IEEE P802.11  
Wireless LANs

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| Minutes REVmd - July and Aug Telecons | | | | |
| Date: 2017-08-28 | | | | |
| 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 |
| Mark Hamilton | Ruckus/Brocade | 350 West Java Dr  Sunnyvale, CA 94089 | +1-303-818-8472 | mark.hamilton@brocade.com |

Abstract

This file contains the minutes for the 5 telecons scheduled to be held in July and Aug 2017.

R0: July 28th Telecon

R1: Aug 4th Telecon

R2: Aug 11th Telecon

R3: Aug 18th Telecon

R4: Aug 25th Telecon

Color Code

CIDs Ready for Motion

CIDs needing more work

CIDs previously marked ready and have been updated.

1. **802.11 TGmd Telecon** – July 28, 2017 10:00-12:00 ET
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 10:03am ET.
   2. **Present** during some portion of the call:
      1. Dorothy STANLEY (chair) - HPE
      2. Graham SMITH – ST Technologies
      3. Osama ABOUL-MAGD - Huawei
      4. Adrian STEPHENS – Intel Corporation
      5. Emily QI – Intel Corporation
      6. Sue LIEICHT – NSA
      7. Mark RISON – Samsung
      8. Jon ROSDAHL - Qualcomm
      9. Mike MONTEMURRO – (Blackberry)
      10. Roger Marks (Huawei)
      11. Manish KUMAR (Marvel)
      12. Marc Emmelmann (Self)
      13. Sean Coffey (Realtek)
      14. Edward AU (Huawei)
      15. Gabor BAJKO (Mediatek)
      16. Mark Hamilton (Brocade)
   3. **Review Patent Policy** and Participation Policy
      1. Patent policy slideset was reviewed
      2. Call for patents issued. Nobody came forward
      3. Participation Slide was reviewed.
   4. **Approve Agenda**:

The draft agenda for the July 28th teleconference was sent by email:

1.       Call to order, attendance, and patent policy

a.       Call for potentially essential patents: **If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**

 i.      Either speak up now or  
 ii.      Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or  
 iii.      Cause an LOA to be submitted

b.      <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

2.       Editor report – Emily QI

a.       Editor report document: <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-03-000m-802-11revmd-editor-s-report.ppt>b.      Comments received in the recent comment collection are here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-01-000m-revmd-wg-cc-comments.xls>

3.       Comment resolution. Available documents include

a.       Marc EMMELMAN (not presented in Berlin, ran out of time)

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1102-01-000m-resolution-for-cid-33-fils-hlp.docx>

ii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1100-01-000m-fils-comment-resolutions.docx>

iii.       <https://mentor.ieee.org/802.11/dcn/17/11-17-1103-00-000m-comment-resolution-for-cids-52-and-53-on-suggested-rewording-of-fils-text.docx>

b.      Ganesh VENKATESAN (not presented in Berlin, ran out of time)

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc>

c.       Jon ROSDAHL - GEN CIDS (not presented in Berlin)

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0928-01-000m-revmd-cc25-gen-comments.xlsx>

 d.      Gabor BAJKO - r0 was discussed in Berlin, more work needed

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1030-01-000m-sae-retry-timeout-clarification.docx>

e.       Mike MONTEMURRO - began discussion in Berlin

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1089-01-000m-revmd-cc25-comment-resolutions.doc>

f.        Graham SMITH - began discussion in Berlin

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1137-00-000m-resolutions-for-obsolete-blockack.docx>

                                                             ii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0987-01-000m-resolutions-for-dcf-and-edca-comments-d0-1.docx> - CIDs 294, 189, 282 remain

                                                           iii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0988-00-000m-resolutions-for-qos-and-tspec-comments-d0-1.docx> - CIDs 74, 218, 17 remain

g.       James YEE/Gabor BAJKO - discussed in Berlin, needed revision

                                                               i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0971-01-000m-enhancement-to-beacon-report.docx>

h.      Stephen MCCANN - discussed in Berlin, needed revision

                                                               i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0940-01-000m-3gpp-ts-reference-per-liaison-11-17-0854-00.doc>

i.         Edward AU - remaining Editor2 comments

                                                               i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-02-000m-revmd-editor2-comments.xlsx>

j.         Emily QI - remaining Editor comments

                                                               i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0956-04-000m-revmd-wg-cc25-for-editor-ad-hoc.xls>

k.       Peter ECCLESINE - discussed on prior telecom

                                                               i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0950-01-000m-cid-337-super-operating-classes.pptx>

4.       AOB, next call on Friday August 4th

5.       Adjourn

==================================================

* + 1. Mark Rison asked for some time on the 18th of Aug.
       - Some of the resolutions assigned to Mark may need more input from the TG for the direction.
       - Emily will have some time to present some of the CIDs in question on the 4th or the 18th.
    2. No objection to the Agenda as planned.
  1. **Editor report** – Emily QI

a.       Editor report document: <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-03-000m-802-11revmd-editor-s-report.ppt>b.      Comments received in the recent comment collection are here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-01-000m-revmd-wg-cc-comments.xls>

* + 1. The editors have incorporated all the approved resolutions, and hope to have a new draft 0.2
    2. Draft 0.3 would have the 11ah roll-up will be posted by end of August ready for discussion in the Sept Meeting.
  1. **Comment resolution.**
  2. **Review Submissions** from Marc EMMELMAN
     1. i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1102-01-000m-resolution-for-cid-33-fils-hlp.docx>
     2. ii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1100-01-000m-fils-comment-resolutions.docx>
     3. iii.       <https://mentor.ieee.org/802.11/dcn/17/11-17-1103-00-000m-comment-resolution-for-cids-52-and-53-on-suggested-rewording-of-fils-text.docx>
     4. These were not presented in Berlin, ran out of time
     5. CID 52 (MAC):
        + Review Comment
        + Proposed Resolution: REJECTED (MAC: 2017-07-28 14:18:06Z): the proposed resolution does not provide changes to the draft that can be immediately adapted to satisfy the comment.
        + No objection - Mark Ready for Motion – add to Comment Group Motion MAC-C
     6. CID 53 (MAC):
        + Review Comment
        + The Comment suggests a new table, but no one was willing to create it.
        + Proposed Resolution: REJECTED (MAC: 2017-07-28 14:20:59Z): the proposed resolution does not provide changes to the draft that can be immediately adapted to satisfy the comment.
        + No objection - Mark Ready for Motion – add to Comment Group Motion MAC-C
     7. CID 33 (MAC)
        + Review Comment
        + Review the proposed change
          1. Suggest to not include “in all of the following…” text added.
        + Just deleting the “/or” is sufficient.
        + Proposed Resolution: REVISED (MAC: 2017-07-28 14:22:16Z): At 2050L20 remove "/or".
        + No objection - Mark Ready for Motion – add to Comment Group Motion MAC-C
     8. CID 47 (MAC)
        + Review Comment
        + Question on “enters” vs “sets”
        + Several of these language issues like this,
        + MAC: 2017-07-28 14:31:39Z: Generally, agree, but would like more canonical wording than "AP enters"
        + Action ITEM: Marc will work with Adrian offline to adjust the wording.
     9. CID 34 (MAC)
        + Review Comment
        + Review proposed resolution
        + 11b only STA would not be able to support FILS with the current wording.
          1. Not sure if that was the intent.
          2. Need more investigation
        + Discussion about the Basic rate
        + Suggestion to delete “but shall not be transmitted in a DSSS or HR/DSSS PPDU” from the suggested resolution.
          1. We need to be conservative in our changes, and the deletion should be considered in a separate comment.
        + Proposed Resolution: REVISED (MAC: 2017-07-28 14:34:50Z): Replace cited with "A FILS AP supporting FILS discovery may generate and transmit FILS Discovery frames. The FILS Discovery frame shall be transmitted at a mandatory PHY rate, and should be transmitted at a basic rate, but shall not be transmitted in a DSSS or HR/DSSS PPDU."
        + No objection - Mark Ready for Motion – add to Comment Group Motion MAC-C
     10. CID 35 (MAC)
         + Review comment
         + Discussion
           1. The cited sentence is not creating a real requirement
           2. FILS are to be sent between Beacon Frames.
           3. The intent is to send one in each Beacon interval.
           4. How many or should there only be one between Beacon frames.
           5. The sentence could just be deleted.
           6. The rest of the paragraph addresses the interval issue.
           7. The concept is that the FILS AP will send these more frequently than Beacon frames should be captured in the introduction sentence.
           8. Question on rationale for changing the “may” to “should”?

