IEEE P802.11  
Wireless LANs

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| Minutes for REVmd CRC -Jan 2020 - Irvine | | | | |
| Date: 2020-01-16 | | | | |
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Abstract

This document contains the IEEE 802.11 TGmd minutes for the January 2020 session. TGmd is operating as the Comment Resolution Committee for P802.11REVmd.

1. **P802.11REVmd CRC January 13, 2020 Monday PM1 (13:30-15:30)**
   1. **Called to order** at 1:31pm PT by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy and Participant information**
      1. No issues noted.
      2. Participant Behaviour policy reviewed.
   3. **Review Agenda Slides**: 11-19/2134r1
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-01-000m-2020-january-tgmd-agenda.pptx>
      2. We have 5 slots this week
      3. **Monday PM1**

Chair’s Welcome, Policy & patent reminder, Approve agenda

Status, Review of Objectives, Editor Report 11-17-0920

CID 4133 – 11-19-2154r1 – Jouni MALINEN

11-20-127 – Jouni MALINEN

11-19-2165 – Assaf KASHER

* + 1. **Tuesday PM2**

Editorial CIDs – 11-19-2160, 11-19-2163

* + 1. **Wednesday PM1**

Comment resolution

* + 1. **Wednesday PM2**

PHY Comments – Michael MONTEMURRO

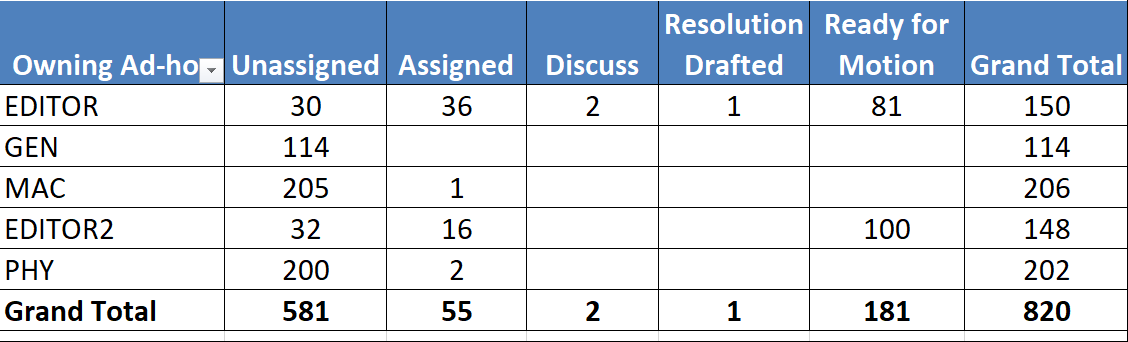
* + 1. **Thursday PM1**

Motions

Plans for January – March 2020

Adjourn

* + 1. Add Editorial CIDs 11-20-0141 and 11-20-0142 to Wednesday Agenda.
    2. Trivial Editorials are included in 11-20-0010r1 and should be included on Thursday for Motion.
    3. Add Editorial CIDs, 11-19/2160 and 11-19/2163 to Monday
    4. Add doc 11-20-143 Lili HERVIEU to Wednesday PM1
    5. Add Menzo CIDs to Tuesday PM2
    6. Add Chris Hansen
    7. Add GEN CIDs to Thursday PM1
    8. Agenda R2 will be uploaded.
    9. **MOTION I1:** Move to approve 11-19/2134r2 Agenda:
       1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-02-000m-2020-january-tgmd-agenda.pptx>
       2. Moved Jouni MALINEN
       3. Seconded: Emily QI
       4. Result Motion I1: No objection – passed by Unanimous Consent
  1. **Review TGmd Status.**
     1. Review Status slides 13-15 – doc 11-19/2134r2
  2. **Editor Report 11-17/920r24** – Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-24-000m-802-11revmd-editor-s-report.ppt>
     2. SA1 Comment Groups Status



* + 1. CID 4134 was approved in December Telecon.
  1. **Review doc 11-19/2154r1 –** Jouni MALIEN (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2154-01-000m-sae-anti-clogging-token.docx>
     2. CID 4133 (PHY) and 4726 (PHY)
        1. Review comments
        2. Review changes from what wa presented during the December telecon. On page 4, there is a “Status Code” that should be “Status Code field”
        3. And the “field” should be lower case.
        4. Change “This” to “the” in several locations when referring to “hash-to-curve”. Also when used prior to “direct hashing technique”.
        5. There was both “hash-to-curve” and “direct hashing technique” names, and a consistent use may need to be reviewed.
        6. The hash-to-element is a generic name, the “hash-to-curve” is only used with curves and the FCC uses “direct hashing technique”
        7. We may want to change to just use one name of “hash-to-element”. We may want to also check to make “method” and technique consistent too.
        8. The change of the name may be corrected between now and Thursday, but a review to ensure that we have all the locations included was the concern.
        9. A Revision 2 will be posted, and an R3 may be posted with the single name by Thursday.
        10. Proposed Resolution 4133 (PHY) and 4726 (PHY): REVISED (PHY: 2020-01-13 22:14:48Z) - Incorporate the changes given in <https://mentor.ieee.org/802.11/dcn/19/11-19-2154-02-000m-sae-anti-clogging-token.docx> which clarifies anti-clogging token usage with password identifiers.
        11. Mark 4133 and 4726 as Ready for Motion.
  2. **Review document 11-20-127r2 - Jouni Malinen (Qualcomm)**
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0127-02-000m-some-revmd-d3-security-comments.docx>
     2. CID 4815(PHY)
        1. Review the comments
        2. Review the changes (redline) made.
        3. There is something similar to the question on the hash function – p2565 which has the name of “*Length*” that is in italics. So changing to be similar to 12.4.4.2.2. There is a need to check the font in the pseudo code to be consistent with the rest of the draft.
        4. New version R3 will be posted.
        5. CID 4815 (PHY): Agreed, after changes made to produce an r3.
        6. Proposed Resolution: REVISED (PHY: 2020-01-13 22:28:51Z) - Incorporate the changes for CID 4815 in 11-20/0127r3 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0127-03-000m-some-revmd-d3-security-comments.docx>> which addresses PMKID derivation for SAE.
        7. Mark Ready for Motion.
     3. CID 4132 (PHY):
        1. Review comment
        2. Review changes proposed
        3. Proposed Resolution: REVISED (PHY: 2020-01-13 22:30:29Z)

Incorporate the changes for CID 4132 in 11-20/0127r3 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0127-03-000m-some-revmd-d3-security-comments.docx>>

* + - 1. Mark Ready for Motion.
  1. **Review doc 11-19/2163r4** – Eward AU (Huawei) – presented by Dorothy STANLEY
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-04-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
     2. CID 4324 (EDITOR2)
        1. Review comment
        2. Review proposed changes and accept (color green) one at a time.
        3. At 2585.14, the “rejected” should be removed from proposed change.
        4. Discussion of syntax in 2585.
        5. Rewrite the changes in section 2585.
        6. Resolution: Proposed resolution: Revised

At 2584.36, replace “new Commit and Confirm” with “SAE Commit message and SAE Confirm message”.

At 2585.14, replace “the previously received Commit frame” with “the previously received SAE Commit message”.

At 2584.16, replace “its Commit and Confirm (with the new Sc value) messages” with “its SAE Commit message and its SAE Confirm message with the new Sc value”

At 2578.27, replace “the peer’s Confirm” with “the peer’s SAE Confirm message”.

At 2585.32, replace “create a new Confirm (with the new Sc value) Message” with “create an SAE Confirm message with the new Sc value”.

At 2585.45 replace “the value of send-confirm shall be checked. If the value” with “the Send-Confirm field shall be checked. If its value”

At 2585.48, replace “the Confirm portion of the frame” with “the Confirm field”.

