IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| REVmc BRC Minutes for November - Dallas | | | | |
| Date: 2015-11-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | CSR Technologies Inc  a Qualcomm Company | 10871 N 5750 W  Highland, UT 84003 | 801-492-4023 | Jrosdahl @ ieee . org |
|  |  |  |  |  |

Abstract

Minutes for the 802.11 REVmc BRC during the IEEE 802 Plenary - November 2015

7 mtgs – Mon – PM1, Tues – PM1/PM2, Wed PM1/PM2, Thurs PM1/PM2

1. REVmc BRC –2015-11-09- Monday PM1 – 1:30-3:30pm
   1. **Called to order** by Dorothy STANLEY (HPE-Aruba) at 13:30
   2. **Review Patent Policy** – call for IP
      1. No items identified
   3. **Review Agenda** 11-15/1223r1 Dorothy STANLEY
      1. Changes to the agenda were identified in 11-15/1223r2
      2. Went around the room to ensure all that were in attendance had identified any CIDs that they were wanting to present proposals for.
      3. After adjustments to agenda

* Monday PM1
  + Chair’s Welcome, Status, Review of Objectives, Approve agenda
  + Editor’s Report
  + Comment resolution: 11-15/1207 Adrian STEPHENS (Intel)
* Tuesday PM1
  + 11ad: 11-15/1272, 11-15/1241, 11-15/1342 – Assaf KASHER (Intel)
  + Location topics: CID 6427, 11-15-1183 – Carlos ALDANA (Qualcomm)
  + 11-15-938 - Payam TORAB (Broadcom)
* Tuesday PM2
  + 11-15/1270 – Sigurd SCHELSTRAETE (Qualcomm)
  + 11-15/1284 – Yakun SUN (Marvell)
  + 11-15/1317 – Bo SUN (ZTE)
* Wednesday PM1
  + 11-15/1184 – Dan HARKINS (HPE-Aruba)
  + CIDs 5969, 5970, 5971, 5972, -11-15-828 – Peter ECCLESINE (Cisco)
  + 11-15/1400 - Vinko ERCEG (Broadcom)
  + 11-15/762 - Mark RISON (Samsung)
* Wednesday PM2
  + 11-15/1022, 11-15/1023, 11-15/1024, 11-15/1025 - Matt FISCHER(Broadcom)
  + 11-15-1147 – Menzo WENTINK (Qualcomm)
  + MAC CIDs - Mark HAMILTON(Ruckus)
* Thursday PM1
  + Comment Resolution:
    - Stephen MCCANN (Blackberry),
    - 11-15/1398 - Michael FISCHER(Freescale Semiconductor)
    - MAC CIDs - Mark HAMILTON(Ruckus)
    - Mike MONTEMURRO (Blackberry)
* Thursday PM2
  + Motions – prior minutes, CIDs ready for motion, other
  + 11-15/1249, 11-15/1239, 11-15/1274, 11-15/1250 Graham SMITH (SR Technologies)
  + Plans for Dec, January Schedule
  + AOB, Adjourn
    1. **Motion PD1:** Motion to approve Agenda
       1. Move to approve Agenda:
       2. Moved Edward AU, 2nd: Graham SMITH
       3. Results: Unanimous – No objection – Motion passes
  1. **Editor Report** 11-13/0095r25 -- Adrian STEPHENS
     1. Through the beginning of Oct, 263 Technical comments were done
     2. So about 7 comments per mtg hour average
     3. Which implied comment completion as Aug 2016.
     4. Review IEEE SASB OM 5.4.3.2
     5. Approximate number of CIDs left is about 400-423.
  2. **Review doc 11-15/1207r5** Adrian STEPHENS
     1. R4 was as of 2015-11-06 telecon
     2. R5 has moved all the CIDs to bunch the comments together by telecom/mtg
     3. CID 6827 (MAC)
        1. Review Comment
        2. Review context and proposed change
        3. Change “includes” to “indicates” several locations.
        4. Proposed resolution: REVISED (MAC: 2015-11-09 19:59:52Z): Make changes under CID 6827 in 11-15/1207r6 (https://mentor.ieee.org/802.11/dcn/15/11-15-1207-06-000m-sb0-stephens-resolutions-part-3.doc). These changes move the referenced field structure into its own subclause in 8.4.1, make it generic, and reference the new subclause from the cited location.
        5. No objection – Mark Ready for Motion
     4. CID 6828 (MAC)
        1. Review Comment
        2. Proposed Resolution: REJECTED (MAC: 2015-11-09 20:09:12Z): The comment identifies a difference in behavior between different types of STA, but does not indicate a problem to resolve.
        3. No objection – Mark Ready for Motion
     5. CID 6808 (MAC)
        1. Review comment
        2. Proposed Resolution: REJECTED (MAC: 2015-11-09 20:11:17Z): While the "Measurement Report" frame is a spectrum management action frame, the name of the frame is itself not prefixed with "Spectrum Management". Likewise for the "Measurement Request" frame.
        3. No objection – Mark Ready for Motion
     6. CID 6298 (MAC)
        1. Was already processed in another presentation
        2. Delete from 11-15/1207
     7. CID 6317 (MAC)
        1. Review comment
        2. Question/discussion on What is “Round Trip Time (RTT)” and “Time of Flight(TOF)”
           1. See Figure 10-36 for discussion
           2. What do different people see as RTT vs TOF?
           3. Equation 10-3 defines RTT
        3. Straw Poll #1:

1. Change RTT to some other term and add definition
2. Provide a definition for RTT in Clause 3
3. Reject comment as shown below
4. None of the above
   * + - 1. Results: 1=5 2=1 3=9 4=1
       1. Go with Reject
       2. Proposed resolution: REJECTED (MAC: 2015-11-09 20:13:39Z): Two of the uses (1741.27, 3566.21) of RTT refer validly to the round trip time, not the one-way time of flight. One of the uses (82.59) could validly be either.
     1. CID 6447 (MAC)
        1. Review Comment
        2. Propose to assign to Submitter (Mark RISON) or reject
        3. Mark R. agreed to try to provide submission
        4. Assign to Mark RISON – Submission required.
     2. CID 6568 (MAC)
        1. Review Comment
        2. Concern with each TG having touch “ProbeDelay”, so global change not a reasonable instruction
        3. Straw poll #2:
           1. Change ProbeDelay in this context as shown
           2. Change this and related terms (DMG, TDLS) including the MIB variables
           3. Make no change
           4. Chicago voting: Results: a= 7 b=3 c=5
           5. Simple voting either a or c Results: a=8 c=4
        4. Proposed resolution: (MAC): REVISED (MAC: 2015-11-09 20:21:15Z): Change ProbeDelay to NAVSyncDelay at: 159.05, 159.28, 200.46, 200.43, 1550.34, 1649.03
        5. Using the straw poll results, Mark Ready for Motion
     3. Revisited CID 6808 ,
        1. Short discussion, but no action was taken
     4. CID 6665 (MAC)
        1. Review comment
        2. Proposed resolution: REJECTED (MAC: 2015-11-09 20:34:11Z): The comment doesn’t indicate an issue to resolve. The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
        3. No objection – Mark Ready for Motion
     5. CID 6757 (MAC)
        1. Review comment
        2. Proposed Resolution: (MAC): REJECTED (MAC: 2015-11-09 20:35:26Z): The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
        3. No objection – Mark Ready for Motion
     6. CID 6055 (MAC)
        1. Review comment
        2. Discussion on possible change
        3. Discussion on deletion of the “i.e.” phrase.
        4. Proposed Resolution: REVISED (MAC: 2015-11-09 20:41:56Z) - At cited location delete ", i.e., all of the MSDUs are intended to be received by a single receiver, and necessarily they are all transmitted by the same transmitter"
        5. No objection – Mark Ready for Motion
     7. CID 5954 (MAC)
        1. Review Comment
        2. CID 6250 and CID 6252 was similar. The cited location is off by one page.
        3. Review Context
        4. Proposed Resolution for CIDs 5954 (MAC) and 6250 (MAC): REVISED (MAC: 2015-11-09 20:46:49Z): Remove the cited note. Table 8-19 suffices to make the constraints expressed in the note clear.
        5. No objection – Mark Ready for Motion (both CIDs)
     8. CID 6107 (MAC)
        1. Assign to Michael FISCHER
     9. CID 5968 (MAC)
        1. Assign to Menzo
     10. CID 6108 (MAC)
         1. Assign to Michael FISCHER
     11. CID 5031 (MAC)
         1. Review comment
         2. Review context
         3. CID 5030 is editorial where terminology is fixed up.
         4. CID 5029 is not related.
         5. Global changes discussed
         6. More work needed – this was discussed previously and we see a proposal in the Ad-hoc notes field in the excel file and database.
     12. CID 6666 (MAC)
         1. Review comment
         2. Not in D4 which was the draft under review.
         3. Review D3.0 for the context of what is being asked about.
         4. Draft 4.0 instance was then reviewed.
         5. See page 940 line 48 in D4.0
         6. See 1568.51 – discussion “delivery interval …”
         7. Suggestion to review CID with Qi Wang
         8. Assign to Mark RISON
     13. CID 6403 (MAC)
         1. Review Comment
         2. Prefer to assign to Dan or Jouni
         3. Assign to Jouni
     14. CID 6607 (GEN)
         1. Review comment
         2. Proposed Resolution: REJECTED (GEN: 2015-11-09 21:06:56Z) the comment asserts an inconsistency, but does not back this up with references. The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
         3. No objection - Mark Ready for Motion
     15. CID 6294 (GEN)
         1. Review comment
         2. Review context
         3. Discussion if the proposed resolution addresses the comment or more.
         4. Proposed Resolution: REVISED (GEN: 2015-11-09 21:09:05Z) Replace "the service field (b7) bit shall indicate a 0 if the rounding performed by the Ceil() operation took less than 8/11 or a 1 if the rounding took more than or equal to 8/11."

