IEEE P802.11
Wireless LANs

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|  Minutes for REVme 2022 December AdHoc - Piscataway |
| Date: 2022-12-07 |
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Abstract

Minutes for 802.11 REVme AdHoc (REVme – TGme) at the IEEE SA headquarters in Piscataway, NJ. There were 8 meetings (slot times) from Dec 5-7, 2022. Thanks to Stephen McCann helping in the taking of minutes while I was presenting.

R0: Initial set of minutes.

Action items:

* + - 1. #1 – Mark RISON to provide the updated Figure 5-1 and 5-2 for CID 3185.

2.6.7.5 #2 – Mark RISON to post CID 3656 (MAC) proposal to the WG Reflector – Identify all the CIDs associated with the change. (CID 3653, 3654, 3655, 3656).

* + - 1. #3 – Mark RISON to post to WG Reflector the details for CID 3796. Will be discussed on January 9th Telecon.

2.5.3.7 #4: Jon Rosdahl to check with commentor for CID 2036. Scheduled for presentation during the January 2023 interim.

3.4.2.5 #5: Mahmoud KAMEL to send an email to the WG reflector indicating the proposed resolution for CID 3166.

3.6.8.3 #6 Mark RISON to send email to WG Reflector to notify the WG about the proposed resolution seeking Comment for CID 3502 and 3503. (Updated AI)

4.5.9.7 #7: Aphi PATIL to bring some background material showing the field in (GCR) MU-BAR Trigger frames (CID 3015).

* + - 1. #8 Edward AU to check with the EDMG experts that the original intent matches the updated change made by CID 3312 (PHY).

6.5.2.7 #9: CID 3277 (MAC): 26-13 Figure- VISO Source to be provided by Joseph Levy – Short down arrow onto STAOBSS-A Line.

6.5.6.10 #10: Mark HAMILTON – Notify Robert STACEY of being assigned CID 3776 and scheduled for Jan 26 Telecon

1. **TGme (REVme AdHoc) Mixed-mode – Monday, December 5, 2022, at 10:00-12:00 ET**
	1. **Called to order** 10:07am ET by the chair, Michael Montemurro (Huawei).
	2. **Introductions:**
		1. **IMAT Report:**

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| --- | --- | --- |
| 1 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| 2 | Hamilton, Mark | Ruckus/CommScope |
| 3 | Kim, Youhan | Qualcomm Technologies, Inc. |
| 4 | Levy, Joseph | InterDigital, Inc. |
| 5 | McCann, Stephen | Huawei Technologies Co., Ltd |
| 6 | Qi, Emily | Intel |
| 7 | RISON, Mark | Samsung Cambridge Solution Centre |
| 8 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 9 | Smith, Graham | SR Technologies |
| 10 | Wullert, John | Peraton Labs |

