IEEE P802.11  
Wireless LANs

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| REVmc BRC Minutes for March 2016 - Macau | | | | |
| Date: 2016-03-18 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | Qualcomm Technologies, Inc. | 10871 N 5750 W  Highland, UT 84003 | +1-801-492-4023 | jrosdahl@ieee.org |
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Abstract

This file is 11-16/250 and contains the Minutes for the 802.11 REVmc BRC during the 802 Plenary March 2016 in Macau. REVmc had 7 time slots during the March 2016 802 Plenary Session.

6 slots: Monday PM1; Tuesday PM1 & PM2; Wed PM2; Thurs PM1 & PM2

The REVmc BRC is operating under the

**Current IEEE 802, 802.11 rules documents:**

* **Patent policy slides**
  + <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>
* **IEEE 802 Policies & Procedures** 
  + (link to AudCom, approved by IEEE-SA Standards Board June 2014)
  + <http://standards.ieee.org/board/aud/LMSC.pdf>
* **IEEE 802 Operations Manual (13 Nov 2015)**
  + <http://www.ieee802.org/PNP/approved/IEEE_802_OM_v18.pdf>
* **IEEE 802 Working Group Policies &Procedures (13 Nov 2015)** 
  + <http://www.ieee802.org/PNP/approved/IEEE_802_WG_PandP_v18.1.pdf> (editor update)
* **IEEE 802 LMSC Chair's Guidelines (13 Nov 2015)**
  + <http://www.ieee802.org/PNP/approved/IEEE_802_Chairs_guidelines_v21.pdf>
* **IEEE 802.11 WG OM: (13 Nov 2015)**
  + <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-14-0000-802-11-operations-manual.docx>
* **Policies and Procedures hierarchy**
  + <http://www.ieee802.org/11/Rules/rules.shtml>
  + **IEEE 802 Procedural document website:** <http://www.ieee802.org/devdocs.shtml>

1. **REVmc BRC in Macau, China – Monday, 14 March 2016 – PM1 - 13:30-15:30**
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 13:31
   2. **Introduction of TG officers**
      1. Chair - Dorothy STANLEY – HPE
      2. Vice Chair – Mark Hamilton – Ruckus Wireless
      3. Vice Chair/Secretary - Jon ROSDAHL – Qualcomm
      4. Editor – Adrian Stephens – Intel
      5. Editor - Emily QI – Intel
      6. Editor - Edward AU - Huawei
   3. **Review Patent Policy** – 5 slides reviewed.
      1. No issues noted.
   4. **Review Status and Objectives**
      1. WG chair has delegated BRC Ballot Resolution Committee responsibility to TGmc: <http://www.ieee802.org/11/email/stds-802-11/msg01475.html>
         * *“The resolution of comments is delegated to TGmc, acting as a sponsor Ballot Resolution Committee (BRC):*
         * *For convenience, we will continue to use the term “TGmc” to represent this BRC*
         * *Any voting member of 802.11 can vote at TGmc meetings*
         * *TGmc can consider motions (e.g. comment resolution,  other changes to the draft, to recirculate) in any of its meetings – including telecons*
         * *TGmc will meet during 802.11 F2F meetings*
         * *Ultimately the WG is required to approve any request to the executive committee to move the project to the standards board for approval.”*
      2. Current status of Plan of Record:

* D5.0 Jan 2016 Initial SB recirculation
* D6.0 April/May 2016 Second Recirculation
* D6.0/D7.0 May/June Third Recirculation
* July 2016 – WG/EC Final Approval
* September 2016 – RevCom/SASB Approval
  1. **Review Agenda** – See doc 11-16/231r2
     1. Monday PM1 (Room 2402)
* Chair’s Welcome, Patent reminder, Status, Review of Objectives, Approve agenda
* Editor’s Report
* CIDs - Payam 7171, 7174, 7176 – 11-16-305,CID 7173 – 11-15-1040r2
* CIDs Graham Smith 11-16-303, 304, 221
  + 1. Tuesday PM1 (Room 2502)
* CIDs – Adrian
* CIDs - Emily
  + 1. Tuesday PM2 (Room 2402)
* CID 7749 – 11-16-296 – Solomon
* CID 7153 – 11-16-253 – Solomon
* CID – 11-16-158 – Solomon
* CIDs – Graham SMITH
  + 1. Wednesday PM2 (Room 2402)
* 11-16-233, 220 – Assaf (20 mins)
* 11-16-313,11-15-1184 OWE (20 mins)
* CIDs – Dan HARKINS (15 mins)
* CIDs - Mark RISON (60 mins)
  + 1. Thursday PM1 (Room 2402)
* CIDs – Mark HAMILTON
* CIDs – Sigurd
* CIDs – Peter E
  + 1. Thursday PM2 (Room 2402)
* CIDs – Mark RISON
* Motions – minutes, CIDs, presentations
* Plans for March - May
* Schedule
* AOB, Adjourn
  + 1. Adjustments were made to the schedule based on those present an 11-16/231r3 will be posted.
    2. Motion to approve agenda
       1. Moved: Edward AU, 2nd Emily QI
       2. Result: unanimous approval without objection
  1. **Editor Report 11-13/95r29** Adrian STEPHENS (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/13/11-13-0095-29-000m-editor-reports.pptx>
     2. Thanks to reviewers which are listed on slide 2
        1. **The following people have kindly aided the technical editor in one way or another during the development of REVmc:**

Dorothy STANLEY, Jon ROSDAHL, Mark HAMILTON, Mark RISON, Peter ECCLESINE, Mike MONTEMURRO, Liwen CHU, Eldad PERAHIA, Brian HART, Sai SHANKAR, James {Yee|Wang|P.K. Gilb}, Assaf KASHER, Carlos CORDEIRO, Edward AU, Kaberi BANERJEE, Rich KENNEDY, Yongho SEOK, Carlos ALDANA, Gabor BAJKO, Scott MARIN, Graham SMITH, Sigurd SCHELSTRAETE, Emily QI

