IEEE P802.11
Wireless LANs

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| Telecon Minutes for REVmd CRC- June 17-19 2020 |
| Date: 2020-06-25 |
| Author(s): |
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Abstract

Minutes for the 802.11md REVmd CRC Telecons for June 17 and 19, 2020.

R0: Minutes for June 17, 2020 – Thanks to Mike for helping with Minutes.

R1: Minutes for June 19, 2020 – Motions were main agenda.

R2: Minor updates/corrections made.

1. **IEEE 802.11md REVmd CRC Telecon Wednesday June 17, 2020 16:00-18:00 ET**
	1. **Called to order at 4:03pm** ET 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 | 6/17 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
|  | TGmd | 6/17 | Coffey, John | Realtek Semiconductor Corp. |
|  | TGmd | 6/17 | Derham, Thomas | Broadcom Corporation |
|  | TGmd | 6/17 | Goodall, David | Morse Micro |
|  | TGmd | 6/17 | Hamilton, Mark | Ruckus Wireless |
|  | TGmd | 6/17 | Levy, Joseph | InterDigital, Inc. |
|  | TGmd | 6/17 | Montemurro, Michael | BlackBerry |
|  | TGmd | 6/17 | NANDAGOPALAN, SAI SHANKAR | Cypress Semiconductor Corporation |
|  | TGmd | 6/17 | Qi, Emily | Intel Corporation |
|  | TGmd | 6/17 | RISON, Mark | Samsung Cambridge Solution Centre |
|  | TGmd | 6/17 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
|  | TGmd | 6/17 | Stanley, Dorothy | Hewlett Packard Enterprise |

* + 1. Missing from IMAT: None reported
	1. **Review Agenda**: 11-20/535r24:
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-24-000m-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:

1. **2020-06-17 Wednesday 4-6pm Eastern 2 hours**
	1. Mark HAMILTON CIDs – 11-20/338r8 –

<https://mentor.ieee.org/802.11/dcn/20/11-20-0338-08-000m-revmd-initial-sa-comments-assigned-to-hamilton.docx>

* 1. Jon Rosdahl - GEN CIDs

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

4.       AOB

5. Adjourn

* + 1. Discussion of Agenda
			1. No comments on proposed agenda
		2. No objection to updated Agenda see R25
	1. **Editor Report** – Emily QI (Intel)
		1. No update since Friday’s report.
	2. **Review doc 11-20/338r8** – Mark HAMILTON (Ruckus/CommScope)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0338-08-000m-revmd-initial-sa-comments-assigned-to-hamilton.docx>
		2. CID 4723 (MAC)
			1. Review status and history of the comment discussion.
			2. Review table 12-10.
			3. From discussion: AKMs 00-0F-AC:14-17 use AES-SIV
* There is no padding needed with AES-SIV.
* So, we now have wrapping algorithms other than “NIST AES Key Wrap”, and padding is confitional. The baseline text was wrong on this aspect. This is now a technical change/fix.
	+ - 1. Proposed Resolution: Revised. Change “encrypted GTK” to “wrapped GTK” (as requested by the commenter). Same thing at P2698.15 (in the description of the Authenticator state machine).

Similarly, replace “Encrypted” with “Wrapped” in Figures 4-32 and 4-33.

In 13.8.5 (P2748.59), change

“If a GTK, an IGTK or a BIGTK(#2116) are included, (#102)the Key field of the subelement shall be encrypted using KEK (#102)(when the negotiated AKM is 00-0F-AC:3, 00-0FAC:4, 00-0F-AC:9, or 00-0F-AC:13) or KEK2 (when the negotiated AKM is 00-0F-AC:16 or 00-0F-AC:17) and the NIST AES key wrap algorithm. The Key field shall be padded before encrypting if the key length is less than 16 octets or if it is not a multiple of 8.”

to

“If a GTK, an IGTK or a BIGTK are included, the Key field of the subelement shall be wrapped using KEK and/or KEK2 and the appropriate key wrap algorithm, as specified in Table 12-10.”

At P2668.7 and P2668.10, change “key-wrap” to “key wrap”.

* + - 1. Discussion: need to ensure editors identify 3 instances of changes in the last paragraph.
			2. Item to still resolve: 4-32 and 4-33 – difference in function listed 3 times vs listing the function with 3 parameters.
			3. Identification of where padding specified to ensure deleting the padding info is correct.
			4. Discussion on KEK2 vs KEK wrapping and if it is done twice or not.
			5. Table 12 has some issues that will need more homework.
			6. Comparing 4-31 and 4-32 are describing independent processes, so 4-32 is probably the one that needs to be changed.
			7. Discussion on how to describe KEK2 process and if it is defined in Table 12-10, so no more changes in text.
			8. More work needed – pull from Motion on Friday.
		1. CID 4221 (MAC)
			1. Review comment
			2. Discussed previously, reviewed the history.
			3. Proposed Resolution: Revised; Delete “valid” at 1618.41, as requested.