with:

"the service field (b7) bit is 0 if ((number of octets x 8/11)-Length) < 8/11 and is 1 otherwise."

* + - 1. No objection – Mark Ready for Motion
    1. CID 5067 (GEN)
       1. Review comment
       2. Proposed resolution: REVISED (GEN: 2015-11-09 21:14:40Z) at cited location replace “The normative specifications of generating the transmitted waveforms shall utilize the rectangular pulse shape.”

with

“This standard describes transmitted waveforms using a rectangular pulse shape.”

Also change the following sentence to read:

“In a typical implementation, a higher TTR is used in order to smooth the transitions between consecutive subsections.”

* + - 1. No objection – Mark Ready for Motion
    1. CID 6268 (GEN)
       1. Review comment
       2. Proposed Resolution: REVISED (GEN: 2015-11-09 21:17:01Z) at 2360.25 delete subclause 20.3.16 (Transmit and receive in-band and out-of-band spurious transmissions) in its entirety.
       3. No objection – Mark Ready for Motion
    2. CID 6260, 6262 (GEN)
       1. Review Comments
       2. Discussion on if all the changes were necessary
       3. Review propose changes in context
       4. Concern that 6257 conflicts with the proposed resolution:
       5. Proposed resolution CID 6260 and 6262: At 2367.41, 2367.42, 2368.05, 2368.06 change “OFDM PHY” to “HT PHY”.

At 2367.25, 2367.55 change “the interfering signal” to “an interfering signal of 20 MHz bandwidth”.

At 2367.35, 2367.64 change “the interfering signal” to “an interfering signal of 40 MHz bandwidth”.

At 2552.09, 2552.12, 2553.20, 2553.23 change “OFDM PHY” to “VHT PHY”

* + - 1. Ran out of time – more checking needs to be done.
  1. **Recess at 3:31pm**

1. **REVmc BRC –2015-11-10- Tuesday PM1 – 1:30-3:30pm**
   1. **Called to order** by Dorothy STANLEY (HPE-Aruba) at 13:34
   2. **Review Patent Policy** – call for IP
      1. No items identified
   3. **Review Agenda** 11-15/1223r3
      1. Move CID 6427 to Nov 20 Telecon
      2. Add 11-15/1404 to Tues PM1 prior to 11-15/1183
      3. Change doc # 11-15/1183 to 11-15/1419
      4. Remove – doc 11-15/1342 Assasf KASHER
      5. No objection to proceed with the modified agenda (see 11-15/1223r4)
2. 11ad: 11-15/1272, 11-15/1241 Assaf KASHER (Intel)
3. 11-15/1040, 11-15/938, 11-15/1041 - Payam TORAB (Broadcom)
4. Location topics: CID 6427, 11-15/1404, 11-15-1419 – Carlos ALDANA (Qualcomm)
   * 1. 7 documents to present
   1. **Review doc:**11-15/1272r1 Assaf KASHER
      1. Bug Fix identified and described
      2. The changes here were based on 4.3, but not noted as such.
         1. Request to include that in an updated revision
      3. 3 discussion points were identified and explained
      4. Only Editorial changes were made, no technical change in this doc
      5. A motion will be considered later this week.
   2. **Review doc:**11-15/1241r1 Assaf KASHER
      1. R0 was posted to the server
      2. The intent was to discuss R0 plus some updates and an R1 will be posted after discussion is completed.
      3. CID 5596 (MAC)
         1. Review comment
         2. Review proposed changes
         3. The proposed changes do not require any field changes
         4. Question on duration of the allocation
         5. More discussion is needed
      4. Expect to have an updated document for a discussion later in the week.
   3. **Review doc:** 11-15/1040r1 Payam TORAB
      1. Abstract: This submission proposes to use the DMG SC mode header encoding and modulation for DMG OFDM mode and DMG low-power SC mode headers, to ensure that all DMG devices can decode any DMG packet header and understand its structure including duration. Some editorial corrections are also included. The changes are relative to Draft P802.11REVmc\_D4.2.
      2. There are 2 CIDs listed in the document
         1. CID 5857 (Resolved 2015-5-12- rejected CID motion 132 )
         2. CID 5995 (GEN) – still open (Assign to Payam)
         3. This document will only resolve CID 5995 if it is acceptable.
      3. Question on Frame exchanges at the MAC level could mitigate the issues outlined here. The point of the change is to improve the deployment in dense environments. Improves the future
      4. The test vectors will need to be recalculated – the files in the zip file will need to be updated or documented for clarity.
      5. Question on if OFDM supported devices using 11ad would not be compatible with this change.
         1. This does change the 11ad PHY
         2. The claim is that there are no 11ad devices now, but when REVmc comes out, if there were by then, they would be non-compliant
         3. There would be a possible incompatibility.
      6. Comment – how to clarify that the future prove of the 11ad specification.
         1. Timing of making fixes is always a question
      7. OFDM future with TGay may take precedence over TGad, but that is out in the future, so the change today is to try to correct the problem identified in the submission
      8. Fundamental PHY changes should be made in amendments not in the revision.
      9. An alternative resolution to CID 5995 would be to reject the comment as the Commenter indicated he would like to withdraw.
      10. **Straw Poll #3:**
          1. Should we resolve CID 5995 with the changes in this document?
          2. Results: Yes: 10 No: 13
      11. Suggest further discussion as there is not enough support for adoption.
      12. If no agreement is found, then we will reject at a later time.
   4. **Review doc:** 11-15/ 938r2 - Payam TORAB
      1. CID 6373 (Resolved Motion 167 – 2015-10-26) (EDITOR)
      2. CID 6374 (Resolved Motion 167 – 2015-10-26) (EDITOR)
      3. CID 6816 (Resolved Motion 167 – 2015-10-26) (EDITOR)
      4. Review of the proposed changes
      5. Question on Power save changes and the work in TGay and the potential conflict.
         1. The changes proposed have been identified in plugfests and are fixes that should be compatible with the future changes
      6. This submission has taken several months and is the result of preparing test cases for the plugfests and fixes problems identified
      7. The Distribution table may need more thought to determine how when records are added/deleted.
      8. General support in accepting the document.
      9. CID 6373 is a small change and is resolved, but the proposed resolution has an error and needs the CID number updated.
      10. CID 6374 and 6816 were rejected CIDS, so we will propose a change to the approved resolutions.
          1. Move the CIDs back to MAC for Processing
      11. New Proposed Resolution for 6374 and 6816 (MAC): Revised; Incorporate the changes in 11-15/938r2 [https://mentor.ieee.org/802.11/dcn/15/11-15-0938-02-000m-unscheduled-power-save-for-dmg.docx]
      12. Change resolution – Mark Ready for Motion
   5. **Review doc:** 11-15/1041r2 Payam TORAB
      1. Abstract: Proposed resolutions to CID 5987 and 5988, relative to Draft P802.11REVmc\_D4.2.
      2. CID 5987 was already Resolved – see Motion #147 – 2015-08-19 (EDITOR)
      3. CID 5988 (MAC)
         1. Review proposed changes
         2. Discussion “RR6” do you need it? Need to remove “regardless” regardless.
         3. Change “GroupCast” to “Group Addressed”
         4. Proposed Resolution: Revised; incorporate the changes in 11-15/1041r3: <https://mentor.ieee.org/802.11/dcn/15/11-15-1041-03-000m-dmg-small-fixes.docx> .
         5. Mark Ready for Motion
      4. R3 will be posted for consideration as resolution.
   6. **Review doc:**  11-15/1404r0 Carlos ALDANA
      1. Abstract: This contribution addresses some minor revisions to FTM protocol. The motivation behind these changes stem from:
5. some audio applications having clock synchronization errors as large as 1ms
6. ps changes to FTM timestamps that lead to 1/4096m ranging errors can also be applied to Z
7. exponential ranging error replacing linear ranging error in FTM Range report

It uses Draft 4.3 as a baseline.

