IEEE P802.11
Wireless LANs

|  |
| --- |
| Telecon Minutes for REVmd CRC- April 29 May 1 2020 |
| Date: 2020-05-05 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | Qualcomm Technologies, Inc. | 10871 N 5750 WHighland, UT 84003 | +1-801-492-4023 | jrosdahl @ ieee.org |
|  |  |  |  |  |

Abstract

Minutes for the 802.11md REVmd CRC Telecons for April 29 and May 1

R0: April 29th

R1: May 1

R2: Minor updates including missing contact info added

1. **IEEE 802.11md REVmd CRC Telecon Wednesday April 29, 2020 16:00-18:00 ET**
	1. **Called to order at 4:05pm** by the TG Chair Dorothy STANLEY (HPE)
	2. **Review Patent and Participation Policy**
		1. No Issues noted.
	3. **Attendance:** -please log with IMAT:
		1. About 12 attendees reported by WebEx

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | TGmd | 4/29 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
|  | TGmd | 4/29 | Coffey, John | Realtek Semiconductor Corp. |
|  | TGmd | 4/29 | Derham, Thomas | Broadcom Corporation |
|  | TGmd | 4/29 | Goodall, David | Morse Micro |
|  | TGmd | 4/29 | Hamilton, Mark | Ruckus Wireless |
|  | TGmd | 4/29 | Hansen, Christopher | Peraso Technologies Incorporated |
|  | TGmd | 4/29 | Levy, Joseph | InterDigital, Inc. |
|  | TGmd | 4/29 | Montemurro, Michael | BlackBerry |
|  | TGmd | 4/29 | Qi, Emily | Intel Corporation |
|  | TGmd | 4/29 | RISON, Mark | Samsung Cambridge Solution Centre |
|  | TGmd | 4/29 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
|  | TGmd | 4/29 | Stanley, Dorothy | Hewlett Packard Enterprise |

* + 1. Missing from IMAT: None
	1. **Review Agenda**: 11-20/535r9:
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-09-000m-2020-april-july-teleconference-agendas.docx>
		2. **The draft agenda for the teleconferences is below:**

1.       Call to order, attendance, and patent policy

a.       **Patent Policy: Ways to inform IEEE:**

1. Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or
2. Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
3. Speak up now and respond to this 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, please respond at this time by providing relevant information to the WG Chair

b.      Patent, Participation slides: See slides 5-12 in <https://mentor.ieee.org/802.11/dcn/20/11-20-0308-00-000m-2020-march-tgmd-agenda.pptx>

c. Adhoc meeting reminders:

April 21-23 Cambridge UK – Not in person; teleconference proposal is below.

2.       Editor report – Emily QI/Edward AU

3.       Comment resolution

1. **2020-04-29 Wednesday 4-6pm Eastern 2 hours**
	1. Edward AU –
		1. CID 4497 <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-16-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
		2. CID 4101 <https://mentor.ieee.org/802.11/dcn/20/11-20-0270-10-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0-part-ii.docx>
		3. Edward Au – CID 4250 <https://mentor.ieee.org/802.11/dcn/20/11-20-0371-02-000m-resolution-for-cmmg-mac-related-cids-4217-4218-and-4250.docx>
	2. Jon ROSDAHL – GEN CIDs
	3. Mark RISON - CIDs – see <https://mentor.ieee.org/802.11/dcn/20/11-20-0639-00-000m-selected-rison-discussion-cids.xlsx>

4. Adjourn

* + 1. Discussion of Agenda
		2. No objection to updated Agenda see R10
	1. **Editor Report** – Emily QI (Intel)
		1. We have worked on implementing D3.3 and ready for review tomorrow
		2. Reviewer requests need to respond today.
		3. Plan to review and post after review.
	2. **Review doc 11-20/657**- Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0657-00-000m-proposed-text-change-related-to-the-description-of-a-deprecated-object.docx>
			1. This submission presents proposed text change to the description of a deprecated object.
			2. Review Changes to Deprecated sentence.
			3. Proposed Resolution: Proposed resolution:

At 3816.56, 3817.4, 3817.20, 3817.39, 3823.59, 3825.58, 3826.10, 3852.61, 3876.54, 3877.1, 3877.14, 3877.28, 3877.44, 3878.22 3878.40, 3878.53, 3896.1, 3896.40, 3897.26, 3901.51, 3999.4, 4006.16, 4011.65, 4014.10, 4014.24, 4023.24, 4023.40, 4023.53, 4150.8, 4155.24, 4155.56, 4156.5, 4156.21, 4156.37, 4156.53, 4171.16, 4171.30, 4269.30, change “Deprecated as the related feature has been removed from the standard” to “Deprecated as the related feature has been removed from IEEE Std 802.11”.