Also, replace “no valid TSF timestamp is present” with “no timestamp is present” at both P2199.63 and P2200.2.

* + - 1. Discussion on if there are more instances of “valid TSF timestamp”
			2. Suggestion that “valid” is not needed in all cases.
			3. Table 9-227 – discussion on if deleting “valid” is meaningful or not.
			4. Discussion on the use of values vs enumerated name/descriptions.
			5. Direction to change similar to “Status field indicating “Accept, timestamp present in TIM Frames” “.
			6. More work to make the changes throughout.
		1. CID 4377 (MAC)
			1. Review Comment
			2. Review discussion history
			3. No objection to the bit numbering
			4. No objection to change 9-114 and 9-115.
			5. Proposed resolution: Revised; Proposed Resolution:

Subtract 1 from each of the bit positions in the Figures 9-12, 9-13, 9-16, 9-21, 9-687.

Subtract 4 from each of the bit positions in Figures 9-8, 9-338.

Subtract 8 from each of the bit positions in Figure 9-9.

Subtract 3 from each of the bit positions in Figure 9-17.

Subtract 9 from each of the bit positions in Figures 9-18, 9-19.

Subtract 18 from each of the bit positions in Figure 9-22.

Subtract 29 from each of the bit positions in Figure 9-559.

Subtract 34 from each of the bit positions in Figure 9-560.

Subtract 1 from each of the bit numberings in Figures 9-114 and 9-115.

Correct “B4” to “B0” in Figure 9-838.

Request the Editors to add a statement in the Editors Guide that all format figures shall number bits from B0.

Action ITEM: Request the Editors to add a statement in the Editors Guide that all format figures shall number bits from B0.

* + - 1. No objection - Ready for Motion.
		1. CID 4485 (MAC)
			1. Review comment.
			2. Review history of discussion.
			3. Still need to add a phrase for a convention for reserved fields.
			4. Proposed Text to add:

“Reserved field and subfield values are not used upon transmission.

NOTE—Should a future revision of this standard make use of such values, it is intended that steps be taken to ensure only devices compliant with this future revision are expected to receive and process them.”

* + - 1. Discussion on what happens when reserved fields or reserved values are received and what the action should be.
			2. Debate on the action of the reception of a reserved value.
			3. Discussion on the new text to add that covers the values.
			4. Proposed Resolution: CID 4485: Revised. Replace, at the cited location, “Setting this field to 0 indicates that the low rate TIM frame is not transmitted.” with “The value 0 is reserved.”

Add to the end of subclause 9.2.2:

* + - 1. “Reserved field and subfield values are not used upon transmission. Upon reception of a reserved field or subfield value, the behavior is undefined.”
			2. No objection – Mark Ready for Motion
		1. CID 4442 (MAC)
			1. Review Comment
			2. Review the context of the proposed change and description of “co-located”. Different higher layer entities will send synch to the lower MAC and have the indication passed through the SAP.
			3. This is just trying to clean up the language description the operation and behavior.
			4. Discussion of PPDU and MPDU vs Data Frame usage and what is being depicted.
			5. Proposed Resolution: CID 4442: Revised; Replace the second and third sentences with: “When the MAC transmits a Data frame with an Address 1 match, the MLME-HL-SYNC.indication shall occur when the last symbol of the PPDU carrying the Data frame is transmitted. When the MAC receives a Data frame with an Address 1 match, the MLME-HL-SYNC.indication shall occur when the last symbol of the PPDU carrying the matching Data frame is received.”
			6. No objection – Mark Ready for Motion
		2. CID 4418 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accept
			3. Review summary of the changes.
			4. No objection – Mark Ready for Motion.
	1. **GEN Comments** – document 11-20/147r11 - Jon ROSDAHL (Qualcomm)
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-11-000m-sb1-revmd-gen-comments.xls> -
		2. These comments can be viewed in 11-20/147r11, but we are processing directly from the database today.
		3. CID 4170 (GEN)
			1. The proposed resolution is technically correct, but it would make existing implementations non-compliant.
			2. Some devices “work around the issue” by setting the probe delay to 0. However, probe delay cannot be set to 0. ProbeDelay is a local variable unique to the scanning procedure.
			3. A new MIB variable could be created to allow a probe delay of 0.
			4. This comment needs a submission and some discussion.
			5. Discussion on the proposed resolution, or to possibly create a new variable.
			6. Possible MIB variable to be added is one possible solution. If the MIB variable allows zero, then existing devices can use zero. The issue is not arriving at the new Channel and starting to transmit too early.
			7. ACTION ITEM: Menzo WENTINK to create a submission
			8. If no submission comes forward, the comment will need a rejection reason.
		4. CID 4169 (GEN)
			1. This comment is related to CID 4170.
			2. CID 4169 only has a proposed change to clause 11.8.9 but no changes to the primitives.
			3. The issue needs to be specified for legacy PHYs as well as new PHYs
			4. The resolution to CID 4170 should apply to CID 4169 as well.
		5. CID 4115 (GEN)
			1. Clause 11.18 in the proposed resolution would become Clause 11.17.
			2. There is agreement to moving the sub-clause but there isn’t agreement on the proposed destination for the sub-clause.
			3. The first chapter 10 clause dealing with RSNA is clause 10.25.
			4. SPP refers to Signalling and Payload Protected and has was added as part of 802.11n.
			5. The sub-clause should be moved to Clause 10 or Clause 12. Maybe the sub-clause should be a sub-clause of Clause 10.11.
			6. In Clause 11, there are a number of security procedures that are applied. For instance, Beacon Protection procedures are added to the MLME.
			7. A-MSDU does not belong in Clause 11.
			8. If there is a strong preference to move the sub-clause, it should be moved to after Clause 10.11. We could move it to Clause 10.11.2
			9. We could move the two paragraphs to the end of Clause 10.11.
			10. Proposed Resolution: CID 4115 (GEN) REVISED (GEN: 2020-06-17 21:53:23Z) Move the contents of 11.17 and place the contents at the end of clause 10.11 and delete the current 11.17 and renumber the remaining subclauses after it.
			11. No objection – Mark Ready for Motion
	2. **Review agenda for next call.**
	3. **Adjourn at 5:59pm**
1. **IEEE 802.11md REVmd CRC Telecon Friday June 19, 2020 10:00-12:00 ET**
	1. **Called to order at 10:03pm** ET 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 24 attendees reported by WebEx

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | TGmd | 6/19 | Aboulmagd, Osama | Huawei Technologies Co. Ltd |
|  | TGmd | 6/19 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
|  | TGmd | 6/19 | Bhandaru, Nehru | Broadcom Corporation |
|  | TGmd | 6/19 | Coffey, John | Realtek Semiconductor Corp. |
|  | TGmd | 6/19 | Derham, Thomas | Broadcom Corporation |
|  | TGmd | 6/19 | Hamilton, Mark | Ruckus Wireless |
|  | TGmd | 6/19 | Huang, Po-Kai | Intel Corporation |
|  | TGmd | 6/19 | Kasher, Assaf | Qualcomm Incorporated |
|  | TGmd | 6/19 | Kerry, Stuart | OK-Brit; Ruckus; CommScope |
|  | TGmd | 6/19 | Kim, Youhan | Qualcomm Incorporated |
|  | TGmd | 6/19 | Kwon, Young Hoon | NXP Semiconductors |
|  | TGmd | 6/19 | Levy, Joseph | InterDigital, Inc. |
|  | TGmd | 6/19 | Liu, Yong | Apple, Inc. |
|  | TGmd | 6/19 | McCann, Stephen | BlackBerry |
|  | TGmd | 6/19 | Montemurro, Michael | BlackBerry |
|  | TGmd | 6/19 | Park, So Ryoung | Hewlett Packard Enterprise |
|  | TGmd | 6/19 | Patil, Abhishek | Qualcomm Incorporated |
|  | TGmd | 6/19 | RISON, Mark | Samsung Cambridge Solution Centre |
|  | TGmd | 6/19 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
|  | TGmd | 6/19 | Sherlock, Ian | Texas Instruments Incorporated |
|  | TGmd | 6/19 | Smith, Graham | SR Technologies |
|  | TGmd | 6/19 | Stacey, Robert | Intel Corporation |
|  | TGmd | 6/19 | Venkatesan, Ganesh | Intel Corporation |
|  | TGmd | 6/19 | Wentink, Menzo | Qualcomm Incorporated |

* + 1. Missing from IMAT: None reported
	1. **Review Agenda**: 11-20/535r25:
		1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-25-000m-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:

1. **2020-06-19 Friday 10 am Eastern 2 hours**
	1. Motions
	2. Motion: Approve the following minutes documents:
		1. May 13-15, <https://mentor.ieee.org/802.11/dcn/20/11-20-0765-02-000m-telecon-minutes-for-revmd-crc-may-13-15-2020.docx>
		2. May 20-22, <https://mentor.ieee.org/802.11/dcn/20/11-20-0794-01-000m-telecon-minutes-for-revmd-crc-may-20-22-2020.docx>
		3. May 27-29, <https://mentor.ieee.org/802.11/dcn/20/11-20-0830-01-000m-telecon-minutes-for-revmd-crc-may-27-29-2020.docx>
		4. June 3-5, <https://mentor.ieee.org/802.11/dcn/20/11-20-0858-02-000m-telecon-minutes-for-revmd-crc-june-3-5-2020.docx>
		5. June 10-12, <https://mentor.ieee.org/802.11/dcn/20/11-20-0893-01-000m-telecon-minutes-for-revmd-crc-june-10-12-2020.docx>
	3. Motion 194: EDITOR CID 4501
		1. Approve comment resolution included in the “Motion-EDITOR-V” tab in <https://mentor.ieee.org/802.11/dcn/20/11-20-0010-08-000m-revmd-sa1-comments-for-editor-ad-hoc.xls>
	4. Motion 19x: PHY CIDs (17)
		1. Approve comment resolutions included in the “PHY Motion F” tab in <https://mentor.ieee.org/802.11/dcn/20/11-20-0145-13-000m-sb1-revmd-phy-sec-comments.xlsx> .
	5. Motion 19x: MAC CIDs (45)
		1. Approve comment resolutions included in the “Motion MAC-AP” tab in <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-60-000m-revmd-mac-comments.xls> , except for CID 4723.
	6. Motion 19x: GEN CIDS (4)
		1. Approve comment resolutions included in the “Motion GEN May” tab in <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-11-000m-sb1-revmd-gen-comments.xls>
	7. Motion 19x: Motion: - Random SAE Comments
		1. Incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/20/11-20-0725-01-000m-random-sae-comments.docx> into the TGmd draft
	8. Motion 19x– Update to Japanese Annex D
		1. Incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/20/11-20-0568-01-000m-remove-channel-14.docx> into the TGmd draft.
	9. Motion xxx– RSNXE interoperability fixes
		1. Incorporate the text changes in https://mentor.ieee.org/802.11/dcn/20/11-20-0332-04-000m-rsnxe-interoperability-issue.docx into the TGmd draft.
	10. Motion xxx – SAE H2E minor change
		1. Incorporate the text changes in <https://mentor.ieee.org/802.11/dcn/20/11-20-0890-01-000m-sae-h2e-capability-indication.docx> into the TGmd draft.
	11. Motion xxx: CID 4731
		1. Resolve CID 4731 as “Rejected” with a resolution of “Password Identifiers are a useful feature in certain deployments such as apartment buildings and shared use spaces.

The privacy currently provided is equivalent to other solutions for such deployments, such as use of multiple BSSIDs. The Resolution Committee considered a solution to protect the password identifier, documented in <https://mentor.ieee.org/802.11/dcn/20/11-20-0543-03-000m-privacy-for-password-identifiers.docx> . The Resolution Committee did not come to consensus on adopting this solution, as it is specific to password identifiers, and does not protect other trackable identifiers. See the straw poll in section 2.10 in <https://mentor.ieee.org/802.11/dcn/20/11-20-0893-01-000m-telecon-minutes-for-revmd-crc-june-10-12-2020.docx> .”

* 1. Motion xxx– CID 4156 – In direction suggested by the commenter
		1. Resolve CID 4156 as “Revised” with a resolution of “Incorporate the text changes under CID 4156 in <https://mentor.ieee.org/802.11/dcn/19/11-19-1562-09-000m-all-sta-crs-mcs-negotiation.docx> which resolve the comment in the direction suggested by the commenter.
	2. Motion xxx – CID 4156 – Rejection
		1. Resolve CID 4156 as “Rejected” with a resolution of “The CRC discussed this comment at length and did not come to consensus to make the change. The major concern raised during the discussion to extend and cover PHY types beyond S1G is the need to negotiate for MCS change. Specifically, 11ah is designed for a scenario with thousands of STAs due to extended coverage, which is different from the scenario of baseline. As a result, the needs of negotiation due to huge number of STAs does not hold in the baseline scenario. Further, the uplink channel condition is dynamic and depends on many factors. The STA is likely required to have an implementation specific algorithm to figure out the MCS difference and may need several rounds of change independent of the decision from the AP. Negotiation puts additional complexity on the implementation specific algorithm.”
	3. Comment resolution
		1. Youhan KIM – CIDs 4538, 4296, <https://mentor.ieee.org/802.11/dcn/20/11-20-0891-01-000m-d3-0-phy-cr-part-2.docx>
		2. Youhan KIM – CID 4513 - https://mentor.ieee.org/802.11/dcn/20/11-20-0892-01-000m-mcs32-deprecation.docx
		3. Abhi PATIL – CID 4695, <https://mentor.ieee.org/802.11/dcn/20/11-20-0320-00-000m-resolution-for-cid-4695.docx>
		4. Jon ROSDAHL– GEN CIDs (if time available)