* 1. **Review Patent Policy,** Copyright policy and participation policies.
	2. **Review Agenda** – 11-22/2060r3
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-03-000m-revme-december-2022-adhoc-agenda.docx>
		2. **Monday December 5, 2022**
	3. AM1 – 10:00-12:00 ET
		1. MAC CIDs - Hamilton (Ruckus-Commscope)
		2. CID 3510 (MAC) – Rison (Samsung)
		3. CID 3338 (MAC) – Rison (Samsung)
		4. CID 3796 (MAC) – Rison (Samsung)
	4. **Editor Report –** Emily QI (Intel)
		1. None.
	5. **MAC Review CIDS** – Mark HAMILTON (Ruckus/Commscope)
		1. CID 3344 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No objection – Mark Ready for Motion
			4. Request to have future Security Related CIDs moved to SEC prior to discussion.
		2. CID 3169 (MAC)
			1. Review Comment
			2. Review Context – p1962
			3. Discussion on the definition of use of “Robust”.
			4. For these instances, it was determined that “robust” was not needed/required.
			5. For the case on page 1967, it was thought that changing “robust” to “protected” would be ok.
			6. After review only one would be changed and delete the others.
			7. Proposed Resolution: REVISED (MAC: 2022-12-05 15:28:04Z): Change "robust" to "protected" at 1967.15. Delete "robust" at the other 5 locations.
			8. No Objection – Mark Ready for Motion
		3. CID 3185 (MAC)
			1. Review Comment
			2. Review Context
			3. Proposed Resolution: Accepted
			4. No Objection – Mark Ready for Motion
			5. ACTION ITEM #1 – Mark RISON to provide the updated Figure 5-1 and 5-2 for CID 3185.
		4. CID 3202 (MAC)
			1. Review Comment
			2. Discussion on the context change. One change to add article.
			3. Proposed Resolution: CID 3202 (MAC): REVISED (MAC: 2022-12-05 15:35:07Z): Change to "each carrying a Control frame as an S-MPDU" at 2038.4, 2047.28. Change "carrying HT NDP" to "carrying an HT NDP" at 2038.4.
			4. No Objection – Mark Ready for Motion
		5. CID 3206 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		6. CID 3243 (MAC)
			1. Review Comment
			2. Review Context - p288, p3742 and
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion
		7. CID 3656 (MAC)
			1. Review comment
			2. Review Context
			3. Previously presented in last ballot, but we did not come to consensus on the proposed changes.
			4. Discussion on why we may want to send to reflector to get a broader review of this CID.
			5. ACTION ITEM #2 – Mark RISON to post CID 3656 (MAC) proposal to the WG Reflector – Identify all the CIDs associated with the change. (CID 3653, 3654, 3655, 3656).
			6. Mark all 4 CIDs More work Needed
			7. Schedule time for January Interim.
		8. CID 3787 (MAC)
			1. Review Comment
			2. Update from Subir DAS
			3. Mark CID Submission Required
			4. Schedule time for January Interim.
			5. Discussion on what part is to be done in REVme and which parts will be done in TGbe. We must keep the parts separate.
			6. Expectation to have this well-defined for January Interim.
		9. CID 3338 (MAC)
			1. Review Comment
			2. Assign to MARK RISON
			3. Mark More Work Needed
			4. It is on today’s Agenda
		10. CID 3304 (MAC)
			1. Review Comment
			2. Review context – p4642 and p2773.
			3. Proposed resolution: Accepted.
			4. No Objection – Mark Ready for Motion
		11. CID 3376 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		12. CID 3425 (MAC)
			1. Review Comment
			2. Editor asked for clarity on the resolution to be improved.
			3. Proposed Resolution: CID 3425 (MAC): REVISED (MAC: 2022-12-05 16:11:54Z): Replace "Mesh Peering element", "Authenticated Mesh Peering element", "Authentication Mesh Peering element", or "AMPE Authenticated Mesh Peering element" in the 4 cited locations (plus 3034.41) with "Authenticated Mesh Peering Exchange element".
			4. No objection – Mark Ready for Motion
		13. CID 3583 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
	6. **Review Doc 11-22/2069r0** CID 3510, 3338, - Mark RISON (Samsung)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx>
		2. CID 3510 (MAC)
			1. Review Comment
			2. Review Discussion in submission
			3. Proposed Resolution: CID 3510 (MAC): REVISED (MAC: 2022-12-05 16:23:01Z): Incorporate the changes in 11-22/2069r0 (https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx) for CID 3510.
			4. No Objection – Mark Ready for Motion
		3. CID 3338 (MAC)
			1. Review Comment
			2. Review discussion in submission.
			3. Review Proposed Changes noted in submission.
			4. Proposed Resolution: CID 3338 (MAC): REVISED (MAC: 2022-12-05 16:27:02Z): Make the changes shown under “Proposed changes” for CID 3338 in 11-22/2069 (https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx), which make changes in the suggested direction (including recognizing VHT and DMG APs as necessarily QoS APs), but keep the BSS Load element optional in DMG beacons. The description of the dot11QBSSLoadImplemented attribute is aligned with Clause 9.
			5. No Objection – Mark Ready for Motion
		4. CID 3796 (MAC)
			1. No Response from SME requests.
			2. Email was sent to select SME experts.
			3. ACTION ITEM #3 – Mark RISON to post to WG Reflector the details for CID 3796. Will be discussed on January 9th Telecon.
	7. **MAC Review CIDs** – Mark HAMILTON (Ruckus/Commscope)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-30-000m-revme-mac-comments.xls>
		2. CID 3522 (MAC)
			1. Review Comment
			2. Review changes in Doc 11-21/829r10 for CID 422.
				1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0829-10-000m-resolutions-for-some-comments-on-11me-d0-0-cc35.docx>
			3. At the time (Oct-November 2021), the changes were not ready for review, but are now (Dec 2022) ready for review.
			4. Discussion on alternatives – Change RA value to “RA field” or “RA”.
			5. Discussion on where we need to add “field”.
			6. May need a bit more discussion offline to come to consensus on the final proposed changes.
			7. Mark This CID More work Needed.
			8. Schedule for January interim.
		3. CID 3518 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion.
		4. CID 3191 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		5. CID 3741 (MAC)
			1. Review Comment
			2. There are other locations with this same problem.
				1. 1297.31, 1812.60, 1794.56 and 3911.32
			3. These are “block agreement” that may need to be changed to “block ack agreement”.
			4. Proposed Resolution: CID 3741 (MAC): REVISED (MAC: 2022-12-05 16:57:01Z): At original cited location and 1812.60 insert "ack" (to be "block ack agreement"). Also 1297.31 (and make it not upper case). At 1794.56 and 3911.32 change "BlockAck" to "block ack".
			5. No Objection – Mark Ready for Motion
		6. CID 3170 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
	8. Question about an email sent by Mark RISON and if it is viewable.
		1. Several could see, and at least one could not see the email highlights.
		2. Possible individual issue with their email client.
	9. **Recess 12:00pm ET.**
1. **TGme (REVme AdHoc) Mixed-mode – Monday, December 5, 2022, at 13:00-15:00 ET**
	1. **Called to order** 1:03pm ET by the chair, Michael Montemurro (Huawei).
	2. **Reminder of Policies**
		1. No issues noted.
	3. **Review Agenda:11-22/2061r3:**

PM1 – 13:00-15:00 ET

* + 1. CID 3079 (GEN) – Levy (InterDigital)
		2. GEN CIDs – Rosdahl (Qualcomm)
	1. **Review doc 11-22/2096r0** – CID 3079 (GEN) Joseph Levy (InterDigital)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2096-00-000m-proposed-resolution-for-cid-3079-self-protected-action-frames.docx>
		2. CID 3079 (GEN)
			1. Review Comment and history
			2. Review Background in submission.
			3. Discussion on if the term is only in Clause 9, can we just delete it from Clause 3.
			4. P2428 has the frame listed without the word “frame”.
			5. Proposed Resolution: Revised; Delete the definition for “self-protected action frame.
			6. No Objection – Mark Ready for Motion.
	2. **Presentation of database CID GEN Jon Rosdahl (Qualcomm)**
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2016-01-000m-revme-gen-ad-hoc-comments-on-lb270.xlsx>
		2. CID 3519 (GEN)
			1. Review Comment
			2. C: I think the receiver should be capable of using multiple antennas, so I’m not sure about making this requirement only on the transmitter.
			3. C: I think that the current definition of MU-MIMO mentions the different configurations of multiple antennas. Therefore, the MIMO definition appears to be ok.
			4. C: I’m not sure of if the current definition should use the term “may”.
			5. C: As this definition is in clause 3.1, this term will go into the IEEE dictionary.
			6. The proposed resolution was then updated.
			7. Proposed Resolution: Revised: Change the definition in 3.1: "multiple input, multiple output (MIMO): A physical layer (PHY) configuration in which both transmitter and receiver use multiple antennas."

to:

"multiple input, multiple output (MIMO): A physical layer (PHY) configuration in which the transmitter has multiple antennas and the receiver might have multiple antennas."

* + - 1. Note 1 objection and 1 abstention – Mark Ready for Motion
		1. CID 3026 (GEN)
			1. Review Comment
			2. Q: Is non-overlapping correct for the non-infrastructure BSS and peer-to-peer link cases?
			3. A: Not sure.
			4. C: The comment suggests a non-infrastructure BSS and peer-to-peer link and then finishes with “…to which the STA is associated.” But that does not apply to a non-infrastructure BSS, so the revised definition does not make any sense.
			5. C: Recall that the definition of peer-to-peer link has recently been updated.
			6. C: There is now an off channel TWT, which also needs to be considered.
			7. ACTION ITEM #4: Jon Rosdahl to check with commentor for CID 2036. Scheduled for presentation during the January 2023 interim.
		2. CID 3108 (GEN)
			1. Review Comment
			2. C: The scope of this definition is just defined in clause 9.6.10.
			3. C: Each frame type does not have a definition in clause 3, so I don’t know why this definition is required.
			4. Proposed Resolution: Revised: Delete the definition for protected dual of public action frame.