At 3848.1, change “Deprecated because this variable is not referenced in the standard” to “Deprecated because this attribute is not referenced in IEEE Std 802.11”.

* + - 1. A Separate motion will be made on this change.
	1. **Review doc 11-20/270r10** Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0270-10-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0-part-ii.docx>
		2. CID 4101 (Editor2)
			1. Review comment
			2. Review proposed changes and context of change
			3. Proposed Resolution: Revised;

At 2549.6 and 2550.53, change “RSNA capable STA’s” to “RSNA STA’s”.

At 2549.8 and 2549.34, change “identifies the AP as RSNA capable” to “identifies the AP as an RSNA AP”.

At 2549.37 and 2549.42, change “RSNA capable AP” to “RSNA AP”.

At 2550.4 and 2550.30, change “identifies the peer as RSNA capable” to “identifies the peer as an RSNA STA”.

At 2550.8 and 2550.34, change “RSNA capable” to “an RSNA STA”.

At 2550.10 and 2550.15, change “RSNA capable peer” to “peer RSNA STA”.

At 2550.57, change “RSNA capable STA” to “RSNA STA”.

At 2630.41, change “RSNA capable AP” to “RSNA AP” (2x).

At 2643.6 and 2643.9, change “RSNA capable” to “an RSNA STA”.

At 2643.20 change “RSNA capable STA” to “RSNA STA”.

At 3824.50, change “RSNA capable” to “an RSNA STA”.

At 3865.64, change “RSNA capable clients” to “an RSNA non-AP STA”.

Delete definition of RSNA capable at 196.44.

At 4331.37, change “DMG capable Station” to “DMG STA”.

At 2708.6, change “FILS capable AP” with “FILS AP”.

At 2708.26, change “FILS-capable AP” to “FILS AP”.

At 2708.43, change “a FILS capable STA” with “a FILS STA”.

At 2708.47 and 2708.48, change “a FILS capable AP” with “a FILS AP”.

At 2712.43, change “a FILS capable STA” with “a FILS STA”.

At 1595.39, change “TDLS capable STAs” with “TDLS STAs”.

At 2348.63, replace “TDLS capable STAs” with “TDLS STAs”.

At 2349.2, change “A TDLS capable STA” with “A TDLS STA”.

At 2349.21, change “whether the TDLS peer STA is a TDLS capable or not” with “whether the peer STA is a TDLS STA”.

At 2349.23, change “the TDLS peer STA sending the TDLS Setup Response frame is TDLS capable” with “the peer STA sending the TDLS Setup Response frame is a TDLS STA”.

At 2349.26, change “TDLS capable STAs” with “TDLS STAs”.

At 2430.19, change “another TDLS capable STA” with “another TDLS STA”.

Note to the commenter: This is the proposed change with an additional change at 2549.42 for “RSNA capable AP”, and additional changes for “DMG capable”, “FILS capable”, and “TDLS capable”.

* + - 1. No objection – Mark Ready for Motion
	1. **Review doc 11-19/2163r16** – Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-16-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
		2. CID 4497 (PHY)
			1. Review Comment
			2. Review proposed changes
			3. Proposed Resolution: REVISED (PHY: 2020-04-29 20:28:14Z) –

 Delete the entry of PC34.1.8.1 and the corresponding protocol capability, references, status, and support from B.4.4.1.

At 2705.5, 2705.19, 2705.23, 2705.35, 2705.43, and 2705.47 in subclause 12.11.2 (AP PeerKey protocol), replace “PeerKey protocol” with “AP PeerKey protocol”.

* + - 1. No Objection – Mark Ready for Motion
	1. **Review Doc 11-20/633r0** – Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0633-00-000m-resolution-for-cids-4578-4579-and-4580.docx>
		2. CID 4578, 4579, 4580 (GEN)
			1. Review comment
			2. Review submission discussion
			3. Review proposed changes
			4. Proposed resolution: REVISED (GEN: 2020-04-29 20:37:07Z); incorporate the changes in 11-20/633r1<REVISED (GEN: 2020-04-29 20:37:07Z); incorporate the changes in 11-20/633r1 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0633-01-000m-resolution-for-cids-4578-4579-and-4580.docx>> which addresses the comment in the direction proposed by the commenter.
			5. No objection – Mark Ready for Motion
	2. **Review doc 11/20/0371r4** – Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0371-04-000m-resolution-for-cmmg-mac-related-cids-4217-4218-and-4250.docx>
		2. CID 4250 (MAC)
			1. Review Comment
			2. Discussion on characteristics that need to be included in table.
			3. Keep the focus on the specific Comment and proceed with the proposed resolution.
			4. Proposed Resolution: REVISED (MAC: 2020-04-29 20:38:03Z): At page 3562 in Table 25-37 (CMMG PHY characteristics) in subclause 25.14.4 (PHY characteristic), add a new PHY parameter aCMMGPPMinListeningTime parameter with value 150 μs, and add the unit μs for the PHY parameter aCCATime.