4.       AOB

5. Adjourn

* + 1. Discussion of Agenda
			1. No comments on proposed agenda
		2. No objection to updated Agenda see R26
	1. **Editor Report** – Emily QI (Intel)
		1. No update today.
	2. **Motions**
		1. **Motion #19June1: Previous Minutes**
			1. **Approve the following minutes documents:**
1. May 13-15, https://mentor.ieee.org/802.11/dcn/20/11-20-0765-02-000m-telecon-minutes-for-revmd-crc-may-13-15-2020.docx
2. May 20-22, https://mentor.ieee.org/802.11/dcn/20/11-20-0794-01-000m-telecon-minutes-for-revmd-crc-may-20-22-2020.docx
3. May 27-29, https://mentor.ieee.org/802.11/dcn/20/11-20-0830-01-000m-telecon-minutes-for-revmd-crc-may-27-29-2020.docx
4. June 3-5, https://mentor.ieee.org/802.11/dcn/20/11-20-0858-02-000m-telecon-minutes-for-revmd-crc-june-3-5-2020.docx
5. June 10-12, https://mentor.ieee.org/802.11/dcn/20/11-20-0893-01-000m-telecon-minutes-for-revmd-crc-june-10-12-2020.docx
	* + 1. Moved: Jon Rosdahl
			2. Seconded: Michael MONTEMURRO
			3. **Results Motion #19June1:** No objection, Unanimous Consent – Motion passes
		1. **Motion #194: EDITOR CID 4501**
			1. Approve comment resolution included in the “Motion-EDITOR-V” tab in 11-20/0010r8 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0010-08-000m-revmd-sa1-comments-for-editor-ad-hoc.xls>>
			2. Moved: Michael MONTEMURRO
			3. Seconded: Emily QI
			4. **Results Motion #194:** 19-0-2 - Motion Passes
		2. **Motion #195: PHY CIDs (17)**
			1. Approve comment resolutions included in the “PHY Motion F” tab in 11-20/0145r13 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0145-13-000m-sb1-revmd-phy-sec-comments.xlsx>> except for CIDs 4445, 4338, 4049, 4178, 4137.
			2. Request to adjust the motion and pull some CIDs – Email From Mark RISON sent to Chair. List of CIDs to pull 4445, 4338, 4049, 4178, 4137.
			3. Moved: Michael MONTEMURRO
			4. Seconded: Mark Hamilton
			5. Discussion:
				1. the requests for removal of CIDs was just looked at this morning, but those that were pulled will be considered later today.
			6. **Results Motion #195**: No objection, Unanimous Consent – Motion passes
		3. **Motion #196: MAC CIDs (45)**
			1. Approve comment resolutions included in the “Motion MAC-AP” tab in 11-17/927r60 <<https://mentor.ieee.org/802.11/dcn/17/11-17-0927-60-000m-revmd-mac-comments.xls>>, except for CID 4723 4155 and 4159 and in CID 4641, change “within time” to “within a time”..
			2. Discussion on CID 4641 – missing an article in the resolution.
			3. Discussion on CID 4454 – confused if the requested change was indicated correctly.
			4. Request to pull CID 4155 and 4159.
			5. Moved: Mark HAMILTON
			6. Seconded: Michael MONTEMURRO
			7. Discussion - None
			8. **Results Motion #196:** No objection, Unanimous Consent – Motion passes
		4. **Motion #197: GEN CIDS (4)**
			1. Approve comment resolutions included in the “Motion GEN May” tab in 11-20/0147r11 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0147-11-000m-sb1-revmd-gen-comments.xls>>
			2. Moved: Jon ROSDAHL
			3. Seconded: Michael MONTEMURRO
			4. Discussion:
				1. Status of CID 4100 discussed.
			5. Result Motion #197: No objection, Unanimous Consent – Motion passes
		5. **Motion #198: Motion: - Random SAE Comments**
			1. Incorporate the text changes in 11-20/275r1 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0725-01-000m-random-sae-comments.docx>> into the TGmd draft
			2. Moved: Michael MONTEMURRO
			3. Seconded: Jon ROSDAHL
			4. Discussion on which version of the document
				1. It as noted that R1 has not been posted,
				2. It is expected that some changes were needed.
			5. **Move to table the Motion**
				1. Moved: Jon ROSDAHL, 2nd Mark Hamilton
				2. **Results of Motion to Table:** No objection – Motion tabled.
		6. **Motion #199– Update to Japanese Annex D**
			1. Incorporate the text changes in 11-20/568r1 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0568-01-000m-remove-channel-14.docx>> into the TGmd draft.
			2. Moved: Michael MONTEMURRO
			3. Seconded: Edward AU
			4. Discussion
				1. Review the process to make the motion.
				2. Review the proposed changes in the 11-20/568r1
				3. Request to call the question – Michael MONTEMURRO, 2nd Robert Stacey

Objection to calling the question.