At p1600.60 change "Action frames that are not robust (see 9.4.1.11 (Action field))." to "Public Action frames."

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3373 (GEN)
			1. Review Comment
			2. C: I think the last sentence of the note should be deleted.
			3. C: All is needs to be say is that a S-MPDU is a special type of an MPDU.
			4. C: I don’t think definitions in clause 3.1 should have references in them.
			5. Q: What is the difference between clause 3.1 and 3.2?
			6. A: Clause 3.1 are generic, whilst 3.2 are specific to 802.11.
			7. Proposed Resolution: Revised: on page 229.59,

Delete "A single medium access control protocol data unit (S-MPDU) is a special form of MPDU that is carried in an A-MPDU."

* + - 1. Note 1 objection – Mark Ready for Motion
		1. CID 3305 (GEN)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		2. CID 3284 (GEN)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		3. CID 3785 (GEN)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		4. CID 3784 (GEN)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		5. CID 3783 (GEN)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		6. CID 3436 (GEN)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		7. CID 3276 (GEN)
			1. Review Comment
			2. C: I think we need to logic to how these primitives are exposed.
			3. C: I’m not sure that all of them need to changed?
			4. C: I don’t think that clause 6.7.4 can be deleted, as other groups such as IEEE 1609 have references to it.
			5. Proposed Resolution: Revised: at p540.40 change "provides the PHY" to "provides PHY" (delete "the").
			6. Note 1 objection – Mark Ready for Motion
		8. CID 3422 (GEN)
			1. Review Comment
			2. Q: Are these items defined in clause 3?
			3. A: Not sure.
			4. Proposed Resolution: Accepted.
			5. No Objection – Mark Ready for Motion
		9. CID 3479 (GEN)
			1. Review Comment
			2. C: There’s nothing to say what happens when reception completes with an error.
			3. Proposed Resolution: Revised: at p570.14 Change "MAC entity to indicate that the receive state machine" to "MAC entity after the receive state machine".
			4. No Objection – Mark Ready for Motion
	1. **No objection to updating the agenda** for further CID MAC review (11-22-2061r4)
	2. **Presentation of database CID MAC Mark Hamilton (Ruckus/Commscope)**
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-30-000m-revme-mac-comments.xls>
		2. CID 3410 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		3. CID 3237 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		4. CID 3224 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		5. CID 3226 (MAC)
			1. Review Comment
			2. Proposed Resolution: Revised: After the cited text add "An angle is measured counter-clockwise from the positive X-axis towards the positive Y-axis."
			3. No Objection – Mark Ready for Motion
	3. **Recess at 15:30 ET (3pm)**
1. **TGme (REVme AdHoc) Mixed-mode – Monday, December 5, 2022, at 15:30-18:00 ET**
	1. **Called to order** at 15:30 ET by the chair, Michael Montemurro (Huawei).
	2. **Reminder of Patent**, Participation, Copyright polices.
		1. No issues.
	3. **Continue with Agenda** 11-22/2061r3
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-03-000m-revme-december-2022-adhoc-agenda.docx>
	4. **Review doc 11-22/2064r0** – Mahmoud KAMEL (Interdigital)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2064-00-000m-lb270-cr-for-cid-3166.docx>
		2. CID 3166 (PHY)
			1. Review Comment
			2. Review Discussion in Submission.
			3. This was discussed in TGbe as well and had some expert review there identifying the problem and identified the possible solution.
			4. Proposed Resolution: CID 3166 (PHY): Revised. Change the value of "aPSDUMaxLength" in Table 21-28 to 4 692 478 octets;
			5. ACTION ITEM #5: Mahmoud KAMEL to send an email to the WG reflector indicating the proposed resolution for CID 3166.
			6. No objection – Mark Ready for Motion (action item in parallel).
	5. **Review Doc 11-22/2088r0** CID 3048 and 3049 Graham SMITH (SR Technologies).
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2088-00-000m-resolution-of-cids-3048-and-3049.docx>
		2. CIDs 3048 (MAC) and 3049 (PHY):
			1. Review Comments
		3. CID 3048 (MAC)
			1. Review potential options to satisfy the comment
			2. Discussion on option 1.
			3. Option 3 modified was consensus. (no objection).
			4. Proposed Resolution: CID 3048 (MAC): Revised. At 2661.45
			5. Delete “Setup of an MSCS uses the MLME primitives defined in 6.3.116 (MSCS request and response procedure).”

Insert a new second sentence in this paragraph:

“Setup of an MSCS uses the MLME-MSCS.request, MLME-MSCS.indication, MLME-MSCS.response and MLME-MSCS.confirm primitives. (see 6.3.2 Type 1).”

* + - 1. Discussion looking for definition of MSCS Descriptor Parameter.
			2. Proposed Resolution: CID 3048 (MAC): REVISED (MAC: 2022-12-05 20:51:53Z):

At 2661.45

Delete

“Setup of an MSCS uses the MLME primitives defined in 6.3.116 (MSCS request and response procedure).”

Insert a new second sentence in this paragraph:

“Setup of an MSCS uses the MLME-MSCS.request, MLME-MSCS.indication, MLME-MSCS.response and MLME-MSCS.confirm primitives (see 6.3.2 Type 1).”

And, change "MSCS Descriptor parameters" to "MSCS Descriptor parameter".