Note to Editor: Result of the change is shown in 11-20/0371r4 (https://mentor.ieee.org/802.11/dcn/20/11-20-0371-04-000m-resolution-for-cmmg-mac-related-cids-4217-4218-and-4250.docx).

* + - 1. No objection – Mark Ready for Motion
	1. **Review doc 11-20/634r0** - Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0634-00-000m-resolution-for-gen-cids-4162-4256-4122-and-4102.docx>
		2. CID 4162 (GEN)
			1. Review Comment
			2. Review location.
			3. Discussion on the changes to the table being inline with other changes to the tables.
			4. Peter E. noted that E-4 needs to be constantly updated to align with any changes to the other tables.
			5. This is ready to go but need to post to the reflector for more discussion.
		3. CID 4256 (GEN)
			1. Review comment
			2. Discussion on when we should add or delete “DEFVAL” lines.
			3. Suggestion to add “The table is empty by default”.
			4. Discussion to not have either the suggested line or the “DEFVAL” line.
			5. Proposed Resolution: REVISED (GEN: 2020-04-29 21:00:43Z) at 4172.42 delete “DEFVAL {0}”
			6. Update the resolution of CID 4254 to remove the line that added DEFVAL. (line for change of 4174.39). We will make the change, assign the CID to EDITOR2 and will remotion the CID on May 15th.
			7. Mark both CID 4256 and 4254 to Ready for Motion.
		4. CID 4122 (GEN)
			1. Review Comment
			2. Proposed resolution: REJECTED (GEN: 2020-04-29 21:02:04Z) This document will be professionally edited during publication. This request will be referred to the publication editor.
			3. No objection -Mark Ready for Motion
		5. CID 4102 (GEN)
			1. Review comment
			2. Proposed Resolution REJECTED (GEN: 2020-04-29 21:03:51Z) The commenter 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
	2. **GEN CIDs** – Jon ROSDAHL (Qualcomm)
		1. CID 4783 (GEN)
			1. Review Database proposal:
				1. GEN: 2020-04-24 15:23:22Z - updated Proposed resolution:

Change "This is a capability variable" to "This is a status variable."

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

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

Editor - Deprecate the MIB entries for dot11CDMGSpatialsharingActivated and dot11CDMGClusteringActivated.[Add sentence here for why per C.2]