* + - 1. **And a big thank you to Edward Au and Emily Qi, who are the sub-editors**
    1. Reference documents:
       1. Draft: P802.11REVmc D5.0 (members’ area)
       2. WG Ballot composite comments
* 11-15/0532 – currently R36
* LB193 comments start at CID 1000
* LB199 comments start at CID 2000
* LB202 comments start at CID 3000
* LB206 comments start at CID 4000
* SB0 is shown as “LB1000”, comments start at CID 5001
* Includes pre-ballot comments
  + - 1. MAC comment resolutions
* 11-15/0565
  + - 1. GEN comment resolutions
* 11-15/0665
  + - 1. MAC/GEN sheets usually used for motioning tech resolutions.
      2. Composite SS may lag contents of these sheets during a session, but is the eventual resting place of approved resolutions.
    1. Draft 5.2 is current draft
       1. D5.2 contains editing of all resolutions approved in the Feb F2F, plus changes approved by motion in the Jan 2016 802.11 session.
    2. Review progress
       1. We took 249 days to resolve 1899 comments from SB0.
       2. We have 338 comments unresolved from SB1.
       3. Assuming linear progress, this implies 44 days left (from date of writing) to resolve these comments at the same rate – i.e., it is reasonable to expect completion of these comments mid-April.
    3. A few comments have been approved, but the Editors determined there was an issue with the resolution and need more information to address CID. These will be brought up with the BRC for discussion and review.
  1. **Review doc 11-16/305r0** Payam TORAB (Broadcomm Ltd.)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0305-00-000m-dmg-low-power-sc-a-ppdu-and-other-mac-fixes.docx>
     2. CID 7174 (GEN)
        1. Review Comment
        2. Review proposed changes
        3. Concern that there is a mix of use of PPDU and Additional PPDU. This is really an If and only If type of condition.
        4. Discussion on the proposed changes and also on the Ga64 block
        5. After changing the text, it was determined to use as is in R0
        6. Proposed Resolution: REVISED (GEN: 2016-03-14 06:02:08Z) Make the text changes as indicated in 11-16/305r0 <https://mentor.ieee.org/802.11/dcn/16/11-16-0305-00-000m-dmg-low-power-sc-a-ppdu-and-other-mac-fixes.docx>, for CID 7174. This provides A-PPDU aggregation for DMG low-power SC mode as the commenter requested.
        7. No Objection – Mark Ready for Motion
     3. CID 7176 (MAC)
        1. Review Comment
        2. Need to change the wording from “ blah is required” to “this thing reference requires”
        3. Discussion when this rule applies.
        4. Corrections were made to create an 11-16/305r1 of the document.
        5. Proposed Resolution: REVISED (MAC: 2016-03-14 06:10:06Z): At P1105.27 insert a "NOTE--Regardless of the value of the Chan-FBCK-CAP subfield, 10.38.6.4 requires a DMG STA to return the SNR values from the last TXSS if it receives a BRP frame with the TXSS-FBCK-REQ field and the SNR Requested subfield within the FBCK-REQ field both set to 1." This clarifies as requested by the comment, but with editorial fix ups.
        6. No objection – Mark ready for Motion
  2. **Review document 11-15/1040r2** Payam Torab (Broadcom LTD.)
     1. <https://mentor.ieee.org/802.11/dcn/15/11-15-1040-02-000m-dmg-unified-header.docx>
     2. CID 7173 and 7175 (GEN) (Duplicate comments)
        1. Review Comments
        2. Review discussion
        3. Discussion on what references were made that may be incorrect…some “21” that should be “20”
        4. Discussion on the difference in “Preamble” vs “preamble structure” terminology.
        5. Request to keep the descriptive “DMG low-power SC Mode” in the replacement sentence in 20.7.2.2.2.
        6. The use of “structure” seems to imply that there may be something different, but we should be clearer. Use similar preamble instead of common preamble
        7. Update to the document to create 11-15/1040r3 was made.
        8. Proposed Resolution: REVISED (GEN: 2016-03-14 06:29:29Z) Incorporate the text changes in 11-15/1040r3 <<https://mentor.ieee.org/802.11/dcn/15/11-15-1040-03-000m-dmg-unified-header.docx>> these changes transmit the LPSC PHY Header using the SC modulation.
        9. No objection – Mark ready for Motion
  3. **Discussion on Payam TORAB’s remaining CIDs**
     1. CID 7171 (MAC)
        1. Assigned CID to Adrian from Payam.
        2. Discussion on the lack of specificity on the rules in 9.3.4.2 area.
        3. There seems to be a lot of work to resolve this problem, and no volunteer to solve the larger problem, but the specific question of the Beacon frame question is addressed in a submission from Adrian
        4. Discussion on the Power Save mode
        5. There are other open comments that we need to address also.
        6. Question on if we should accept the comment – there was objection that we may not know the full scope.
        7. More discussion on the rationale that leads to making this optional.
        8. There is no specific case where it may not be present, so we need to do more research.
        9. Include CID 7171 in discussion with CID 7828 in doc 11-16/273r0.
        10. Assign to Adrian for resolution.
     2. CID 7172 (GEN)
        1. Similar to CID 7136 (GEN)
        2. The Proposed Change in CID 7136 (GEN) is what is proposed as the resolution for CID 7172 (GEN).
        3. Discussion to also include CID 7143 (GEN)
        4. Proposed Resolution for CID 7136 and 7172 and 7143 REVISED (GEN: 2016-03-14 06:54:27Z) at 2448.12; Insert the following in clause 20.5.1: "The use of the DMG OFDM mode is obsolete. Consequently, this option may be removed in a later revision of the standard." This would send a signal for vendors not to implement this PHY, and would pave the way for 802.11ay to then design a proper OFDM PHY that does not exhibit the interop issue that the current OFDM PHY does.
        5. Discussion to also send an email blast to the reflector notifying everyone about this.
        6. ACTION ITEM #1: Jon to send resolution to Dorothy and then she will send out the notification.
        7. Mark Ready for Motion but will pull from motion if there are objections.
  4. **Review doc 11-16/303r1** Graham SMITH (SR Technologies)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0303-01-000m-resolution-of-several-cids-for-d5.docx>
     2. CID 7085 (MAC)
        1. Review comment
        2. Review context
        3. Proposed change from “=” to “>=”.
        4. The boxes in the diagram are not precisely describing the timing, but do give a budget that you need to address in processing packets.
        5. The need to redraw the figures opens an opportunity to cause a problem.
        6. Concern with the implication of the changing the sign.
        7. The new figure loses the rx/tx switch time.
        8. More time will be needed on this CID.
     3. CID 7212 (MAC)
        1. Review comment
        2. Discussion on the proposed changes and the location to apply the changes.
        3. More discussion needed to research the “AP Quiet Mode” vs “Quiet Mode”.
        4. More work is needed on this one.
     4. CID 7179 (MAC)
        1. Review comment
        2. Can you have a non-DMG IBSS STA and a DMG IBSS STA? – yes
        3. Discussion on the flavors that do exist.
        4. Proposed resolution: ACCEPTED (MAC: 2016-03-14 07:23:41Z)
        5. No Objection – Mark Ready for Motion
        6. Question to review the section in question.
     5. CID 7178 (MAC)
        1. Review Comment
        2. Discussion on the basis for the change
        3. Proposed Resolution: Revised; At P 1273.58 Replace

“EIFS shall not be invoked if the NAV is updated by the frame that would have caused an EIFS, such as when the FCS fails and the L-SIG TXOP function employs L-SIG information to update the NAV.”

With

“EIFS shall not be invoked if the NAV is updated by the frame that would have caused an EIFS.”

* + - 1. No objection - Mark Ready for Motion
  1. **Recessed at 3:30pm (15:30)**

1. **REVmc BRC in Macau, China – Tuesday, 15 March 2016 – PM1 - 13:30-15:30**
   1. **Called to order** by Dorothy STANLEY (HPE) at 13:30
   2. **Patent Policy reminder**
      1. No issues identified.
   3. **Review Agenda** for today’s Slot:
      1. See 11-16/231r3: <https://mentor.ieee.org/802.11/dcn/16/11-16-0231-03-000m-tgmc-agenda-march-2016.pptx>
      2. comment Resolution:

* CIDs – Emily
* CIDs – Brian Hart
* CIDs – Adrian
  1. **Review doc:11-16/412r0** Brian HART (Cisco)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0412-00-000m-tgmc-rm-cids-7563-7523-and-7444.doc>
     2. CID 7523 (MAC)
        1. Review Comment
        2. Review discussion
        3. The Proposal is to decline, but there is a part that is editorial that could be made:
           1. Declined; The OC is intended for beacon discovery so indicating the primary channel (band and bandwidth) is the correct language.
        4. Discussion on the bandwidth vs OC differences
           1. See Note 1 on page 3380.
        5. More discussion on where the VHTVHT OC was located, and then it was determined more work was needed on this CID.
     3. CID 7444 (MAC)
        1. Review Comment
        2. Review Discussion and the proposed changes.
        3. Proposed resolution: REVISED (MAC: 2016-03-15 06:08:35Z): Make the changes as shown in 11-16/412r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0412-01-000m-tgmc-rm-cids-7563-7523-and-7444.doc) for CID 7444. These changes upgrade the language to be more precise, and fix the errors of style and fact.
        4. No objection - Mark Ready for Motion
     4. CID 7563 (MAC)
        1. Review comment
        2. Review proposed changes
        3. Proposed Resolution: REVISED (MAC: 2016-03-15 06:02:29Z): Make the changes as shown in 11-16/412r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0412-01-000m-tgmc-rm-cids-7563-7523-and-7444.doc) for CID 7563. These changes add references to the usage of this attribute.
        4. No objection – Mark Ready for motion
  2. **Review doc 11-16/374r0** Emily Qi (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0374-00-000m-sb1-proposed-resolutions-for-some-mac-comments.doc>
     2. CID 7101 (MAC)
        1. Review comment
        2. Review discussion and proposed changes
        3. Discussion on the case of “LCI Measurement Capability”
           1. Change to “LCI measurement capability”
        4. Proposed Resolution: REVISED (MAC: 2016-03-15 06:12:01Z): CID 7101 (MAC) Revised incorporate the text changes in 11-374r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0374-01-000m-sb1-proposed-resolutions-for-some-mac-comments.doc). These changes are similar to the requested changes, but are more consistent with the first bullet.
        5. No Objection – Mark Ready for Motion
     3. CID 7104 (EDITOR)
        1. Review Comment
        2. Review discussion and proposed changes
           1. Change “the STA may assume” to “it indicates”.
           2. Discussion that it may be better to change “assume” to “use”
        3. Proposed Resolution: Revised; at the 1897.37 and 1897.46 change “assume” to “use”.
        4. No objection – Mark Ready for Motion.
     4. CID 7267 (MAC)
        1. Review Comment
        2. Agreed with the comment, but not with the proposed change
        3. This is the general meaning of frame reception, but it doesn’t seem to be specifically stated anywhere. Maybe a global definition would be helpful, but elsewhere, not buried in the DIFS subclause. Suggest moving this text to near/before 10.3.2.2.
        4. Proposed Resolution: REVISED (MAC: 2016-03-15 06:26:21Z): Move the cited sentence to P1269.40.
        5. No objection - Mark Ready For Motion
     5. CID 7310 (MAC)
        1. Review Comment
        2. Review discussion – propose to reject
        3. Concern that the text may be redundant and hence the request to make a change.
        4. Question on the MIB variable in 10.21.4 being the correct attribute.
        5. Between D4 and D5 – 10.21.4 was added.
           1. CID 5871 was used to add
           2. Review CID information
        6. ACTION ITEM #2: Emily to talk with Peter about the details of this addition.
     6. CID 7316 (MAC)
        1. Review Comment
        2. While very similar, it is a revised as the text was not clear what is being cited.
        3. Discussion on what the quoted text to be changed.
        4. Proposed resolution: REVISED (MAC: 2016-03-15 06:44:25Z): Incorporate the text changes for CID 7316 in 11-15/374r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0374-01-000m-sb1-proposed-resolutions-for-some-mac-comments.doc). This change clarified the antenna ID usage.
        5. No objection Mark ready for Motion
     7. CID 7501 (MAC)
        1. Review Comment
        2. Review proposed change
        3. Corrections made to proposed changes included in R1
        4. Discussion on changing MPDUs to “a Data or Management frame” and if that is a good change or not.
        5. We may want to make some of the changes offline.
        6. ACTION ITEM #3: Mark RISON to work with Emily on the proposed change
     8. CID 7590 (MAC)
        1. Review comment
        2. Change proposed change to include the “Value field” as well.
        3. Make changes consistent with text on 1065.
        4. Proposed Resolution: REVISED (MAC: 2016-03-15 06:55:00Z): Make the changes as shown in 11-16/374r1 (<https://mentor.ieee.org/802.11/dcn/16/11-16-0374-01-000m-sb1-proposed-resolutions-for-some-mac-comments.doc> ) for CID 7590. These changes clarify the fields as reserved for the initiating STA, and sometimes reserved for the responding STA.
        5. No objection – Mark Ready for Motion
  3. **Review doc 11-16/273r2** Adrian STEPHENS (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0273-02-000m-sb1-stephens-resolutions-part-3.doc>
     2. CID 7811 (GEN)
        1. Review comment
        2. More work is needed as the text in the document was not correct.
     3. CID 7151 (GEN)
        1. Review Comment
        2. Proposed Resolution: Revised. At cited location replace “access to one or more distribution systems, via the wireless medium (WM)” with “access to a single distribution system”.
        3. More discussion on if this was right or not.
        4. More work is needed.
     4. CID 7447 (GEN)
        1. Review Comment
        2. Review discussion
        3. Proposed resolution: REVISED (GEN: 2016-03-15 07:11:37Z) Revised.