* + 1. Review changes
    2. Note ANA request in the Civic Table is not necessary as it is not under ANA control.
    3. An R1 will be uploaded with the ANA number reservation removed with “7” corrected.
    4. We will consider it in a motion later this week.
  1. **Review doc:** 11-15/1419r0 Carlos ALDANA
     1. Remove the reserved number doc:11-15/1183 as this document replaces.
        1. No document was posted, it is the reservation that was deleted.
        2. The header of 1419 indicates 1183, but this will be updated in the next revision
     2. Review proposed changes
     3. Propose that on page 4 that the list of items be a bulleted list rather than a comma list.
     4. A new doc revision will need to be posted with the changes as discussed
  2. **Recess at 3:30pm**

1. **REVmc BRC –2015-11-10- Tuesday PM2 – 4-6pm**
   1. **Called to order** by Dorothy STANLEY (HPE-Aruba) at 16:01
   2. **Review Patent Policy** – call for IP
      1. No items identified
   3. **Review Agenda** 11-15/1223r4
      1. No proposed change
   4. **Review doc:** 11-15/1270r0 Sigurd SCHELSTRAETE
      1. Abstract: This document contains the discussion of and proposed resolutions to CIDs 5942, 5943, 5944, 5945, 5946, 6222, 5949, 5950, 5951, 5952 and 5953.
      2. CID 5942 (GEN)
         1. Review comment
         2. Review changes
         3. Proposed resolution: REVISED (GEN: 2015-11-10 22:09:37Z) at 2612.52 change “VHT Format” to “TVHT Format”
         4. No objection - Mark Ready for Motion
      3. CID 5943 (GEN)
         1. Review comment
         2. Prosed resolution: REVISED (GEN: 2015-11-10 22:12:55Z); at 2612.57 and 2612.59 change “VHT-SIG-A” to “TVHT-SIG-A”
         3. No objection - Mark Ready for Motion
      4. CID 5944 (EDITOR)
         1. Review comment
         2. Proposed Resolution: REVISED (GEN: 2015-11-10 22:12:44Z): at 2613.14 change reference “20-20” to “22-20”
         3. No objection - Mark Ready for Motion
      5. CID 5945 (GEN)
      6. Proposed changes reviewed.
      7. Proposed resolution: REVISED (GEN: 2015-11-10 22:14:57Z) incorporate the changes in 11-15/1270r1 [https://mentor.ieee.org/802.11/dcn/15/11-15-1270-00-000m-tvht-comment-resolutions.docx] for CID 5945.
      8. No objection - Mark Ready for Motion
      9. CID 5946 (GEN)
         1. Review Comment
         2. Proposed Resolution: REVISED (GEN: 2015-11-10 22:16:41Z) At 2614.1 change “VHT format” to “TVHT format”
         3. No objection - Mark Ready for Motion
      10. CID 6222 (GEN)
          1. Review comment
          2. Proposed Resolution: ACCEPTED (GEN: 2015-11-10 22:19:19Z)
          3. No objection - Mark Ready for Motion
      11. CID 5949 (GEN)
          1. Review comment
          2. Proposed Resolution: REVISED (GEN: 2015-11-10 22:20:55Z) - incorporate the changes in 11-15/1270r1 for CID 5949
          3. No objection - Mark Ready for Motion
      12. CID 5950, 5951, 5952 (GEN)
          1. Review comment
          2. Proposed Resolution: REVISED (GEN: 2015-11-10 22:22:29Z) incorporate the changes in 11-15/1270r1 for CID 5950, 5951, 5952
          3. No objection - Mark Ready for Motion
      13. CID 5953 (GEN)
          1. Review comment
          2. Proposed resolution: REVISED (GEN: 2015-11-10 22:28:51Z) At 2631.22 change “1 065 600” to “1 401 120” and at 2631.25 change “740” to “973”
          3. No objection - Mark Ready for Motion
   5. **Review Doc:** 11-15/1384r0 Bo SUN
      1. Abstract: This document contains proposed resolutions for comments in *Clauses 22.3 &* 8.4from REVmc D4.0 with the CIDs below:

Clause 22.3: 5020, 5058, 5921, 5925, 5928, 5934, 5935, 5936

Clause 8.4: 5225

* + 1. CID 5020 (GEN)
       1. Review comment
       2. Proposed resolution: ACCEPTED (GEN: 2015-11-10 22:31:31Z)
       3. No objection - Mark Ready for Motion
    2. CID 5058 (GEN)
       1. Review comment
       2. Proposed Resolution: ACCEPTED (GEN: 2015-11-10 22:34:48Z) Note to editor to insert dash in PHY-RXEND
       3. No objection - Mark Ready for Motion
    3. CID 5225 (GEN)
       1. Review comment
       2. Change proposed change to be “If the SU Beamforming Capable field is set to 1…” in both cases. At 1040.48 and
       3. At 1040.60 change to “If the SU Beamformee Capable field is set to 1…”
       4. Proposed Resolution: REVISED (GEN: 2015-11-10 22:43:38Z) in *Clause 8.4*: On P1040L48 (CID #5225): change the encoding field of “Beamformee STS Capability” to “If the SU Beamformee Capable field is set to 1…”, and On P1040L60 (CID #5225) change the encoding field of “Number of Sounding Dimensions” to be “If the SU Beamformer Capable field is set to 1…”
       5. No objection –Mark Ready for Motion
    4. CID 5921 (GEN)
       1. Review comment
       2. Proposed Resolution: REJECTED (GEN: 2015-11-10 22:45:16Z) the same caption has been used for the same table in 11a and HT
       3. No objection –Mark Ready for Motion
    5. CID 5925 (GEN)
       1. Review comment
       2. Discussion on the proposed change to see if it was clear from the comment what was intended.
       3. Proposed resolution: REVISED (GEN: 2015-11-10 22:50:54Z) - Add the following Sentence at P2496.24 “M*u* is defined in Table 22-6 (Frequently used parameters).”
       4. No objection –Mark Ready for Motion
    6. CID 5928 (GEN)
       1. Review Comment
       2. Proposed Resolution: ACCEPTED (GEN: 2015-11-10 22:52:46Z)
       3. No objection –Mark Ready for Motion
    7. CID 5934, 5935, and 5936 were already resolved see Motion #164 – their resolution was “ACCEPTED (GEN: 2015-10-09 14:08:26Z) - -.”
  1. **Review doc:** 1317r0 – Bo Sun
     1. Abstract: This document contains proposed resolutions for some of SB0 comments in the VHT PHY. Proposed resolutions for CIDs: 5938, 6264, 6265, 6266, 6267, 6296, 6675, 6678
     2. CID 5938 (GEN)
        1. Review comment
        2. Discussion on proposed rejection
        3. Determine a better resolution and change.
        4. Proposed Resolution REVISED (GEN: 2015-11-10 23:02:06Z) at 2539.42 replace "A STA with dot11VHTSUBeamformerOptionImplemented equal to true shall support all tone grouping values and Codebook Information values." with "A beamformer shall support all tone grouping values and Codebook Information values."