* + - 1. More work needed.
			2. Follow-up on Action items from previous Telecons.
		1. CID 4777 (GEN)
			1. Review Comment
			2. Review Definition change
			3. Proposed Resolution: REVISED (GEN: 2020-04-29 21:10:33Z) Add a definition to 3.1 "single-user multiple input, multiple output (SU-MIMO): A technique by which a station (STA) with more than one antenna either transmits to or receives from a single STA independent space-time streams over the same radio frequencies."
			4. No Objection – Mark Ready for Motion
		2. CID 4738 (GEN)
			1. The text is on p755.34.
			2. The proposed change describes an index, but the primitive defines an integer for the same parameter.
			3. The parameter still needs to be an integer, but the description could be updated on guidance of what the integer is.
			4. In the context where this parameter is used, the possible PPDU formats are not know. Ok with the spirit of the change, but the formats are not understood.
			5. Clause 10.6 describes exactly what formats are required.
			6. For example, for a NAV timeout, it’s the format of the data frame. That can’t be determined from the RTS/CTS exchange.
			7. The specification is unclear as it is usage.
			8. The description of the parameter needs to be updated to indicate the value.
			9. The thing that’s sent from the PHY to the MAC needs to be a list. Not just a single value.
			10. It’s not understood whether this is true for other PHY attributes.
			11. PHY SMEs should be consulted for this resolution.
			12. The return value to the MAC from the PHY will be different depending on its state.
			13. The PLME.request primitive is not generated in real implementations. They just give an indication of how the layers contribute conceptually.
			14. The two alternatives:
				1. Accept the comment.
				2. Leave the middle cell as integer and modify the description.
			15. MORE WORK REQUIRED: Jon ROSDAHL to document the three alternatives and send it to the 11md reflector for feedback on the proposed way forward.
			16. Given that this primitive is not generally implemented, we likely do not need the precision. These parameters could be dynamic.
			17. *{Post meeting note: GEN: 2020-04-30 05:37:22Z - Similar to CID 1413 - with resolution: REJECTED (GEN: 2018-10-05) Reject. The proposed change is insufficient; normative text describing how this list of integers is used or indexed, and when a worst case must be used, is required.}*
		3. CID 4603 (GEN)
			1. Review comment
			2. In D3.2, page 999.26, there is a MIB variable dot11MutipleBSSIDActivated exists. (left over typo from CID 1095)
			3. If we change the specification text, we can align with the MIB.
			4. There are three different spellings. We need to decide on how to move forward.
			5. This is related to CID 1095, document 18/1566r3. It looks as though there was a change missed.
			6. MORE WORK REQUIRED: Assign to Edward AU and mark the CID as submission required.
			7. Its not that the feature was deprecated. The use of dot11MultiBSSIDImplemented replaced dot11MultiBSSIDActivated.
			8. GEN: 2020-04-29 21:35:32Z - status set to: Submission Required - Note CID 1095 was used to change MultipleBSSIDActivated to MultiBSSIDImplemented, and one was missed on page 998.34.
		4. CID 4419 (GEN)
			1. If a STA that implements mesh and infrastructure is configured to use infrastructure, the STA is not a mesh STA.
			2. The proposed resolution indicates that the definition is sufficient.
			3. The issue is that this goes back to a convention that is not documented. A given instantiation of an implementation is what the qualifier refers to.
			4. Two options: We could describe the convention or change “implements” to “executes”.
			5. We should just fix the definition of “implements”.
			6. When we say, “A STA implements”, we really mean the code is being executed.
			7. If a device behaves as a STA and an AP, when it behaves as a STA, it does not have AP properties.
			8. Either we modify the definition, or we do not come to consensus to make the change.
			9. MORE WORK REQUIRED: Mark HAMILTON to either propose a resolution or reject the comment. This will be on the agenda for the Friday May 1 teleconference.
		5. CID 4163 (GEN)
			1. Review Comment
			2. Proposed Resolution: REJECTED (GEN: 2020-04-29 21:50:41Z) 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.
		6. CID 4787 (GEN)
			1. Review Comment
			2. MORE WORK REQUIRED: Assigned to Jon ROSDAHL
			3. GEN: 2020-04-28 01:56:37Z - Either we would need to identify each location of that phrase " "FILS authentication frame" or "SAE authentication frame " and change to the longer description or accept the proposed change. A Rejection reason may also be acceptable.
		7. CID 4458 (GEN)
			1. Review comment
			2. Change Comment Group to Insufficient Detail with Status: Submission required.
			3. MORE WORK REQUIRED: Assign to Mark RISON
			4. AdHoc status: GEN: 2020-04-29 21:54:56Z - status set to: Submission Required – if no proposal, reject for insufficient detail.

Default Resolution: REJECTED; 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.

* + 1. CID 4247 (GEN)
			1. Review Comment – similar, but broader than CID 4248.
			2. Assign to Comment Group: Insufficient Detail – with status: Submission required.
			3. MORE WORK REQUIRED: Assign to Mark RISON if no submission, will be rejected for insufficient detail.
		2. CID 4248 (GEN)
			1. Review Comment – Similar to 4247, but it is a specific instance.
			2. Note: dot11TunneledDirectLinkSetup cannot have a default.
			3. Proposed Resolution: ACCEPTED (GEN: 2020-04-29 21:59:04Z)
			4. No objection – Mark Ready for motion.
	1. **Review the proposed agenda for the next call.**
	2. **Adjourn at 18:01 pm ET**
1. **IEEE 802.11md REVmd CRC Telecon Friday May 1, 2020 10:00-12:00 ET**
	1. **Called to order at 10:05 am** by the TG Chair Dorothy STANLEY (HPE)
	2. **Review Patent and Participation Policy**
		1. No Issues noted.
	3. **Attendance:** -please log with IMAT:
		1. About 13 attendees reported by WebEx

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | TGmd | 5/1 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
|  | TGmd | 5/1 | Coffey, John | Realtek Semiconductor Corp. |
|  | TGmd | 5/1 | Hamilton, Mark | Ruckus Wireless |
|  | TGmd | 5/1 | Kwon, Young Hoon | NXP Semiconductors |
|  | TGmd | 5/1 | Levy, Joseph | InterDigital, Inc. |
|  | TGmd | 5/1 | McCann, Stephen | BlackBerry |
|  | TGmd | 5/1 | Montemurro, Michael | BlackBerry |
|  | TGmd | 5/1 | Qi, Emily | Intel Corporation |
|  | TGmd | 5/1 | RISON, Mark | Samsung Cambridge Solution Centre |
|  | TGmd | 5/1 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
|  | TGmd | 5/1 | Smith, Graham | SR Technologies |
|  | TGmd | 5/1 | Stanley, Dorothy | Hewlett Packard Enterprise |
|  | TGmd | 5/1 | Wentink, Menzo | Qualcomm Incorporated |