At 2585.24 and 2585.50 replace “to the send-confirm portion of the frame” with “ to the value of the Send-Confirm field”

At 3881.23, replace “Commit or Confirmed state” with “Committed or Confirmed state”.;

* + - 1. Mark Ready for Motion.
      2. Alternatively, it could be a resolution of CID 4324 (EDITOR2): Revised. Incorporate the changes shown in 11-19/2163r5 (<https://mentor.ieee.org/802.11/dcn/19/11-19-2163-05-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>).
    1. CID 4307 (EDITOR2)
       1. Review comment
       2. Discussion on what HT\_GF – what does the “f” stand for?
       3. Page 2984 shows all 3 types of definitions of including or not including “Format” into the name.
       4. The 3 locations of proposed change seemed to be an improvement, and not significant change.
       5. Page 3039 line 60 there is an “HT\_MF format” that is thought to drop “format”.
       6. Proposed resolution: Revised. At 3065.17, 3065.41, and 3065.44, replace “HT\_GF format PPDUs” with “HT\_GF PPDUs”. At 3039.60 replace “HT\_MF format PPDU” with “HT\_MF PPDU”
       7. Mark Ready for Motion.
    2. CID 4020 (EDITOR2) and 4021 (EDITOR2)
       1. Review Comment
       2. The proposed change would leave the child section to be same as the parent section name.
       3. Proposed Resolution: Rejected; The title of the section is broad enough to the clause.
       4. There was not consensus on the direction.
       5. We could rename the parent clause, but we were not able to conclude as the name fits the nominal convention we are using.
       6. As we could not come to agreement, we will need to revisit.
  1. **Recess at 3:32pm**

1. **P802.11REVmd CRC January 14, 2020 Tuesday PM2 (14:00-16:00)**
   1. **Called to order** at 4:02pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy**
      1. No issues noted
   3. **Review Agenda** – 11-19-2134r2
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-02-000m-2020-january-tgmd-agenda.pptx>
      2. **Tuesday PM2**

Editorial CIDs – 11-19-2160, 11-19-2163

Menzo WENTINK (Qualcomm) CIDs

GEN CIDs – Jon ROSDAHL (Qualcomm)

* + 1. Addition of GEN CIDS to Tuesday PM2
    2. Look to possibly add some time on Thursday.
    3. Request from Payam TORAB (Facebook) – CID 4816 – doc 11-19-1598
    4. No Objection to the changes an R3 was uploaded.
       1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-03-000m-2020-january-tgmd-agenda.pptx>
  1. **Review doc 11-19/2163r5 Edward AU (Huawei) presented by Dorothy**
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-05-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
     2. CID 4020 (EDITOR2) and 4021 (EDITOR2)
        1. Review where we left off yesterday.
        2. Discussion on if we should change the Title or not
        3. Concern on if the title is general enough to cover what is in the clause
        4. Many of those speaking indicated reject.
        5. Discussion on changing to “GCR – operation”
        6. Proposed resolution: CID 4020 and 4021 (EDITOR2): Revised

At 2402.35 and 2402.38, replace “GCR frame exchange procedures” with “GCR operation”.

At 2402.39, replace “GLK-GCR frame exchange procedures” with “GLK-GCR operation”.

* + - 1. Mark Ready for Motion.
    1. A new revision R6 will be posted
  1. **Review doc 11-20-150r0 Menzo WENTINK (Qualcomm)**
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-00-000m-assorted-crs-revmd-draft-3-0.docx>
     2. CID 4001 (GEN)
        1. Review comment
        2. Discussion on the use of PIFs.
        3. Discussion on if the operation is a priority mode or a mode that may cause problems. The purpose of the standard is to benefit to all.
        4. Discussion on what the standard says vs implementations.
        5. A Submission that analyses the standard to see just what is in defined.
        6. Action item: Andrew MYLES and Mark RISON will work on a new submission.
        7. Assign CID to Andrew MYLES
     3. CID 4002 (MAC)
        1. Review Comment
        2. Membership Selectors Elements being added when there is only 8 octets to store the supported rates. The extra octet is believed to cause some trouble.
        3. Review proposed changes
        4. The 2nd sentence seemed redundant.
        5. Lamenting that this element could have been extensible, but for historical reasons it is not…too bad.
        6. Review history that 17 years ago, this limitation was defined.
        7. The 11b rates are not limited to this element, but that would be a good idea as if the 11b rates are in the new element, the devices may have an issue.
        8. Change to “any combination of “
        9. Discussion on the inclusion of the proposed 2nd sentence.
        10. Proposed resolution: CID 4002 (MAC): REVISED (MAC: 2020-01-15 00:41:35Z) - Replace

"The Supported Rates and BSS Membership Selectors element specifies up to eight rates in the OperationalRateSet parameter, as described in the MLME-JOIN.request and MLME-START.request primitives, and zero or more BSS membership selectors. The Information field is encoded as 1 to 8 octets, where each octet describes a single supported rate or BSS membership selector (see Figure 9-147 (Supported Rates and BSS Membership Selectors element format))."

with

"The Supported Rates and BSS Membership Selectors element specifies any combination of up to eight BSS membership selectors and rates in the OperationalRateSet parameter, as described in the MLME-JOIN.request and MLME-START.request primitives. The Information field is encoded as 1 to 8 octets, where each octet describes a single supported rate or BSS membership selector (see Figure 9-147 (Supported Rates and BSS Membership Selectors element format))."

* + - 1. Mark Ready for Motion.
    1. CID 4004 (MAC)
       1. Review comment
       2. Discussion on the changes
       3. Discussion on what the new values were based on. Was it a technical or political reason?
       4. The work to define the numbers was done in the past, and those reasons to set the values was not taken lightly.
       5. The new values have come from the discussion of creating the “Harmonized Standard” in ETSI.
       6. Discussion on the value of having the new values.
       7. Discussion on why keeping the values as it is.
       8. 11-13/14r1 was the document that we debated the TXOP Limit.
       9. Proposed Resolution: REJECTED (MAC: 2020-01-15 01:06:44Z): The CRC discussed the comment and did not reach consensus, concerns included lack of technical evidence provided to support the change. Specific values may vary based on the particular regulatory domain. Document 11-13/14r1 (<https://mentor.ieee.org/802.11/dcn/13/11-13-0014-01-000m-txop-limits.pptx>) provides the rationale for the current numbers with the technical justification.
       10. Mark Ready for Motion.
    2. CID 4041 (PHY)
       1. Review comment
       2. Proposed Resolution: REJECTED (PHY: 2020-01-15 21:35:44Z) - ATIM is the Rejected – the comment does not identify a technical issue in sufficient detail. ATIM is the frame transmitted intermittently by STAs in an IBSS, for purpose of IBSS power save. Most of the related text is in 11.2.4 (Power management in an IBSS).

But ATIM is also used in DMG, described in 11.2.7.4 (ATIM frame usage for power management of non-AP STAs), which is part of 11.2.7 Power management in a PBSS and DMG infrastructure BSS.

Given that the comment only cites IBSS operation, it is assumed that it is not related to ATIM operation in DMG.

It is not specified what harm there is to IBSS operation.

Given that deleting ATIM for IBSS may impact ATIM for DMG, this deletion may not be trivial.

* + - 1. Mark Ready for Motion.
    1. CID 4042 (MAC)
       1. Review comment
       2. Discussion on the rationale for the rejection.
       3. Proposed Resolution: REJECTED (MAC: 2020-01-15 01:16:49Z): The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
       4. Mark Ready for Motion.
  1. **GEN CIDs** Jon ROSDAHL (Qualcomm)
     1. No document reviewed review comments directly in the database.