It is to address the interval that is later discussed.

* + - * After discussion – a proposed sentence with “should” was proposed.
      * Proposed Resolution: REVISED (MAC: 2017-07-28 14:51:02Z): Replace cited with "A FILS AP should transmit FILS Discovery frame(s) in every beacon interval."
      * No objection - Mark Ready for Motion – add to Comment Group Motion MAC-C
    1. CID 36 (MAC)
       - Review Comment
       - Discussion:
         1. Review the interval issue
         2. There is one typo on the 2nd FDF frame – should be 60ms
       - MAC: 2017-07-28 15:01:35Z: Reviewed discussion in 11-17-1100-01.

Ran out of time. Needs more consideration.

* + - * Out of time for Marc – will continue Marc’s CIDs on 25th August.
  1. **Review Submission 11-17/1030r1** - Gabor BAJKO
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1030-01-000m-sae-retry-timeout-clarification.docx>
     2. r0 was discussed in Berlin, more work needed
     3. SAE reauthentication timer Value
     4. Abstract: 802.11-2016 spec defines the use of SAE authentication and key establishment protocol.

The SAE protocol suggests that if a response to a COMMIT message is not received during dot11RSNASAERetransPeriod (timer t0), then the originating peer may retransmit the COMMIT message. The value of the dot11RSNASAERetransPeriod variable is currently set to 40ms, which is a rather small value.

Here it is proposed to change the value of that variable to a more realistic value.

* + 1. Discussion
       - What is the correct value?
       - Is the final 40 correct? – yes it is the id value that happens to be the same.
       - 2 seconds seems too long – we may want to have more testing/discussion
       - The Document will need to be reposted with the correct footer.
       - Review minutes from Berlin – more info was expected from that presentation of R0.
       - Does the SME set the value, or is this something that can change?
         1. MLME-START.request primitive would be the effectiveness of the changed value.
       - We need to have some more check on other default timeout values.
       - For example, check RetransmitEAPpoll key frame value.
    2. There is no CID for this issue.
    3. Action Item: Mike MONTEMURRO to check similar timeout periods in 802.1X.
  1. **Review submission 11-17/0971r1** - Gabor BAJKO –
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0971-01-000m-enhancement-to-beacon-report.docx>
     2. discussed in Berlin, needed revision
     3. Review the entry of the Berlin minutes for discussion
     4. Discussion
        + Is ANA needed to be consulted for ID? No
        + Question on some of the grammar
          1. Missing “Report” from Last Beacon Indication… should be Last Beacon Report Indication.
          2. Should put “1” not “one”, and “zero” to “0”
          3. Instance of Request and Report that need checking
        + Issue with when a report is to be generated. When the Sub-Element is included is not clear.
     5. Some proposed changes were made online and sent to Gabor for posting a new revision of the submission.
     6. Question on the changes proposed and how it would make existing implementations non-complaint.
        + How to allow for non-complaint implementations that do not include the report was discussed.
        + The recognition of the “optional” elements is determined to be ignored, then is the “shall” statement for the response causing a problem?
        + Something similar in the standard (1837.51) “If the Reporting Detail is 1 and the optional Request subelement is included in the Beacon request, the corresponding Beacon report shall include the list of elements listed in the Request subelement.” And may have the same issue.
     7. The same fix should be applied to both the example and this one if it really is a problem. Not changing for now.
     8. Action Item: Dorothy to send realtime changes to Gabor and he will post a new revision. Then a motion to adopt the changes can be considered in September Interim.
  2. **Revisit the timeout question** – 11-17/1031r1
     1. In checking some timeout values – 60 seconds for IEEE8021XAuthPaeQuietPeriod.
     2. Anytime between 2 and 60 seconds may be ok.
     3. This is how this value was chosen.
     4. Remember that 802.1X timeouts are longer to allow for going to AAA server, and the SAE is to avoid going to the AAA servers.
     5. Most Implemnations set timeouts from 2 and 10 seconds for requester and suplicants.
     6. Let’s consider 11-17/1031r1 complete for now other than the footer, and will have a revision for consideration in September.
  3. **Review submission 11-17/1089r1** - Mike MONTEMURRO –
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1089-01-000m-revmd-cc25-comment-resolutions.doc>
     2. began discussion in Berlin on R1
     3. CID 226 (PHY)
        + Review Comment
        + Review revised proposal
        + Comments from Chat window from Mark Rison: “

CID 226: the text under "Revised. Replace" is not from D0.1 (some weird semicolon-related corruption?)

CID 226: "Validate that the contents" should be "Confirm that the contents"

CID 226: "Confirm that BSSID" is missing "the"

CID 226: the second half of the proposed change loses the "discard the message" aspect

CID 226: the original "if any of the following checks fail: The contents of the RSNE are not the same as that sent by the TDLS responder STA in message 2 " is ambiguous: is the failure if the contents are not the same, or if the contents are not not the same? Are we sure we have the right polarity in the new text?

* + - * There was some issue with the original text that is listed. An Editorial change needs to be done.
      * The second test did not explicitly say “discard the message”
      * Action Item: Mike to clean up and bring back for discussion.
    1. CID 234 (PHY)
       - Review Comment
       - Comments from Mark Rison from Chat Window:

CID 234: the locations are 1759.16, 1759.35, 1759.36 and maybe also 1753.41, 1756.1, 1756.2, 1760.2

CID 234: I think the proposed changes are slightly broken as they would result in: A STA that is in PS mode and following a wakeup schedule and has in the awake state and receives... A STA is in the doze state and receives...

CID 234: at 1759.16, I'm not sure a STA can be both in PS mode and in the awake state

CID 234: Similarly, in the NOTE, I don't think a STA in doze state can receive an ATIM frame

* + - * Action Item: Mike to review and update a proposed resolution in r3 of the document
      * Will continue the discussion on Agenda for the 25th and the updated document presentation. Doc 11-17/1089r3
  1. **Next call is Aug 4th**
     1. Proposed presenters: Emily, Jon Rosdahl and Ganesh
  2. **Adjourned at 12:03pm ET**

1. **802.11 TGmd Telecon** – Aug 4, 2017 10:00-12:00 ET
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 10:02am ET.
   2. **Present** during some portion of the call:
      1. Dorothy STANLEY, Chair (HPE)
      2. Graham SMITH (ST Technologies)
      3. Osama ABOUL-MAGD (Huawei)
      4. Adrian STEPHENS (Intel Corporation)
      5. Emily QI (Intel Corporation)
      6. Mark RISON (Samsung)
      7. Jon ROSDAHL (Qualcomm)
      8. Manish KUMAR (Marvel)
      9. Amelia ANDERSDOTTER (Article 19)
      10. Chris HANSEN (Preso)
      11. Mark HAMILTON (Brocade)
      12. Stephen MCCAAN (BlackBerry)
      13. Sungeun LEE (Cypress)
      14. Yunsong YANG (Huawei)
   3. **Review Patent Policy** and Participation Policy
      1. Patent policy slide set was reviewed
      2. Call for patents issued. Nobody came forward
      3. Participation Slide was reviewed.
   4. **Review and Approve Agenda**:

1.       Call to order, attendance, and patent policy

a.       Call for potentially essential patents:

**If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**

i.      Either speak up now or

ii.      Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or

 iii.      Cause an LOA to be submitted

b.      <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

2.       Editor report – Emily QI

a.      Comments received in the recent comment collection are here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-01-000m-revmd-wg-cc-comments.xls>

3.       Comment resolution.

**2017-08-04**

a.  Emily QI - remaining Editor comments – 1 hour

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0956-04-000m-revmd-wg-cc25-for-editor-ad-hoc.xls>

ii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1191-00-000m-cc25-proposed-resolutions-for-editorial-comments.doc>

b.      Jon ROSDAHL – GEN CIDS (not presented in Berlin) – 30 minutes

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0928-01-000m-revmd-cc25-gen-comments.xlsx>

c.       Ganesh VENKATESAN (not presented in Berlin, ran out of time) – 20 minutes

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc>

4.       AOB, next call on Friday August 11th

5.       Adjourn

* + 1. Agenda reviewed and approved without objection
  1. **Editor Report:** 
     1. Work to incorporate the approved changes ongoing.
     2. Work to roll in 11ah is started – expect to have ready by end of Aug goal ready for Sept Session.
  2. Comment Resolution:
  3. **Review submission on Editor Comments**: Emily QI - remaining Editor comments – 1 hour
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0956-04-000m-revmd-wg-cc25-for-editor-ad-hoc.xls>
     2. CID 249 (Editor)
        + Review Comment
        + Propose to reject comment
        + Discussion:
          1. The qualifier is not needed, so we should not have the word “valid”.
          2. We have sections that talk about non-valid frames, but that is specific.
          3. We receive only valid frames.
        + Proposed Resolution: Accepted
        + No objection - Mark ready for motion
     3. CID 123 (Editor)
        + Review Comment
        + Proposed Resolution: Revised. In Clause 9, if the size of an integer is given in the figure and the cited text is in the same subclause of the figure, delete the "x-bit" or "xxx bit" before "unsigned integer". Otherwise, no change.
        + Discussion:
          1. Clause 10 no change is necessary
          2. Clause 6 the change should be made to “Integer”
          3. The specific change in the example would be ok, but each clause 6 need to be checked on a case by case basis
          4. It seems that the clause 6 instances match the same example.
          5. Why did we have the “32-bit unsigned integer”?
          6. Unsure why it came to be, but as this is an abstract interface so there is no value in the having the explicit “32-bi unsigned” label
        + Updated Proposed Resolution: Revised. In Clause 6, delete the “x-bit” or “xxx bit unsigned” before “integer”, and change “integer to “Integer”; In Clause 9, if the size of an integer is given in the figure and the cited text is in the same subclause of the figure, delete the "x-bit" or "xxx bit" before "unsigned integer". Otherwise, no change.
        + No objection - Mark ready for motion
     4. CID 164 (Editor)
        + Review comment
        + Proposed resolution: reject
        + Discussion
          1. There is concern with the abbreviation – and is used in industry for a different meaning. We don’t generally abbreviate frame names
          2. BRP seems to be a category of action frames or a type of frames, see 9.6.22.3
          3. Review instances of BRP acronym.
          4. If we change BRP frame to Beam Refinement Protocol frame we will want to change other instances of BRP as well.
          5. 41 instances of Beam forming report, and over 400 instances of BRP, so 11ad was in first, we should leave as is.
        + Proposed Resolution: Reject. Reject reason: In *clause 3.4 Abbreviations and acronyms*, BRP is defined as “beam refinement protocol”. It should be clear that BRP frame is for “beam refinement protocol” frame. There is no need to rename it.
        + No objection – Mark ready for Motion
     5. CID 169 (Editor)
        + Review comment
        + Proposed Resolution: Reject; There are differences between the Measurement Request/Report frame and Radio Measurement Request/Report frame. The Measurement Request/Response frames are Spectrum management Action frames, see 9.6.2. The Radio Measurement Request/Report frames are Radio Measurement action frames, see 9.6.7.
        + No objection – mark ready for motion
     6. CID 203 and 204 (Editor)
        + Review Comments
        + Discussion
          1. Discussion on when the qualifier is needed on “STA”
          2. Flavors of BSS seemed to be an issue.
          3. Retain BSS qualifier and drop the qualifier on “STA”
        + Proposed Resolution CID 203: Accept
        + Concern that we are changing over 600 DMG STA to STA
        + Would it be better to just add a definition for VHT STA?
        + The comment only asks to drop the definition not all instances of the DMG STA to STA.
        + Discussion of proposed rejection.
        + More editing is needed.
        + Proposed resolution CID 204: (Reject): In the usage of <adjective> AP and <adjective> BSS, the situation is not always clear, without a definition. In the case of DMG BSS, confusion can also arise from whether a PBSS is a type of DMG BSS or not.
        + No objection – Mark Ready for Motion
     7. CID 208 (Editor)
        + Review Comment
        + Proposed Resolution: Revised. At 348.40, 349.40: change “elements” to “parameters”. At 352.35: change “protection elements” to “ProtectDescriptors”. At 352.38: change “Protectlist” to “ProtectDescriptor”.
        + Review the proposed changes to Protectlist
          1. This is to be similar to the SetKey structure
        + No objection – Mark Ready for Motion
     8. CID 146 (Editor)
        + Mark Rison assigned comment and wanted direction
        + He has a word document that was presented as a possible future document.
        + The Chair Asked that the document be posted for reference as a record of the document.
          1. Mark agreed to post after presentation
        + Discussion on the meaning of the Ack Policy Field settings
        + Proposal to use proper Capitalization policy – when talking about the field, it should be capitalized and when not is should not.
        + Recognition of the work that has gone into identifying the issue.
        + Unsure how many instances of this fall into the unsure cases
        + This seems to be the right direction, but concerned with the proposed capitalization proposal.
        + There is concern for the “bit rot” that has the name of the field changing over time, may be would can find a more generic name for the cases.
        + Concern with the variety of Acks that there are.
        + Mark RISON felt that he had some guidance and would start with showing the first 20 or so and review rather than the full 200.
     9. CID 201 (Editor)
        + Mark Rison assigned Comment
        + Concerned with inconsistency, hence this comment
        + We can reject 201, and then reverse CID 7770 in REVmc
        + So this is to change the “Expected to” instances
        + There are some cases that this is not a problem.
        + So with that a new proposal can be prepared.
        + Another example in 10.24.7.6.1 that was a good one to change.
        + Another example in 8.3.5.13.3 – this looks like a possible requirement or at least a should.
        + In general, there should be a case by case review of the 60 instances.
     10. CID 328 (Editor)
         + Mark RISON assigned Comment
         + No objection to follow on the direction.
  4. **Review GEN CIDS - 11-17/928r1** – Jon ROSDAHL
     1. (not presented in Berlin) – 30 minutes
     2. <https://mentor.ieee.org/802.11/dcn/17/11-17-0928-01-000m-revmd-cc25-gen-comments.xlsx>
     3. CID 121 (GEN):
        + - Think we did this on a prior telecon.
        + - Review again, now, to be sure.
        + - OK in concept. Need to fix the typos.
        + Proposed Resolution: REVISED (GEN: 2017-08-04 15:32:01Z) REVISED: Delete the sentence "Integration is one of the services in the DSS." Also, change then next paragraph to start, "MSDUs received from an integrated LAN invoke the integration function within a portal before the MAC service tuple ..." In the last paragraph, change "DS" to "portal"
        + No objection – Mark Ready for motion – Comment Group = GEN-Aug
     4. CID 297 (GEN):
        + Review comment
        + Proposed Resolution: REVISED: Change cited text to "The STA capabilities to be advertised" at P286.28 and 326.50. Change P286.32 to start "The STA's HT capabilities to be advertised ..."
        + Need to include 4 locations for changes,
        + Updated Resolution: REVISED (GEN: 2017-08-04 15:36:18Z) Change cited text to "The STA capabilities to be advertised" at P286.28 and 326.50. Change P286.32 and P327.38 to start "The STA's HT capabilities to be advertised."
        + No objection – Mark Ready for motion – Comment Group = GEN-Aug
     5. CID 22 (GEN):
        + Discussion
          1. - "faster", in the other locations seems okay. But, do we need to say "faster" than what?
          2. - By that argument, the one at P245.60 should also stay as "faster"
          3. - If we say "faster" at P245.60, we need to say faster than what, or when we invent an even faster one, we'll confuse the reader.
          4. - If we say "fast", we are implying a precision of what is "fast".
          5. - This is analogous to "HT" and then "VHT". If we say "fast", we'll have to say "very fast" next time.
        + Proposed Resolution: REJECTED (GEN: 2017-08-04 15:51:42Z) The term "faster" refers to the operation rather than the name of the feature.
        + No objection – Mark Ready for motion – Comment Group = GEN-Aug
     6. CID 20 (GEN):
        + Similar to CID 22
        + Proposed Resolution: REJECTED (GEN: 2017-08-04 15:54:50Z)The current text is accurate. In response to the commenter, "faster" than operation with additional frame exchanges... The current text is accurate.
        + No objection – Mark Ready for motion – Comment Group = GEN-Aug
  5. **Review attendance and closing announcements**-
     1. Notice that the Draft agenda for Sept has been posted 11-17/1199r0.
     2. Next call we will discuss possible Adhoc Session in Oct 2017.
     3. Call next week Aug 11th
        + Presenters– Graham, Edward, maybe Ganesh, Emily for fill in (and on 18th)
  6. **Adjourned 12:01pm ET**