Change definition of “RF chain” to read:

“The physical entity that is able to act as a receive chain or transmit chain, or both.”

* + - 1. No objection – Mark Ready for Motion
    1. CID 7722 (GEN)
       1. Review Comment
       2. Proposed to use the same Resolution for 7447 and 7722.
       3. Discussion on the definition of RF chain that can be either a RX or TX chain.
       4. There is 30 pages of Beamforming text, and it has not been very well scrubbed and so we may need to clean that text up.
          1. Action ITEM #4: Carlos ADANA to review and provide feedback.
       5. Proposed Resolution: REVISED (GEN: 2016-03-15 07:20:14Z) -REVISED -Change definition of “RF chain” to read:

“The physical entity that is able to act as a receive chain or transmit chain, or both.”

Note to editor, this is the same resolution as CID 7447

* + - 1. No objection – Mark Ready for Motion
    1. CID 7727 (GEN)
       1. This CID is to be assigned to Jouni M.
    2. CID 7775 (MAC)
       - 1. Need to wait for CID 7828
    3. CID 7828 (MAC)
       1. Review comment
       2. Review proposed changes
       3. No objection to the planned changes.
       4. Proposed Resolution (CID 7828): REVISED (MAC: 2016-03-15 07:28:52Z): Make the changes as shown in 11-16/0273r3 (https://mentor.ieee.org/802.11/dcn/16/11-16-0273-03-000m-sb1-stephens-resolutions-part-3.doc) for CID 7828. Which explicitly state which elements can be present.
       5. No objection – Mark ready for Motion
    4. CID 7171 (MAC):
       1. Proposed Resolution: REVISED (MAC: 2016-03-15 07:31:35Z): At 649.18 insert in the Notes column: "The DMG Wakeup Schedule element is optionally present (see 11.2.6.3.3)."

Note to the editor, this is a subset of the changes for CID 7828.

* + - 1. No objection – Mark ready for Motion
    1. CID 7775 (MAC)
       1. Proposed Resolution: REVISED (MAC: 2016-03-15 07:28:52Z): Make the changes as shown in 11-16/0273r3 (<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-03-000m-sb1-stephens-resolutions-part-3.doc>) for CID 7828. Which explicitly state which elements can be present.
       2. No objection – Mark ready for Motion
  1. **Recess at 3:35pm (15:35)**

1. **REVmc BRC in Macau, China – Tuesday, 15 March 2016 – PM2 - 16:00-18:00**
   1. **Called to order** by Dorothy STANLEY (HPE) at 16:08
   2. **Patent Policy reminder**
      1. No issues identified.
   3. **Review Agenda** for this slot:
      1. Comment Resolution:

* CID 7749 – 11-16-296 – Solomon TRAININ
* CID 7153 – 11-16-253 – Solomon TRAININ
* CID – 11-16-158 – Solomon TRAININ
* CIDs – Graham Smith
  + 1. No objection to the Agenda plan
  1. **Review doc 11-16/296r0** Solomon TRAININ (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0296-00-000m-cid7749-resolution.docx>
     2. CID 7749 (MAC)
        1. Review Comment
        2. Discussion on the rational for the rejection
        3. Proposed Resolution: REJECTED (MAC: 2016-03-15 08:15:44Z): The standard is clear. See 10.24 and 9.2.4.5.4:

a) 10.24 Block acknowledgment (block ack). The sub clause contains all definition related to behaviour of the block acknowledgement feature. Definitions across the entire sub clause is devoted to QoS data frames, QoS data MPDU’s and MSDU’s. An Action no Ack frame is of different frame type than QoS data frame so there is nothing that needs clarification that Action No Ack frames are not related to the block acknowledgement feature.

b) 9.2.4.5.4 Ack Policy subfield. As clearly stated in the Table 9-9—Ack Policy subfield in QoS Control field of QoS Data frames in relation to No Ack policy: “This value of the Ack Policy subfield is not used for QoS Data frames with a TID for which a block ack agreement exists.”

No change is needed.

* + - 1. No objection – Mark Ready for Motion
  1. **Review doc 11-16/253r0** Solomon TRAININ (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0253-00-000m-cid7153-max-number-of-msdu-in-a-msdu.docx>
     2. CID 7153 (MAC)
        1. Review Comment
        2. Review proposed changes
        3. Discussion on the use of Short MSDU vs MSDU
        4. The Term “Basic MSDUS in AMSDU” is defined.
        5. The field name seems to cause the confusion, but it used in the past.
        6. Change field name to “Maximum Number of MSDUs in Basic AMSDU” and “Maximum Number of MSDUs in Short AMSDU”.
        7. There is a misspelled Maximum as well as on page 2.
        8. Concern with the values used, as the values for coding.
           1. The coding matched on page 842.
        9. Reorder the table to be low to high on the number of MSDUs supported.
        10. Proposed Resolution: REVISED (MAC: 2016-03-15 08:29:10Z): Make the changes indicated in 11-16/0253r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0253-01-000m-cid7153-max-number-of-msdu-in-a-msdu.docx) as "Editor" instructions. These changes extend the DMG Capabilities element to convey the maximum number of MSDUs supported by DMG STAs.
        11. After discussion – Mark Ready for Motion
  2. **Review doc 11-16/158r0** Solomon TRAININ (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0158-00-000m-power-management-state-transition-diagram.docx>
     2. CID 7148(MAC), and CID 7149 (MAC)
        1. Review the new figures 11-9 and 11-10
        2. Proposed Resolution (CID 7148): REVISED (MAC: 2016-03-15 08:47:08Z): Replace Figure 11-9 with the Figure 11-9 in document 11-16/0158r0 (https://mentor.ieee.org/802.11/dcn/16/11-16-0158-00-000m-power-management-state-transition-diagram.docx). This matches the text.
        3. Proposed Resolution (CID 7149): REVISED (MAC: 2016-03-15 08:45:38Z): Replace Figure 11-10 with the Figure 11-10 in document 11-16/0158r0 (https://mentor.ieee.org/802.11/dcn/16/11-16-0158-00-000m-power-management-state-transition-diagram.docx). This matches the text.
        4. No objection – Mark both Ready for Motion
  3. **Review Doc 11-16/406r0** Solomon TRAININ (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0406-00-000m-bss-type-in-ssw-feedback-subfield.docx>
     2. Review submission
     3. Review proposed change
     4. Discussion on Discovery Mode
     5. There is change request to have “Beacon” changed to “DMG Beacon” in three places on page 2.
     6. A motion will be prepared for Thursday to adopt the changes described in 11-16/406r1.
  4. **Review Doc 11-16/273r3** Adrian STEPHENS (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0273-03-000m-sb1-stephens-resolutions-part-3.doc>
     2. CID 7811 (GEN)
        1. Review Comment
        2. Update on the changes from earlier revision of the discussion.
        3. Proposed Resolution: REVISED (GEN: 2016-03-15 09:04:00Z) At 11.31 change “distribution service” to “distribution system service (DSS)”