Delete the Note at 2539.461

* + - 1. No objection –Mark Ready for Motion
    1. CID 6464 (MAC) and 6266 (GEN)
       1. Review comment
       2. Similar to the 6260 and 6262 that we ended on in Adrian’s Doc on Monday.
       3. Discussion on remembering what we discussed on Monday. The disagreement is on what the interfering signal is and where it was coming from.
       4. Discussion on possible reject reason: The interfering signal in the adjacent channel or nonadjacent channel is intended to be taken as if it’s an OFDM PHY signal. And the same description applies to HT PHY as well.
       5. There are cases where the description of what is OFDM and not is under question.
       6. Assign these to Adrian for resolving in a consistent way. 6264, 6266,
    2. CID 6265, 6267 (GEN)
       1. Review comment
       2. Use the resolution for CID 6257
       3. Proposed Resolution for CID 6265 and 6267: REVISED (GEN: 2015-11-10 23:20:58Z) Change "For a conforming OFDM PHY, the" to "The" at the locations: 2367.42, 2368.6, 2552.12, 2553.23
       4. No objection –Mark Ready for Motion
    3. CID 6296 (GEN)
       1. Review comment
       2. Proposed resolution: REVISED (GEN: 2015-11-10 23:26:01Z) at 2503.12 insert "(see 22.3.10.9.4 Space-time block coding)" after "Set to 1 if space time block coding ".
       3. No objection –Mark Ready for Motion
    4. CID 6675 (GEN)
       1. Review Comment
       2. Proposed Resolution: at 546.28 add a new paragraph

“The Clause 22 (Very High Throughput (VHT) PHY specification) PHY TXVECTOR and RXVECTOR contain additional parameters related to the operation of the Clause 22 (Very High Throughput (VHT) PHY specification) PHY modes of operation as described in 22.2 (VHT PHY service interface). In certain modes of operation, the DATARATE parameter is replaced by a MCS value. The mapping from Clause 22 (Very High Throughput (VHT) PHY specification) MCS to data rate is defined in 22.5 (Parameters for VHT MCSs).”

* + - 1. Discussion on replacing MCS with “MSC and NUM\_STS”, and then maybe just “parameters”. This was not thought to be correct
    1. Need more thought – Bo will work with Mark RISON and Sigurd SCHELSTRAETE to look for better resolution.
    2. CID 6678 (GEN)
       1. Review comment
       2. Review table changes
       3. Proposed resolution: REVISED (GEN: 2015-11-10 23:48:17Z) - at 2539.38 change "CBW20" to "CBW20 when FORMAT is VHT; HT\_CBW20 when FORMAT is HT\_MF or HT\_GF"

At 2539.45 change "CBW40" to "CBW40 when FORMAT is VHT; HT\_CBW40 when FORMAT is HT\_MF or HT\_GF"

* + - 1. No objection –Mark Ready for Motion
  1. **Review doc:** 11-15/1010r14 Adrian STEPHENS
     1. Start with CID 5141 for last few minutes of time slot.
     2. CID 5141 (MAC)
        1. Review Comment
        2. More review is needed.
        3. The discussion starts on about page 42
  2. Ran out of time.
  3. **Recess at 6:01pm**

1. **REVmc BRC –2015-11-11 Wednesday PM1 – 1:30-3:30pm**
   1. **Called to Order:** Dorothy STANLEY (Chair) called meeting to order at 13:30
   2. **Patent Policy:** Notification that we are still operating under the IEEE-SA P&P
      1. No issues noted.
   3. **Agenda review** 11-15/1223r5 slide 3
      1. No modifications requested
   4. **Review doc:** 11/15/1184r4 – opportunistic wireless encryption (OWE) – Dan HARKINS
      1. Review background
      2. Discussion on what people use today to gain access to Wi-Fi Networks in public spaces.
      3. Review the proposed text needed to add OWE to the draft
      4. Discussion on the value of adding this here or how to encourage proper use.
      5. Discussion on how much extra security OWE would be adding.
      6. Discussion on the problems that OWE is addressing, and what it is not.
      7. Discussion on difference of OWE and SAE/PSK.
      8. Discussion on user perspective of encryption/security.
      9. Plan to have a motion to adopt during Thursday PM2
   5. **Review doc:**11-15/828r3 Peter ECCLESINE
      1. CID 5969 (MAC) and CID 5970 (MAC)
         1. Review comment
         2. Review changes since we discussed in September.
         3. CID 5972 is the same thing, for Mesh.
         4. Do we need to not send these to a STA that did not indicate support? Therefore, these can't go in Beacons?
         5. Question on the MIB variable and if it was entered into a compliance group, looks like that was overlooked. Need to add to compliance group.
         6. Request to remove “intermittently” on page 4
         7. Query on how broad the proposal is applied (i.e. PCP, STA, AP etc.)
            1. This is an information element, so those STAs that do not know this element will ignore this element.
         8. Concern on the Legacy devices and how they would deal with this new channel switch element.
            1. Discussion on Channel Switch Mode set to non-zero vs the actual values.
         9. More work is needed.
      2. CID 5971 (GEN)
         1. Review comment
         2. Review proposed changes.
         3. Proposed Resolution: REVISED (GEN: 2015-11-11 20:31:45Z) Incorporate Changes in 11-15/828r3 <https://mentor.ieee.org/802.11/dcn/15/11-15-0828-03-000m-sb0-ecclesine-resolutions.docx> under CID 5971.
         4. No objection - Mark Ready for Motion
   6. **Review doc:** 11-15/1400r0 Vinko ERCEG
      1. Abstract: This document proposes a resolution for the following CIDs: 5761, 6225, 6241, 6258, 6259, 6281, 6404, 6409, and 6423. The proposed resolution is based on D4.0.
      2. CID 5761 (GEN)
         1. Review comment
         2. The proposed Accept does not work as the variable name is not correct.
         3. Need to look at a different PHY Clause to find the wording that has already been worked out.
         4. There is overlap with a change being proposed in 11-15/1155.
         5. More work needs to be done on the first part of the change.
         6. Review the second part of the change, but also there are alternative proposals in the pipeline.
         7. This relates to other CIDs.
         8. Assign to Mark RISON and Vinko will remove from this document.
      3. CID 6225 (GEN)
         1. Review comment
         2. Agree in principle with the proposed change, but change from 128 to 168.
         3. Proposed resolution: REVISED (GEN: 2015-11-11 20:43:32Z) Revise. Change the exposition to:

1) LCWD=168 is the maximal number of data bits in each LDPC codeword. LHDR=5 is the length of the header (including HCS) in octets. LFDCW=6 is the length of the additional data in the first LDPC codeword in octets.

2) The total (header and additional data) number of bits in the first LDPC codeword is LDPFCW=(LHDR+LFDCW)x8=88.

3) The number of LDPC codewords is NCW=<blah>.

4) The number of bits in the second and any subsequent LDPC codeword (if present), except the last, is LDPCW=<blah>.

5) The number of bits in the last LDPC codeword is LDPLCW=<blah>.

Change the example to:

NOTE---For example, if Length = 128, then NCW=<blah>=7, LDPCW=163 and LDPLCW=161. In the first LDPC block the 88 bits of LDPFCW consist of 40 header+HCS bits along with 48 bits of data.

* + - 1. No objection - Mark Ready for Motion
    1. CID 6241 (GEN)
       - 1. Review comment
         2. Proposed Resolution: ACCEPTED (GEN: 2015-11-11 20:47:23Z)
         3. No objection - Mark Ready for Motion
    2. CID 6258 and 6259 (GEN)
       - 1. Assign to Adrian STEPHENS
    3. CID 6281 (GEN)
       - 1. Review comment
         2. Discussion on the changes in other CIDs that may affect this text.
         3. Proposed resolution: ACCEPTED (GEN: 2015-11-11 20:52:09Z)
         4. No objection – Mark Ready for Motion
    4. CID 6304 (GEN)
       1. Review Comment.
       2. Slotted CCA reset is not currently used…or at least it was wanted to check.
       3. Discussion on what timers are being used, and what
       4. The Timers are not well defined, need to determine what they are.
       5. More discussion needed.
    5. CID 6409 (GEN)
       1. Review comment
       2. Discussion in the past has not found consensus for any change
       3. Proposed Resolution: REJECTED (GEN: 2015-11-11 21:00:39Z) Reason for rejection: In each PHY ED levels are clearly specified. Those ED levels should be used for corresponding PPDUs.
       4. No objection - Mark Ready for Motion
    6. CID 6423 (GEN)
       1. Review comment
       2. The 2pi should be 2 pi symbol
       3. B90 should be 90% bandwidth
       4. Proposed Resolution: REVISED (GEN: 2015-11-11 21:03:58Z) Revise

Change:

“Channel 14 is unique. The Japanese standard ARIB RCR-STD 33 (5.0) [B7] states that B90/2pi normalized to the ‘transmission speed of modulation signal’ shall be > 10.”