**Results of Calling Question:** 10-4-3 – Required 2/3 – Question is called.

* + - 1. **Results Motion #199:** 12-2-4 Motion Passes
		1. **Motion #200– RSNXE interoperability fixes**
			1. Incorporate the text changes in 11-20/0322r4 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0332-04-000m-rsnxe-interoperability-issue.docx>> into the TGmd draft.
			2. Moved: Michael Montemurro
			3. Seconded: Jon ROSDAHL
			4. Discussion:
				1. From Webex Chat Window:

from [V] Mark RISON (Samsung) to everyone:

The RSNXE Used subfield of the MIC Control field is used in the third and fourth messages of the FT authentication sequence to indicate whether the STA transmitting the frame containing the FTE includes an RSNXE in other frames. This subfield is set to 0 in other frames.

\*\*\*\*\* What is the difference between "message"s and "frame"?

from [V] Mark RISON (Samsung) to everyone:

Finally, the R1KH provides the PMKR1Name in the PMKID List field of the RSNE to be included in (Re)Association Response frame. The PMKR1Name shall be as calculated by the R1KH according to the procedures of 12.7.1.6.4 (PMK-R1) and shall be the same as the PMKR1Name in the Association Request frame; all other fields of the RSNE shall be identical to the RSNE present in the Beacon or Probe Response frames. The R1KH shall also provide the FTE and the MDE. The FTE and MDE shall be the same as in the Authentication frame. If the RSNXE is present in the Beacon or Probe Response frames that the AP transmits, the AP shall also provide the RSNXE.

\*\*\*\*\* In the new sentence at the end, why is it "the AP" and not "the R1KH"?

 if the contents of the RSNXE is not identical

\*\*\*\*\* should be "are not".

\*\*\*\*\* General: inconsistency as to whether to say "an RSNXE" or "the RSNXE".

* + - * 1. No other discussion
			1. **Results Motion #200:** 12-5-2 Motion Fails (75% required)
		1. **Motion #201 – SAE H2E minor change**
			1. Incorporate the text changes in 11-20/0890r1 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0890-01-000m-sae-h2e-capability-indication.docx>> into the TGmd draft.
			2. Moved: Stephen MCCann
			3. Seconded: Emily QI
			4. Discussion:
				1. From Webex Chat Window:

“If a STA does not support any of capabilities defined in the RSNXE, then the STA is does not required to transmit the RSNXE.” is behaviour -- reword as “the RSNXE is not present”?

* + - * 1. No other discussion:
			1. **Results Motion #201:** 11-1-4 Motion Passes
		1. **Motion #202: CID 4731**
			1. Resolve CID 4731 as “Rejected” with a resolution of “Password Identifiers are a useful feature in certain deployments such as apartment buildings and shared use spaces.

The privacy currently provided is equivalent to other solutions for such deployments, such as use of multiple BSSIDs. The Resolution Committee considered a solution to protect the password identifier, documented in <https://mentor.ieee.org/802.11/dcn/20/11-20-0543-03-000m-privacy-for-password-identifiers.docx>. The Resolution Committee did not come to consensus on adopting this solution, as it is specific to password identifiers, and does not protect other trackable identifiers.

See the straw poll in section 2.10 in <https://mentor.ieee.org/802.11/dcn/20/11-20-0893-01-000m-telecon-minutes-for-revmd-crc-june-10-12-2020.docx>.”