At 99.29 change “distribution service of the DS” to “DSS”

* + - 1. No objection – Mark ready for Motion
    1. CID 7151 (GEN)
       1. Review Comment
       2. The Rational was updated in R4
       3. Proposed Resolution: REVISED (GEN: 2016-03-15 09:06:14Z) At cited location replace “access to one or more distribution systems, via the wireless medium (WM)” with “access to a single distribution system”.
       4. No objection – Mark Ready for Motion
    2. CID 7672 (Editor)
       1. Assigned to Sigurd
    3. CID 7750 (MAC)
       1. Review Comment
       2. Review discussion
       3. Proposed Resolution: REVISED (MAC: 2016-03-15 09:13:24Z): At 880.10, 880.08, 1761.53 change "capability enabled" to "Capability Enabled".

At 1829.25 change "that have the Beacon request capability enabled" to "that support the Beacon request capability".

* + - 1. No objection – Mark Ready for Motion
    1. CID 7685 (Editor)
       1. Review Comment
       2. Similar to CID 7686
       3. Provide changes to be same changes
       4. Proposed Resolution: Revised. Make changes in 11-16/273r4: <https://mentor.ieee.org/802.11/dcn/16/11-16-0273-04-000m-sb1-stephens-resolutions-part-3.doc> under CID 7685. These changes reword the cited text to indicate that the RXVECTOR MCS is subject to additional constraints when dot11VHTExtendedNSSBWCapable is true.
       5. No objection – Mark ready for Motion
    2. CID 7743 (MAC)
       1. Review Comment
       2. Proposed Resolution: REJECTED (MAC: 2016-03-15 09:19:43Z): The statements as indicated are sufficient for STAs built to the current revision to know what to do with any future revision. In the case of Extensible=Yes, they delete any "surplus". In the case of Extensible=Subelements, they parse it as subelements.

It is not necessary to embed what amounts to guidance to future contributors to the Standard in the standard itself on this topic, as this guidance does not affect the implementation of a compliant implementation to the current standard.

* + - 1. No Objection – Mark Ready for Motion
    1. CID 7777 (MAC)
       1. Review comment
       2. Proposed Resolution: REJECTED (MAC: 2016-03-15 09:22:21Z): The cited text permits elements to be included with no constraints on the content or ordering of the provided elements. Thus is it up to the implementation to determine this content and ordering. This outcome is different from “vacuous”, which would allow nothing useful.
       3. No objection – Mark Ready for Motion
    2. CID 7778 (MAC)
       1. Review Comment
       2. Proposed Resolution: REJECTED (MAC: 2016-03-15 09:23:21Z): The cited location contains: "The provided elements are elements, as described in 9.4.2 (Elements), that the transmitter of this frame provides to the destination of the frame, either in addition to the requested elements, or in an unsolicited Information Response frame."

This clarifies the purpose of this field, distinguishing it from the requested elements.

The cited text permits elements to be included with no constraints on the content or ordering of the provided elements. Thus is it up to the implementation to determine this content and ordering. This outcome is different from "vacuous", which would allow nothing useful.

* + - 1. No objection – Mark Ready for Motion
    1. CID 7774 (MAC)
       1. Review Comment
       2. Discussion on the rejection reason
       3. Discussion on the lack of definition of what can be in the FST Setup Request Frame.
       4. Proposed Resolution: REJECTED (MAC: 2016-03-15 09:26:12Z): The cited text allows elements that are not listed in orders 1-9 to be included. The description references 11.33, which lists the elements that can be present.
       5. No objection – Mark Ready for Motion
    2. CID 7776 (MAC)
       1. Similar comment
       2. Proposed Resolution: REJECTED (MAC: 2016-03-15 09:31:40Z): The cited text allows elements that are not listed in orders 1-9 to be included. The description references 11.33, which lists the elements that can be present.
       3. No objection – Mark ready for Motion
    3. CID 7121 (MAC)
       1. Review Comment
       2. More work is required – similar to CID 7310
       3. Assign to Emily Qi as it is similar to the CID she is working on.
       4. Delete from 11-16/273r4
    4. CID 7755 (MAC)
       1. Review Comment
       2. Proposed Resolution: REVISED (MAC: 2016-03-15 09:37:06Z):Replace cited text with:

“A frame exchange, in the context of multiple frame transmission in an EDCA TXOP, may be one of the following:”

This is the change the commenter intended, with the location given.

* + - 1. No objection – Mark Ready for Motion
    1. CID 7103 (EDITOR)
       1. Review comment
       2. Review proposed change
       3. Proposed change: Revised. At 1883.24 delete the column headed “B0-B1 (BW) in TVHT-SIG-A1”
       4. More work needed – Peter ECCLESINE to check on the details.
    2. CID 7739 (GEN)
       1. This is the same Comment as in the previous ballot.
       2. Assign to Dorothy STANLEY – submission required
    3. CID 7235 (GEN)
       1. Review comment
       2. Discussion on how the “Lock Clock Bits” vs “Locked clock bits” and other variants are seen in the different PHY Clauses.
       3. Proposed Resolution: REVISED (GEN: 2016-03-15 09:49:22Z)

Delete Table 18-4.

Replace the para at 2311.38 with:

“The SERVICE field is defined in 16.2.3.5. An ERP STA shall set the Locked clocks bit to 1, when transmitting at a data rate described in Clause 16 (High rate direct sequence spread spectrum (HR/DSSS) PHY specification).”

Delete the subclause 18.3.2.2.2 and its contents.

Delete the subclause heading 18.3.2.2.1, thus leaving the existing contents under 18.3.2.2.

* + - 1. No objection – Mark Ready for Motion
    1. CID 7411 (EDITOR)
       1. Review comment
       2. Review Comment status – was pulled from a motion.
       3. Similar but not the same as 7412 which will need to be updated
       4. Proposed Resolution: Revised. At 2504, replace “The” with “where the”. At 2504.50 delete “and the Clause 17 (Orthogonal frequency division multiplexing (OFDM) PHY specification) PHYTXSTART.request(TXVECTOR) primitive is issued”
       5. No objection – Mark Ready for Motion
  1. **Review Agenda for rest of week**:
     1. for Wednesday PM2 –
        1. Assaf is planned – Dan and Guido have submission for OWE.
        2. Graham – may not have time, but if there is time, will present
     2. For Thursday PM1
        1. Mark Hamilton – 11-16/290
     3. For Thursday PM2
        1. Add Emily 11-16/374r2 to start of slot
  2. **Recess at 6:02pm (18:02)**

1. **REVmc BRC in Macau, China – Wednesday, 16 March 2016 – PM2 - 16:00-18:00**
   1. **Called to order** by Dorothy STANLEY (HPE) at 16:00
   2. **Patent Policy reminder**
      1. No issues identified.
   3. **Review Agenda** for today’s Slot:
      1. See 11-16/231r4