* + 1. Missing from IMAT: None
	1. **Review Agenda**: 11-20/535r10:
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-10-000m-2020-april-july-teleconference-agendas.docx>
		2. **The draft agenda for the teleconferences is below:**

1.       Call to order, attendance, and patent policy

a.       **Patent Policy: Ways to inform IEEE:**

1. Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or
2. Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
3. Speak up now and respond to this 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, please respond at this time by providing relevant information to the WG Chair

b.      Patent, Participation slides: See slides 5-12 in <https://mentor.ieee.org/802.11/dcn/20/11-20-0308-00-000m-2020-march-tgmd-agenda.pptx>

2.       Editor report – Emily QI/Edward AU

3.       Comment resolution

a) 2020-05-01 Friday 10 am Eastern 2 hours

i. Alfred ASTERJADHI– CIDs 4441, 4443 11-20-0446

ii. Sean COFFEY – CID 4229, 4471

iii. Menzo CIDs 4494, 4495, 4416

iv. Graham SMITH – CIDs 4444 11-20-367, CIDs 4438, 4439

v. Stephen MCCANN – CID 4100 <https://mentor.ieee.org/802.11/dcn/20/11-20-0654-00-000m-cid-4100-proposed-resolution.doc>

vi. Mark Rison – CIDs 4432, 4451, 4767, 4625, 4543 <https://mentor.ieee.org/802.11/dcn/20/11-20-0435-02-000m-resolutions-for-some-comments-on-11md-d3-0-sb1.docx>

vii. Mark RISON - CIDs – see <https://mentor.ieee.org/802.11/dcn/20/11-20-0639-03-000m-selected-rison-discussion-cids.xlsx>

* + 1. Move Alfred to the end of the list as he was not present at the start.
		2. No objection with updated agenda see doc 11-20/535r11.
		3. Note May 15th is next scheduled Motion time.
	1. **Editor Report** – Emily QI (Intel)
		1. Review of D3.3 has begun
		2. Master Spreadsheet doc 11-19/2156r8
			1. <https://mentor.ieee.org/802.11/dcn/19/11-19-2156-08-000m-revmd-sponsor-ballot-comments.xls>
		3. Should have D3.3. available next week
	2. **Review doc 11029/683r0** – Sean Coffey (Realtek)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0683-00-000m-revmd-sb1-phy-cr-cid-4229.docx>
		2. CID 4229 (MAC)
			1. Review Comment.
			2. Review discussion from submission.
			3. Proposed resolution: REVISED.

Change “NOTE 1—A STA is not required to include all mandatory rates in its operational rate set, and a STA starting a BSS is not required to include all mandatory rates in the basic rate set.” to “NOTE 1—A STA that is not a Class 2 ERP STA and is not a Class 2 HT STA is not required to include all mandatory rates in its operational rate set, and a STA starting a BSS is not required to include all mandatory rates in the basic rate set.”

(I.e., add “that is not a Class 2 ERP STA and is not a Class 2 HT STA” after the first “A STA” in the note.)