1. **802.11 TGmd Telecon** – Aug 11, 2017 10:00-12:00 ET
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 10:02am ET.
   2. **Present** during some portion of the call:
      1. Dorothy STANLEY, Chair (HPE)
      2. Graham SMITH (ST Technologies)
      3. Osama ABOUL-MAGD (Huawei)
      4. Adrian STEPHENS (Intel Corporation)
      5. Emily QI (Intel Corporation)
      6. Mark RISON (Samsung)
      7. Jon ROSDAHL (Qualcomm)
      8. Manish KUMAR (Marvel)
      9. Amelia ANDERSDOTTER (Article 19)
      10. Mark HAMILTON (Brocade)
      11. Yunsong YANG (Huawei)
      12. Guido Hiertz (Ericsson)
      13. Sue LEICHT (NSA)
      14. Peter ECCLESINE (Cisco)
      15. Edward AU (Huawei)
      16. Sean Coffey (Realtek)
      17. Ganesh VENKATESAN (Intel)
   3. **Review Patent Policy** and Participation Policy
      1. Patent policy slide set was reviewed
      2. Call for patents issued. Nobody came forward
      3. Participation Slide was reviewed.
   4. **Review and Approve Agenda**:

1.       Call to order, attendance, and patent policy

a.       Call for potentially essential patents: **If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**

i.      Either speak up now or

ii.      Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or

iii.      Cause an LOA to be submitted

b.      <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

2.       Editor report – Emily QI

a.       Comments received in the recent comment collection are here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-02-000m-revmd-wg-cc-comments.xls>

3.       Comment resolution 2017**-08-11**

a.       Graham SMITH - began discussion in Berlin – 1 hour

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1137-01-000m-resolutions-for-obsolete-blockack.docx>

ii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0987-02-000m-resolutions-for-dcf-and-edca-comments-d0-1.docx> - CIDs 294, 189, 282 remain

iii.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0988-00-000m-resolutions-for-qos-and-tspec-comments-d0-1.docx> - CIDs 74, 218, 17 remain

b.      Edward AU - remaining Editor2 comments – 30 mins

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-02-000m-revmd-editor2-comments.xlsx>

c.       Ganesh VENKATESAN (not presented in Berlin, ran out of time) – 20 minutes

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc>

d.      Emily QI - remaining Editor comments – if time available, start with CID 210, page 6

i.      <https://mentor.ieee.org/802.11/dcn/17/11-17-1191-01-000m-cc25-proposed-resolutions-for-editorial-comments.doc>

