to "might". At 1310.58 change "may" to "might"
        4. No objection – Mark Ready for Motion
     4. CID 8127 (MAC)
        1. Review comment
        2. There was an issue with the comment import, the correct comment “"Gaps might exist in the ordering of fields and elements within frames. The order that remains is ascending." is not very clear (the order of what?) but assuming it is referring to the order of elements by element ID, the second statement is wrong (e.g. Quiet and TPC Report in beacons, VSIEs in all frames that can take an element with ID > 221, MME/AMPE, etc.)”
        3. Discussion on “Order”
           1. The cited sentence is correct, but not adhered to in practice
        4. Compliant STA would adhere to the standard
        5. Propose to just reject the CID
        6. The interoperability should be foremost in the consideration.
        7. Discussion on the possible resolution options
        8. Straw Poll:
           1. Accept - 111
           2. Reject – out of Scope - 111
           3. Abstain – 11111
           4. Result – 3-3-5
        9. Proposed Resolution: REJECTED (MAC: 2016-07-08 15:53:41Z): The comment is out of scope: i.e., it is not on changed text, text affected by changed text or text that is the target of an existing valid unsatisfied comment.
        10. Mark Ready for Motion
     5. CID 8269 (MAC)
        1. Review comment
        2. The comment had been cut off as well. The full comment:

"The Estimated Air Time Fraction subfield is 8 bits in length and contains an unsigned integer that represents the predicted percentage of time, linearly scaled with 255 representing 100%, that a new STA joining the BSS will be allocated for PPDUs carrying Data of the corresponding AC for that STA." -- if you look at R.7 it turns out that this is exactly the time for the PPDUs, not including any contention/IFS time. This is a very subtle point (and differs from e.g. admission control).

* + - 1. Review Discussion
      2. Discussion of the precision of the calculations and if the note is warranted.
      3. Discussion on why the rejection is warranted
         1. Alternative rejections reasons discussed
         2. Out of scope – no change where in this area
         3. Text is clear and this is just a note – no need
         4. Calculation is not that precise and the note implies something that is not
      4. Proposed Resolution: REJECTED (MAC: 2016-07-08 16:07:08Z): The proposed note is not viewed as necessary, as the cited text is clear.
      5. Mark Ready for Motion
    1. CID 8270 (MAC) and 8266 (MAC)
       1. Review Comment
       2. Review discussion
       3. Proposed Change cites “other comment”, but not clear which it is.
          1. From Commenter: """The Data PPDU Duration Target field is 8 bits in length and is an unsigned integer that indicates theexpected target duration of PPDUs that contain at least one MPDU with the Type subfield equal to Data"" -- but the equations in R.7 assume the PPDU contains just Data MPDUs"
       4. Discussion on what the update revised “Proposed Resolution:”
          1. Change "at least one MPDU" to "only MPDUs" in the cited text
       5. Similar to CID 8266 (MAC) and the changes being suggested by the Editors in CID 8273 (Editor)
       6. Suggestion that input from Matthew FISCHER, but we could choose the best guess and check with him afterward.
       7. Proposed Resolution for CID 8270 (MAC): REVISED (MAC: 2016-07-08 16:12:02Z): Change the cited text to "PPDUs that contain only MPDUs with the Type subfield equal to Data"
       8. Proposed Resolution for CID 8266 (MAC): ACCEPTED (MAC: 2016-07-08 16:12:02Z)
       9. No Objection – Mark Ready for Motion
  1. **Review document 11-16/823r0** – Kazuyuki SAKODA (Sony)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0823-00-000m-cid8028-high-throughput-airtime-link-metric.docx>
     2. CID 8028 (MAC)
        1. Review comment
        2. Review discussion
        3. Explanation on the scale needed for accurate metric values.
        4. Discussion on how this change affects aggregation
        5. Concern with some grammar,
        6. Objection to the change at this time. Better to take up next revision.
        7. Discussion on the Goal of getting the REVmc done by Aug 5th Submission deadline.
        8. Straw-Poll
           1. Accept the possible proposed change direction
           2. Reject Comment as Out of Scope
           3. Results: 1-6-2 – clear direction for rejection
        9. Suggestion that the submission be updated and resubmit for consideration for REVmd
        10. Proposed Resolution: REJECTED (MAC: 2016-07-08 16:43:40Z): The comment is out of scope: i.e., it is not on changed text, text affected by changed text or text that is the target of an existing valid unsatisfied comment
        11. Mark Ready for Motion
  2. **Return to doc 11-16/820r1**
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0820-00-000m-sb2-stephens-resolutions.doc>
     2. CID 8222 (GEN)
        1. Review Comment
        2. Review Discussion
        3. Discussion on the value of Estimated Throughput in both or only in outbound direction.
        4. Need to include a change at 3623.50 also
        5. Discussion on the value of the change
        6. Discussion on how to possibly reject the Comment
           1. not really an “Out of Scope”
           2. The R.1 equation uses EstimatedThroughput and not “inbound/outbound” so implies both are equal.
        7. The R7 equation is for both inbound and outbound as they are calculated separately.
        8. Ran out of Time
     3. Will take up later
  3. Next call is July 15th at the normal time -- 3 hour call – 10am-1pm ET
  4. Proposal for new calls
     1. July 19th and July 22nd proposed
        1. No support for July 22nd
        2. Change to July 21st for two hours – 10am-noon ET
        3. July 19th 10am ET for two hours – 10am-noon ET
  5. Request to do some more assignments before the next telecom
     1. The TG leadership to have an adhoc call to suggest assignments prior to next telecom.
  6. Adjourned at 1:02pm ET

**References:**

July 8th

<https://mentor.ieee.org/802.11/dcn/13/11-13-0095-31-000m-editor-reports.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0820-00-000m-sb2-stephens-resolutions.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0820-01-000m-sb2-stephens-resolutions.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0824-00-000m-resolution-for-cids-8083-8251-8127-8269-8270.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0823-00-000m-cid8028-high-throughput-airtime-link-metric.docx>