* + - 1. Discussion – what rates should be included in the MCS values.
			2. From WebEx chat window:
				1. from [V] Mark RISON (Samsung) to everyone: From D3.2:
				2. from [V] Mark RISON (Samsung) to everyone: shall select a <VHT-MCS, NSS> tuple from the operational VHT-MCS and NSS set parameter of the intended receiver the AP’s operational HT-MCS(#2446) set the AP’s operational VHT-MCS and NSS set
				3. from [V] Mark RISON (Samsung) to everyone: Figure 9-377—Supported MCS Set field format
				4. from [V] Mark RISON (Samsung) to everyone: Basic HT-MCS Set Indicates the HT- MCS(#2446) values that are supported by all HT STAs in the BSS.
			3. Discussion on the history and implementation methods. Discussion on the asserted issue and if it should be changed or not.
			4. Note from the standard:
				1. From 10.6.5.7: When the operational rate set of the receiving STA or STAs is not known, the transmitting STA shall transmit using a rate in the BSSBasicRateSet parameter, or an MCS in the Basic HT-MCS Set field of the HT Operation parameter of the MLME-START.request primitive or Basic HT-MCS Set field of the HT Operation parameter of the SelectedBSS parameter of the MLME-JOIN.request primitive, or a <VHT-MCS,NSS> tuple in the basic VHT-MCS and NSS set, (11ah)or an <S1G-MCS, NSS> tuple in the BSSBasicS1GMCS\_NSSSet parameter, or a rate from the mandatory rate set of the attached PHY if the BSSBasicRateSet, the Basic HT-MCS Set field of the HT Operation parameter of the MLMESTART.request primitive or Basic HT-MCS Set field of the HT Operation parameter of the SelectedBSS parameter of the MLME-JOIN.request primitive, and the basic VHT-MCS and NSS set(11ah), and the BSSBasicS1GMCS\_NSSSet are empty.
				2. Discussion on the terms and what rates are constrained to be.
				3. Looking for Volunteer for making some text to link the operational rate set and mandatory rate sets.
				4. A Note is informational and is informational not mandatory. It is highlighting something that is in normative text. The Note should be consistent with normative text.
				5. The reason for the Note is the concept of PHY mandatory rates and how they are associated with the MAC operating rates. The Note was added to help, and we should address the comment.
				6. ACTION ITEM: CID 4229 assigned to Mark RISON. Mark H and Mark R will work on the proposed resolution.
	1. **Review doc 11-20/691r0** – Sean COFFEY (Realtek)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0691-00-000m-revmd-sb1-phy-cr-cid-4471.docx>
		2. CID 4471 (MAC)
			1. Review comment
			2. Review discussion and changes presented in the submission.
			3. Proposed Resolution: CID 4471 (MAC): REVISED (MAC: 2020-05-01 14:44:43Z): Incorporate the changes in 11-20/0691r0 (<https://mentor.ieee.org/802.11/dcn/20/11-20-0691-00-000m-revmd-sb1-phy-cr-cid-4471.docx>), which resolves the comment suggested by the commenter.
			4. No objection – Mark Ready for Motion
	2. **Review Doc 11-20/150r8** Menzo WENTINK (Qualcomm)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-08-000m-assorted-crs-revmd-draft-3-0.docx>
		2. CID 4416 (GEN)
			1. Review Comment
			2. Review proposed changes
			3. Proposed Resolution: Revised. Instead of making these entries read-only, extend the dot11EDCATable MIB attributes so they can also be used at the AP to define the EDCA parameters to be communicated to the non-AP STAs. Make the changes specified in doc 11-20/0150r8 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0150-08-000m-assorted-crs-revmd-draft-3-0.docx>> for CID 4271.
			4. No objection – Mark ready for Motion
		3. CID 4289 (MAC)
			1. Review Comment.
			2. Review discussion from submission.
			3. Proposed Resolution: CID 4289 (MAC): REJECTED (MAC: 2020-05-01 14:51:26Z): It is not possible to send MPDUs from two ACs within an A-MPDU in REVmd. This proposal might be submitted to 11ax.
				1. No objection – Mark Ready for Motion
		4. CID 4291 (PHY)
			1. Review comment
			2. Review proposed changes.
			3. Proposed resolution deletes the parenthesis in the phrase, "(QoS) Data +CF-Ack, (QoS) Data +CF-Poll+CFAck, or (QoS) CF-Poll +CF-Ack"
			4. ACTION ITEM: Menzo to update the resolution with MIB definitions and post an updated document. *(This was completed after further discussion below)*
			5. Need to review when updates are made.
			6. Discussion on if QoSCFPolls are still needed. Dot11QosCFPoll\* do exist, but not dot11CFPoll.
			7. Add p179.46 delete definition of “contention free (CF) pollable”.
			8. Added a note to commenter for rational for not deleting some of the requested item.
			9. At 782.18 "delete CF-Poll means delete the phrase at the end that talks about CF-Poll (without the QoS).
			10. Proposed Resolution: REVISED (PHY: 2020-05-01 15:03:22Z) - Incorporate the changes in 11-150r9 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0150-09-000m-assorted-crs-revmd-draft-3-0.docx>> under CID 4291, which corrects some vestigial occurrences of the PCF frame formats, mainly in the PICS.
			11. Mark Ready for Motion – updates may be needed to be included in the R9.
		5. CID 4294 (MAC)
			1. Review comment
			2. Discussion on the changes to the cells at 797.20. and 797.28
			3. Need to delete At P797.37, P797.40, P797.45, P797.48, delete "in a nonmesh BSS".
			4. Proposed resolution: REVISED (MAC: 2020-05-01 15:10:06Z):

At P797.20, change:

QoS Data and QoS Data +CF-Ack frames sent by non-AP STAs that are not a TPU buffer STA or a TPU sleep STA in a nonmesh BSS

to:

QoS Data and QoS Data +CF-Ack frames sent in a nonmesh BSS by non-AP STAs that are not a TPU buffer STA or a TPU sleep STA

At P797.28, change:

QoS Null frames sent by non-AP STAs that are not a TPU buffer STA or a TPU sleep STA in a nonmesh BSS

to:

QoS Null frames sent in a nonmesh BSS by non-AP STAs that are not a TPU buffer STA or a TPU sleep STA

At P797.37, P797.40, P797.45, P797.48, delete "in a nonmesh BSS".