4.       AOB, next call on Friday August 18th

5.       Adjourn

* + 1. Concern with the swap of order of agenda from what was discussed last week.
    2. Request for moving Emily QI earlier in the agenda – move to after Graham.
    3. Approve the adjusted Agenda with Graham, Emily Edward then Ganesh
    4. No objection to updated Agenda
  1. **Editor Report**
     1. Not much to update this week
     2. Master Spreadsheet is R2 posted last week
     3. Working on roll-in of 11ah this week targeting d0.03
     4. Comment resolution 2017**-08-11**
  2. **Review submission 11-17-1137r1 Graham** SMITH – 1 Hour
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1137-01-000m-resolutions-for-obsolete-blockack.docx>
     2. CIDs 57, 58, 61 (all MAC)
        + Review PSMP on page 2
        + Request for volunteers to help review details.
        + Suggestion to wording suggested
        + The original author of this section was Naveen KAKANI, who is now at Qualcomm, but was at Nokia at the time.
        + Concern with the dropping of “Basic” as that would make it a more global BlockAckReq
          1. It seems to read correct, but agree to have more review on the dropping of “Basic”
        + More review will need to be done on CID 57 and 58.
        + CID 61 is more straight deletions and would like some review of the deletions.
  3. **Review submission 11-17-0987r2** 
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0987-01-000m-resolutions-for-dcf-and-edca-comments-d0-1.docx> -
     2. CIDs 294, 189, 282 remain
     3. Review CID 294, 189 (MAC)
        + R1 has been reviewed and an R2 was created and posted today, but has not been reviewed.
        + Reviewed option 1 vs option 2
        + Need to ensure we use Count and Counter consistently
     4. CID 282 (MAC)
        + Review Comment
        + Review discussion and proposed changes
        + From note: (On July 13, during Berlin F2F: BRC discussed 11-17/987. General agreement this should apply to Data and Management frames (or, more correctly, MPDUs with type Data or Management). Need more consideration offline to work out details.)
        + The SRC/LRC is on a MPDU basis and the SSRC/SLRC is across all MPDU in the STA. So Concern with the legacy behaviour being lost if we make a change.
        + Question on the Limits for the SSRC/SLRC usage
        + Only effect on these is if you are transmitting a different order.
          1. The effect on system performance to reset the CW window maybe the result of this feature.
          2. This has been there since 11e is the believe
        + Discussion on if the use is to keep the contention window to a CWmin.
          1. When a new MPDU is selected, the CWmin is not reset, so you do not have a congestion issue automatically.
        + After this discussion, the commenter was asked to consider if there was enough information – need to check notes.
        + More review will need to be done – some errors may have been identified where a per MSDU vs per Station was noted, and so specific changes will need to be identified and they will need to be compelling for the group to be comfortable with a change.
  4. **Review Submission 11-17-988r1**
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0988-01-000m-resolutions-for-qos-and-tspec-comments-d0-1.docx> -
     2. CIDs 74, 218, 17 remain
     3. CID 74 (MAC)
        + Review comment
        + Review proposed changes
        + Proposed Resolution: Revised; Replace cited text with “The STA Count field specifies the number of associated QoS STAs that have transmitted QoS traffic of the corresponding AC.”
        + Discussion
          1. QoS traffic capability element has a count field and need to know what number to put in.
          2. Discussion of the use of the QoS Traffic Capability
          3. Need to reread the clause and check to see if there is enough info or not.
        + CID 74 (MAC): MAC: 2017-08-11 14:59:31Z: Might be referring to the QoS Traffic Capability IE (optionally sent by an WNM non-AP STA). Needs further investigation.
     4. CID 218 and CID 17 (MAC)
        + Review comments
        + Short discussion was had, but audio to the secretary was lost for a couple minutes.
        + Decision was to review and come back.
        + CIDs 218, 17 (MAC): MAC: 2017-08-11 15:05:34Z: Reviewed 11-17/988r1. No immediate objections, but need to consider more, especially whether CID 218 is sufficiently covered.
  5. Review submission 11-17/1191r1.      Emily QI
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1191-01-000m-cc25-proposed-resolutions-for-editorial-comments.doc>
     2. - remaining Editor comments – if time available, start with CID 210, page 6
     3. CID 210 (Editor)
        + Review comment
        + Review discussion from submission
        + Request for Feedback
        + 6 places for the changes – 3 changes were displayed, so the question is if this direction should be applied to the other 3 locations.
        + Is the “of length less” than applying to the PSDU or the A-MPDU part?
        + This is somewhat applicable to the SRC/SSRC issue. This applies to the PSDU. And the precedence is to the PSDU or Frame and it may apply to both.
        + The proposal is to delete the “A-MPDU” from the cited sentences.
        + There seemed to be agreement on the direction, but the specific instances would need to be noted in the proposed resolution.
        + There were only 3 places noted, but there were possibly more locations that may need the same changes.
        + Request for Emily to note all the instances she can find and include in the resolution.
        + Mark RISON noted other examples: "the QSDRC[AC] shall be reset when an A-MPDU or frame in a PSDU of length less than or equal to dot11RTSThreshold succeeds" and "QSDRC[AC] shall be incremented every time transmission of an A-MPDU or frame in which the HT variant HT Control field is present"
     4. CID 243 (Editor)
        + Review Comment
        + Proposed resolution: Reject. The proposed resolution does not provide changes to the draft that can be immediately adapted to satisfy the comment.
        + Discussion on if the “is shown in” needs to be changed.
        + Do we have a definitive list or set of rules on if a figure is normative or informative?
          1. From the IEEE-SA point of view, any figure in a Normative clause is considered Normative unless otherwise noted.
        + The context tells if the figure is Normative or informative.
        + The “is illustrated in” phrase seems to need a review to determine if they will be changed.
        + The Commenter is asked to give a list and the proposed changes for the “is illustrated in” cases and bring back for consideration.
        + Assign comment to Mark RISON
     5. CID 248 (Editor)
        + Review comment
        + Proposed Resolution: Reject. Reject Reason: There is no style guidance for function words (of, in etc…) in the field name. The proposed resolution does not provide changes to the draft that can be immediately adapted to satisfy the comment.
        + Discussion on if Consistency is really a beneficial change to be concerned with. Some say yes, some say no.
        + **Straw Poll:**
          1. A – Reject the comment
          2. B – Ask the commenter to develop a specific list of possible changes
          3. C - abstain
          4. Results of Straw Poll: A –7; B –1; C – 3
        + Mark Ready for motion with rejection as noted.
        + This does not preclude someone from determining specific changes of field names in the future.
  6. Review Editor2 Comments - Edward AU (Edward AU - remaining Editor2 comments – 30 mins
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-02-000m-revmd-editor2-comments.xlsx>
     2. CID 331 (EDITOR2)
        + Review comment
        + This was covered in another CID (CID 88) and so would mark this similarly
        + Note in the notes that this change was made for CID 88 already.
        + Question on if the changes were approved – it was noted that they were.
        + Proposed Resolution: CID 331 (Accepted) Editor's note: CID 331 is implemented by CID 88.
        + No objection - Mark this ready for motion
     3. CID 48 (EDITOR2)
        + Review comment
        + Question on the use of “can” vs “for example”.
          1. “can” is more an enablement
          2. “can” means “is able to”
          3. A weaker form of “can” would be “might”
        + From the Join.Me Chat Window, it was noted that the IEEE-SA Style Manual notes “The word can is used for statements of possibility and capability, whether material, physical, or causal (can equals is able to).”
          1. True. We refined our understanding when we had 600 comments on "can" from David HUNTER in REVmc.
        + Discussion on the sentence and if the changes to the sentence addresses the concern.
        + Proposed Resolution: REVISED (EDITOR2: 2017-08-11 15:47:47Z) - Change the cited sentence to "For example, the above procedure can be used for IP address configuration.".
        + No objection – Mark Ready for Motion
     4. CID 263 (EDITOR2)
        + Review comment
        + See 11.2.3.6 – p1727.10
        + We need to quote the page and line number in the resolution.
        + Proposed change – CID 263: REVISED (EDITOR2: 2017-07-29 10:33:14Z) Replace "a single buffered BU" with "a buffered BU" at 1727.10.
        + No objection – Mark Ready for Motion
     5. Edward will be available on the 25th to review more CIDs from EDITOR2 comments.
  7. Return to Emily’s Editor CIDs
     1. CID 263 (EDITOR)
        + Review comment
        + Proposed Resolution: CID 254 (EDITOR): REVISED. Incorporate the changes for CID 254 in 11-17/1191r1. This makes the changes as requested by the comment.
        + No objection – Mark ready for motion
  8. Reminder on next week’s agenda – 10-12 am ET
     1. Ganesh to join next week to present
     2. Peter E to present next week.
  9. **Adjourned 12:01pm**

1. **802.11 TGmd Telecon** – Aug 18, 2017 10:00-12:00 ET
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 10:03am ET.
   2. **Present** during some portion of the call:
      1. Dorothy STANLEY, Chair (HPE)
      2. Graham SMITH (ST Technologies)
      3. Osama ABOUL-MAGD (Huawei)
      4. Adrian STEPHENS (Intel Corporation)
      5. Emily QI (Intel Corporation)
      6. Mark RISON (Samsung)
      7. Jon ROSDAHL (Qualcomm)
      8. Amelia ANDERSDOTTER (Article 19)
      9. Mark HAMILTON (Brocade)
      10. Peter ECCLESINE (Cisco)
      11. Sean Coffey (Realtek)
      12. Ganesh VENKATESAN (Intel)
      13. Michael Montemurro (Blackberry)
   3. **Review Patent Policy** and Participation Policy
      1. Patent policy slide set was reviewed
      2. Call for patents issued. Nobody came forward
      3. Participation Slide was reviewed.
   4. **Review and Approve Agenda**:

1.       Call to order, attendance, and patent policy

a.       Call for potentially essential patents: **If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**

i.      Either speak up now or

ii.      Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or

iii.      Cause an LOA to be submitted

b.      <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

2.       Editor report – Emily QI

a.       Comments received in the recent comment collection are here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-02-000m-revmd-wg-cc-comments.xls>

3. Comment resolution. 2017-08-18

a. Peter ECCLESINE - discussed on prior telecom – 20 mins

i. [https://mentor.ieee.org/802.11/dcn/17/11-17-0950-01-000m-cid-337-super-operating-classes.pptx](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-0950-01-000m-cid-337-super-operating-classes.pptx&sa=D&usd=2&usg=AFQjCNHhWete5JizMnVvf2-13I8eNljCsg)

b. Ganesh VENKATESAN (not presented in Berlin, ran out of time) – 20 minutes

i. [https://mentor.ieee.org/802.11/dcn/17/11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc&sa=D&usd=2&usg=AFQjCNHuxge5sxIqjMDTfEu0fbr1D5sJNw)

c. Mark RISON CIDs – 40 mins also CIDS 146 (under discussion) and 172, 229, 261, 269 (resolution approved)

d. Emily QI - remaining Editor comments – 30

i. [https://mentor.ieee.org/802.11/dcn/17/11-17-1191-01-000m-cc25-proposed-resolutions-for-editorial-comments.doc](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-1191-01-000m-cc25-proposed-resolutions-for-editorial-comments.doc&sa=D&usd=2&usg=AFQjCNF4j0VPf-xDfsXh6meA_4ViRDwCPA)