* 11-16-233, 220 – Assaf
* 11-16-313,11-15-1184 OWE
* CIDs – Dan Harkins
  1. **Review doc 11-16/220r3** Assaf KASHER (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0220-03-000m-clause-20-extended-mcs-set.docx>
     2. CID 7142 (GEN):
     3. Review document goals
        1. Abstract: his document provides the details of the changes needed for adding 7 more rates: one QPSK, two 16-QAM and 4 64-QAM, to the SC PHY subclause.
        2. Interim solution to keep 60Ghz market viable
     4. Review document
     5. Questions on if OFDM was deleted.
        1. Some other CIDs have marked the DMG OFDM has been marked obsolete, but a motion to accept the proposal has not occurred.
        2. The DMG OFDM has not been deleted.
        3. If the other proposal does not pass and this one passes is this a problem?
           1. Not thought to be a problem.
     6. Question on the history of how the submission came to be:
        1. A CID was submitted in the last ballot recirc.
        2. The initial submission was presented in January and then again on the telecom.
     7. Discussion on the scope of changes that are expected in revision projects.
        1. Concern that change is not well understood
        2. Experience in test events seem to believe that this is a good option
        3. Have we notified the stakeholders of the changes
           1. The test plan R1 of 60GHz was closed, but these changes could be included in R2 of the next test plan.
        4. Explore possibilities:
           1. Delay adoption until Stakeholders respond
           2. Delay to TGay
           3. Accept the document now
     8. Discussion on the support of the features described
     9. Dropping OFDM and 64QAM modes give slightly higher rates
        1. The STA that has implemented OFDM will be disadvantaged if this goes through
        2. Concern to treatment of those that implemented the standard as originally published
     10. Discussion on if there is any support being deployed to date.
     11. Noted straw poll that was in 11-14/0129r0
         1. Would like to run similar straw poll now.
     12. Straw Poll:

A) No change to existing text at present, liaison to WFA

B) Resolve CID 7142 as revised with the text changes in 11-16/220

C) Not make the change at this time, send document to TGay

D) No Change to existing text

E) Abstain

* + - 1. Results: A) 1 B) 16 C) 11 D) 1 E)8
    1. Proposed Resolution: REVISED (GEN: 2016-03-16 08:36:26Z) Move to incorporate the changes in 11-16/220r3 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0220-03-000m-clause-20-extended-mcs-set.docx>> into the TGmc draft, which extends the DMG MCS
    2. **MOTION #197** **Extended DMG MCS**
       1. Move to resolve CID 7142 as REVISED (GEN: 2016-03-16 08:36:26Z) Move to incorporate the changes in 11-16/220r3 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0220-03-000m-clause-20-extended-mcs-set.docx>> into the TGmc draft, which extends the DMG MCS
       2. Moved: Assaf KASHER, 2nd: Alecsander EITAN
       3. Discussion:
          1. Explanation on the Single carrier and OFDM rates are not related.
       4. **Results for Motion #197: 15-5-11 Motion Passes 75%**
       5. CID marked Resolved – moved to Editor
  1. **Review Doc 11-16/313r1** Guido R. HIERTZ, Ericsson
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0313-01-000m-the-benefits-of-opportunistic-wireless-encryption.pptx>
     2. CID 7160 (GEN):
     3. Review document abstract:
  + **Security is a delicate topic**
    - Past experiences with insufficient 802.11/Wi-Fi security
      * WEP, WPA1, WPS …
    - Huge market impact because of press reports etc.
  + **Opportunistic Wireless Encryption (OWE) fills a (severe) gap in the IEEE 802.11 standard**
    - 802.11 does not allow for unauthenticated but encrypted operation
  + **OWE is simple to add, requires no hardware changes**
    - Few software changes, can even operate on legacy equipment
  + **OWE is simple to use, no configuration required**
    1. Review submission
    2. Review overview of implementation (Slide 7)
    3. Review proposed benefits (slide 11)
    4. Recommendation: Integrate OWE into IEEE P802.11-REVmc/D5.1 resp. IEEE 802.11-2016 and Apply the changes proposed in 802.11-15/1184r7
    5. Questions –
       1. If you are doing both the OWE and open at the AP how is that advertised?
          1. Capabilities bits tells STAs the benefits available on an AP.
          2. There are a couple bits in the capabilities field to indicate using this
       2. How is the Man-in-the-Middle attack projected in OWE?
          1. This provides a way to encrypt the traffic, and that reduces the Man-in-the-Middle threat.
       3. What kind of Frames are encrypted?
          1. All frames once the RSNA process is completed, it is the same as any PSK protected traffic today – we use the same PTK, GTK etc.
          2. Robust PMF can still be supported
       4. This is an opportunistic feature – no false sense of extensive security.
       5. Security is a major concern and does give a lot of attention in the Press when security is thought to be broken, and so with this new protocol, concern that we could get bad press
          1. This is better than open, and provides an incremental improvement. If you are wanting to do full RSNA then you have to do something different.
          2. OWE gives you the Captive portal & opportunistic encryption combined.
       6. The traffic provides confidentiality because the traffic is encrypted.
       7. There is no guarantee to stop Man-in-the-Middle Attack, but open would be much easier for the attack to occur.
  1. **Review document 11-16/1184r7** Dan Harkins (HPE)
     1. <https://mentor.ieee.org/802.11/dcn/15/11-15-1184-07-000m-owe.docx>
     2. CID 7160 (GEN)
     3. Review submission
        1. Abstract: This submission proposes an opportunistic encryption scheme for 802.11.
     4. Review changes required to include into the draft.
     5. Have presented this basically before this revision address concerns voiced before and updates to the new numbering of REVmc.
     6. The methods described here have been used since 1977 or so.
     7. Question on when the acronym is first used needs to be defined prior to use.
     8. Question on possibly adding test vectors?
     9. Is there any ambiguity in the use of Diffie-Hellman Parameter?
        1. No, see page 6 where it was defined specifically
     10. Discussion on changing the name of the Element that was known as Element Element.
     11. Question on how the encoding a Diffie-Helman key?
         1. See 12.4.7.2.4 Element to octet string conversion
         2. It has a couple ways that can be used, and they are different, but defined in the 12.4.7.2.4.
     12. Question on if OWE is PHY agnostic?
         1. Yes, and so this needs to have the non-AP becomes “non-AP and non-PCP” and “AP” becomes “AP or PCP”
         2. Need to make changes to be completely ready for inclusion.
     13. Discussion on the process to consider adoption.
     14. Can have a motion with editorial considerations pending.
     15. Question on how this applies to DMG, it is the same as any other Open
  2. **Motion #198 OWE**
     1. Move to resolve CID 7160 as “revised” with a resolution of “incorporate the changes in 11-16/1184r7 <<https://mentor.ieee.org/802.11/dcn/15/11-15-1184-07-000m-owe.docx>> into the TGmc draft.
     2. Moved: Dan HARKINS 2nd: Guido HIERTZ
     3. Discussion:
        1. Speaking against the motion - concern that there is not enough review in the wider community. Concern that this method of security may be interpreted as not being secure enough.
        2. Speaking for the motion – this solves a set of threats that comes with a low overhead and gives an incremental improvement. This is not expected to be a guarantee, but in IETF, it was discussed and thought that as it is a simple solution, the quicker we get this consider the better it would be.
        3. Speaking in favor of the motion – This is an example were we can provide a solution to a problem that has been identified and the detractors are looking to stall, and this is counter to providing cooperation with the Wi-Fi alliance in solving this type of security/privacy issues.
        4. Speaking in favor of the motion – we have other features that have been included in REVmc, and this should not have to have a different path to consider than those other features.
        5. Speaking against the motion – Concerned with the addition of PCP into the proposal, and concern that this addition may cause an unknown result with this addition.
        6. Speaking in favor motion – Doing something late in the game is a concern, but there are very few variables to get wrong, so it seems reasonable risk to benefit ratio. We have done nothing to fix PSK security, and have been getting bad press for many years and we have not tried to address the dictionary attack that can crack the PSK.
           1. We have not been getting complaints of IPSEC being insecure for using the opportunistic encryption, so this is no different, we should see this as a benefit.
        7. Speaking to abstain on the motion: initially I was going to vote yes, but the concern of the Man-in-the-Middle Attack is known to be an issue, and so this could still be a bad press issue that concerns if we give the appearance of having provided security.
        8. Speaking in favor in the motion: this is an incremental improvement over nothing. The User will not be getting any feedback that this is even happening, they will just be hacked less.
     4. **Results Motion #198: 16-7-7 Motion fails**
  3. **Review doc 11-16/447r1** Dan Harkins (HPE)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx>
     2. CID 7249 (GEN)
        1. Review Comment
        2. Proposed changes reviewed and option to include more changes was determined to wait
        3. Proposed Resolution: REVISED (GEN: 2016-03-16 09:42:49Z) Incorporate the text changes in 11-16/447r2 https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx> clarifies the cited paragraph
        4. No objection – Mark Ready for Motion
     3. CID 7318, 7319, 7335 (GEN):
        1. Review comments
        2. Review proposed changes
        3. Proposed Resolution 7318 and 7319: Accept
        4. Proposed Resolution 7335: Revised; Incorporate the text changes in 11-16/447r2 <https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx>> for CID 7335; these changes change the text in the direction of the commenter’s request.
        5. No objection – Mark ready for Motion
     4. CID 7339 and 7341 (GEN):
        1. Review comments
        2. Proposed Resolution: Accept
        3. No objection – Mark ready for Motion
     5. CID 7571 (GEN)
        1. Review comment
        2. Review the proposed changes
        3. Proposed Resolution: Revised; incorporate the text changes in 11-16/447r2 < <https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx> > for CID 7571.
        4. No objection – Mark ready for Motion
     6. CID 7710 (GEN)
        1. Review comment
        2. Proposed Resolution: Revised: Incorporate the text changes in 11-16/447r2 <https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx>> for CID 7710
        3. No objection – Mark Ready for Motion
     7. CID 7728 (GEN)
        1. Review comment
        2. Proposed Resolution: Revised: Add “or FT Protocol authentication” at the end of the cited text.
        3. No objection – Mark ready for Motion
     8. CID 7729 (GEN)
        1. Review Comment
        2. Proposed Resolution: Revised: Incorporate the text changes in 11-16/447r2 <https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx>> for CID 7729.
        3. No objection – Mark ready for Motion
     9. CID 7730 (GEN)
        1. Review comment
        2. Discussion on if there is a Status Code Field
        3. Proposed resolution: Reject; the Mesh Peering Open frame does not include a Status Code field.
        4. No objection – Mark ready for Motion
     10. CID 7740 (GEN)
         1. Review comment
         2. Proposed resolution: Revised: Incorporate the text changes in 11-16/447r2 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx>> for CID 7740.
         3. No objection – Mark Ready for Motion
  4. Recess at 6:04pm (18:04)