* + - 1. No Objection – Mark Ready for Motion
		1. CID 4315 (EDITOR2)
			1. Review comment
			2. Review proposed changes.
			3. Change to view context and changes together.
			4. The cited sentence was ambiguous, and more work will need to be done.
		2. CID 4326 (EDITOR)
			1. Already motioned – see motion #170
		3. CID 4345 (MAC)
			1. Review comments
			2. Discussion on footnotes vs Notes and which are normative.
			3. See 11-13/0697, and it shows 7.5.8 Foot notes to a table are normative, but notes are informative.
			4. Not enough detail is provided to resolve.
			5. FYI - per IEEE SA P&P website: "6.4.3 Notes and footnotes

Notes and footnotes are informative except as noted in subclauses 6.4.4 and 6.4.5. The IEEE Standards Style Manual provides further information about notes and footnotes.

6.4.4 Notes to tables and footnotes to tables

A note to a table is informative. A footnote to a table is normative.

6.4.5 Notes to figures and footnotes to figures

A note to a figure is informative. A footnote to a figure is normative."

* + - 1. Proposed Resolution: REJECTED (MAC: 2020-05-01 18:21:23Z): 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.
			2. ACTION ITEM: Mark HAMILTON to provide expanded rejection reason for the resolution. {*Secretary note – action item complete}*
			3. Mark Ready for Motion
		1. CID 4436 (PHY)
			1. Review comment
			2. Review the proposed changes.
			3. Proposed Resolution: ACCEPTED (PHY: 2020-05-01 15:29:01Z)
			4. No objection- Mark Ready for Motion
		2. CID 4437 (MAC)
			1. Review comment
			2. Proposed Resolution: ACCEPTED (MAC: 2020-05-01 15:31:37Z)
			3. No objection- Mark Ready for Motion
		3. CID 4494 (MAC)
			1. Review comment
			2. Discussion on initialize vs set.
			3. Proposed resolution:

CID 4494 (MAC): REVISED (MAC: 2020-05-01 15:34:36Z): At 2783.63, change "When ACTOPN event occurs, the mesh STA shall set the retryCounter to 0, and perform a sndOPN action. The retryTimer shall be set and the finite state machine shall transition to OPN\_SNT state." to "When ACTOPN event occurs, the mesh STA shall set a retryCounter to 0, and perform a sndOPN action. The retryTimer shall be set and the finite state machine shall transition to OPN\_SNT state." This change implements what the comment suggested.

* + - 1. No objection – Mark Ready for Motion
		1. CID 4495 (MAC)
			1. Review comment
			2. Review proposed changes
			3. Prepared revised resolution
			4. Proposed Resolution:

CID 4495 (MAC): REVISED (MAC: 2020-05-01 15:36:42Z):

At 2781.40 change

"TOR1—This event indicates that the retryTimer has expired and dot11MeshMaxRetries has not

been reached. The Mesh Peering Open frame shall be resent, an action represented in the state

machine table by setR."

to

"TOR1—This event indicates that the retryTimer has expired and the retry counter is less than dot11MeshMaxRetries. The Mesh Peering Open frame shall be resent, an action represented in the state

machine table by setR."

At 2781.44 change

"TOR2—This event indicates that the retryTimer has expired and dot11MeshMaxRetries has been reached. The mesh peering instance shall be closed when TOR2 occurs."

to

"TOR2—This event indicates that the retryTimer has expired and the retryCounter is equal to dot11MeshMaxRetries. The mesh peering instance shall be closed when TOR2 occurs."

This change ties the TOR2 event to the retryCounter explicitly, rather than implicitly.

At 2792.62 change

"TOR3—This event indicates that the retryTimer has expired, the dot11MeshMaxRetries has been

reached, the AMPE is enabled, but the mesh STA failed to confirm the selection of the shared mesh"

to

"TOR3—This event indicates that the retryTimer has expired, the retryCounter is equal to dot111MeshMaxRetries, the AMPE is enabled, but the mesh STA failed to confirm the selection of the shared mesh"

These changes tie the TOR1, TOR2, TOR3 events to the retryCounter explicitly, rather than implicitly.