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3049 (PHY)
			1. Review comment
			2. Review Discussion for CID 3049 in submission.
			3. Discussion of the potential change.
			4. 8 locations that have the same incorrect reference.
			5. Proposed Resolution: CID 3049 (PHY): Revised. Incorporate the changes shown in 11-22/2088r1 for CID 3049.
			6. No Objections – Mark Ready for Motion.
	1. **MAC Review CIDs** – Mark HAMILTON (Ruckus/Commscope)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-30-000m-revme-mac-comments.xls>
		2. CID 3217 (MAC)
			1. Review Comment
			2. Discussion on if the elipse Shape Value parameters that are needed.
			3. Request to delay to January Interim.
			4. Assign to Mark RISON
			5. Mark CID ‘More Work Required”
			6. Schedule January Interim.
		3. CID 3368 (MAC)
			1. Review Comment
			2. While this is associated with SEC, we will continue to discuss.
			3. Discussion on if a new sentence should be added or not.
			4. It seems another change was lost at p964.34 that should have been moved up to 968.25.
			5. Proposed resolution:

CID 3368 (MAC): REVISED (MAC: 2022-12-05 21:30:06Z): Append at the end of the paragraph at 968.30: "Use of anything other than BIP-CMAC-128, BIP-GMAC-128, BIP-GMAC-256,

and BIP-CMAC-256 is not valid as a group management cipher suite."

Move "Use of BIP-CMAC-128, BIP-GMAC-128, BIP-GMAC-256, and BIP-CMAC-256 is not

valid as a data cipher suite." to be appended to the paragraph at 968.25.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3432 (MAC)
			1. Review Comment
			2. Discussion on need for IEEE reference.
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion.
		2. CID 3498 (MAC)
			1. Review comment
			2. Review Context
			3. Discussion on what the changes should be made.
			4. Are there one or more optional parameters allowed?
			5. Need to clarify that it is one or more of the optional parameters subfields.
			6. Discussion on the format of the new sentence.
			7. Proposed Resolution.

CID 3498 (MAC): REVISED (MAC: 2022-12-05 21:49:11Z): Replace the cited sentence with: "The Optional Parameter(s) field contains zero or more of the triplets shown in Figure 9-419 (Optional Parameter(s) field format)."

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3503 (MAC)
			1. Review Comment
			2. Concern with wider review before we act on the CID
			3. ACTION ITEM #6 Mark RISON to send email to WG Reflector to notify the WG about the proposed resolution.
			4. Proposed Resolution: Accepted.
			5. No Objection – Mark Ready for Motion
		2. CID 3502 (MAC)
			1. Review Comment
			2. Same Proposed Change for both CID 3502 and CID 3503.
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion.
			5. Discussion on the field of time variables, only 4 octets for any one field.
		3. CID 3502 and 3503 - UPDATED
			1. CID Set to More Work Required
			2. Schedule for January Interim.
			3. UPDATED ACTION ITEM #6 Mark RISON to send email to WG Reflector to notify the WG about the proposed resolution seeking Comment for CID 3502 and 3503.
		4. CID 3427 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		5. CID 3444 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		6. CID 3008 (MAC)
			1. Review Comment
			2. Discussion on how to change the Nontransmitted BSSID Capability field which is not in a beacon.
			3. Proposed Resolution:

CID 3008 (MAC): REVISED (MAC: 2022-12-05 22:16:09Z): Change

The Nontransmitted BSSID Capability field contains the contents of the Capability Information field

(defined in 9.4.1.4 (Capability Information field)) in beacons for the BSS.

To

"The Nontransmitted BSSID Capability field has the same format as Capability Information field (defined in 9.4.1.4 (Capability Information field)) and indicates the capabilites of the nontransmitted BSS."

* + - 1. No Objection – Mark Ready for Motion.
		1. CID 3010 (MAC)
			1. Review Comment.
			2. Review context.
			3. Discussion of what the change would mean.
			4. Proposed Resolution: Accepted.
			5. No objection – Mark Ready for Motion
		2. CID 3420 (MAC)
			1. Review Comment
			2. Discussion on what TBTT really is used for and what the interval in the beacon.
			3. We want to know when the next beacon will appear on the new channel.
			4. Discussion on what the TBTT is going to tell us.
			5. Proposed Resolution: Accepted.
			6. No Objection – Mark Ready for Motion.
		3. CID 3333 (MAC)
			1. Review Comment
			2. Long discussion on alternatives.
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion.
		4. CID 3223 (MAC)
			1. Review Comment
			2. Discussion on what the proposed change could become.
			3. Discussion on what the negotiated protocols are used.
			4. Proposed Resolution: CID 3223 (MAC): REVISED (MAC: 2022-12-05 22:43:37Z): At the end of the rightmost cell for row 5 in Table 9-363 add "NOTE---If SAE is not negotiated, this field is ignored by the receiver."
			5. Mark Ready for Motion
		5. CID 3789 (MAC)
			1. Review Comment
			2. Review Context – check what is in Annex E.
			3. Proposed Resolution: CID 3789 (MAC): ACCEPTED (MAC: 2022-12-05 22:53:41Z) - Note to Editor, delete "If E.2.7 (6 GHz band(11ax)(#600)) does not list information for the country in which the BSS is operating, then the Regulatory Info subfield is reserved."
			4. No Objection – Mark Ready for Motion.
		6. CID 3380 (MAC)
			1. Review Comment
			2. Review Context
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion.
		7. CID 3517 (MAC)
			1. Review Comment
			2. Review Context.
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion.
	1. **Recess at 6pm** until 9am Tuesday.
1. **TGme (REVme AdHoc) Mixed-mode – Tuesday, December 6, 2022, at 9:00-12:00 ET**
	1. Called to order at 9:05am ET by the chair, Michael Montemurro (Huawei).
	2. **Introductions:**
		1. **IMAT Report:**

|  |  |  |
| --- | --- | --- |
| 1 | Bahn, Christy | IEEE STAFF |
| 2 | Das, Subir | Peraton Labs |
| 3 | Hamilton, Mark | Ruckus/CommScope |
| 4 | Kim, Youhan | Qualcomm Technologies, Inc. |
| 5 | Levy, Joseph | InterDigital, Inc. |
| 6 | Malinen, Jouni | Qualcomm Incorporated |
| 7 | McCann, Stephen | Huawei Technologies Co., Ltd |
| 8 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| 9 | Petrick, Albert | InterDigital |
| 10 | Qi, Emily | Intel Corporation |
| 11 | RISON, Mark | Samsung Cambridge Solution Centre |
| 12 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 13 | Smith, Graham | SRT Wireless |
| 14 | Zimmerman, George | CME Consulting |