4.       AOB, next call on Friday August 18th

5.       Adjourn

* + 1. Reviewed agenda plan for today
    2. No objection to the plan
  1. **Editor Report** 
     1. **R2 is still the current document**
     2. **11ah roll-in is progressing – 75% done - hope to be done by end of Month**
  2. **Comment Resolutions:**
  3. **Review Submission 11-17/095r1** Peter ECCLESINE – 20 Mins
     1. [https://mentor.ieee.org/802.11/dcn/17/11-17-0950-01-000m-cid-337-super-operating-classes.pptx](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-0950-01-000m-cid-337-super-operating-classes.pptx&sa=D&usd=2&usg=AFQjCNHhWete5JizMnVvf2-13I8eNljCsg)
     2. Review submission
     3. CID 337 (MAC):
     4. Look to create channels to have one class for width
     5. Discussion
        + Supported channel elements need review
        + The operating class gives the channels and the example on Slide 4 was explained for supported channels.
        + The history of how the channels and the classes were created has caused a potential problem that we need to adjust the way we indicate it.
     6. Feedback is needed and a final proposal and some draft text would be available for September, but not looking to adopt until November.
  4. **Review submission 11-17/1078r0** Ganesh VENKATESAN - 20 minutes
     1. [https://mentor.ieee.org/802.11/dcn/17/11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc&sa=D&usd=2&usg=AFQjCNHuxge5sxIqjMDTfEu0fbr1D5sJNw)
     2. CID 148 (MAC)
        + Review Comment
        + Discussion on the naming
          1. “session” does not seem correct
          2. Maybe confusing, but these two frames establish the session.
        + Concern that you would have a frame that is both a session and an FTM starting frame.
        + The comment in 148 was for only one frame
        + Discussion on the context of why the frames are considered special.
        + There should be an Initial and then a First as noted in CID 148
        + Is there a way to avoid highlighting first or initial? Ganesh will think about it and come back.
          1. Suggestion that you describe the sequence
          2. “the sequence is described as …”
          3. Then you don’t have initial or first
        + Thanks for the feedback – will bring updated version in September
     3. CID 339 (MAC)
        + Review comment
        + The equation does need to be corrected, but we may want to describe it more precisely.
        + The discussion indicates that the equation is wrong, but correct, and as explained, it was more how the term in the equation was derived is the issue, not the equation itself.
        + Discussion –
          1. Disagree that there is really an issue, but if we need to get a new figure (similar to Figure 11-34 in D0.1) to go with the equation that may help resolve the potential confusion.
          2. Discussion on the method of defining T1 and T2 etc.
          3. Try to avoid the “prime” usage
          4. Wording may come from several for making the all the descriptions of the figures consistent.
          5. The primes seem to be the source of ambiguity and confusion.
        + There was confusion on just what the path forward will be
     4. Thanks for the feedback and look forward to getting actual suggestions.
  5. Attendance check was done.
  6. **Review** - **CID 146, 172, 229, 261, 269** - Mark RISON CIDs – 40 mins
     1. (also CIDS 146 (under discussion) and 172, 229, 261, 269 (resolution approved))
     2. Review doc **11-17/1243r1:** <https://mentor.ieee.org/802.11/dcn/17/11-17-1243-01-000m-resolutions-for-some-comments-on-11md-d0-1-cc25.docx>
     3. CID 146 (EDITOR)
        + Review comment
        + Discussion on what needs to actually change.
        + The table gives only 4 entries, and how to adjust the description in the table. So we could change to add a column for “ack” and one for AMPDU etc and try not to squeeze into one bit description.
        + Thus we would need to change to a lower-case “ack policy” and be more generic for the description.
        + Normal Ack vs Implicit Block Ack
        + Whenever we use lower case “ack policy” we may need to provide a reference. There are a lot of instances, so we may need to adjust when it is needed.
        + Thanks for feedback – will go and make a new proposal.
     4. CID 172 (EDITOR) - already approved (motioned):
        + Review the change that was implemented
        + Discussion on how to make a change where we have already approved a change.
        + The change suggested change will need more work and would be a new comment.
        + The original comment was to remove “the” so the change suggested here today is orthogonal to the comment.
        + For now, Mark R. will add to list to add to next round of comment.
        + This is on text from 11af, and Peter E. was asked if he would help with the suggested word changes.
        + ACTION ITEM: Peter E – prepare a submission on the suggested update on the wording proposal.
     5. CID 229 (EDITOR) - already approved (motioned):
        + Review change that was implemented
        + The use of “may” to “might” is the issue.
        + In order to make a change, we would require a new motion to update the resolution.
        + The resolution would need to be updated to be Revised and then the specific cases noted.
        + There was no objection to change 1551.48 (d0.2) back to “may”
        + Discussion on the change in 12.6.11, but the discussion quickly went to changing the full sentence, and so was deemed outside the actual comment scope. More work would need to be done, and would need to be a separate comment.
        + So we should just revert the change on 2136.30 (D0.2) to the original.
        + Status of CID 229 would need to be changed to Revised: Apply the changes indicated except at 1551.48 and 2136.30.
        + And bring (CID 229) back for motion
        + Resolution updated and marked ready for motion
     6. CID 261 (EDITOR) - already approved (motioned):
        + Review the changes made
        + “addressed to” is the issue
        + The proposed resolution was to change to “Addressed to” throughout the draft, and now we are noting that is not a global correct change. We should revert this comment and reject and then a new specific change set should be created that is not global.
        + Proposed Revised Resolution: Reject; The proposed change introduces errors into the draft. For example, 1981.1 and 1480.19 show the problem the change caused in d0.2.
        + This will have the two changes reverted and then marked ready for motion
        + Resolution updated and marked ready for motion
     7. CID 269 (EDITOR2) - already approved (motioned):
        + Review the changes made
        + The change as made is incorrect.
        + The comment was marked editorial
        + Update Resolution: Rejected; the capabilities and operation element being referred to may or may not be the DMG elements
        + This will be reverted and marked ready for motion.
     8. CID 243 (EDITOR):
        + From Discussion: “is shown in” is arguably strong enough. But “is illustrated in” is too weak, seeming just to be a “serving suggestion”, and should only be used for examples.
        + Discussion on whether “as shown in” would be better.
        + Changing all the “defined” to “as shown in” may be ok, but we need to be careful not to do just a blind global change.
        + Discussion on the proposed changes.
          1. The last call we had a similar discussion and depending on the context the change may or may not be good.
          2. “is shown in” seems to be more popular in the draft.
          3. “illustrated” is more clearly informative and other cases where it is normative the defined or depicted may need to be left.
          4. “depicted” while not wrong, we are looking for a more precise term to use.
        + Ok to change “defined” to “shown” in the proposed changes. And the meaning of “shown” to be added in the interpretation of wording.
        + Proposed resolution: REVISED; Make the changes shown under “Proposed changes” for CID 243 in 11-17/1243r2 <<https://mentor.ieee.org/802.11/dcn/17/11-17-1243-02-000m-resolutions-for-some-comments-on-11md-d0-1-cc25.docx> >, which cause the participle “shown” to be used rather than “illustrated”, “provided”, “depicted”, etc. when the figure is normative.
        + No objection - Mark ready for Motion
     9. CID 264 (MAC)
        + Review comment
        + From Discussion: “The likelihood of finding all the references to acknowledgement is low, and the likelihood of any such solution not rotting is zero.”
        + Concern about “these rules” not clear which rules are being referenced.
        + Discussion on when no Ack or BlockAck is not sent.
        + Question on the way Annex G defines this and if it is not actually defined properly there.
        + Peter E put in the Chat window: NOTE 3—The rules that specify the contents of BlockAck frames are defined in 10.24 (Block acknowledgment (block ack))
        + Ran out of time.
  7. Next call next week Aug 25th
     1. (Jon sends regrets – Mike Montemurro to take minutes next week).
  8. Adjourned 12:01pm ET.