To:

“Channel 14 is unique. The Japanese standard ARIB RCR-STD 33 (5.0) [B7] states that B90/2pi normalized to the ‘transmission speed of modulation signal’ shall be > 10, where B90 is the 90% occupied channel bandwidth.

Editor – please change “pi” to symbol. (two locations)

* + - 1. No objection – Mark Ready for Motion
  1. **Review doc:** 11-15/762r13 Mark RISON
     1. New additions to document “changes made up to the BRC meeting on 2015-11-11. Added CID 6572 (in progress).”
     2. CID 6235 (MAC)
        1. Review comment
        2. Previously planned for rejection, needed more detail (Was in “Motion MAC-AY Pulled” tab).
        3. Proposed Resolution: Revised Incorporate the changes in 11-15/762r13 < <https://mentor.ieee.org/802.11/dcn/15/11-15-0762-13-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx>> for CID 6235.
        4. No objection – Mark Ready for Motion
     3. CID 6802 and 6803 (GEN)
        1. Review comments
        2. Review the context of the proposed changes.
        3. Discussion on if the Last\_RSSI parameter should be defined, and if it can be set to zero and if so when.
        4. Will delete the Reserved setting.
        5. Proposed Resolution: REVISED (GEN: 2015-11-11 21:13:26Z) Incorporate the changes in 11-15/762r14 < https://mentor.ieee.org/802.11/dcn/15/11-15-0762-14-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx> for CID 6802 and 6803.
        6. No objection – Mark Ready for Motion
     4. CID 6684 (EDITOR)
        1. Was proposed to be rejected, but was removed from the motion
        2. Review comment
        3. Discussion on “will not” being present, and the usage of “will”.
        4. Ran out of time
  2. **Recess at 3:30pm**

1. **REVmc BRC –2015-11-11 Wednesday PM2 - 4:00-6:00pm**
   1. **Call the meeting to order** by Dorothy STANLEY (Chair) at 16:00 central time
   2. **Patent Policy:** Notification that we are still operating under the IEEE-SA P&P
   3. **Agenda review** 11-15/1223r5 slide 3
      1. Agenda Changes
         1. drop 11-15/1024, and 11-15/1025
      2. Updated Agenda:

Comment resolution –

11-15/1022, 11-15/424, 11-15/1023 - Matt FISCHER (Broadcom)

MAC CIDs, 11-15/555, 11-15/1422 Mark HAMILTON (Ruckus)

* + 1. No objection to agenda changes
  1. **Review doc:** 11-15/1022r2 Matthew FISCHER
     1. Abstract: This document proposes an update to the resolution of LB1000 (first sponsor ballot) CID 5959 document 11-15-0653r2 which provided modifications to the ESTTHROUGHPUT SAPs introduced by the resolution of CID 3309 of LB202 (i.e. the 11-15-0653r2 resolution of CID 5959 added uplink throughput estimate and added an example algorithm for determining the estimated throughput values). Following the adoption of 11-15-0653r2 as the resolution for CID5959, editorial review suggested that some refinement to the updated draft was needed. This document provides those refinements
     2. Explanation of what is in R2: modify Probe request change slightly

Revert to the already adopted old IE format for the ESP IE (i.e. remove the proposed change to the new element ID extension format)

Add an instruction to the editor to remove the reserved octet of the ESP IE

Remove the definitions of the min() and max() functions as these are already defined somewhere for all of 802.11

Change draft reference (and cited and changed text) to D4.3

Remove the change to add an equation reference number in annex V text because the editor already made the change in D4.3

* + 1. CID 5959 was accepted and has been edited into the draft. This submission is trying to correct errors that were introduced while incorporating 11-15/653r2 in August (See motion #139).
    2. Review the changes proposed in this document
    3. Note that “measured in B” should be changed to “measured in octets”
    4. Need to include reference to 3692.64, on page 5.
    5. In several locations, do we need to have some underscores to be used to indicate a sub-script, but the use of sub-script is not necessarily useful.
    6. The instruction needs to be clear if it is a sub-script or not.
    7. Need to change “s/b” to “seconds/bits”
    8. Discussion on what the process for adopting the changes.
    9. A motion will be made to accept r3
  1. **MOTION #168:** Doc 11-15/1022
     1. Incorporate the text changes in 11-15/1022 < <https://mentor.ieee.org/802.11/dcn/15/11-15-1022-03-000m-cid5959-esp-editorial-changes.docx>> into the TGmc draft.
        1. Moved: Matthew FISCHER 2nd Adrian STEPHENS
        2. Discussion – some want to let more changes be done, others say let it go and then the comments can be made later.
        3. Results: 11-5-0 **Motion Fails**
  2. **Review doc:** 11-15/1424 Matthew FISCHER
     1. Abstract: This document proposes some minor modifications to the accepted resolution for CID 5960 of LB1000 (first sponsor ballot), a comment on TGm Draft 4.0 suggesting the creation of additional partitioning of support indication for NSS values.
     2. Review Document
     3. CID 5960 (already resolved in motion #154 – edited into D4.3)
     4. Discussion on table 8-73, and at least some of the Notes may need to be converted to Normative text.
     5. No consensus on what path to take – Author to make change and bring back for consideration at a later time.
     6. Continue on page 6 reviewing the proposed changes
     7. Need to change “through” to “to” and change MCSx to MCS X
     8. So another set of edits will need to be done on this document and will bring back later.
     9. We would need to review the changes prior to motion, and so it may be better for the Nov 20 Teleconference.
  3. **Review doc: 11-15/0555r6** Mark Hamilton
     1. Abstract: This document is a follow-up to 11-14/1218, with a proposal to make the DS SAP (and thusly, Annex R) normative text.
     2. Review document
     3. Description of how Service Providers to Service Users were made consistent.
     4. Question on definition of what an AP has or has not.
        1. The claim is that the standard has always indicated what is in the AP and the included figure simply documents what is believed to be there.
     5. The reordering of the clauses will occur with a draft soon so the change of annex R will not add undue burden.
        1. There are two PHY clauses that are deprecated, and will be removed soon anyway, so moving Annex R will solve half the problem.
        2. There is precedence in renumbering and so revisions may do this without concern.
     6. A motion will be prepared to accept the document on Thursday.
     7. Discussion on if a non-AP STA should really be a Non-DSAF STA or a Non-AP STA with DSAF and the explanation on why this is not the right definition at this point, but ARC is working on trying to describe what a STA’s interface is providing.
  4. **Review Doc 11-15/1422** Mark HAMILTON
     1. Abstract: This submission contains proposed changes to clarify text on how IPI densities are measured and computed. References herein are to REVmc Draft 4.3.
     2. Review discussion
     3. Review proposed change to break the cited paragraph into two sentences.
     4. Review the context of the location.
     5. Change “entire” to “requested”
     6. An R1 will be posted and a motion will be added for Thursday PM2.
  5. **MAC CIDs**
     1. These CIDs can be found in 11-15/565r24
     2. CID 5079 (MAC)
        1. Review comment
        2. Proposed Resolution: Revised. Change “context specified” to “context, with contents as specified”.
        3. No objection – Mark Ready for Motion
     3. CID 5080 (MAC)
        1. Review Comment
        2. Review the table that is cited in the sentence that is being proposed to be deleted. (8-140).
        3. There is a concern that DMG may send certain frame types and the table tells what is valid to send/receive.
        4. In DMG case the BlockACK can be sent multiple times to address dropped packet cases.
        5. Review what may be used in the DMG case
        6. Proposed Resolution: Agree
        7. No objection – Mark Ready for Motion
  6. Recess at 6:00pm