(They also appear in the 11-20/147r0 document, which has all the GEN comments.)

* + - 1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-03-000m-sb1-revmd-gen-comments.xls>
    1. CID 4810 (GEN):
       1. Review Comment
       2. Proposed Resolution: ACCEPTED (GEN: 2020-01-15 01:22:17Z)
       3. No objection. Mark Ready for Motion.
    2. CID 4803 (GEN):
       1. Review comment
       2. Concern that removing “other not present” is against our prior agreement that we don’t use “if and only if” language, instead we use “otherwise” language in such cases.
       3. Worked on wording to cover all the cases.
       4. Proposal that this is in the MLME primitives, and not in the frame formats where interoperability precision is critical. Suggest we don’t worry about the “if and only if” situation. In fact, we should do this throughout the MLME primitives.
       5. No consensus to accept the comment. No quick consensus on other rewording.
       6. Proposed resolution: REVISED (GEN: 2020-01-15 01:44:30Z) Change "If the association request result was SUCCESS,, then AssociationID specifies the association ID value assigned to the peer MAC entity by the AP or PCP. (11ah)This parameter is not present if dot11S1GOptionImplemented is true; otherwise not present." to ""If the association request result was SUCCESS and dot11S1GOptionImplemented is not true, then AssociationID specifies the association ID value assigned to the peer MAC entity by the AP or PCP; otherwise not present.
       7. No objection. Mark Ready for Motion.
    3. CID 4801 (GEN):
       1. What about the case where the non-AP STA does a bunch of MLME-SCAN.requests, then does the MLME-RESET.request, and then does the MLME-JOIN.request – is that okyay?
       2. That’s still a hole; we could choose that fix that too or call this an improvement.
       3. Proposed Resolution: ACCEPTED (GEN: 2020-01-15 01:51:33Z)
       4. No objection. Mark Ready for Motion.
    4. CID 4798 (GEN):
       1. Review Comment
       2. Proposed resolution: ACCEPTED (GEN: 2020-01-15 01:54:11Z).
       3. No objection. Mark Ready for Motion.
    5. CID 4783 (GEN):
       1. We can’t delete any MIB variables, then need to be deprecated.
       2. Revised. Change "This is a capability variable" to "This is a status variable."
       3. Change "Its value is determined by device capabilities." to "It is written by an external management entity."
       4. Change the name "dot11OpportunisticTransmissionsActivated" throughout, to "dot11OpportunisticTransmissionsImplemented"
       5. Editor - Deprecate the MIB entries for dot11CDMGSpatialsharingActivated and dot11CDMGClusteringActivated.
       6. GEN: 2020-01-15 01:59:39Z - status set to: Review –
       7. Will need to review again.
  1. **Consider adding an additional meeting time slot**
     1. Straw Poll: Thursday AM2 or PM2?
     2. Results of Straw poll AM2: 5, PM2: 3.
     3. We’ll request Thursday AM2.
  2. **Recess 6pm**

1. **P802.11REVmd CRC January 15, 2020 Wednesday PM1 (13:30-15:30)**
   1. **Called to order** at 1:31pm by Dorothy STANLEY (HPE)
   2. **Review Agenda**
      1. We will add a new slot for Thursday
      2. Continue with agenda as posted.
      3. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-03-000m-2020-january-tgmd-agenda.pptx>
   3. **Review Doc 11-20/141r0** Emily QI (Intel)
      1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-00-000m-sa1-proposed-resolutions-for-editor-adhoc.doc>
      2. CIDs 4312, 4202 (EDITOR2):
         1. Review status
         2. Was discussed by the Editors
         3. Emily is reporting on what was discussed.
         4. Discussion on the name change.
         5. Proposed Resolution for CID 4312 and 4202: Reject.

WG editor will update 802.11 Editorial Style guide 09/1034 (<https://mentor.ieee.org/802.11/documents?is_dcn=1034> ) to add a new rule including preposition and conjunction capitalization in the (sub)field and (sub)element names. This rule applies for new amendment. As stated in the style guide, “This rule does not apply to legacy text; these remain unchanged since the effort involved in changing all instances is substantial and no harm has been demonstrated.”

There is no change to TGmd draft.

* + - 1. Mark Ready for Motion.
      2. The editors were asked to define “legacy text”
      3. Also, a request to soften the Editors rule “does not apply” to “may not apply”
    1. CID 4117 (EDITOR)
       1. Review Comment
       2. Trivial comment identified, but other locations identified to also be updated.
       3. Review discussion from the submission.
       4. Proposed Resolution: REVISED.

At 1494.16, change "Local MAC address policy" to "Local MAC Address Policy". Note to the commenter, when the text in 1494.16 is changed, the text in 1473.37 will be changed automatically. This change resolves the comment in the direction suggested by the commenter.

* + - 1. Mark Ready for Motion.
    1. CID 4601 (EDITOR)
       1. Review comment
       2. Discussion on the use of That and Which. Determine to delete the phrase.
       3. Proposed Resolution: Revised. Delete at the cited location “, which is used to protect information exchanged over the link”
       4. Mark Ready for Motion.
    2. CID 4533 (EDITOR)
       1. Review comment
       2. Discussion to make minor changes to the proposed resolution. Fixed some grammar and spelling error.
       3. Proposed Resolution: Revised; Incorporate the changes for CID 4533 in doc 11-20/141r1 < <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-01-000m-sa1-proposed-resolutions-for-editor-adhoc.doc>> which changes text from 1059.39 to 1059.59 .
       4. Mark Ready for Motion.
  1. **Review document 11-20-142r0** Emily QI (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0142-00-000m-proposed-resolution-for-cid-4048.doc>
     2. CID 4048 (PHY)
        1. Review comment
        2. Review submission discussion and proposed changes.
        3. Discussion on possible DOS attack.
        4. Discussion on if a Note or just a paragraph is correct.
        5. Discussion on the
        6. Proposed Resolution: REVISED (PHY: 2020-01-15 22:36:54Z) - At the end of 12.5.4.5 BIP transmission (2613.21), add a paragraph as follows:

"Once a STA transmits a protected Beacon frame using a new BIGTK, the STA shall not transmit protected Beacon frames using the previously BIGTK. Once a STA transmits a protected group addressed robust Management frame using a new IGTK, the STA is should not transmit protected group addressed robust Management frames using the previously used IGTK."

* + - 1. Mark Ready for Motion.
  1. **Review doc 11-20/143r0** Lili HERVIEU (CableLabs)
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0143-00-000m-proposed-resolution-for-cid-4108.docx>
     2. Abstract: On December 12th, 2019, the FCC issued a Notice of Proposed Rulemaking proposing the lower 45 megahertz of the 5.9 GHz band for unlicensed uses (not under DFS rules). This contribution proposes the addition of the corresponding channels to the channels listing in Annex E - Table E-4 - Global operating classes
     3. Review Submission
     4. Discussion on the use of Global table vs Country specific tables.
     5. CID 4108 (PHY) –
     6. Concern that the rule making is still being discussed and has not become official.
     7. Discussion that we could wait until March to make the decision.
     8. Discussion on what the harm was to put in now and not use the new channels is low.
     9. Changing an Existing operating Class number should be done carefully. Some not sure if there is a problem with that or not.
     10. Use of a particular operating class may or may not need to list all the channels supported.
     11. Discussion on the value of incorporating this now or later, and if it is appropriate to change existing Operating classes.
     12. Straw Poll:
         1. Do you support the technical direction as proposed?
            1. **Results**: 7-0-5
         2. Shall we resolve this comment now or later in March?
            1. **Results:** 1 Now - 7 later
     13. Encourage people to spend time to investigate and we will bring up for final consideration in March.
  2. **GEN CIDs** Jon ROSDAHL (Qualcomm)
     1. No document, reviewed comments in the database. (They also appear in the 11-20/147r0 document, which has all the GEN comments.
     2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-03-000m-sb1-revmd-gen-comments.xls>
     3. CID 4810 (GEN):
        1. Review Comment
        2. Proposed Resolution: ACCEPTED (GEN: 2020-01-15 01:22:17Z).
        3. No objection. Mark Ready for Motion.
     4. CID 4803 (GEN):
        1. Concern that removing “other not present” is against our prior agreement that we don’t use “if and only if” language, instead we use “otherwise” language in such cases.
        2. Worked on wording to cover all the cases.
        3. Proposal that this is in the MLME primitives, and not in the frame formats where interoperability precision is critical. Suggest we don’t worry about the “if and only if” situation. In fact, we should do this throughout the MLME primitives.
        4. No consensus to accept the comment. No quick consensus on other rewording.
        5. Proposed Resolution: REVISED (GEN: 2020-01-15 01:44:30Z). Change "If the association request result was