1. **802.11 TGmd Telecon** – Aug 25, 2017 10:00-12:00 ET
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 10:03am ET.
   2. **Present** during some portion of the call:
      1. Dorothy STANLEY, Chair (HPE)
      2. Graham SMITH (ST Technologies)
      3. Osama ABOUL-MAGD (Huawei)
      4. Emily QI (Intel Corporation)
      5. Mark RISON (Samsung)
      6. Amelia ANDERSDOTTER (Article 19)
      7. Mark HAMILTON (Brocade)
      8. Edward AU (Huawei)
      9. Sean Coffey (Realtek)
      10. Michael Montemurro (Blackberry)
      11. Joe LEVY (InterDigital)
      12. Manish KUMAR (Marvell)
   3. **Review Patent Policy** and Participation Policy
      1. Patent policy slide set was reviewed
      2. Call for patents issued. Nobody came forward
      3. Participation Slide was reviewed.
   4. **Review and Approve Agenda**:

1.       Call to order, attendance, and patent policy

a.       Call for potentially essential patents: **If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**

i.      Either speak up now or

ii.      Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or

iii.      Cause an LOA to be submitted

b.      <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

2.       Editor report – Emily QI

a.       Comments received in the recent comment collection are here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-02-000m-revmd-wg-cc-comments.xls>

3. Comment resolution.

a. Marc EMMELMAN – 45 mins

i. <https://mentor.ieee.org/802.11/dcn/17/11-17-1100-01-000m-fils-comment-resolutions.docx>

b. Mike MONTEMURRO – 40 mins

i. <https://mentor.ieee.org/802.11/dcn/17/11-17-1089-02-000m-revmd-cc25-comment-resolutions.doc>

c. Dorothy STANLEY – JTC1 comment – 5 mins

i. <https://mentor.ieee.org/802.11/dcn/17/11-17-1172-00-000m-missed-tgmc-jtc1-sc6-comment.docx>

d. Edward AU - remaining Editor2 comments – 20 mins

i. <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-02-000m-revmd-editor2-comments.xlsx>

4. AOB, next meeting: 802.11 meeting, Waikoloa; proposed subsequent teleconferences Fridays Sept 29, Oct 6, 13 10am Eastern 2 hours; ad-hoc?

5.       Adjourn

* + 1. Reviewed agenda plan for today
    2. Marc Emmelmann is not on call today, with apologies. We’ll review his contribution in Waikoloa, where he will arrange for someone to present.
    3. Added item for Mark Rison to review some proposed resolutions, if there is time at the end of the call.
    4. Added documents for Edward AU:
       - 11-17/1274r0, 11-17/1273r0.
    5. Added a document for Mike MONTEMURRO:
       - 11-17/1176r0.
    6. No objection to the plan, with the above changes.
  1. **Editor Report** 
     1. An updated 11-17/914 (r3) will be ready for Waikoloa, with all comment resolution status up-to-date, reflecting work on teleconferences.
     2. R2 is still the current document
     3. 11ah roll-in is progressing well. The amendment roll-in is done, and undergoing review.
     4. R3 will be ready next week.
  2. **Comment Resolutions:**
  3. **Review Submission 11-17/1172r0** Dorothy STANLEY
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1172-00-000m-missed-tgmc-jtc1-sc6-comment.docx>
     2. This document has one comment with changes agreed to in REVmc, to implement responses to JTC1 comments, but which never got incorporated into the draft.
     3. Comment CN2:
     4. Proposes adding words to clarify the various scope clauses (in PHY clauses) that are not the main Scope clause.
     5. Will bring a motion for these changes in Waikoloa.
     6. Will need to fix 11ah’s “Scope” clause title, as well. Confirmed that the 11ah amendment does have the same style. Dorothy will add that to the document and motion.
     7. Should these really say “Services” – especially for the PHY clauses? Only clause 8 is really defining the PHY services. The other are defining how the PHYs provide the services. Looked at following wording in those subclauses, and that would need to be corrected as well. Beyond the scope of this comment. But, would be better to use a lower-case ‘s’ in ‘services’. Dorothy will also make that change.
  4. **Review Submission 11-17/1176r0** Mike MONTEMURRO
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1176-00-000m-cc25-cid-96.docx>
     2. CID 96 (PHY):
     3. Document proposes updated figure, as requested, but also changes “Tx/Rx” to “Group” in MLME-SETKEYS.request.
     4. CID 96 (PHY): REVISED. Incorporate changes as shown in 11-17/1176r0.
     5. No objection. Ready for motion.
  5. **Review Submission 11-17/1089r3** Mike MONTEMURRO
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1089-03-000m-revmd-cc25-comment-resolutions.doc>
     2. CID 133 (PHY):
     3. Can also change one “does allow” to “allows” at the same time.
     4. This becomes very wordy in each sentence/line. Could we say “when the operating channel width is 40 MHz” once at the beginning? Not necessary, as part of this technical change.
     5. CID 133 (PHY): REVISED. Relative to D0.1,
     + At 1005.57 change “does not allow use of DSSS/CCK in 40 MHz” to “does not allow transmission of DSSS/CCK PPDUs when the operating channel width is 40 MHz”
     + At 1005.58 change “does allow use of DSSS/CCK in 40 MHz” to “allows transmission of DSSS/CCK PPDUs when the operating channel width is 40 MHz”
     + At 1005.61 change “does not use DSSS/CCK in 40 MHz” to “does not transmit DSSS/CCK PPDUs when the operating channel width is 40 MHz”
     + At 1005.62 change “STA uses DSSS/CCK in 40 MHz” to “STA transmits DSSS/CCK PPDUs when the operating channel width is 40 MHz”
     1. No objection. Ready for motion.
     2. CID 182 (PHY):
     3. Reviewed proposed change. No comments.
     4. CID 182 (PHY): REVISED. At 1722.36, Change “By setting the EOSP subfield to 1 in the last frame sent during the SP, an unscheduled SP may be terminated before the maximum number of BUs in the SP has been reached.” to “The last frame sent during the SP has the EOSP subfield set to 1. An unscheduled SP may be terminated before the maximum number of BUs in the SP has been reached."
     5. No objection. Ready for motion.
     6. CID 188 (PHY):
     7. Mark Rison and Graham were going to discuss off-line. Graham is working on a proposal to remove Annex G, and that could cover this. Concerns about this approach to resolve this.
     8. A list of frame types that require acknowledgement is proposed, and looks complete (no one believes it is not). Mike will draft a resolution that adds this list in 10.3.2.9, and it can be considered/reviewed, to be approved in Waikoloa.
     9. CID 190 (PHY):
     10. Last discussion was leaning toward accepting, but not sure yet. No further concerns with Accepting.
     11. CID 190 (PHY): ACCEPTED.
     12. No objection. Ready for motion.
     13. CID 226 (PHY):
     14. Discussed previously, with action for Mike to clean up the resolution. He hasn’t gotten to it. Will do so off-line and post to the reflector, before bringing back.
     15. CID 234 (PHY):
     16. Similar to CID 226. Same follow-up action.
  6. **Review Submission 11-17/1274r0** Edward AU
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1274-00-000m-resolution-for-cid-238.docx>
     2. CID 238 (EDITOR2):
     3. There are 612 instances of “packet”.
     4. The 802.11 Style Guide does recommend that the use of “packet” should be minimized unless it is an external reference.
     5. It will take case-by-case check of all instances to make this completely correct, as the correct change (for example to MPDU or PPDU) depends on usage. What does the group want to do?
     6. Is this change necessary? “Packet” is felt to be ambiguous. But, perhaps that generality is useful, and it is a well-used term in communications.
     7. Given that the change is so far-reaching, and has technical aspects to being sure the changes are correct, this is not Editorial. We need a submission.
     8. Straw poll:
     9. 1. Make the changes, work on a submission.
     10. 2. Don’t make any change.
     11. 3. Abstain.
     12. Results: 3-5-3. Chair requested a reject resolution be prepared.
  7. **Review Submission 11-17/1273r0** Edward AU
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1273-00-000m-resolution-for-cid-246.docx>
     2. CID 246 (EDITOR2):
     3. A few similar changes are needed to keep the text consistent with the rest of clause 12, as proposed in the document.
     4. These changes remove “Hash” as a defined term, but that term is used in the equation at P2195L14 (copy of the text, as shown in the document).
     5. Also, part of the suggested definition for KDF-Hash-Length has been lost (“to generate a key whose length is TK\_bits + 128”)
     6. Need to discuss off-line and bring this back, with this concern about “Hash” sorted out.
  8. **Review Submission 11-17/1243r1** Mark RISON
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1243-01-000m-resolutions-for-some-comments-on-11md-d0-1-cc25.docx>
     2. CIDs 209 (PHY) and 299 (PHY):
     3. Discussion about wording. No changes result.
     4. CIDs 209 (PHY) and 299 (PHY): REVISED. Make the text changes shown under CIDs 209 and 299 in 11-17/1243r1, which make the description of the MIB variable clear.
     5. No objection. Ready for motion.
     6. CIDs 186 (MAC), 187 (MAC):
     7. Graham is also working on these, in 11-17/1259.
     8. No objection to the first diagram, as the resolution.
     9. Noted that “AIFS[AC]” is not well-defined near the diagram (that is the “AC” part). Agreed, could expand on the text in (e).
     10. CID 186 (MAC): REVISED. Make the proposed changes to the diagram. Also amend bullet (e) for the diagram to read: “AIFS[AC] AIFS arbitration interframe space (for the AC used by the QoS facility).”
     11. CID 187 (MAC): REJECTED. The intention of showing two AIFSs is to get across the concept that AIFS generally takes on different values for each AC.
     12. No objection. Ready for motion.
     13. CID 291 (PHY):
     14. Reviewed discussion and proposed resolution in document. No comments.
     15. CID 291 (PHY): Make the changes shown under “Proposed changes” for CID 291 in 11-17/1243r1, which clarify that the Differential Encoder Initialization field is c(0) for the differential encoding process described in 20.4.3.3.4, but that this field is not recovered by a typical receiver implementation. No objection. Ready for motion.
  9. Reviewed Waikoloa agenda. No significant changes. Dorothy will post shortly.
  10. Next meeting is at the F2F in Waikoloa.
  11. Will plan for teleconferences on most Fridays in September and October.
  12. Think about possibility for dates for an ad hoc meeting, perhaps Oct 19-20, or Oct 30-31, in Cambridge, UK.
  13. Adjourned 11:58pm ET.