* 1. **Review Patent Policy,** Copyright policy and participation policies.
		1. No Issues noted.
	2. **Review Agenda: 11-22/2061r4:**
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-04-000m-revme-december-2022-adhoc-agenda.docx>
		2. Review Today’s Agenda

**Tuesday December 6, 2022**

AM1 – 09:00-12:00 ET

MAC Review CIDs – Hamilton (Ruckus-Commscope

CID 3122 (SEC), CID 3253 (SEC)

SEC CIDs – doc 11-22/2061 – Montemurro (Huawei)

PHY Review CIDs – Rison (Samsung)

PM1 – 13:00-15:00 ET

MAC Review CIDs – Hamilton (Ruckus-Commscope

CID 3778 and 3779 – doc 1-22/1437 – Wei (NXP)

PHY Review CIDs – Rison (Samsung)

PM2 – 15:30-17:00 ET

CID 3078 (GEN) – Rosdahl (Qualcomm)

MAC CIDs – Hamilton (Ruckus-Commscope)

Recess

* 1. **MAC Review CIDs** – Mark HAMILTON (Ruckus/Commscope)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-30-000m-revme-mac-comments.xls>
		2. CID 3384 (MAC)
			1. Review Comment
			2. CID Set to More Work Required
			3. Schedule for January Interim.
			4. Assign to Mark HAMILTON
		3. CID 3440 (MAC)
			1. Review comment
			2. Proposed Resolution: Accepted:
			3. No Objection – Mark Ready for Motion
		4. CID 3366 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted:
			3. No Objection – Mark Ready for Motion
		5. CID 3089 (MAC)
			1. Review Comment
			2. Proposed Resolution:

CID 3089 (MAC) - UPDATED: REVISED (MAC: 2022-12-06 14:38:07Z): Replace the cited note with: "NOTE--PN processing will generate consecutive PN numbers for constituent MPDUs of fragmented MSDUs, A-MSDUs or MMPDUs (see 12.5.2.3.2 (PN processing) and 12.5.4.3.2 (PN processing))." No Objection – Mark Ready for Motion

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3396 (MAC)
			1. Review Comment
			2. Proposed Resolution: CID 3396 (MAC): REVISED (MAC: 2022-12-06 14:38:07Z): Replace the cited note with: "NOTE--PN processing will generate consecutive PN numbers for constituent MPDUs of fragmented MSDUs, A-MSDUs or MMPDUs (see 12.5.2.3.2 (PN processing) and 12.5.4.3.2 (PN processing))."

Note to Editor: this is the same resolution as for CID 3089.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3089 and 3396 (MAC)
			1. Reassign to More Work Required
			2. Assign to January Interim
			3. AdHoc Notes: MAC: 2022-12-06 14:47:54Z - status set to: More Work Required. Bring back at Jan interim. NOTE 2 on page 1821 needs additional research into a similar direction update.
		2. CID 3034 (MAC)
			1. Review Comment
			2. Review Context – p1860
			3. Proposed Resolution: Accepted
			4. No Objection – Mark Ready for Motion
		3. CID 3015 (MAC)
			1. Review Comment
			2. Discussion if a MU-BAR Trigger frame has the suggested field.
			3. Assign to Abhi PATIL
			4. Mark CID More Work Required.
			5. Schedule for January Interim
			6. AdHoc Notes: CID 3015 (MAC): MAC: 2022-12-06 14:54:32Z - status set to: More Work Required. Bring back in Jan interim. Request commenter to bring some background material showing the field in (GCR) MU-BAR Trigger frames.
			7. ACTION ITEM #7: Aphi PATIL to bring some background material showing the field in (GCR) MU-BAR Trigger frames (CID 3015).
		4. CID 3774 (MAC)
			1. Review Comment
			2. Review Context p2334.14 and p1820.62
			3. Discussion – We should not add the “irrespective phrase”.
			4. Remove the word “individual”
			5. Add “needed”
			6. Proposed Resolution: ID 3774 (MAC): REVISED (MAC: 2022-12-06 14:59:06Z): Change to "The fragments that comprise a complete MSDU, A-MSDU or MMPDU together contain the information needed to reassemble the MSDU, A-MSDU or MMPDU."
			7. No Objection – Mark Ready for Motion
		5. CID 3019 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No objection – Mark Ready for Motion
		6. CID 3192 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No objection – Mark Ready for Motion
		7. CID 3460 (MAC)
			1. Review Comment
			2. Review Changes as proposed.
			3. Review Context on 2390.19.
			4. Proposed Resolution: Accepted.
			5. No objection – Mark Ready for Motion
		8. CID 3205 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No objection – Mark Ready for Motion
		9. CID 3174 (MAC)
			1. Review Comment
			2. Review Context of 11.5.2.2
			3. Note 10.5.2.2 is very similar to 11.5.2.2
			4. Note: End of 10.25.2: "(#1807)A block ack agreement may be modified by the originator by sending an ADDBA Request frame.All parameters of the agreement may be changed except for the TID. If the request is not successful, the existing agreement is not modified."
			5. More work may need to be done to clarify it here.
			6. Question on if there are two duplicate clauses.
			7. Assign to Mark RISON
			8. Set CID to More Work Required
			9. Schedule to the 2nd Telecon after the January Interim
		10. CID 3036 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		11. CID 3035 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
	1. **Hand over Chair** to Mark HAMILTON, Vice Chair
	2. **Review Doc 11-22/2050r1** CID 3122 and CID 3253 Michael Montemurro (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2050-01-000m-lb270-sec-adhoc-comment-resolutions-part-1.docx>
		2. Review Submission
		3. CID 3122 (SEC)
			1. Review Comment
			2. Discussion the resolution form.
			3. Discussion: (5) does have a reference to it for key management and 12.6.10 does talk about FT to some extent, but not about the FT authentication (other than mentioning that PMKSA caching is used for it). It would seem to make sense to add this into the item (4) as well. Maybe something like this: "..., FT protocol to authenticate as described in 13.5 (FT protocol), or uses FILS..."
			4. Proposed Resolution: Revised; Make the Changes proposed by the commentor and

At 2781.25, change

“… or uses FILS authentication to authenticate as described in 12.11 (Authentication for FILS).”

to

“… FT protocol to authenticate as described in 13.5 (FT protocol) or uses FILS authentication to authenticate as described in 12.11 (Authentication for FILS).”