* + - 1. Moved: Nehru Bhandaru
			2. Seconded: Emily QI
			3. **Results Motion #202**: No objection, Unanimous Consent – Motion passes
		1. **Motion #203– CID 4156 – Revised - In direction suggested by the commenter**
			1. Resolve CID 4156 as “Revised” with a resolution of “Incorporate the text changes under CID 4156 in 11-19/1562r9 <<https://mentor.ieee.org/802.11/dcn/19/11-19-1562-09-000m-all-sta-crs-mcs-negotiation.docx>> which resolve the comment in the direction suggested by the commenter.
			2. Moved: Matthew Fischer
			3. Seconded: Michael MONTEMURRO
			4. Discussion: None
			5. **Result Motion #203**:7-7-4 Motion Fails.
		2. **Motion #204 – CID 4156 – Rejection**
			1. Resolve CID 4156 as “Rejected” with a resolution of “The CRC discussed this comment at length and did not come to consensus to make the change. The major concern raised during the discussion to extend and cover PHY types beyond S1G is the need to negotiate for MCS change. Specifically, 11ah is designed for a scenario with thousands of STAs due to extended coverage, which is different from the scenario of baseline. As a result, the needs of negotiation due to huge number of STAs does not hold in the baseline scenario. Further, the uplink channel condition is dynamic and depends on many factors. The STA is likely required to have an implementation specific algorithm to figure out the MCS difference and may need several rounds of change independent of the decision from the AP. Negotiation puts additional complexity on the implementation specific algorithm.”
			2. Moved: Po-kai HUANG
			3. Seconded: Stephen MCCANN
			4. **Result Motion #204:** 14-2-1 Motion Passes
		3. CIDs pulled from motions for discussion.
			1. Proposal is to discuss the pulled CIDs on Wednesday to allow presentations to continue today.
			2. Discussion on the proposal and timing.
			3. Request for Friday instead of Wednesday.
			4. Requests for Motion on pulled CIDs.
		4. **Motion #205** – CID 4338 (PHY)
			1. Approve comment resolutions for CID 4338 included in the “PHY Motion F” tab in 11-20/0145r13 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0145-13-000m-sb1-revmd-phy-sec-comments.xlsx>>
			2. Moved: Michael MONTEMURRO
			3. Seconded: Stephen MCCANN
			4. Discussion: The resolution for 4339 and 4100 is the same as the resolution for 4338 which have passed already.
			5. **Results Motion #205**: No objection, Unanimous Consent – Motion passes
		5. **Motion #206 - CID 4049 (PHY)**
			1. Approve comment resolutions for CID 4049 included in the “PHY Motion F” tab in 11-20/0145r13 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0145-13-000m-sb1-revmd-phy-sec-comments.xlsx>>
			2. Moved Emily QI
			3. Second: Michael MONTEMURRO
			4. Discussion:
				1. Concern on the magic numbers in the resolution.

This was discussed during the call.

The change is mostly editorial, and the change would not impact the proposed changes in the resolution.

From the Minutes of June 12 (11-20/0893r1)

2.9.2 CID 4049 (PHY)

2.9.2.1 Review comment

2.9.2.2 Reference Table 12-10 (Page 2668):

2.9.2.3 Review submission discussion.

2.9.2.4 Discussion on changing a shall to may, as it may cause a backward compatibility issue. So, for Value 2 it should keep the “shall”.

2.9.2.5 Discussion on the changes and how the table vs the text balance of what goes in each place and how complex it may be. The deprecated row needs to be marked appropriately.

2.9.2.6 Discussion on if TKIP is an option in the two different values for AKM.

2.9.2.7 Some of the discussion noted potential changes that would be outside the scope of the CID.

2.9.2.8 There will be an R6 posted.

2.9.2.9 The proposed resolution: Revised; Incorporate the changes for CID 4049 in doc 11-20/247r6 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0247-06-000m-initial-sb-proposed-resolutions-for-bp-comments.doc>>

2.9.2.10 No Objection – Mark Ready for Motion

* + - 1. **Results Motion #206:** 14-1-1 Motion Passes.
		1. **Motion #207 – CID 4159 (MAC)**
			1. Approve the comment resolution for CID 4159 as REVISED, with a resolution of, with a resolution of “Incorporate the changes as shown in 11-20/516r11 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0516-11-000m-cr-mscs-and-cid4158.docx>> for CID 4159. These include the MSCS setup in (Re)Association request and response frames, as requested.
			2. Moved: Matthew FISCHER
			3. Second: Stephen MCCANN
			4. Discussion:
				1. The last version we reviewed was r7, so this is proposed as R11, so there may be more changes that have not been reviewed.
				2. From the Chat window:

Upon receipt of an MSCS Request frame from an associated non-AP STA or receipt from a non-AP STA of a (Re)Association Request frame containing an MSCS Descriptor element, the AP shall respond with a corresponding MSCS Response frame

\*\*\*\* doesn't the Request Type field have to be set to “Add” too, per

the para two up?

from [V] Mark RISON (Samsung) to everyone:

Also in

If an MSCS Descriptor element is present in an MSCS Response frame that does not indicate “SUCCESS” for the MSCS setup, the Request Type field is set to “Change” and the element indicates a suggested set of parameters that could be accepted by the AP in response to a subsequent request by the non-AP STA. In the MSCS Descriptor element of a (Re)Association Response frame that does not indicate “SUCCESS” for the MSCS setup, the Request Type field is set to “Add” if no suggested set of parameters is indicated, or “Change” if the element indicates a suggested set of parameters as described above.