SUCCESS, then AssociationID specifies the association ID value assigned to the peer MAC entity by the AP or PCP. (11ah)This parameter is not present if dot11S1GOptionImplemented is true; otherwise not present." to ""If the association request result was SUCCESS and dot11S1GOptionImplemented is not true, then AssociationID specifies the association ID value assigned to the peer MAC entity by the AP or PCP; otherwise not present.

* + - 1. No objection. Mark Ready for Motion.
    1. CID 4801 (GEN):
       1. Review Comment
       2. What about the case where the non-AP STA does a bunch of MLME-SCAN.requests, then does the MLME-RESET.request, and then does the MLME-JOIN.request – is that okay?
       3. That’s still a hole; we could choose that fix that too or call this an improvement.
       4. Proposed Resolution: ACCEPTED (GEN: 2020-01-15 01:51:33Z).
       5. No objection. Mark Ready for Motion.
    2. CID 4798 (GEN):
       1. Review Comment
       2. Proposed Resolution: Accepted.
       3. No objection. Mark Ready for Motion.
    3. CID 4783 (GEN):
       1. We can’t delete any MIB variables, then need to be deprecated.
       2. Proposed Resolution: Revised. Change "This is a capability variable" to "This is a status variable."

Change "Its value is determined by device capabilities." to "Its is written by an external management entity."

Change the name "dot11OpportunisticTransmissionsActivated" throughout, to "dot11OpportunisticTransmissionsImplemented"

Editor - Deprecate the MIB entries for dot11CDMGSpatialsharingActivated and dot11CDMGClusteringActivated.

* + - 1. Need to review more.
  1. **Recess 3:33 pm**

1. **P802.11REVmd CRC January 15, 2020 Wednesday PM2 (14:00-16:00)**
   1. **Called to Order** at 4:05pm by the TG Chair Dorothy STANLEY .
   2. **Remainder of Patent Policy**
      1. No items
   3. **Review Agenda**: 11-19/2134r4
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-04-000m-2020-january-tgmd-agenda.pptx>
      2. No changes
   4. **Review doc 11-18-2165r6** Assaf KASHER (Qualcomm)
      1. <https://mentor.ieee.org/802.11/dcn/18/11-18-2165-06-000m-mac-addr-change-scrambler-reset.docx>
      2. Abstract: This contribution addresses an issue with scrambler reset when the MAC address changes as proposed by TGaq and inserted into TGmd.
      3. Review the changes since the last review.
      4. CID 4027 (PHY) and CID 4028 (PHY)
         1. Review comments
         2. Proposed resolution: 1) Add a TXVECTOR parameter of SCRMABLER\_RESET. The scrambler reset should be based on this parameter.
2. Rather than reset the scrambler, set the scrambler to a value which is different that the value which is usually used, the value at the end of the last PPDU.
   * + 1. This change can also be used to resolve CID 4704 (PHY) and CID 4705 (PHY).
       2. Discussion on minor changes to the editor changes.
       3. Discussion on how to get the random value.
       4. After a long discussion, we continued the random number discussion.
       5. Proposed Resolution – CID 4027, 4028, 4704, and 4705 (PHY): REVISED (PHY: 2020-01-16 00:29:43Z). Incorporate the changes in 11-18/2165r7 <https://mentor.ieee.org/802.11/dcn/18/11-18-2165-07-000m-mac-addr-change-scrambler-reset.docx> indicated at labels for CID 4027/4028 which clarify the scrambler reset on a MAC address change.
       6. Mark all 4 CIDs Ready for Motion.
     1. CID 4029 (PHY)
        1. Review comment
        2. Discussion on the change proposed.
        3. Fix-up some minor grammar and punctuation changes.
        4. Proposed Resolution CID 4029 (PHY): REVISED (PHY: 2020-01-16 00:31:20Z) - Incorporate the changes in 11-18/2165r7 <<https://mentor.ieee.org/802.11/dcn/18/11-18-2165-07-000m-mac-addr-change-scrambler-reset.docx>> which clarify the TXVECTOR settings for a scrambler reset on a MAC address change.
        5. Mark Ready for Motion.
   1. **Review doc 11-20/168r1** Chris Hansen (Peraso)
      1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0168-01-000m-cid4076-technical-motivation.pptx>
      2. Abstract: Technical motivation for 8PSK modes for the DMG SC PHY
      3. CID 4076 (PHY)
      4. Review background of technical description.
      5. Review submission
      6. Summary:

* 8 PSK has been evaluated using the phase noise, PA models, and EVM targets for DMG STAs
* Range increases of 27% to 47% are possible with MCS10 and MCS11 using 8 PSK instead of 16 QAM
* Existing Clause 20 LDPC codes can be shortened to achieve the rate 2/3 and rate 5/6 codes required for 8 PSK
* No new encoder / decoder
* Small additions to 802.11md Clause 9 and Clause 20 will be proposed to support 8 PSK operation
  + 1. Discussion on some details of how the simulations were created.
    2. This is also discussed in TGay. This is to add to DMG PHYs.
    3. Something similar was done in TGmc
    4. This feature was presented to TGay, and accepted for EDMG STA, but the proposal today is to make changes to the DMG STA.
    5. Review a potential for the size of the changes being proposed.
    6. The TGay experts should review the proposal.
    7. A document with the prescribed changes will be forthcoming.
  1. **Review PHY Comments:** Mike MONTEMURRO
     1. CID 4039 (PHY)
        1. Review comment
        2. Review doc 11-19/2024r2
        3. <https://mentor.ieee.org/802.11/dcn/19/11-19-2024-01-000m-mac-address-change.docx>
        4. Concern on how the MAC address is stored in the MIB and in the standard.
        5. IEEE 1609 has a methodology of changing the MAC address.
        6. Request for edits to be shared with Mike.
        7. Description of the STAAddress was updated.
        8. Request to document the rational for why the existing primitives are not enough to provide the feature.
        9. Version R2 will be posted.
     2. CID 4796 (PHY)
        1. Review comment
        2. There are two instances of EAPOL frames – this CID is only addressing one instance.
        3. Discussion on the proposed changes.
        4. Discussion on changes:

At 2671.2 and 2681.4 change “EAPoL frames” to “EAPOL-Key frame”. At 2727.2, change “EAPOL frames” to “EAPOL PDUs”

* + - 1. Proposed resolution: REVISED (PHY: 2020-01-16 01:15:50Z) - At 2671.2 and 2681.4, change "EAPOL frame" to "EAPOL-Key frame"

At 2727.2, change "EAPOL frames" to "EAPOL PDUs"

* + - 1. Mark Ready for Motion.
    1. CID 4786 (PHY)
       1. Review comment
       2. Review figure
       3. Proposed Resolution: Accept
       4. Mark Ready for Motion.
    2. CID 4748 (PHY)
       1. Review Comment
       2. Discussion on if we can remove clause 12.9.1.
       3. Proposed Resolution: ACCEPTED (PHY: 2020-01-16 01:24:39Z)
       4. Mark Ready for Motion.
    3. Feedback from 1609 – Liaison – John Kenny (Toyota)
       1. MLME-Reset would flush EDCA state and queues and they did not want to reset all states.
       2. This also affects the Channelization
    4. CID 4737 (PHY)
       1. Review comment
       2. Discussion on the description of Deprecated/Obsolete.
       3. Change to add at 9.31 discussed.
       4. Proposed Resolution: REVISED (PHY: 2020-01-16 01:31:09Z) - At 9.31 change "Generally, features that are marked deprecated or obsolete are not maintained."

to "Generally, features that are marked deprecated or obsolete are not maintained; there might be technical errors in the material describing these features."