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3253 (SEC)
			1. Review comment
			2. Review History.
			3. An Email was posted to the reflector.
			4. Discussion on whether this section is an example or not.
			5. Discussion on Figure 12-31 – Maybe change to simple 3 boxes without a transient key derivation.
			6. Delete the 2nd row in the figure boxes and item d).
			7. Discussion on what to modify.

Modify figure 12-30 – delete the entire 2 lower boxes.

Change the Group Temporal Key Box, changing “Length bits” to “TK\_Bits bits”

Change “PRF-Length…” to “PRF-TK\_Bits…”

At P2891.36, item b) below figure, change “PRF-Length…” to “PRF-TK\_Bits…”

In Item C) delete “Length = TK\_bits.”

Delete item d)

In Item e) change “temporal key” to “GTK”

Mark Rison to provide updated Figure 12-31.

* + - 1. Proposed resolution:

CID 3253 (SEC) REVISED.

Modify Figure 12-31 as follows:

Delete the two lower boxes

Change the Group Temporal Key box, changing “Length bits” to “TK\_bits bits”

Change “PRF-Length…” to “PRF-TK\_bits…”

On p2891.36 in item b) below the figure, change “PRF-Length…” to “PRF-TK\_bits…”

In item c) delete “Length = TK\_bits.”

Delete item d)

In item e) change “temporal key” to “GTK”

*Note to Editor*: Mark Rison to provide updated figure 12-31.

* + 1. Discussion on if more word changes are needed to make this not an example.
		2. No further Changes identified.
		3. No Objection – Mark Ready for Motion.
	1. **PHY Review CIDs** Mark RISON (Samsung)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0727-18-000m-revme-phy-comments.xls>
		2. CID 3077 (PHY)
			1. Review Comment
			2. Discussion on what the change should be.
			3. Suggestion to add “0.4 (micro)s” to line with “0.8 (micro)s”
			4. Need to know why 1.6 or 3.2 us?
			5. The Bullet list is specifying input sensitivity.
			6. Possible: "0.8 µs GI is used." to "0.4 µs GI or 0.8 µs GI is used."
			7. AdHoc Notes: CID 3077: PHY: 2022-12-06 16:00:38Z - status set to: More Work RequiredWhy 0.4 us when this is not an HE PPDU GI? Why not 1.6 and 3.2 us, which are valid HE PPDU GIsAlso, why does the receiver sensitivity requirement have to apply to all PPDUs?
			8. Will move on for now and come back when Sean COFFEY Returns.
		3. CID 3097 (PHY)
			1. Review Comment
			2. Review the proposed change – note that the Proposed Change as a duplicate change included in it.
			3. The 9 instances are different PHYs
			4. There is a reference that was cleared up yesterday, it was removed.
			5. Discussion on why we may remove the “connector” from Antenna.
			6. It was discussed if this one was the connector or the start of the antenna.
			7. The discussion is measurement of a received antenna, only one antenna is used to receive a specific signal and is what is used for measurement.
			8. In a Multi-antenna system, we have had debate on where the point is.
			9. For most of the antenna measurements, they are done at the antenna connector, but for this parameter, it is about when the signal hit the antenna, and when the measurement occurred.
			10. Timestamp is one word.
			11. Assign CID to Joseph Levy
			12. Mark CID – More Work Required.
			13. Schedule for the January Interim
		4. CID 3077 (PHY) – Return
			1. Discussion on what the range of operation is implied.
			2. This particular text, is just where the specific requirements are noted for minimum sensitivity
			3. We may need a submission to harmonize the requirements.
			4. Guard interval is not a major criterion.
			5. The discussion seemed to be off topic, and the specific comment will be withdrawn by commentor
			6. Proposed Resolution: Rejected; Commenter has withdrawn the comment.
			7. No Objection – Mark Ready for Motion.
		5. CID 3098 (PHY)
			1. Similar to CID 3097
			2. Assign CID to Joseph Levy
			3. Mark CID – More Work Required.
			4. Schedule for the January Interim
		6. CID 3821 (PHY)
			1. Review Comment
			2. Center Frequency 9 is missing in Table E-5
			3. Document 11-22/719r4 had the channel 9 in it and was missing in the draft.
			4. Proposed Resolution: Accepted.
			5. No objection – Mark Ready for Motion
		7. CID 3256 (PHY)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		8. CID 3262 (PHY)
			1. Review comment
			2. Expand the proposed changes out in the adHoc Notes to make it easier to read.
			3. Review context p5528.5
			4. Discussion on what happens if we delete one thing, then it may need to cause more locations that are needed to be identified.
			5. The Removal of “delayed-no-ack” causes more work to be done.
			6. Mark More work required
			7. Assign to Mark RISON
			8. Schedule 2nd Telecon after January Interim
		9. CID 3278 (PHY)
			1. Review Comment
			2. Submission prepared = 11-22/2083r1
			3. Mark More Work Required
			4. Assign to Sean Coffey
			5. Scheduled Dec 7th.
	2. **Recess at 12:00pm**
1. **TGme (REVme AdHoc) Mixed-mode – Tuesday, December 6, 2022, at 13:00-15:00 ET**
	1. Called to order at 13:01pm ET by the chair, Michael Montemurro (Huawei).
	2. Review Patent, Copyright and Participation Policies
		1. No Issues noted.
	3. **Review Agenda: 11-22/2061r5:**
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-05-000m-revme-december-2022-adhoc-agenda.docx>
		2. Review Today’s Agenda

**Tuesday December 6, 2022**

PM1 – 13:00-15:00 ET

MAC Review CIDs – Hamilton (Ruckus-Commscope

CID 3778 and 3779 – doc 1-22/1437 – Wei (NXP)

]PHY Review CIDs – Rison (Samsung)

Recess

* 1. **MAC Review CIDS** – Mark HAMILTON (Ruckus/Commscope)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-30-000m-revme-mac-comments.xls>
		2. CID 3240 (MAC)
			1. Review comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		3. CID 3176 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion.
		4. CID 3322 (MAC)
			1. Review Comment
			2. Question to Editor for clarity for instructions.
			3. Review Context on p2497.14 and p2497.46
			4. Discussion on the consequences of Accepting the CID.
			5. Proposed Resolution: Accepted.
			6. Discussion on who would be good to review.
			7. No Objection – Mark Ready for Motion.
		5. CID 3325 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion.
		6. CID 3324 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		7. CID 3402 (MAC)
			1. Review Comment
			2. Review Context 2506.17
			3. Discussion on the proposed changes
			4. Proposed Resolution:

CID 3402 (MAC): REVISED (MAC: 2022-12-06 18:17:25Z): To the end of the sentence: "If dot11RMBeaconActiveMeasurementActivated is true and the Measurement Mode in the measurement

request is Active, the measuring STA shall perform the following procedure (or an equivalent procedure) on

the requested channel:" add ", if permitted (e.g. the channel is not subject to DFS):"

* + - 1. No Objection – Mark Ready for Motion.
		1. CID 3451 (MAC)
			1. Review Comment
			2. Review Context 2559.25
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion
		2. CID 3179 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		3. CID 3286 (MAC)
			1. Review Comment
			2. Review Context p3014
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion
		4. CID 3393 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		5. CID 3438 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		6. CID 3401 (MAC)
			1. Review Comment
			2. This one instance was missed in REVmd.
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion
		7. CID 3781 (MAC)
			1. Review Comment
			2. This is the same as CID 3401 (MAC)
			3. Proposed Resolution: Accepted. – Note to Editor this is the same result as the resolution for CID 3401
			4. No Objection – Mark Ready for Motion
		8. CID 3024 (MAC)
			1. Review Comment
			2. Proposed Resolution: Accepted.
			3. No Objection – Mark Ready for Motion
		9. CID 3777 (MAC)
			1. Review Comment
			2. Review Context p3851.19
			3. Proposed Resolution: Accepted.
			4. No objection – Mark Ready for Motion
		10. CID 3318 (MAC)
			1. Review Comment
			2. Review Context p3875.15
			3. Discussion on the need to make the change.
			4. More Alternatives discussed.
			5. Proposed Resolution: Accepted

CID 3318 (MAC): REVISED (MAC: 2022-12-06 18:46:50Z):

Delete the cited text and add "NOTE---This allows an unassociated non-AP STA to determine the BSS color. The non-AP STA needs this information to indicate it in the HE TB PPDU.".

* + - 1. No objection – Mark Ready for Motion
	1. **Review doc 11-22/1437r1** CIDs 3778 and 3779 Dong WEI (NXP)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-1437-01-000m-ht-transmit-spectrum-mask-alignment.docx>

* + 1. CID 3778 and 3779 (PHY)
			1. Review Comments
			2. Review Submission discussion.
			3. Discussion on why the mask was changed.
			4. Check on why there is an entry for VHT in 2.4 GHz – it is not used there.
			5. Will need to double check that it is actually stated in normative text.
			6. Proposed Resolution: Incorporate changes in 11-22/1437r1…
			7. There will be other reviews done out of band to ensure that it correctly crafted.
			8. Discussion on the dBm/MHz number -53…why did it not change also?
			9. Mark More Work Required
			10. Assigned to Dong WEI
			11. Schedule for January 9 telecon
	1. **PHY Review CIDs** Mark RISON (Samsung)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0727-18-000m-revme-phy-comments.xls>
		2. CID 3299 (PHY)
			1. Review Comment
			2. Review Context – p3201.54
			3. Some indicated that the way the notes appear in clause 17 is correct. And there is no need to copy to another location.
			4. The Note in Clause 19 should be split into x.x.6.1 and x.x.6.2.
			5. The clear notes in the x.x.6.2 to indicated that it is ok to ignore the one feature.
			6. Assign to Youhan KIM
			7. Mark as More Work Required
			8. Schedule January Interim
		3. CID 3312 (PHY)
			1. Review Comment
			2. Preview the Proposed Changes with restored white spaces.
			3. One of the examples starts with 00 instead of 01.
			4. Discussion on what the example may need
			5. Discussion on what “exactly” and if multiple options can work.
			6. ACTION ITEM #8 Edward AU to check with the EDMG experts that the original intent matches the updated change made by CID 3312 (PHY).
			7. Proposed Change: Accepted
			8. No Objection – Mark Ready for Motion
		4. CID 3381 (PHY)
			1. Review Comment
			2. Review Context p4941
			3. Proposed Resolution: Revised; Delete the Cited sentence
			4. No Objection – Mark Ready for Motion
		5. CID 3386 (PHY)
			1. Review comment
			2. Discuss the changing of the order of the proposed changes.
			3. Proposed Resolution:

REVISED (PHY: 2022-12-06 19:34:05Z)

Change to:

"If the CH\_BANDWIDTH parameter has two noncontiguous bits equal to 1 (e.g., “01001000”) and the

CHANNEL\_AGGREGATION parameter is set to AGGREGATE, or the CH\_BANDWIDTH parameter has a single bit equal to 1 (#2349)(e.g., “01000000”),"

* + - 1. No Objection -- Mark Ready for Motion
		1. CID 3445 (PHY)
			1. Review Comment
			2. Review Context p4385.29
			3. Discussion on how to clarify the updated sentence.
			4. Proposed Resolution:

REVISED (PHY: 2022-12-06 19:40:06Z)

Change to "Each port or antenna connected to a transmit chain of the transmitting STA shall be assigned to a port or antenna of the testing instrumentation". Also at 4436.24

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3449 (PHY)
			1. Review Comment
			2. Review Context p4714 and p4715
			3. Review BSS transition and the context of mobility.
			4. Discussion on the Mobility domains vs Roaming in the 11u sense.
			5. Discussion to remove “Roaming requires”.
			6. Proposed Resolution: At the Referenced location delete “Roaming requires”.
			7. Discussion on the consequences of removing “Roaming requires”.
			8. Discussion on if DM1 and DM8 may indicate the same requirement.
			9. Proposed Resolution: REVISED (PHY: 2022-12-06 19:53:42Z) -- At the referenced location delete "Roaming requires"
			10. No Objection – Mark Ready for Motion
	1. **Recess at 3:00pm**
1. **TGme (REVme AdHoc) Mixed-mode – Tuesday, December 6, 2022, at 15:30-17:00 ET**
	1. **Called to order** at 15:32pm ET by the chair, Michael Montemurro (Huawei).
	2. Review Patent, Copyright and Participation Policies
		1. No Issues noted.
	3. Review Agenda: 11-22/2061r6:
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-06-000m-revme-december-2022-adhoc-agenda.docx>
		2. Review Today’s Agenda