1. **REVmc BRC –2015-11-12 Thursday PM1 – 1:30-3:30pm**
   1. **Called to Order:** Dorothy STANLEY (Chair) called meeting to order at 13:30
   2. **Patent Policy:** Notification that we are still operating under the IEEE-SA P&P
      1. No Issues identified
   3. **Agenda review** 11-15/1223r6 slide 3
      1. Submissions from Michael FISCHER, Mark Hamilton, Mike MONTEMURRO, and Adrian STEPHENS
      2. Change from previous list
      3. CID 6675 – Bo Sun – would like to asked first start time.
      4. Updated Agenda – No objection – approved without objection
   4. **Review doc:**11-15/1317r1 Bo SUN
      1. CID 6675 (GEN)
         1. Review comment
         2. While similar comments may appear elsewhere a discussion was held and a solution found to propose that does not conflict.
         3. Proposed resolution: REVISED (GEN: 2015-11-12 19:38:16Z); incorporate the changes in 11-15/1317r1 < <https://mentor.ieee.org/802.11/dcn/15/11-15-1317-01-000m-sb0-resolutions-for-vht-phy-comments.docx>> for CID 6675.
         4. Will include in a motion later today.
         5. No objection - Mark Ready for Motion
   5. **Review doc:** 11-15/1398r0 Michael FISCHER
      1. Abstract: The PICS entry for CF10 in REVmc Draft 4.3 does not reflect the set of changes pertaining to this entry from 802.11ac, 802.11ad, and 802.11af. This presentation proposes text for CF10 to incorporate this full set of amendments being incorporated by REVmc.
      2. Discussion on the dependencies that were removed.
      3. CID 2425 refers to 11-13/1345r4, but should be 11-12/1345r4
      4. Minutes from May 2 2014 telecon is when the resolution was prepared.
      5. Discussion on if the optional status is valid
      6. No proposal for making a change, but discussion on if it should be changed did not have any consensus for change.
      7. Concern that there was a retroactive requirement….
   6. **Review doc:**11-15/532r20 Adrian STEPHENS
      1. CID 6120 (EDITOR),
         1. Review comment
         2. Suggestion that words that imply movement may be causing confusion
         3. The definition refers to the transition of the BSS association of a STA.
         4. Review the Adhoc Notes.
         5. The Verb to use with association was the concern.
         6. Proposed Resolution: REVISED (EDITOR: 2015-11-12 20:02:13Z) - Change the definition to "Change of association by a station (STA) from one BSS to another BSS in the same extended service set (ESS)."
         7. No objection - Mark Ready for Motion
      2. CID 6127 (Editor)
         1. Same issue as 6120
         2. Proposed Resolution: REVISED (EDITOR: 2015-11-12 20:03:09Z) - Change the definition to "Change of association by a station (STA) from one basic service set (BSS) in one ESS to another BSS in a different ESS."
         3. No objection Mark Ready for Motion
      3. CID 6128 Editor)
         1. Same issue as 6120
      4. Proposed Resolution: REVISED (EDITOR: 2015-11-12 20:03:46Z) - Change the definition to "Change of association by a station (STA) that is from one BSS in one extended service set (ESS) to another BSS in the same ESS and that minimizes the amount of time that the data connectivity is lost between the STA and the distribution system (DS)."
         1. No objection Mark Ready for Motion
   7. **Review doc:** 11-15/1399r2 Michael MONTEMURRO
      1. CID 5042 (MAC)
         1. Review Comment
         2. Leaving the table open was not thought to be
         3. Proposed Resolution: Rejected – Cited text is accurate and provides a very high level description.
         4. No objection – Mark Ready for Motion
      2. CID 5043 (MAC)
         1. Review Comment
         2. Proposed Resolution: Revised. Change all occurrences of "Block ACK is" to "Block Ack agreement is" throughout the document.
         3. No objection – Mark Ready for Motion
      3. CID 5044 (MAC)
         1. Review Comment
         2. Proposed Resolution: REVISED (MAC: 2015-11-12 20:13:58Z):

Note to Editor, to ensure the capitalization follows 802.11 convention.

Changes made in the description text.

At 401.50, change "QoS Map" to "QoS Map Configure frame"

At 402.9, change "QoS Map" to "QoS Map information"

At 402.53, change "QoS Map" to "QoS Map information"

At 628.15, change "QoS Map" to "The QoS Map element"

At 632.18, change "QoS Map" to "The QoS Map element"

At 965.63, change "QoS Map" to "QoS Map element"

At 966.11, change "QoS Map" to "QoS Map element" - note 2 occurrences.

At 966.43, change "QoS Map" to "QoS Map element".

At 1787.14, change "QoS Map" to "QoS mapping"

At 1787.20, change "QoS Map" to "QoS mapping"

At 1787.21, change "QoS Map" to "QoS mapping"

At 1787.29, change "QoS Map" to "QoS mapping"

At 3576.23, change "QoS Map" to "QoS mapping"

At 107.31, change "QoS Map" to "QoS mapping"

* + - 1. No objection – Mark Ready for Motion
    1. CID 5045 and 5267 (MAC)
       1. Review Comments
       2. Need to review proposed changes
       3. CID 6708 was rejected, but may be related.
       4. Author to go back and rework these two CIDs
    2. CID 6059 (MAC)
       1. Review comment
       2. The ResultCodes and the Status codes do no align. Need more work
       3. Meantime Reject comment
       4. Proposed Resolution: REJECTED (MAC: 2015-11-12 20:21:57Z): The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
       5. No objection – Mark Ready for Motion
    3. CID 6071 (MAC)
       1. Review comment
       2. Proposed Resolution: REVISED (MAC: 2015-11-12 20:25:02Z):

At 169.32, remove AssociateFailureTimeout,

At 170.08, remove the AssociationFailureTimeout row.

At 183.34, remove ReassocateFailutreTimeout,

At 184.08, remove the ReassociationFailureTimeout row.

At 1595.31, replace "the AssociateFailureTimeout expires" with "the association fails to complete within dot11AssociationResponseTimeOut"

At 1599.18, replace "the ReassociateFailureTimeout expires" with "the reassociation fails to complete within dot11AssociationResponseTimeOut:"

* + - 1. No objection – Mark Ready for Motion
    1. CID 6220 (MAC)
       1. Review comment
       2. Review Figure 6-17
       3. More work is needed to the figure.
       4. Assign to Mark RISON
    2. CID 6408 (MAC)
       1. Review Comment
       2. Review of 162.58 for sample context.
       3. Proposed Resolution: REVISED (MAC: 2015-11-12 20:31:47Z): Make the following changes: At 162.58, 171.63, 186.09, 245.60, 416.22, 419.52, 426.04, change "The MLME subsequently..." to "In the case that a response is received from the responder STA, the MLME subsequently…"
       4. No objection – Mark Ready for Motion
    3. CID 6428 (MAC)
       1. Review Comment
       2. Discussion: This one is about the special "rate" values 126 and 127, which don't actually indicate a rate but indicate a PHY (VHT and HT).  So either the name should indicate this, or the range should exclude those special values.
       3. Discussion on what changes should be made devolved into more detail.
       4. Assign to Mark RISON
    4. CID 6604 (MAC)
       1. Review comment
       2. Review context
       3. Proposed Resolution REJECTED (MAC: 2015-11-12 20:41:27Z): The FT Authentication is a set of elements that is included in either an Action frame or an Authentication frame.
       4. No objection – Mark Ready for Motion
    5. CID 6170 and 6860 (MAC)
       1. Review Comment
       2. Proposed Resolution: REVISED (MAC: 2015-11-12 20:42:35Z): At 147.18, change "Ordered set" to "Set"
       3. No objection – Mark Ready for Motion
  1. **Review doc:** 11-15/1207r7 Adrian STEPHENS
     1. CID 6294 (GEN)
        1. Review Comment
        2. Previous resolution was found to not be accurate, so this has been updated.
        3. Proposed Updated Resolution: REVISED (GEN: 2015-11-12 20:49:49Z).

Replace “the service field (b7) bit shall indicate a 0 if the rounding performed by the Ceil() operation took less than 8/11 or a 1 if the rounding took more than or equal to 8/11.”

with: “the service field (b7) bit is 0 if (Length - (number of octets x 8/11)) < 8/11 and is 1 otherwise.”

* + - 1. No objection – update resolution and Mark Ready for Motion
    1. CID 6465 (GEN)
       1. Review Comment
       2. Proposed Resolution: REVISED (GEN: 2015-11-12 20:52:57Z) At 2569.32, 2573.33, and 2577.33 after “400 ns GI” insert “(See NOTE)”

At 2569.52, 2573.53, and 2577.53 insert a new last table row, merged, containing:

“NOTE—Support of 400 ns GI is optional on transmit and receive”

In reply to the comment The NOTE applies specifically to this table because it is the only Clause 20 MCS table that includes “mandatory” in its caption, and reminds the reader that support of short GI is not mandatory. Change to Clauses 21 and 23 are not necessary, because these do not label their MCS tables with “mandatory”.

* + - 1. No objection – Mark Ready for Motion
    1. CID 6466 (GEN)
       1. Review Comment
       2. Review context – question about rounding in the table
       3. Discussion on if the value is rounded or not
       4. Need to add for Clause 23 as well as Clause 20.
       5. Proposed Resolution: REVISED (GEN: 2015-11-12 20:56:27Z) at 2384.55, delete “(see NOTE)”. At 2385.09 delete the last table row containing the NOTE.