1. **REVmc BRC in Macau, China – Thursday, 17 March 2016 – PM1 - 13:30-15:30**
   1. **Called to order** by Dorothy STANLEY (HPE) at 13:31
   2. **Patent Policy reminder**
      1. No issues identified.
   3. **Review Agenda** for today’s Slot:
      1. See doc: 11-16/231r5

* CIDs – Sigurd
* CIDs – Peter E
* CIDs – Matthew Fischer
  1. **Review doc 11-16/410r0** Sigurd SCHELSTRAETE (Quantenna)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0410-00-000m-cids-7672-and-7687.docx>
     2. CID 7672 (MAC)
        1. Review Comment
        2. Proposed Resolution: REJECTED (MAC: 2016-03-17 05:35:48Z): Reference to 9.4.2.158.3 is correct and appropriate.
        3. After discussion there was concern that this may be part of another unnamed CID, but for now we will go with the proposed resolution, and if a change is needed deal with any issue when processing the other CID.
        4. Mark Ready for Motion
     3. CID 7687 (MAC)
        1. Review Comment
        2. Proposed resolution: REVISED (MAC: 2016-03-17 05:43:34Z): Incorporate the text changes for CID 7687 in doc: 11-16/410r0 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0410-00-000m-cids-7672-and-7687.docx>> which makes the requested change.
        3. No objection – Mark ready for Motion
  2. **Review doc 11-16/445r0** Sigurd SCHELSTRAETE (Quantenna)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0445-00-000m-cids-7577-7405-7584-and-7805.docx>
     2. CID 7577 (MAC)
        1. Review comment
        2. Discussion the terms Beemformee vs Beemformer terms
        3. Proposed resolution: ACCEPTED (MAC: 2016-03-17 05:48:23Z)
        4. No objection - Mark Ready for Motion
     3. CID 7405 (GEN)
        1. Review Comment
        2. Proposed resolution: ACCEPTED (GEN: 2016-03-17 05:52:48Z)
        3. Similar to CID 7402, but that CID has more changes needed.
        4. No objection - Mark Ready for Motion
     4. CID 7584 (GEN)
        1. Review Comment
        2. Proposed to accept, but may need more detail to incorporate.
        3. Discussion on if this is going to cause implementations to become non-compliant.
        4. More work will be required.
     5. CID 7805 (MAC)
        1. Review comment
        2. Proposed Resolution: Accept
        3. This comment was submitted from the chair of TGah and presumably on their behalf. Concern on the ramifications on the change.
        4. This change will affect more than just TGah.
        5. Reassign CID to Mark RISON
  3. **Review Doc 11-16/0292r1** Peter ECCLESINE (Cisco)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0292-01-000m-sb1-ecclesine-resolutions.docx>
     2. CID 7102 (MAC)
        1. Review Comment
        2. Proposed Resolution: ACCEPTED (MAC: 2016-03-17 06:06:22Z)
        3. No objection – Mark Ready for Motion
     3. CID 7121 (MAC)
        1. Review Comment
        2. Discussion on fixing the table reference and the sense of the verb “indicate” vs “indicates”
        3. Proposed resolution: REVISED (MAC: 2016-03-17 06:07:22Z): Make changes as shown in 11-16/0292r2 (https://mentor.ieee.org/802.11/dcn/16/11-16-0292-02-000m-sb1-ecclesine-resolutions.docx) for CID 7121. These changes clarify when the peer STA supports global operating classes.
        4. No objection –Mark Ready for Motion
     4. CID 7123 (MAC)
        1. Review comment
        2. Proposed Resolution: REVISED (MAC: 2016-03-17 06:15:33Z): Make the changes under CID 7123 in 11-16/0292r2 (https://mentor.ieee.org/802.11/dcn/16/11-16-0292-02-000m-sb1-ecclesine-resolutions.docx) for CID 7123. These changes make the requested change in two places.
        3. No objection – Mark ready for Motion
     5. CID 7170 (MAC)
        1. Review comment
        2. Discussion on the Robust bit and the proper setting
        3. Need to clarify if the STA is MBSS or non-MBSS.
        4. The intent was to make changes to public action frames and not touch the beacon frames.
        5. The Channel Switch had 2 modes and this adds an additional mode, and so to avoid a compatibility with legacy devices, this is only used in the new public action frames that the legacy devices will not understand it.
           1. The reason for an action frame rather than an element ID is the use of resources.
        6. If this was an element, this may be better.
        7. Peter to rewrite as an Extended Element
     6. CID 7220 (MAC)
        1. Review comment
        2. This was discussed in Ft. Lauderdale, and was ready for motion later today on tab “Motion MAC-BO”
        3. Discussion on the proposed change
        4. Discussion on what to do when ignoring the Channel Switch Mode Field. – do you need to explain the behavior or can you expect that the STA will continue as it was operating.
           1. Concern that there is a potential conflict with other places that say a STA shall do something when the Channel Switch Mode Field is set.
        5. This CID will be pulled from the Motion Tab
           1. Pulled from Motion MAC-BO. Request for more time to confirm the changes do not conflict with other existing text.
        6. ACTION ITEM #5: Adrian has requested to review this CID.
     7. CID 7676 (MAC)
        1. Review comment
        2. Proposed resolution: ACCEPTED (MAC: 2016-03-17 06:44:18Z)
        3. No objection Mark Ready for Motion
  4. **Review doc 11-16/374r3** Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0374-03-000m-sb1-proposed-resolutions-for-some-mac-comments.doc>
     2. CID 7310 (MAC)
        1. Review comment
        2. Revisit, to review action item from Tuesday.
        3. After research, proposal now is to reject
        4. Discussion on the case where it is still seemingly duplicative where a “Global” vs “Local” being defined.
           1. 10.21.3 could be one or more regulatory domains, including local domain only.
           2. 10.21.4 cannot be local only regulatory domain, only more than one regulatory domain, which implies global is one of them.
           3. We can reject the comment for the reason that the statement in 10.21.4 is unique to itself, not already being stated in 10.21.3.
        5. More discussion is needed – do so over the break.
     3. CID 7316 (MAC)
        1. Review comment
        2. Proposed Resolution: REVISED (MAC: 2016-03-15 06:44:25Z): Incorporate the text changes for CID 7316 in 11-15/374r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0374-01-000m-sb1-proposed-resolutions-for-some-mac-comments.doc). This change clarifies the antenna ID usage.
        3. No objection Mark Ready for Motion
     4. CID 7501 (MAC)
        1. Review comment
        2. Proposed Resolution: REVISED (MAC: 2016-03-17 06:58:12Z): Incorporate the text changes for CID 7316 in 11-15/374r4 (https://mentor.ieee.org/802.11/dcn/16/11-16-0374-04-000m-sb1-proposed-resolutions-for-some-mac-comments.doc). Which resolves the comment in the direction suggested by the commenter.
        3. No objection Mark Ready for Motion
  5. **Review doc 471r0** Matthew FISCHER (Broadcom)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0471-00-000m-esp-ie-format.docx>
     2. This is about the ESP IE Format
     3. Abstract: This document proposes a modification to the ESP IE to conform to the extended element ID format for an element.
     4. Review the change needed to make this element an extended element.
     5. No objection to incorporate the change
     6. Dorothy will include a motion in the motion set in PM2 today.
  6. **Review doc 11-16/426r1** Matthew FISCHER (Broadcom)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0426-01-000m-lb1001-nss-bs-and-est-tput-cids.docx>
     2. CID 7093 (MAC)
        1. Review comment
        2. The text to be deleted in D5.2
        3. Proposed resolution: Revised – delete the entire paragraph beginning at P1053L51 and note that changes introduced by resolution to CID 7674 clarify the text already present within the cited table.
        4. Work on revising the resolution to include the specific information rather than referring to cited text or to an alternate CID.
        5. Updated Proposed Resolution: REVISED (MAC: 2016-03-17 07:05:51Z): Delete the entire paragraph beginning at P1053L51.