\*\*\*\* the bit about "Change" seems to be duplicated, and the bit about

"Add" is confusing (you say "Add" to say you have no suggestion

to make?).

* + - * 1. Discussion on describing what action is to take when not following the requested action.
				2. Discussion on the chat window comment.
			1. **Results Motion #207:** 9-4-3 Motion Fails.
		1. **Motion #208: CID 4178 (PHY)**
			1. Approve comment resolutions for CID 4178 included in the “PHY Motion F” tab in 11-20/0145r13 <<https://mentor.ieee.org/802.11/dcn/20/11-20-0145-13-000m-sb1-revmd-phy-sec-comments.xlsx>>
			2. Moved: Michael MONTEMURRO
			3. Second: Jon ROSDAHL
			4. Discussion:
				1. Objection to motion as there is an alternative proposal that has been posted in 11-20-435r4 – This was a requested alternative.
				2. Additional Changes to the draft can be adopted as a separate issue/submission.
				3. Note CID 4178 (PHY), CID 4575 (Editor), CID 4576 (Editor), CID 4177 (PHY) MORE WORK NEEDED –
				4. The minutes noted that the resolution to the comments may be different.
				5. CID 4178 was looking to include more expansive changes that have been proposed in 11-20/435r4.
			5. **Results Motion #208:** 5-5-5 Motion Fails.
	1. **Ran out of Time** –
		1. Discuss future telecons.
		2. Rescheduled Youhan to Wednesday and Abhi to Friday.
		3. The remaining CIDs that were pulled today will be discussed on Wednesday.
	2. **Adjourn 11:59pm**

**References:**

**July 17, 2020:**

1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-24-000m-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/20/11-20-0338-08-000m-revmd-initial-sa-comments-assigned-to-hamilton.docx>
4. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-11-000m-sb1-revmd-gen-comments.xls>

**July 19th:**

1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0535-25-000m-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. Approved the following minutes documents
	1. May 13-15, <https://mentor.ieee.org/802.11/dcn/20/11-20-0765-02-000m-telecon-minutes-for-revmd-crc-may-13-15-2020.docx>
	2. May 20-22, <https://mentor.ieee.org/802.11/dcn/20/11-20-0794-01-000m-telecon-minutes-for-revmd-crc-may-20-22-2020.docx>
	3. May 27-29, <https://mentor.ieee.org/802.11/dcn/20/11-20-0830-01-000m-telecon-minutes-for-revmd-crc-may-27-29-2020.docx>
	4. June 3-5, <https://mentor.ieee.org/802.11/dcn/20/11-20-0858-02-000m-telecon-minutes-for-revmd-crc-june-3-5-2020.docx>
	5. June 10-12, <https://mentor.ieee.org/802.11/dcn/20/11-20-0893-01-000m-telecon-minutes-for-revmd-crc-june-10-12-2020.docx>
4. **Motion #194: EDITOR CID 4501**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0010-08-000m-revmd-sa1-comments-for-editor-ad-hoc.xls>
5. **Motion 195: PHY CIDs (17)**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0145-13-000m-sb1-revmd-phy-sec-comments.xlsx>
6. **Motion 196: MAC CIDs (45)**
	1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-60-000m-revmd-mac-comments.xls>
7. **Motion 197: GEN CIDS (4)**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0147-11-000m-sb1-revmd-gen-comments.xls>
8. **Motion 198: Motion: - Random SAE Comments – Tabled Motion**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0725-01-000m-random-sae-comments.docx>
9. **Motion 199– Update to Japanese Annex D**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0568-01-000m-remove-channel-14.docx>
10. **Motion 200– RSNXE interoperability fixes**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0332-04-000m-rsnxe-interoperability-issue.docx>
11. **Motion #201 – SAE H2E minor change**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0890-01-000m-sae-h2e-capability-indication.docx>
12. **Motion #202: CID 4731**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0543-03-000m-privacy-for-password-identifiers.docx>
	2. <https://mentor.ieee.org/802.11/dcn/20/11-20-0893-01-000m-telecon-minutes-for-revmd-crc-june-10-12-2020.docx>
13. **Motion #203– CID 4156 – Revised – Motion Failed**
	1. <https://mentor.ieee.org/802.11/dcn/19/11-19-1562-09-000m-all-sta-crs-mcs-negotiation.docx>
14. **Motion #207 – CID 4159 (MAC) -- Motion Failed**
	1. <https://mentor.ieee.org/802.11/dcn/20/11-20-0516-11-000m-cr-mscs-and-cid4158.docx>