* + - 1. No objection – Mark Ready for Motion
		1. Skipped 4438 and 4439 are assigned to Graham, he has a doc 11-20/650
	1. **Review doc 11-20/367r2** Graham SMITH (SR Technologies)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0367-02-000m-resolution-of-cid-4444.docx>
		2. CID 4444 (MAC)
			1. Review comment
			2. Review the discussion in the submission.
			3. Review the proposed changes.
			4. CAP is the time where HC maintains control
			5. Discussion on the changes and the resultant text.
			6. Review context of 10.23.3.2.1. need similar change to keep consistent. P1845.6.
			7. A revision 3 will be posted.
			8. Discussion on operation of (HC) Hybrid-Coordinator.
			9. Ran out of time – will continue offline.
			10. Request to have Menzo review comment and provide opinion.
			11. MORE WORK NEEDED: Graham will work with Menzo offline. Perhaps we need an explanation to the commenter as the response.
	2. **Request to continue until the 12:30 ET.**
		1. A couple people dropped at 12:05, but 11 continued
		2. No objection for continuing.
	3. **Review doc 11-20/639r3** – Selected Mark RISON CIDs – Dorothy STANLEY (HPE)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0639-03-000m-selected-rison-discussion-cids.xlsx>
		2. CID 4556 (MAC)
			1. Review comment
			2. See P1836
			3. Discussion on proposed change
			4. Change the text to refer to a specific clause - 10.23.2.7.
			5. Change the “Note that” to make this paragraph a “NOTE”.
			6. Discussion on the value of leaving it as a “Note that” vs “NOTE”.
			7. Discussion on what the final text change should become.
			8. Proposed resolution:

CID 4556 (MAC) - REVISED

At 1836.52, change to

"NOTE – A multiple frame transmission is granted to an EDCAF, not to a STA, so that the multiple frame transmission is permitted only for the transmission of a frame of the same AC as the frame that was granted the EDCA TXOP, except as specified in 10.23.2.7."

* + - 1. Mark Ready for Motion.
	1. **Next call Wednesday**
		1. Review agenda:

b) 2020-05-06 Wednesday 4-6pm Eastern 2 hours

i. Chris Hansen – CIDs 4479, 4480, 4486

ii. Matthew Fischer

a. CID 4156 <https://mentor.ieee.org/802.11/dcn/19/11-19-1562-04-000m-all-sta-crs-mcs-negotiation.docx> ,

b. <https://mentor.ieee.org/802.11/dcn/19/11-19-1778-05-000m-india-ch-167-169-173.pptx>

c. <https://mentor.ieee.org/802.11/dcn/20/11-20-0516-01-000m-cr-mscs-and-cid4158.docx>

iii. Dan Harkins <https://mentor.ieee.org/802.11/dcn/20/11-20-0543-01-000m-privacy-for-password-identifiers.docx>

* + 1. Request from Stephen to have doc 11-20-0654r1to be on an upcoming telecon – May 15th – note that it addresses CID 4100, 4338 and 4339.
	1. **Adjourned 12:35pm**

**References:**

**April 29th:**

1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-09-000m-2020-april-july-teleconference-agendas.docx>
2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0308-00-000m-2020-march-tgmd-agenda.pptx>
3. <https://mentor.ieee.org/802.11/dcn/20/11-20-0657-00-000m-proposed-text-change-related-to-the-description-of-a-deprecated-object.docx>
4. <https://mentor.ieee.org/802.11/dcn/20/11-20-0270-10-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0-part-ii.docx>
5. <https://mentor.ieee.org/802.11/dcn/19/11-19-2163-16-000m-resolutions-for-some-initial-sa-ballot-comments-on-11md-d3-0.docx>
6. <https://mentor.ieee.org/802.11/dcn/20/11-20-0633-00-000m-resolution-for-cids-4578-4579-and-4580.docx>
7. <https://mentor.ieee.org/802.11/dcn/20/11-20-0633-01-000m-resolution-for-cids-4578-4579-and-4580.docx>
8. <https://mentor.ieee.org/802.11/dcn/20/11-20-0634-00-000m-resolution-for-gen-cids-4162-4256-4122-and-4102.docx>

**May 1st:**

1. [**https://mentor.ieee.org/802.11/dcn/20/11-20-0535-10-000m-2020-april-july-teleconference-agendas.docx**](https://mentor.ieee.org/802.11/dcn/20/11-20-0535-10-000m-2020-april-july-teleconference-agendas.docx)
2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0308-00-000m-2020-march-tgmd-agenda.pptx>
3. <https://mentor.ieee.org/802.11/dcn/19/11-19-2156-08-000m-revmd-sponsor-ballot-comments.xls>
4. <https://mentor.ieee.org/802.11/dcn/20/11-20-0683-00-000m-revmd-sb1-phy-cr-cid-4229.docx>
5. <https://mentor.ieee.org/802.11/dcn/20/11-20-0691-00-000m-revmd-sb1-phy-cr-cid-4471.docx>
6. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-08-000m-assorted-crs-revmd-draft-3-0.docx>
7. <https://mentor.ieee.org/802.11/dcn/20/11-20-0150-09-000m-assorted-crs-revmd-draft-3-0.docx>
8. <https://mentor.ieee.org/802.11/dcn/20/11-20-0367-02-000m-resolution-of-cid-4444.docx>
9. <https://mentor.ieee.org/802.11/dcn/20/11-20-0639-03-000m-selected-rison-discussion-cids.xlsx>