Note to commenter: P1051L6 contains the information that was duplicated by the cited text.

* + - 1. No objection – Mark Ready for Motion
    1. CID 7114 (MAC)
       1. Review Comment
       2. Discussion on the use of “dbm” vs “dB”.
       3. Proposed resolution: REVISED (MAC: 2016-03-17 07:14:20Z): Add "in units of dBm" to the end of the RSSI definition and add "in units of dBm" to the end of the P\_adjust definition.
       4. No objection – Mark Ready for Motion
    2. CID 7113 (GEN)
       1. Review Comment
       2. Review Equations proposed
       3. Proposed Resolution: REVISED (GEN: 2016-03-17 07:20:18Z) Incorporate the text changes for CID 7113 in doc 11-16/426r2 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0426-02-000m-lb1001-nss-bs-and-est-tput-cids.docx> > which updates the equations and formats.
       4. No objection – Mark ready for motion (GEN-Macau-B)
       5. Related CIDs: 7190 (MAC), 7192 (MAC), 7195 (MAC), 7193 (GEN), 7197 (GEN), 7198 (GEN), and 7199 (MAC).
       6. Discussion that we may need to look at the database to prepare the resolutions to match the document.
          1. CID 7190 (MAC) and CID 1799 (MAC)

Proposed Resolution: ACCEPTED (MAC: 2016-03-17 07:35:56Z)

* + - * 1. CID 7192 (MAC), CID 7195 (MAC), CID 7193 (GEN), CID 7197 (GEN), CID 7198 (GEN)

Proposed Resolution: REVISED (GEN: 2016-03-17 07:20:18Z) Incorporate the text changes for CID 7113 in doc 11-16/426r2 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0426-02-000m-lb1001-nss-bs-and-est-tput-cids.docx> > which updates the equations and formats.

* + - 1. Mark all the CIDs ready for motion based on the resolutions.
         1. GEN Comments moved to Comment group “GEN-Macau-B”
      2. Ran out of time –
  1. **Recess at 3:31pm**

1. **REVmc BRC in Macau, China – Thursday, 17 March 2016 – PM2 - 16:00-18:00**
   1. **Called to order** by Dorothy STANLEY (HPE) at 16:01
   2. **Patent Policy reminder**
      1. No issues identified.
   3. **Review Agenda** for today’s Slot:
      1. See doc:11-16/231r7
         1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0231-07-000m-tgmc-agenda-march-2016.pptx>
      2. Proposed to do the motions first to avoid rushing at the end.
      3. No objection
   4. **MOTIONS**
      1. **Motion – BSS type in SSW feedback subfield**
         1. Deferred motion and did not make the motion at this time.
      2. **Motion #199:– ESP extended element ID change**
         1. Review proposed change
         2. Move to incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/16/11-16-0471-00-000m-esp-ie-format.docx> into the TGmc draft.
         3. Moved: Stephen PALM 2nd: Mark HAMILTON
         4. Discussion: none
         5. Results Motion #199: 13-0-11 Motion Passes
      3. **Motion #200**: **– Mon-Weds & FLL CIDs**
         1. Review the proposed CIDs for the motion
         2. Request if anyone wanted to pull the CID for DMG OFDM obsolete to be removed from the motion.
            1. No one requested it to be removed.
         3. CID 7153 (MAC) has the wrong version number cited in what is posted to be resolved.
         4. Request 4 CIDs: CID 7749 (MAC) 7774 (MAC) 7776 (MAC) 7590(MAC) to be pulled.
         5. Request 8 CIDs from GEN: CID 7318, 7474, 7249, 7335, 7571, 7710, 7729, 7740
         6. CID 7474 was marked incorrectly with the resolution that was meant to be 7470, see item 8.72 in the February meeting minutes. This has been corrected in r1 of the February minutes.
         7. Move to approve the comment resolutions in the

“Motion MAC-BP” and “Motion MAC-BO” tabs in <https://mentor.ieee.org/802.11/dcn/15/11-15-0565-38-000m-revmc-sb-mac-comments.xls> except for CIDs 7220, 7153, 7749, 7774, 7776, and 7590

“GEN Macau-A” tab in <https://mentor.ieee.org/802.11/dcn/15/11-15-0665-26-000m-revmc-sb-gen-adhoc-comments.xlsx> except CID 7318, 7474, 7249, 7335, 7571, 7710, 7729, 7740 and

“Editorials – Ready for motion” tab in <https://mentor.ieee.org/802.11/dcn/15/11-15-0532-37-000m-revmc-sponsor-ballot-comments.xls>

And incorporate the text changes into the TGmc draft

And resolve CID 7318 as “Accepted”

And resolve CID 7470 as “Revised” with a resolution of “Incorporate changes as shown in 11-16/0280r1 (https://mentor.ieee.org/802.11/dcn/16/11-16-0280-01-000m-cids-4776-and-4777.docx)...Which affect the changes requested by the commenter.”

* + - 1. Moved: Adrian STEPHENS; 2nd Emily QI
      2. Results motion #200: 19-0-3 – Motion Passes
    1. **Motion #201: – Decoupling MU Beamformee**
       1. Move to Resolve CIDs 7166, 7167, 7168 (MAC), and 7169 (MAC): as “revised” with a resolution of “Rejected” and a reason of:

“The comment does not indicate an error in the change introduced by the resolution to CID 5879. The change made by CID 5879 is in scope of a revision project.

Regarding specific changes made related to decoupling MU Beamformee Sounding capability from MU PPDU reception capability, the exact determination of the beamforming matrix by the AP has always been outside the scope of the standard. The AP controls the number of streams that a STA will feed back. As such, it can continue to operate as it did before the text changes and no extra processing or complexity results from the changes made with the resolution of CID 5879. The change is fully backwards compatible with current devices.”

* + - 1. Moved: Sigurd SCHELSTRAETE; 2nd: Huizhao WANG
      2. Discussion:
         1. Speaking against this motion: Concern on the processing complexity has been added with the addition of CID 5879. Concern on the late introduction of this feature into the draft, and do not see why this was not added to another amendment.
         2. No other comments
      3. **Results Motion #201: 10-6-6 - Motion Fails**
      4. Request to review the decision of the chair
         1. This Motion does not change the draft, but the TG would need to resolve the CIDs to make a change to the draft with 75%. The chair is looking for agreement on the resolutions to all the comments.
         2. Question on the proposed change in this proposed resolution.
         3. How to proceed – this motion failed on trying to accept the resolution on these comments. Therefore we need to find a resolution that is acceptable to the group for resolving the comment resolution.