* + - 1. Mark Ready for Motion.
    1. CID 4735 (PHY)
       1. Review comment
       2. The term "FILS Shared Key authentication" and "Shared Key authentication" are well-defined in the Standard and are distinct and unambiguous.
       3. We can reject the comment or add a statement that this is a statement that the terms are ambiguous or not.
       4. The Comment indicates that FILS Shared Key and Shared key that these are ambiguous.
       5. Looking for a place to put the definition.
       6. Straw Poll:

1. Reject the comment
2. Adding a statement that the two concepts are district.
3. Remove Shared Key
   * + - 1. Results: a =4 b= 4 c=3
       1. Looking for Volunteer to resolve this comment.
       2. What is the status of “Shared Key”?
          1. p2558.6 has a deprecated indication for “Shared Key”.
       3. “Shared Key” (WEP version) is only used in WEP section.
       4. The label indicates that “Shared Key” is deprecated, so it should be moved to “obsolete”.
       5. We have determined that when WEP was marked Obsolete, we should have also marked Shared Key as Obsolete, but we missed that. So the debate is on how to proceed with the Obsolete marking of Shared Key or if it can be deleted.
       6. Discussion on the resolution to the comment.
       7. Proposed Resolution: REVISED (PHY: 2020-01-16 01:50:11Z) - The term "shared key" is commonly used to describe these cryptographic procedures. The term "FILS Shared Key authentication" and "Shared Key authentication" are well-defined in the Standard and are distinct and unambiguous.

At 2558.6, replace "Shared Key authentication is deprecated and should not be implemented except for backward compatibility with pre-RSNA STAs."

* + - 1. Mark Ready for Motion.
    1. CID 4734 (PHY)
       1. Review comment
       2. Proposed Resolution: REVISED (PHY: 2020-01-16 01:50:11Z) - The term "shared key" is commonly used to describe these cryptographic procedures. The term "FILS Shared Key authentication" and "Shared Key authentication" are well-defined in the Standard and are distinct and unambiguous.

At 2558.6, replace "Shared Key authentication is deprecated and should not be implemented except for backward compatibility with pre-RSNA STAs."

* + - 1. Mark Ready for Motion.
    1. CID 4733 (PHY)
       1. Review Comment
       2. Proposed Resolution: REVISED (PHY: 2020-01-16 01:50:11Z) - The term "shared key" is commonly used to describe these cryptographic procedures. The term "FILS Shared Key authentication" and "Shared Key authentication" are well-defined in the Standard and are distinct and unambiguous.

At 2558.6, replace "Shared Key authentication is deprecated and should not be implemented except for backward compatibility with pre-RSNA STAs."

* + - 1. Mark Ready for Motion.
    1. CID 4730 (PHY)
       1. Review Comment
       2. WEP and TKIP have been marked Obsolete and Deprecated respectfully.
       3. Proposed resolution: REJECTED (PHY: 2020-01-16 01:54:53Z) - The group has discussed removing these features at length and the consensus was to mark WEP obsolete and mark TKIP as deprecated. Obsolete features may be removed in a future revision of the Standard.
       4. Mark Ready for Motion.
  1. **Review agenda for Thursday**
     1. New time slot
        1. Add Menzo and Jon
     2. For Thursday PM1
        1. Add Payam and Michael Montemurro
     3. Motions on Thursday –
        1. Draft Motion will be prepared by Dorothy
  2. **Recess at 5:58pm**

1. **P802.11REVmd CRC January 16, 2020 Thursday AM2 (10:30-12:30)**
   1. **Called to order** at 10:33am by the TG Chair Dorothy STANLEY (HPE)
   2. **Review Agenda:** 11-2134r4
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-04-000m-2020-january-tgmd-agenda.pptx>
      2. **Thursday AM2**

11-20-0150 Menzo WENTINK (Qualcomm)

GEN CIDs – Jon ROSDAHL (Qualcomm)

* + 1. No changes requested.
    2. Start with Menzo for one hour then Jon
  1. **Patent Policy reviewed**
     1. No items
  2. **Review doc 11-20-150r2** Menzo WENTINK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-02-000m-assorted-crs-revmd-draft-3-0.docx>
     2. CID 4043 (MAC)
        1. Review comment
        2. Review Rational for reject
           1. Dynamic EIFS allows to reduce the EIFS time based on a presumed duration of the response frame to the frame causing the EIFS, and to start no EIFS after what looks like a response frame. Not reducing the EIFS time has been shown to cause potential capture effects.
           2. This concept is relevant irrespective of the addition of new PHYs with more advanced methods, also when the effectiveness is reduced.
           3. Proposed resolution: reject.
        3. Discussion on the history of EIFS vs Dynamic EIFS.
        4. Discussion on the value of the feature.
        5. Rereview of the Commenter proposed change.
        6. Adjustment to the rational for rejection was made.
           1. New Phys may make dynamic EIFS less effective in certain situations, but there may still be benefits. The change proposed by the commenter may not work because the presence or absence of a response or the length of a presumed response cannot (easily) be determined from the PHY header.
        7. Proposed Resolution: Reject - Dynamic EIFS allows to reduce the EIFS time based on a presumed duration of the response frame to the frame causing the EIFS, and to start no EIFS after what looks like a response frame. Not reducing the EIFS time has been shown to cause potential capture effects.

New Phys may make dynamic EIFS less effective in certain situations, but there may still be benefits. The change proposed by the commenter may not work because the presence or absence of a response or the length of a presumed response cannot (easily) be determined from the PHY header.

* + - 1. Mark Ready for Motion.
    1. CID 4044 (MAC)
       1. Review comment
       2. Proposed resolution: Rejected - RIFS is supported in products and should not be removed for this reason. RIVS is marked as obsolete for non-DMG STAs.
       3. Mark Ready for Motion.
    2. CID 4041(PHY) - May have an updated presentation to come later.
    3. CID 4051 (MAC)
       1. Review comment
       2. Discussion on if there is any implementation using DCF rather than EDCA.
       3. Discussed what changes to DCF should be done.
       4. Dot11LongRetryLimit is claimed to be deprecated.
       5. Discussion on why the change would be appropriate.
       6. P1076.41 and line 46 also delete” as appropriate”.
       7. Discussion on why on P4163.8 it was not deleted.
       8. Also, on 4166.46, and 4181.45.
       9. Proposed Resolution: 4051 (MAC): Proposed resolution -- Revised

Remove “or dot11LongRetryLimit” at 1034.50, 1034.57, 4000.38, 4000.53.

Remove "or dot11LongRetryLimit (as appropriate)" at 1076.41, 1076.46

At 1759.37, remove "when SLRC reaches dot11LongRetryLimit,".

At 1763.65, remove “or until the LRC for the MPDU with the Type subfield equal to Data or Management is equal to dot11LongRetryLimit."