**References:**

**Teleconferences are subject to applicable policies and procedures:**

•       IEEE Code of Ethics

–       <http://www.ieee.org/about/corporate/governance/p7-8.html>

•       IEEE Standards Association (IEEE-SA) Affiliation FAQ

–       <http://standards.ieee.org/faqs/affiliation.html>

•       Antitrust and Competition Policy

–       <http://standards.ieee.org/resources/antitrust-guidelines.pdf>

•       IEEE-SA Patent Policy

–       <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>

–       [https://development.standards.ieee.org/myproject/Public//mytools/mob/loa.pdf](http://standards.ieee.org/board/pat/pat-slideset.ppt)

–       <http://standards.ieee.org/board/pat/faq.pdf>

–       <http://standards.ieee.org/board/pat/pat-slideset.ppt>

•       IEEE 802 Working Group Policies &Procedures (29 Jul 2016)

–       <http://www.ieee802.org/PNP/approved/IEEE_802_WG_PandP_v19.pdf>

•       IEEE 802 LMSC Chair's Guidelines (Approved 17 Mar 2017)

–       <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0201-00-00EC-ieee-802-lmsc-chairs-guidelines.pdf> as updated in <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0016-06-00EC-march-2017-rule-changes.pdf>

•       Participation in IEEE 802 Meetings

–       <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>

•       IEEE 802.11 WG OM: (Approved 17 Mar 2017)

–       <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-19-0000-802-11-operations-manual.docx>

**July 28th telecon:**

**Editor Report:**

<https://mentor.ieee.org/802.11/dcn/17/11-17-0920-03-000m-802-11revmd-editor-s-report.ppt>

**Submissions:**

1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1102-01-000m-resolution-for-cid-33-fils-hlp.docx>
2. <https://mentor.ieee.org/802.11/dcn/17/11-17-1100-01-000m-fils-comment-resolutions.docx>
3. <https://mentor.ieee.org/802.11/dcn/17/11-17-1103-00-000m-comment-resolution-for-cids-52-and-53-on-suggested-rewording-of-fils-text.docx>
4. <https://mentor.ieee.org/802.11/dcn/17/11-17-1030-01-000m-sae-retry-timeout-clarification.docx>
5. <https://mentor.ieee.org/802.11/dcn/17/11-17-0971-01-000m-enhancement-to-beacon-report.docx>
6. <https://mentor.ieee.org/802.11/dcn/17/11-17-1089-01-000m-revmd-cc25-comment-resolutions.doc>

**August 4, 2017:**

**Submissions**

1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0956-04-000m-revmd-wg-cc25-for-editor-ad-hoc.xls>
2. <https://mentor.ieee.org/802.11/dcn/17/11-17-0928-01-000m-revmd-cc25-gen-comments.xlsx>

**August 11, 2017:**

**Submissions:**

1. <https://mentor.ieee.org/802.11/dcn/17/11-17-1137-01-000m-resolutions-for-obsolete-blockack.docx>
2. <https://mentor.ieee.org/802.11/dcn/17/11-17-0987-02-000m-resolutions-for-dcf-and-edca-comments-d0-1.docx>
3. <https://mentor.ieee.org/802.11/dcn/17/11-17-0988-00-000m-resolutions-for-qos-and-tspec-comments-d0-1.docx>
4. <https://mentor.ieee.org/802.11/dcn/17/11-17-1191-01-000m-cc25-proposed-resolutions-for-editorial-comments.doc>
5. <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-02-000m-revmd-editor2-comments.xlsx>

**August 18, 2017:**

**Submissions:**

1. [https://mentor.ieee.org/802.11/dcn/17/11-17-0950-01-000m-cid-337-super-operating-classes.pptx](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-0950-01-000m-cid-337-super-operating-classes.pptx&sa=D&usd=2&usg=AFQjCNHhWete5JizMnVvf2-13I8eNljCsg)
2. [https://mentor.ieee.org/802.11/dcn/17/11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc](https://www.google.com/url?q=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F17%2F11-17-1078-00-000m-resolutions-to-cids-148-and-339.doc&sa=D&usd=2&usg=AFQjCNHuxge5sxIqjMDTfEu0fbr1D5sJNw)
3. <https://mentor.ieee.org/802.11/dcn/17/11-17-1243-01-000m-resolutions-for-some-comments-on-11md-d0-1-cc25.docx>
4. <https://mentor.ieee.org/802.11/dcn/17/11-17-1243-02-000m-resolutions-for-some-comments-on-11md-d0-1-cc25.docx>

**August 25, 2017:**

**Submissions:**

1. https://mentor.ieee.org/802.11/dcn/17/11-17-1172-00-000m-missed-tgmc-jtc1-sc6-comment.docx
2. <https://mentor.ieee.org/802.11/dcn/17/11-17-1176-00-000m-cc25-cid-96.docx>
3. <https://mentor.ieee.org/802.11/dcn/17/11-17-1089-03-000m-revmd-cc25-comment-resolutions.doc>
4. <https://mentor.ieee.org/802.11/dcn/17/11-17-1274-00-000m-resolution-for-cid-238.docx>
5. <https://mentor.ieee.org/802.11/dcn/17/11-17-1273-00-000m-resolution-for-cid-246.docx>
6. <https://mentor.ieee.org/802.11/dcn/17/11-17-1243-01-000m-resolutions-for-some-comments-on-11md-d0-1-cc25.docx>