These 4 comments are not the only comments

* + - * 1. If the CIDs cited were to pass, a 75% threshold would be required, hence the reason that the chair used 75% for this motion.
    1. **Motion #202: – MAX #MSDU in DMG A-MSDU (CID 7153)**
       1. Review CID 7153
       2. See document 11-16/253r2
          1. Review change to figure 9-xyy where we added three extra entries.
       3. Move to resolve CID 7153 as “revised” with a resolution of “REVISED (MAC: 2016-03-17 08:43:07Z): Make the changes indicated in 11-16/0253r2 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0253-02-000m-cid7153-max-number-of-msdu-in-a-msdu.docx> > as "Editor" instructions. These changes extend the DMG Capabilities element to convey the maximum number of MSDUs supported by DMG STAs.”
       4. Moved: Solomon TRAININ 2nd: Assaf KASHER
       5. Discussion: None
       6. **Results Motion #202 : 16-0-7 – Motion Passes**
  1. **March – May 2016 Meeting Planning**
     1. Objectives: Initial Recirculation Sponsor Ballot comment resolution and Second recirculation
     2. **Conference calls** 10am Eastern 3 hours
        1. Friday April 1, 15, Thursday April 21, May 6, 13
     3. **Ballot Resolution Committee meeting –** 
        1. Week April 22 (Cambridge, UK) – Monday -Thursday April 25-28
     4. **Schedule review**
* **D5.0 Jan 2016 Initial SB recirculation**
* **D6.0 April/May 2016 Second Recirculation**
* **D6.0/D7.0 May/June Third Recirculation**
* **July 2016 – WG/EC Final Approval**
* **September 2016 – RevCom/SASB Approval**
  + 1. **Availability of 11mc in the IEEE store**
       1. D5.0 is available (add D5.0 after SB approval), see <http://www.techstreet.com/ieee/products/1867583>
    2. **Forward to ISO JTC1/SC6 WG1**
       1. D5.0 forwarded; D6.0 will be forwarded upon SB approval
  1. **TGmc SB Planning**
     1. **Initial Sponsor Ballot 2015-03-27 through 2015-04-26 on D4.0**
     2. **January/February 2016**
        1. Initial SB recirculation D5.0 2016 -01-11 through 2016-01-26
        2. Teleconferences, Feb 22-25 2016 BRC Ft. Lauderdale meeting
     3. **March/April/May 2016**
        1. Comment resolution
        2. 2rd recirculation May 2016 D6.0
     4. **June/July 2016**
        1. 3th recirculation D6.0 unchanged or D7.0
     5. **July 2016 – WG/EC Final Approval**
     6. **September 2016 – RevCom/SASB Approval** 
        1. **RevCom Submission date: 05 Aug 2016 for Sept 16 RevCom teleconference**
  2. **Review doc: 11-16/429r0** Carlos Aldana (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0429-00-000m-revmc-sponsor-ballot-location-cids.doc>
     2. CID 7099 (MAC)
        1. Review comment
        2. Proposed Resolution: CID 7099 (MAC): REVISED (MAC: 2016-03-17 08:52:47Z) - Incorporate the changes in 11-16/429r0 (https://mentor.ieee.org/802.11/dcn/16/11-16-0429-00-000m-revmc-sponsor-ballot-location-cids.doc). These changes accomplish the commenter's request.
        3. No objection – Mark Ready for Motion
     3. CID 7276 (MAC)
        1. Review comment
        2. Proposal to resolve: Rejected. The RTT term is defined unambiguously in the standard. It is not clear that changing it as proposed would lessen confusion.
        3. Discussion on if the term RTT vs TOF as the right term to use.
        4. Straw Poll:

A) Reject the Comment

B) Accept/revise in the direction suggested by the commenter

C) Abstain

* + - * 1. Results: 10-3-6
      1. Propose proceeding with the rejection
      2. Proposed Resolution: REJECTED (MAC: 2016-03-17 08:55:14Z): The RTT term is defined unambiguously in the standard. It is not clear that changing it as proposed would lessen confusion.
      3. No objection – Mark Ready for Motion
    1. CID 7425 (MAC)
       1. Review Comment
       2. Need to ensure the markings are consistent ” ‘ “
       3. Discussion on the editing of the Note
          1. How to derive t1’ and t4’ discussed.
          2. The variables without the prime does not help the reader with how these are derived.
          3. The definition of the TOD and TOA fields are defined elsewhere and well defined
       4. Discussion on changing the Note to be just normative text.
       5. Change “initialing” to “initiating” at P1805.38
       6. Discussion on which prime character to use.
       7. Proposed Resolution: REVISED (MAC: 2016-03-17 08:59:50Z):

At 1772.36 change

"NOTE--The mechanism by which t1' and t4' are derived from the TOD and TOA fields, and the mechanism by which t2 and t3 are determined, are implementation dependent."

to

"At the initiating STA, the mechanism by which t1' and t4' are derived from the TOD and TOA fields is implementation dependent."

At 1805.38, change "initialing STA" to "initiating STA"

NOTE TO EDITOR: Please make sure that primes are the same throughout this subclause. I.e., change at lines 1772.31, 1772.33, and 1772.36.

* + - 1. No objection – Mark Ready for Motion
    1. CID 7442 (MAC)
       1. Review Comment
       2. Proposed Resolution: REVISED (MAC: 2016-03-17 09:17:37Z): The spec is clear that the Follow Up Dialog Token, TOD, TOA, TOD Error, and TOA Error fields are kept the same when an FTM frame is retransmitted.

Change:

"In order to send the frame again, the responding STA shall send a Fine Timing Measurement frame with the same Action frame body as the Fine Timing Measurement frame for which the Ack was not received, except for an updated Dialog Token."

to

"In order to send the frame again, the responding STA shall send a Fine Timing Measurement frame with the same Action frame body as the Fine Timing Measurement frame for which the Ack was not received, except for an updated Dialog Token. If the Dialog Token is set to 0, it is not updated when the Fine Timing Measurement frame is retransmitted."

* + - 1. No objection – Mark Ready for Motion
  1. **Review doc 11-16/276r3** Mark RISON (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0276-03-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>
     2. CIDs 7398, 7399 and 7400 (MAC):
        1. Review CIDs
        2. Review discussion
        3. LLC Header compression discussion - see figure 9-549
        4. Review proposed changes
        5. Discussion on the changes
        6. Change a “shall” to a “must” in 10.11 MSDU processing
        7. Change “No-LLC” field to “LLC Removed” field
        8. Suggestion to make minimal changes in general.
        9. More work will be needed and then bring back a revision
     3. CID 7478 (MAC)
        1. Review comment
        2. Review discussion
        3. This was a CID that needed more research
        4. After presentation, more discussion on the PS-Poll.
        5. Concern with the possible implementation
        6. More work will be needed and then bring back a revision of the proposal.
  2. Adjourned at 5:58pm

**References:**

Monday PM1:

<http://www.ieee802.org/11/email/stds-802-11/msg01475.html>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-01-000m-tgmc-agenda-march-2016.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-02-000m-tgmc-agenda-march-2016.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-03-000m-tgmc-agenda-march-2016.pptx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0095-29-000m-editor-reports.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0305-00-000m-dmg-low-power-sc-a-ppdu-and-other-mac-fixes.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1040-02-000m-dmg-unified-header.docx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1040-03-000m-dmg-unified-header.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0303-01-000m-resolution-of-several-cids-for-d5.docx>

Tuesday PM1:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-03-000m-tgmc-agenda-march-2016.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0412-00-000m-tgmc-rm-cids-7563-7523-and-7444.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0374-00-000m-sb1-proposed-resolutions-for-some-mac-comments.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0374-01-000m-sb1-proposed-resolutions-for-some-mac-comments.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-02-000m-sb1-stephens-resolutions-part-3.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-03-000m-sb1-stephens-resolutions-part-3.doc>

Tuesday PM2:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0296-00-000m-cid7749-resolution.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0253-00-000m-cid7153-max-number-of-msdu-in-a-msdu.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0158-00-000m-power-management-state-transition-diagram.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0406-00-000m-bss-type-in-ssw-feedback-subfield.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-03-000m-sb1-stephens-resolutions-part-3.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-04-000m-sb1-stephens-resolutions-part-3.doc>

Wednesday PM2:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-04-000m-tgmc-agenda-march-2016.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0220-03-000m-clause-20-extended-mcs-set.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0313-01-000m-the-benefits-of-opportunistic-wireless-encryption.pptx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-1184-07-000m-owe.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0447-02-000m-some-additional-comments.docx>

Thursday PM1:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-05-000m-tgmc-agenda-march-2016.pptx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0410-00-000m-cids-7672-and-7687.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0445-00-000m-cids-7577-7405-7584-and-7805.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0292-01-000m-sb1-ecclesine-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0374-03-000m-sb1-proposed-resolutions-for-some-mac-comments.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0471-00-000m-esp-ie-format.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0426-01-000m-lb1001-nss-bs-and-est-tput-cids.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0426-02-000m-lb1001-nss-bs-and-est-tput-cids.docx>

Thursday PM2:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0231-07-000m-tgmc-agenda-march-2016.pptx>

[mentor.ieee.org/802.11/dcn/16/11-16-0471-00-000m-esp-ie-format.docx](https://mentor.ieee.org/802.11/dcn/16/11-16-0471-00-000m-esp-ie-format.docx)

<https://mentor.ieee.org/802.11/dcn/15/11-15-0565-38-000m-revmc-sb-mac-comments.xls>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0665-26-000m-revmc-sb-gen-adhoc-comments.xlsx>

<https://mentor.ieee.org/802.11/dcn/15/11-15-0532-37-000m-revmc-sponsor-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0253-02-000m-cid7153-max-number-of-msdu-in-a-msdu.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0429-00-000m-revmc-sponsor-ballot-location-cids.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-03-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>