At 4163.8, 4166.46, 4181.45 change "either the dot11ShortRetryLimit or dot11LongRetryLimit" to "the dot11ShortRetryLimit".

* + - 1. Mark Ready for Motion.
    1. CID 4137 (PHY)
       1. Review comment
       2. Discussion on if “Reserved” is correct or not.
       3. Field name is not named Reserved, but rather it is a reserved field.
       4. Discussion on what the name should be, and the name was determined to be “Extra Check Bit”
       5. Proposed Resolution: Revised -- agree with the comment. At 3372.63 add "NOTE -- The Extra Check Bit subfield (B0) of the SIG field of S1G format PPDUs sent with a short preamble is always 1 and can be used in addition to the CRC field to verify that the SIG field is correct."

At 3369.14 change "Reserved" to "Extra Check Bit"

At 3370.6 change the Field entry to "Extra Check Bit" and the Description entry to "Set to 1."

* + - 1. Mark Ready for Motion.
    1. CID 4143 (MAC)
       1. Mark Submission Required Assigned to Menzo
    2. CID 4144 (GEN)
       1. Review comment
       2. Menzo proposed resolution: Reject; An MSDU can either have a relative priority referred to as Traffic Category (TC) or belong to a Traffic Stream (TS). The TC or TS is then mapped to a User Priority (UP), which is subsequently mapped to Access Category (AC), which is associated with an EDCAF.

TC and TS are also used for block ack signalling.

Therefore, it appears that the extra level between UP and TC is required, essentially because there are also TSs on which an MSDU can be transmitted.

* + - 1. These are also being worked on by Osama, so we may want Menzo and Osama to talk about a common resolution.
         1. Also, Osama is working on CIDs 4145, 4146 and 4147
      2. Discussion on the use of traffic streams.
    1. CID 4148 (MAC)
       1. Review comment
       2. Proposed Resolution: Reject; The term alternate EDCA refers to an alternate EDCA queue rather than the primary EDCA queue. It seems to be mostly used in reference to a queue in the spec. the only exception is where it talks about the Alternative EDCA capability.

Splitting between a primary queue and an alternate queue is possible because there are 8 UPs and only 4 ACs, so a mapping needs to take place where multiple UPs are mapped to a single AC, which makes it possible to have multiple separate queues on top of the AC.

* + - 1. Mark Ready for Motion.
    1. 4149 (MAC)
       1. Skip for now.
    2. CID 4150 (MAC)
       1. Review comment
       2. Discussion on the number of Queues per EDCA state machine.
       3. Discussion on the difference between 10-24 and 10-25 figure.
       4. Proposed resolution: Reject – the Figures are for reference implementations, and they are correct. Therefor it is fine to keep them in the spec. Having alternative queues is the whole point of Alternate EDCA, therefore Figure 10-25 is significant.
       5. Mark Ready for Motion.
    3. CID 4152 (GEN)
       1. Review comment
       2. Review Meno Proposed resolution: 802.11s and 802.11z are used extensively in the field, for example in Google home networks (11s) and Chromecast (TDLS). 802.11aa is used as well. HCCA may not be used much. Removing it might be quite an effort though.:
       3. Jon has also a Proposed resolution:
       4. Proposed Resolution: REJECTED (GEN: 2020-01-16 19:42:03Z) The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. Amendments were added over time and become part of the base standard. Removing features is done by the deprecation/obsolete process.

802.11s and 802.11z are used extensively in the field, for example in Google home networks (11s) and Chromecast (TDLS).

HCCA is used in video deployments.

* + - 1. Mark Ready for Motion.
  1. **GEN CIDs** Jon ROSDAHL (Qualcomm)
     1. No document reviewed review comments directly in the database.

(They also appear in the 11-20/147r0 document, which has all the GEN comments.)

* + - 1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-03-000m-sb1-revmd-gen-comments.xls>
    1. CID 4776 (GEN):
       1. Looked at several aspects of whether this is incorrect (it seems correct, but only for the MU/SU contexts), or unclear (agreed that there are many other uses of the term, which are not defined). Agreed that MU-MIMO and SU-MIMO are clear enough on their own, without this.
       2. Proposed Resolution: ACCEPTED (GEN: 2020-01-16 19:56:40Z).
       3. No objection. Mark Ready for Motion.
    2. CID 4772 (GEN):
       1. Reviewed locations.
       2. Proposed Resolution: ACCEPTED (GEN: 2020-01-16 19:58:17Z).
       3. No objection. Mark Ready for Motion.
    3. CID 4767 (GEN):
       1. Review comment
       2. Proposed Resolution: ACCEPTED (GEN: 2020-01-16 20:00:54Z).
       3. No objection. Mark Ready for Motion.
       4. Action Item: Mark HAMILTON will review with Ganesh.
    4. CID 4716 (GEN):
       1. Reviewed related CID 4715 first.
       2. After the below discussion, agreed to assign 4716 (this one) to Mark RISON, also.
    5. CID 4715 (GEN):
       1. Noted typo: The suggestion should be to add a MLME-FINETIMINGMSMTRQ (note the “RQ”) to the top of Figure 6-17.
       2. We need a submission to provide the updated Figure.
       3. Assign to Mark RISON
    6. CID 4713 (GEN):
       1. Agreed, this issue is not on the draft under ballot.
       2. Commenter is referred to Jonathon Goldberg.
       3. Proposed Resolution: REJECTED (GEN: 2020-01-16 20:09:36Z) Comment is not on the Standard under ballot. The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. The Comment Resolution Tools are provided by the IEEE-SA. Commenter is referred to Jonathan Goldberg.
       4. Mark Ready for Motion.
    7. CID 4702 (GEN):
       1. This is out of scope of the current draft. The commenter needs to discuss this with the TGax/TGaz leadership and could bring technical comments to REVmd for consideration.
       2. Proposed Resolution: REJECTED (GEN: 2020-01-16 20:12:18Z) Reject - Comment is not on the Standard being balloted. The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
       3. Mark Ready for Motion.
    8. CID 4647 (GEN):
       1. The headers and footers are per IEEE guidelines.
       2. Proposed Resolution: REJECTED (GEN: 2020-01-16 20:18:17Z) - Comment does not identify a problem with the standard. The headers and footers are defined by convention. The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
       3. The commenter is suggested to talk to Jonathon Goldberg about tools that could help.
       4. Mark Ready for Motion.
    9. CID 4584 (GEN):
       1. Noted that the changes apply to page 61 of 11-19/0856r12.
       2. Proposed Resolution: REVISED (GEN: 2020-01-16 20:26:13Z) - Make the changes in 11-19/0856r12 <<https://mentor.ieee.org/802.11/dcn/19/11-19-0856-12-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx>> on page 61 for the section for CID 2418 after "Otherwise the following changes would be needed" for clause 3.2 and 10.3.4.3
    10. CID 4541 (GEN):
        1. Review comment
        2. Proposed Resolution: ACCEPTED (GEN: 2020-01-16 20:27:56Z)
        3. No objection. Mark Ready for Motion.
  1. **Recess until PM1.**

1. **P802.11REVmd CRC January 16, 2020 Thursday PM1 (13:30-15:30)**
   1. **Called to order** at 1:30pm by the TG Chair, Dorothy STANLEY (HPE)
   2. **Review Patent Policy**,
      1. No items identified.
   3. **Review Agenda** – doc 11-19/2134r4
      1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-04-000m-2020-january-tgmd-agenda.pptx>
      2. **Thursday PM1**