At 2384.13 insert a new para: “In the MCS parameter tables that follow, data rates for a 400 ns GI are rounded to 1 decimal place.”

At 2631.47 insert a new para: “In the MCS parameter tables that follow, data rates for a 400 ns GI are rounded to 1 decimal place.”

* + - 1. No objection – Mark Ready for Motion
    1. CID 6093 (MAC)
       1. Review Comment
       2. Proposed Resolution: ACCEPTED (MAC: 2015-11-12 21:02:02Z)
       3. No objection – Mark Ready for Motion
    2. CID 6589 (MAC)
       1. Review Comment
       2. Discussion on if there is or is not a convention to follow for address representation.
       3. P1781 – shows colons – even though it is just an example
       4. All cited locations should be identified rather than have the Editors be responsible for finding them.
       5. There needs to be a check to ensure that bit reversal was not intended.
       6. ACTION ITEM #1: Mark RISON and Adrian to work together to identify the MAC address representations are correct.
    3. CID 6617 (MAC)
       1. Review comment
       2. 28 locations that talk about subelements and being able to include Vendor Specific Elements
       3. **Straw Poll #4:** Do you agree with this statement: “Excluding in the Vendor Specific element, if an element supports subelements, it should by convention support a Vendor Specific subelement, and the numbering of this subelement should be the same for all elements”? Yes No Abstain
       4. Results: Yes: 6 No: 7
       5. Proposed Resolution: REJECTED (MAC: 2015-11-12 21:20:16Z): An Action frame can always carry Vendor Specific elements, because this is part of the defined structure of the Action frame. But an element doesn’t have a common “payload” format. Some elements contain subelements. Some do not. Each element gets to choose
       6. After straw poll – Mark Ready for Motion
    4. CID 6227 (MAC)
       1. Review Comment
       2. Commenter is ok with the rejection and will reconsider.
       3. Proposed Resolution: REJECTED (MAC: 2015-11-12 21:21:50Z): A Mesh TKSA is the security association that does not contain a PTK and as such, is not called a PTKSA. It contains a mesh TK and consequently, is called mesh TKSA.
       4. No objection – Mark Ready for Motion
    5. CID 6483 (MAC)
       1. Review Comment
       2. Review Proposed Changes
       3. Remove “Based on whether it started or joined a BSS, respectively as appropriate.”
       4. **Straw Poll #5:** to keep descriptive text as shown vs just the parameter name only. –
          1. Results: 2-10
          2. Follow-up question, can we end at the mandatory rate (full-stop).
       5. Ran out of Time
  1. **Recess at 3:30pm**

1. **REVmc BRC –2015-11-12 Thursday PM2 - 4:00-6:00pm**
   1. **Call to Order:** Dorothy STANLEY (Chair) called meeting to order at 16:00 .
   2. **Patent Policy:** Notification that we are still operating under the IEEE-SA P&P
      1. No issues identified.
   3. **Agenda review** 11-15/1223r7 slide 3
      1. No additions proposed
      2. No objection to agenda
   4. **Motion PD2:** Motion to approve minutes
      1. **Approve prior meeting minutes**
      2. <https://mentor.ieee.org/802.11/dcn/15/11-15-1291-00-000m-revmc-brc-teleconference-minutes-nov-6.docx>
      3. <https://mentor.ieee.org/802.11/dcn/15/11-15-1267-02-000m-revmc-brc-minutes-for-2015-10-28-telecon.docx>
      4. <https://mentor.ieee.org/802.11/dcn/15/11-15-1273-00-000m-revmc-brc-minutes-for-2015-10-30-telecon.docx>
      5. <https://mentor.ieee.org/802.11/dcn/15/11-15-1251-02-000m-revmc-brc-minutes-for-f2f-aug-samsung-hosted-cambridge.docx>
      6. <https://mentor.ieee.org/802.11/dcn/15/11-15-1204-02-000m-revmc-brc-minutes-sept-oct-2015.docx>
      7. <https://mentor.ieee.org/802.11/dcn/15/11-15-0996-00-000m-revmc-brc-minutes-for-interim-sept-bangkok.docx>
      8. Emily 2nd Edward
      9. Results: No objection - Motion approved by unanimous consent
   5. **Motion #169 – IPI Clarification**
      1. Incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/15/11-15-1422-01-000m-clarification-of-ipi-densities-text.docx> into the TGmc draft.
      2. **Moved: Mark HAMILTON 2nd: Graham SMITH**
      3. **Results: 19-0-0 Motion Passes**
   6. **Motion #170 -- Annex R normative**
      1. Incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/15/11-15-0555-06-0arc-normative-ds-sap-proposal.docx> into the TGmc draft.
      2. **Moved: Mark HAMILTON2nd: Michael MONTEMURRO**
      3. **Discussion:** 
         1. **Does this force the start of the renumbering?** 
            1. There is another proposal that will remove the place holders that will affect the numbering, and this will further case a change in numbering
      4. **Results: 17-0-1 Motion Passes**
   7. **Motion #171** **-- DMG CBAP allocation**
      1. Resolve CIDs 5996, as “Revised” with a resolution of “incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/15/11-15-1241-02-000m-resolution-to-revmc-sb-cid-5596.docx>
      2. Moved: Emily QI 2nd: Michael MONTEMURRO
      3. Discussion :
         1. The document only address one CID
      4. Results: 11-1-5 Motion Passes
   8. **Motion #172** **– DMG fix 11-15/1272r2**
      1. Incorporate the text changes in
      2. <https://mentor.ieee.org/802.11/dcn/15/11-15-1272-02-000m-clause-21-packet-type-clarification.docx> into the TGmc draft.
      3. Moved: Emily Qi, 2nd Edward AU
      4. Results: No objection to Unanimous Consent – Motion Passes
   9. **Motion #173** **– Location 11-15/1044r2**
      1. Incorporate the text changes in

<https://mentor.ieee.org/802.11/dcn/15/11-15-1404-02-000m-minor-revisions-to-ftm.docx> into the TGmc draft.

* + 1. Moved: Carlos ALDANA 2nd: Jonathan SEGEV
    2. Discussion – the difference between r1 and r2 was that we added text changes that should have been included in Clause 6.
       1. Review each of the changes in Clause 6. (3 primitives)
    3. Results: 20-0-0 – Motion Passes
  1. **Motion #174** -- **Location 11-15/14**
     1. Incorporate the text changes in

<https://mentor.ieee.org/802.11/dcn/15/11-15-1041-03-000m-dmg-small-fixes.docx> into the TGmc draft.

* + 1. Moved: Carlos ALDANA 2nd: Jonathan SEGEV
    2. Results: 20-1-0 – Motion Passes
  1. **Motion #175** – CID 6675
     1. Resolve CIDs 6675, as “Revised” with a resolution of “incorporate the text changes under CID 6675” in <https://mentor.ieee.org/802.11/dcn/15/11-15-1317-01-000m-sb0-resolutions-for-vht-phy-comments.docx>
     2. **Moved: Mike MONTEMURRO 2nd: Mark RISON**
     3. **Results: Unanimous Consent**
  2. **Motion #176 – MAC CIDs – BA and BB**
     1. Approve the comment resolutions in the
     2. “Motion MAC-BA” and “Motion MAC-BB” tabs in
     3. <https://mentor.ieee.org/802.11/dcn/15/11-15-0565-25-000m-revmc-sb-mac-comments.xls>, except for CID 6374 (BB), 5153, 5156, 6671, 6765, 5148, 5163, 6710, 6774, 5155 and 6826 (BA); and for CID 6816 change the revision to 9383r3 from 938r2 and incorporate the indicated text changes into the TGmc draft.
     4. Moved: Adrian STEPHENS 2nd : Solomon TRAININ
     5. Discussion:
        1. CIDs 6374 and 6816 are included in this set, there are changes to 11-15/938r3 that need to be updated.
           1. Review changes in 11-15/0938r3 for latest changes
           2. New Proposed Resolution for 6374 and 6816 (MAC): CID 6816 (MAC), 6374 (MAC): REVISED (MAC: 2015-11-12 22:47:34Z): Incorporate the changes in 11-15/938r3 (https://mentor.ieee.org/802.11/dcn/15/11-15-0938-03-000m-unscheduled-power-save-for-dmg.docx).
     6. Request to withdraw CIDs from MAC Motion
        1. CIDs Pulled from MAC motion: 6374, 5153, 5156, 6671, 6765, 5148, 5163, 6710, 6774
        2. Fix-up CIDs in MAC Motion 5155, 6826
           1. CID 5155

Change the “unknown or reserved…” was rearranged from what was presented.