* Motions
* CID 4816, 4817 - 11-19-1598 Payam TORAB
* PHY CIDs - Michael MONTEMURRO
* Plans for January – March 2020
* Adjourn
  + 1. Please also add CID 4816, 4817 to Payam’s time.
    2. No objection to make the change.
  1. **Motions:** 
     1. **Motion #Irvine1:** Approve Prior TGmd Minutes:
        1. Approve the minutes of

November meeting minutes: <https://mentor.ieee.org/802.11/dcn/19/11-19-1760>

Teleconference minutes:

<https://mentor.ieee.org/802.11/dcn/20/11-20-0098-00-000m-telecon-minutes-for-revmd-jan-10-2020.docx>

<https://mentor.ieee.org/802.11/dcn/19/11-19-2164-00-000m-telecon-minutes-for-revmd-dec-20.docx>

<https://mentor.ieee.org/802.11/dcn/19/11-19-1984-00-000m-tgmd-2019-nov-1-teleconference-minutes.docx>

* + - 1. Moved: Stephen MCCAAN
      2. Seconded: Jon ROSDAHL
      3. Result: 12-0-0
    1. **Motion #154:** Editorial CIDs:
       1. Approve the comment resolutions in the

Motion-EDITOR-R, Motion-EDITOR-Q, Motion-EDITOR-P tabs in <https://mentor.ieee.org/802.11/dcn/20/11-20-0010-03-000m-revmd-sa1-comments-for-editor-ad-hoc.xls>

Motion-EDITOR2-K, Motion-EDITOR2-L and Motion-EDITOR2-M <https://mentor.ieee.org/802.11/dcn/19/11-19-2160-05-000m-revmd-editor2-standards-association-ballot-comments.xlsx>

and incorporate the text changes into the TGmd draft.

* + - 1. Moved: Emily Qi
      2. Seconded: Jouni MALINEN
      3. Discussion: similar CID 4674 and CID 4815, the changes are on the same line.
      4. **Result Motion #154:** – 12-0-1 Motion Passes
    1. **Motion #155 GEN CIDS:**
       1. Approve the comment resolutions in the

Motion-Irvine-1 in <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-01-000m-sb1-revmd-gen-comments.xls>

and incorporate the text changes into the TGmd draft.

* + - 1. Moved: Jon ROSDAHL
      2. Seconded: Jouni MALINEN
      3. **Result Motion #155:** 14-0-1 Motion Passes
    1. **Motion #156 PHY CIDs:**
       1. Approve the comment resolutions in the

Anti-clogging and PHY Motion A tabs in 11-20/145r1 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0145-01-000m-sb1-revmd-phy-sec-comments.xlsx>> except for CID 4041, and replacing the resolution of CIDs 4733 and 4734 with the resolution of 4735.

and incorporate the text changes into the TGmd draft.

* + - 1. Moved: Michael Montemurro
      2. Seconded**:** Jouni MALINEN
      3. : Discussion:
         1. CID 4734 and 4733– is missing part of resolution. It is the same as 4735. Can fix.
         2. Request to discuss the plan for 4041 – after this motion is disposed.
      4. **Result Motion #156:** 13-0-2 - Motion Passes
      5. Note the ANA request is on 11-19/2154r2 page 4.” SAE Anti-clogging Token”
  1. Review CID 4041 (PHY)
     1. Pulled from Motion
     2. Will be assigned to Tomoko ADACHI, and marked Submission Required.
  2. **Review doc 11-19-1598r0** Payam TORAB (Facebook)
     1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1598-00-000m-dmg-link-measurement-frames.docx>
     2. CID 4816 (PHY)
        1. Review comment
        2. Review submission
        3. Discussion on Measurement exception in table 9-53.
        4. It is believed that all implementors are aware of the proposed change.
        5. Proposed Resolution: REVISED (PHY: 2020-01-16 22:02:58Z) - Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/19/11-19-1598-00-000m-dmg-link-measurement-frames.docx> which address the use of robust link measurement frames.
        6. Mark Ready for Motion.
     3. CID 4817 (PHY)
        1. Review Comment
        2. Review PIC B.4.10 – SM4.5.
        3. Note cited location of the change is p3668.
        4. Instructions in 8.3.4 are provided for insertion of the information.
        5. Proposed Resolution:
        6. Mark Ready for Motion.
     4. CID 4818 (PHY)
        1. Payam will bring submission later.
  3. **Review doc 11-20-179r0** Michael MONTEMURRO
     1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0179-00-000m-revmd-sb1-rac-comments.docx>
     2. CID 4103 (PHY)
        1. Review Comment
        2. Proposed Resolution: Revised. Change “EtherType” to “Ethertype” at the following locations: 164.27, 210.15, 302.47, 2634.32, 2634.33, 2634.41, 2634.44
        3. Mark Ready for Motion.
     3. CID 4104 (PHY)
        1. Review comment
        2. P3571.13 there is Company ID that is part of a name.
        3. Proposed Resolution: Accepted.

Note to editor: the change is at 208.44

* + - 1. Mark Ready for Motion.
    1. CID 4105 (PHY)
       1. Review Comment
       2. Proposed Resolution: Accepted. Note to Editor: the change is at 214.15.
       3. Mark Ready for Motion.
    2. CID 4106 (PHY)
       1. Review Comment
       2. Proposed Resolution: Accepted. Note to Editor: the change is at 2433.1
       3. This cannot be an accept as Etherypes is misspelled.
       4. Updated Proposed Resolution: Revised. At 2433.1 Change "A webpage maintained by the IEEE Registration Authority Committee allowing search of the public values of the Ethertype field is found at http://standards.ieee.org/develop/regauth/ethertype/public.html".

to

"The IEEE Registration Authority provides a public listing of Ethertypes and other identifiers at https://regauth.standards.ieee.org/standards-ra-web/pub/view.html#registries.”

* + - 1. Mark Ready for Motion.
    1. CID 4107 (PHY)
       1. Review Comment
       2. Need to make it Revised to address minor issues.
       3. Proposed Resolution: Revised; At 3571.59, change

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to

"this document is available from the IEEE Registration Authority (<https://standards.ieee.org/products-services/regauth/tut>)".

* + - 1. Mark Ready for Motion.
    1. An R1 will be posted and recirculate it with the RAC prior to motion.
  1. **PHY CIDs: Michael MONTEMURRO**
     1. CID 4498 (PHY)
        1. Review Comment
        2. Proposed Resolution: Accept
        3. Mark Ready for Motion.
     2. CID 4496 (PHY)
        1. Review comment
        2. Review P2689.17.
        3. Discussion on what “into the IEEE 802.11 MAC” means.
        4. Proposed Resolution: REVISED (PHY: 2020-01-16 22:40:26Z) - At 2684.17, Replace "If the GTK, the IGTK if present, and the BIGTK if present are not already configured into IEEE 802.11 MAC"

with "If the GTK, the IGTK, if present, and the BIGTK, if present, have not yet been configured using the MLME-SETKEYS.request primitive"

* + - 1. Mark Ready for Motion.
    1. CID 4473 (PHY)
       1. Review comment
       2. Note that the tag “(11ah)” was not relevant to cited sentence.
       3. Proposed Resolution: Accept
       4. Mark Ready for Motion.
    2. CID 4439 (PHY)
       1. Review comment
       2. Discussion on the use of HT-delayed BA.
       3. The text in 2016 was marked obsolete.
       4. We did remove non-HT-delayed BA but chose not to delete the HT-delayed BA.
       5. Discussion on if we want to remove the feature or not. There are 65 references to be included in the submission for exercising the removal.
       6. Straw poll: Should we delete HT-delayed BA? (y/n/a)
          1. Results: 6-2-7
       7. Graham and Menzo will prepare a submission to remove it.
       8. They will check to ensure that no objection in the WG and also specifically in TGbb/TGbe.
       9. Assign to Graham and mark submission required.
    3. CID 4438 (PHY)
       1. Review comment
       2. Assign to Graham and mark submission required.
    4. CID 4313 (PHY)
       1. Review comment
       2. On page 2549.57 Compare the change with line 25.
       3. Proposed resolution: Accept
       4. Mark Ready for Motion.
    5. CID 4151 (PHY)
       1. Review comment
       2. Similar to CID 2662 which had resolution: REJECTED (PHY: 2019-02-28 21:17:04Z) A Normative definition of Frame exchange sequence is required, and Annex G provides this Definition.
       3. Similar to CID 1277 which had resolution: REJECTED (GEN: 2018-04-12 21:08:02Z) The description in Annex G is sufficient, and the only purpose of Annex G is to give this definition.
       4. Similar to CID 72 which had resolution: REJECTED (MAC: 2017-12-07 17:49:06Z): A Normative definition of Frame exchange sequence is required, and Annex G provides this Definition.
       5. Reference to Annex G was added in CID 188
       6. Discussion on the removal of Annex G.
       7. Some do not want to have it removed, others still do.
       8. Strawpoll: Are we in favour of deleting Annex G? (y/n)
          1. Result strawpoll: 5-8
       9. Proposed Resolution: REJECTED (PHY: 2020-01-16 23:11:36Z) - A Normative definition of Frame exchange sequence is required, and Annex G provides this Definition.
       10. Mark Ready for Motion.
    6. CID 4046 (PHY)
       1. Review comment
       2. Discussion on the insertion of the proposed paragraph.
       3. Discussion on the definition specifics.
       4. After more discussion, it was determined that more work is needed.
       5. Assign CID to Emily QI
  1. **Discuss next meetings:**
     1. Objectives: Comment resolution
     2. Conference call TBD 10am Eastern 2 hours–
        1. January 31, 2020, Feb 7, 14 2020
     3. Next ad-hoc:
        1. February 18-20, 2020 – Sunrise FL
           1. Please RSVP to Graham SMITH
        2. April 2020 –
           1. 21-22-23 April for Cambridge Meeting.
           2. This is accommodating Mark RISON.
           3. Mark RISON to confirm for logistics.
  2. **Schedule Review:**

|  |  |
| --- | --- |
| **Milestone** | **Date** |
| **Initial WGLB** | **Held Feb-March 2018** |
| **D2.0 WGLB Recirculation LB** | **Out of November 2018** |
| **D3.0 WGLB Recirculation LB** | **September 2019** |
| **Form Sponsor Ballot Pool** | **August 2019** |
| **MEC/MDR done** | **May 2019** |
| **D3.0 WGLB Unchanged Recirculation** | **November 2019, EC approval to SB** |
| **D 4.0 Unchanged Recirculation** | **May/July 2019** |
| **Initial Sponsor Ballot (D3.0)** | **December 2019** |
| **Recirculation Sponsor Ballot (D4.0)** | **March 2020** |
| **Recirculation Sponsor Ballot (D5.0)/Unchanged** | **June 2020** |
| **Final WG/EC approval** | **July 2020** |
| **RevCom/SASB approval** | **Sept 2020** |

* 1. **Adjourned 3:29pm**

**References:**

1. Monday PM1:
2. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-01-000m-2020-january-tgmd-agenda.pptx>
3. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-02-000m-2020-january-tgmd-agenda.pptx>
4. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-24-000m-802-11revmd-editor-s-report.ppt>
5. <https://mentor.ieee.org/802.11/dcn/19/11-19-2154-01-000m-sae-anti-clogging-token.docx>
6. <https://mentor.ieee.org/802.11/dcn/19/11-19-2154-02-000m-sae-anti-clogging-token.docx>
7. <https://mentor.ieee.org/802.11/dcn/20/11-20-0127-02-000m-some-revmd-d3-security-comments.docx>
8. <https://mentor.ieee.org/802.11/dcn/20/11-20-0127-03-000m-some-revmd-d3-security-comments.docx>
9. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-04-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
10. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-05-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
11. Tuesday PM2:
12. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-02-000m-2020-january-tgmd-agenda.pptx>
13. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-03-000m-2020-january-tgmd-agenda.pptx>
14. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-05-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
15. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-00-000m-assorted-crs-revmd-draft-3-0.docx>
16. <https://mentor.ieee.org/802.11/dcn/13/11-13-0014-01-000m-txop-limits.pptx>
17. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-03-000m-sb1-revmd-gen-comments.xls>
18. Wednesday PM1:
19. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-03-000m-2020-january-tgmd-agenda.pptx>
20. <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-00-000m-sa1-proposed-resolutions-for-editor-adhoc.doc>
21. <https://mentor.ieee.org/802.11/dcn/20/11-20-0141-01-000m-sa1-proposed-resolutions-for-editor-adhoc.doc>
22. <https://mentor.ieee.org/802.11/dcn/20/11-20-0142-00-000m-proposed-resolution-for-cid-4048.doc>
23. <https://mentor.ieee.org/802.11/dcn/20/11-20-0143-00-000m-proposed-resolution-for-cid-4108.docx>
24. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-03-000m-sb1-revmd-gen-comments.xls>
25. Wednesday PM2:
    1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-04-000m-2020-january-tgmd-agenda.pptx>
    2. <https://mentor.ieee.org/802.11/dcn/18/11-18-2165-06-000m-mac-addr-change-scrambler-reset.docx>
    3. <https://mentor.ieee.org/802.11/dcn/18/11-18-2165-07-000m-mac-addr-change-scrambler-reset.docx>
    4. <https://mentor.ieee.org/802.11/dcn/20/11-20-0168-01-000m-cid4076-technical-motivation.pptx>
    5. <https://mentor.ieee.org/802.11/dcn/19/11-19-2024-01-000m-mac-address-change.docx>
26. Thursday AM2:
    1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-04-000m-2020-january-tgmd-agenda.pptx>
    2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-02-000m-assorted-crs-revmd-draft-3-0.docx>
    3. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-03-000m-sb1-revmd-gen-comments.xls>
    4. <https://mentor.ieee.org/802.11/dcn/19/11-19-0856-12-000m-resolutions-for-some-comments-on-11md-d2-0-lb236.docx>
27. Thursday PM1:
    1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2134-04-000m-2020-january-tgmd-agenda.pptx>
    2. <https://mentor.ieee.org/802.11/dcn/19/11-19-1760>
    3. <https://mentor.ieee.org/802.11/dcn/20/11-20-0098-00-000m-telecon-minutes-for-revmd-jan-10-2020.docx>
    4. <https://mentor.ieee.org/802.11/dcn/19/11-19-2164-00-000m-telecon-minutes-for-revmd-dec-20.docx>
    5. <https://mentor.ieee.org/802.11/dcn/19/11-19-1984-00-000m-tgmd-2019-nov-1-teleconference-minutes.docx>
    6. <https://mentor.ieee.org/802.11/dcn/20/11-20-0010-03-000m-revmd-sa1-comments-for-editor-ad-hoc.xls>
    7. <https://mentor.ieee.org/802.11/dcn/19/11-19-2160-05-000m-revmd-editor2-standards-association-ballot-comments.xlsx>
    8. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-01-000m-sb1-revmd-gen-comments.xls>
    9. <https://mentor.ieee.org/802.11/dcn/20/11-20-0145-01-000m-sb1-revmd-phy-sec-comments.xlsx>
    10. <https://mentor.ieee.org/802.11/dcn/19/11-19-1598-00-000m-dmg-link-measurement-frames.docx>
    11. <https://mentor.ieee.org/802.11/dcn/20/11-20-0179-00-000m-revmd-sb1-rac-comments.docx>
    12. <http://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/tutorials/eui.pdf>