There was confusion on what the change was to be done.

* + - * 1. Just pull both and figure later
    1. Results: 19-0-0 Motion Passes
  1. **Review doc:** 11-15/1147r5
     1. CID 6181 (MAC)
        1. Review Comment
        2. Review proposed comment
        3. Discussion on the source of the deleted text.
        4. Proposed Resolution: ACCEPTED (MAC: 2015-11-12 23:02:05Z)
        5. No objection – Mark Ready for Motion
     2. CID 5966 (MAC)
        1. Review comment
        2. Discussion on why the ACK needs to be at the lower rate to ensure the EIFS has the broader coverage.
        3. The proposed change adds a “should” rather than a “shall”.
        4. The issue is in EIFS and large areas not able to hear the frame.
        5. This causes an extra frame “CF-END” to be transmitted, but it does trade off on the cost and fairness.
        6. “CF-END” is used to truncate the NAV in general. Adding the ACK that is just sent seemed odd, so it was requested that ACK and CTS add “-to-self” to clarify where the frame is being sent.
        7. Should a “NOTE” be added to explain why we are adding this?
        8. Some Editorial set of updates to the proposed changes were given.
        9. Discussion on when the TXOP is terminated vs truncated.
        10. Suggestion to use “most robust” rate to allow for any PHY or band.
        11. The Target location is at the end of the EIFS paragraph and may not be clear it is independent from the EIFS.
        12. Discussion on devices that are using lower rates may not be described. – Don’t use ACK-to-self as it is a new undefined frame. CTS-to-self is sufficient.
        13. **Straw Poll #6:** support direction of the proposal
            1. Results: Yes: 11 No: 0 Abstain: 7
     3. CID 5965 (MAC)
        1. Review Comment
        2. Discussion on the new feature being proposed.
        3. Depending on the band, there may be a regulatory limit that prevents the proposed feature from being used. There may be a better way to change the TXOP rules to avoid having to apply the changes to STA and APs.
        4. Simulation results were interesting, and now to see if this can be applied for a universal gain or is this something that could be worked on in 802.11ax.
        5. Discussion on wanting to have the figures updated with new settings – possibly
        6. **Straw Poll #7:** Proceed with proposal in a) REVmc, b) TGax or c) not at all?
           1. Result: a)9 b)16 c) 0
        7. Discussion on the default settings for the TXOP apply to both the STA and AP, but the numbers are default.
        8. Proposed resolution: REJECTED (MAC: 2015-11-12 23:38:23Z): The TGmc ballot resolution committee discussed the comment and there was not sufficient support to make this change.
        9. No objection – Mark Ready for Motion
     4. CID 5968 (MAC)
        1. Review Comment
        2. Review proposed resolution.
        3. Legacy STA would see the Probe request, but would ignore it as the frame is not known.
        4. Other Task Groups have looked at the Probe Request, and we should try to look at the active new TG that are looking at this and see if we can find a common solution that can be used by the base standard.
        5. The Concept is to reduce the size of the Probe Request, as it only is looking for a Probe Response, so the requestor may not really need to communicate its settings.
        6. Need to coordinate the change as it is a more general problem that should have a broader examination.
        7. The Number of Probe Requests has more impact than the size of the Probe Request.
        8. TGai is already in Sponsor Ballot, and they are closing on items and unlikely to be able to add new features at this time….but maybe it could be tried.
        9. **Straw Poll #8:** is the reduction of the Probe Request a generally good idea?
           1. Results: 13-0
        10. Discussion on where to propose this idea.
        11. Proposed Resolution: REJECTED (MAC: 2015-11-12 23:53:04Z): The TGmc ballot resolution committee discussed the comment and there was not sufficient support to make this change.
        12. No objection – Mark Ready for Motion
  2. **October – January Meeting Planning**- -
     1. **Conference calls 10am Eastern 2 hours**
        1. November 20, 30
        2. Dorothy to send Announcement.
     2. **Ballot Resolution Committee meeting –December 7-10, Piscataway NJ**
     3. **Schedule review**
* December 7-10 2015 Piscataway meeting planned
* Targeting December 2015 SB recirculation
* July 2016 – WG/EC Final Approval
* September 2016 – RevCom/SASB Approval
  + 1. **Availability of 11mc in the IEEE store**
       1. D4.0 is available, see <http://www.techstreet.com/ieee/products/1867583>
    2. **Forward to ISO JTC1/SC6 WG1**
       1. D4.0 forwarded
  1. **Adjourned at 6pm**

**References:**

1. Monday PM1:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-01-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-02-000m-tgmc-agenda-november-2015.pptx>

https://mentor.ieee.org/802.11/dcn/13/11-13-0095-25-000m-editor-reports.pptx

<https://mentor.ieee.org/802.11/dcn/15/11-15-1207-05-000m-sb0-stephens-resolutions-part-3.doc>

1. Tuesday PM1:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-03-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-04-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1272-01-000m-clause-21-packet-type-clarification.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1241-00-000m-resolution-to-revmc-sb-cid-5596.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1040-01-000m-dmg-unified-header.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0938-02-000m-unscheduled-power-save-for-dmg.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1041-02-000m-dmg-small-fixes.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1041-03-000m-dmg-small-fixes.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1404-00-000m-minor-revisions-to-ftm.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1404-01-000m-minor-revisions-to-ftm.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1419-00-000m-location-capabilities-and-neighbor-report.doc>

1. Tuesday PM2:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-04-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1270-00-000m-tvht-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1384-00-000m-revmc-d4-0-comment-resolutions-for-clauses-22-3-6-7-8-10-20-8-4-2-1.doc>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1317-00-000m-sb0-resolutions-for-vht-phy-comments.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1010-14-000m-revmc-sb0-stephens-resolutions-part-2.doc>

1. Wednesday PM1:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-05-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1184-04-000m-owe.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0828-03-000m-sb0-ecclesine-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1400-00-000m-lb1000-misc-phy-cids.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0762-13-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0762-14-000m-resolutions-for-some-comments-on-11mc-d4-0-sbmc1.docx>

1. Wednesday PM2:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-05-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1022-03-000m-cid5959-esp-editorial-changes.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1424-01-000m-lb1000-cid5960-nss-support-partitioning-redux.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0555-06-0arc-normative-ds-sap-proposal.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1422-00-000m-clarification-of-ipi-densities-text.docx>

1. Thursday PM1:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-06-000m-tgmc-agenda-november-2015.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1317-01-000m-sb0-resolutions-for-vht-phy-comments.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1398-00-000m-correction-needed-for-pics-cf10.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0532-20-000m-revmc-sponsor-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1399-02-000m-revmc-initial-sponsor-ballot-mac-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1207-07-000m-sb0-stephens-resolutions-part-3.doc>

1. Thursday PM2:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-06-000m-tgmc-agenda-november-2015.pptx>

Previous Minutes approved:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1291-00-000m-revmc-brc-teleconference-minutes-nov-6.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1267-02-000m-revmc-brc-minutes-for-2015-10-28-telecon.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1273-00-000m-revmc-brc-minutes-for-2015-10-30-telecon.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1251-02-000m-revmc-brc-minutes-for-f2f-aug-samsung-hosted-cambridge.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1204-02-000m-revmc-brc-minutes-sept-oct-2015.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0996-00-000m-revmc-brc-minutes-for-interim-sept-bangkok.docx>

Motion 169:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1422-01-000m-clarification-of-ipi-densities-text.docx>

Motion 170:

<https://mentor.ieee.org/802.11/dcn/15/11-15-0555-06-0arc-normative-ds-sap-proposal.docx>

Motion 171:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1241-02-000m-resolution-to-revmc-sb-cid-5596.docx>

Motion 172:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1272-02-000m-clause-21-packet-type-clarification.docx>

Motion 173:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1404-02-000m-minor-revisions-to-ftm.docx>

Motion 174:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1041-03-000m-dmg-small-fixes.docx>

Motion 175:

<https://mentor.ieee.org/802.11/dcn/15/11-15-1317-01-000m-sb0-resolutions-for-vht-phy-comments.docx>

Motion 176:

<https://mentor.ieee.org/802.11/dcn/15/11-15-0565-25-000m-revmc-sb-mac-comments.xls>,

<https://mentor.ieee.org/802.11/dcn/15/11-15-1147-05-000m-assorted-cids.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1223-08-000m-tgmc-agenda-november-2015.pptx>