PM2 – 15:30-17:00 ET

1. ~~CID 3078 (GEN) – Rosdahl (Qualcomm)~~
2. MAC CIDs (3) – doc 11-22/2093 – MCCANN (Huawei)
3. MAC Review CIDs (6) – Hamilton (Ruckus-Commscope)
4. PHY Review CIDS (11) - RISON (Samsung)

RECESS

* 1. **Review doc 11-22/2093r0** – Stephen MCCANN (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2093-00-000m-proposed-resolutions-for-mac-cids.docx>
		2. CID 3780 (MAC)
			1. Review Comment
			2. Review discussion in the Submission.
			3. Discussion on the proposed changes.
			4. The non-HE VHT STA may be defined somewhere.
			5. Discussion on the use of “non-HE” which is indicating an 11ax and not an 11ac STA.
			6. Proposed Resolution:

CID 3780 (MAC): REJECTED (MAC: 2022-12-06 20:41:20Z): The use of "non-HE VHT STA" in this note indicates a legacy VHT STA (defined prior to 11ac).

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3046 (MAC)
			1. Review comment
			2. Review discussion in the submission.
			3. Proposed Resolution: CID 3046 (MAC): REVISED (MAC: 2022-12-06 20:43:19Z): Change the cited reference to 10.25.6.5.
			4. No objection – Mark Ready for Motion.
		2. CID 3047 (MAC)
			1. Review Comment
			2. Proposed Resolution: CID 3047 (MAC): REVISED (MAC: 2022-12-06 20:44:06Z): Change the cited reference to 11.10.9.3.
			3. No Objection – Mark Ready for Motion
	1. **MAC Review CIDS** (6)– Mark HAMILTON (Ruckus/Commscope)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-30-000m-revme-mac-comments.xls>
		2. CID 3277 (MAC)
			1. Review Comment
			2. Review Context – p3940.12
			3. Discussion on why a diamond was chosen. Not sure.
			4. This figure was made by 11-22/655r2 (and a VISO source file).
			5. Looks like a diamond was introduced.
			6. Discussion on if an arrow is needed or not.
			7. ACTION ITEM #9: CID 3277 (MAC): 26-13 Figure- VISO Source to be provided by Joseph Levy – Short down arrow onto STAOBSS-A Line.
			8. Proposed Resolution: CID 3277 (MAC): REVISED (MAC: 2022-12-06 20:58:32Z): Change the diamond to an arrow, the same height as the PSRT PPDU, and pointing down to the STA\_OBSS-A line, and also add the "Duration from Common Info field" horizontal arrow in the upper right (apparently Visio editing glitch).
			9. No Objection – Mark Ready for Motion
		3. CID 3817 (MAC)
			1. Review Comment
			2. Review context: p3962.48
			3. Proposed Resolution: Accepted.
			4. No objection – Mark Ready for Motion
		4. CID 3025 (MAC)
			1. Review Comment
			2. Review Context p3974.14
			3. Discussion on if the SSID cannot be the actual.
			4. Mesh you can use Table 9-67
			5. Proposed Resolution: Accepted
			6. No Objection – Mark Ready for Motion.
		5. CID 3289 (MAC)
			1. Review Comment
			2. Review context: p3979.12
			3. What is a “certain number” ?
			4. Assign CID to Mark RISON
			5. Mark CID as More Work Needed.
			6. Schedule for 2nd telecon after interim.
		6. CID 3776 (MAC)
			1. Review Comment
			2. Review Context p3834 (page number is incorrect).
			3. Expand Proposed Changes in AdHoc Notes to read easier.
			4. Change “sent” to “transmitted” in “Level 1”.
			5. An HE STA that is Level 2 or Level 3 can receive Level 1.
			6. Discussion on what the change the bullets will mean.
			7. Mark More Work Required
			8. Assign to Robert STACEY
			9. Schedule 1st telecon after the January Interim.
			10. ACTION ITEM #10: Mark HAMILTON – Notify Robert STACEY of being assigned CID 3776 and scheduled for Jan 26 Telecon
		7. CID 3314 (MAC)
			1. Review Comment
			2. Review Context p4553
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion
		8. CID 3277 (MAC)
			1. Review the VISO diagram that Joseph LEVY is preparing for Editor.
			2. No Objection to the proposed Figure prepared – Joseph to send to Emily.
	2. **PHY Review CIDs (11)** Mark RISON (Samsung)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0727-18-000m-revme-phy-comments.xls>
		2. CID 3450 (PHY)
			1. Review Comment
			2. Review Context p3180
			3. The Fields shall be interpreted as being sent as LSB-first.
			4. The sentence being deleted is line 9 on page 3181.
			5. CID 602 changed the text, so why deleting now.
			6. While the sentence is repetitive, maybe make a note to ensure context is retained.
			7. Proposed Resolution:

CID 3450 (PHY) REVISED (PHY: 2022-12-06 21:41:19Z)

Change "CH\_BANDWIDTH\_IN\_NON\_HT and SCRAMBLER\_INITIAL\_VALUE are transmitted LSB first. For

example, if CH\_BANDWIDTH\_IN\_NON\_HT is CBW80 (whose numerical value is 2), then B5=0 and B6=1."

to "NOTE---Since CH\_BANDWIDTH\_IN\_NON\_HT and SCRAMBLER\_INITIAL\_VALUE are transmitted LSB first, if, for example, CH\_BANDWIDTH\_IN\_NON\_HT is CBW80 (whose numerical value is 2), then B5=0 and B6=1."

* + - 1. No objection – Mark Ready for Motion
		1. CID 3471 (PHY)
			1. Review comment
			2. Review History of how Transmit Spectral Mask was defined.
			3. Youhan will provide a rejection reason.
		2. CID 3472 (PHY)
			1. Review comment
			2. Review Context – p3151 and p3152
			3. Discussion on if similar change is needed in Clause 17.
			4. Look at the RCPI locations.
			5. Proposed Resolution: Accepted.
			6. No Objection – Mark Ready for Motion.
		3. CID 3471 (PHY)
			1. Proposed resolution: Rejected; When the transmit power is low, then the transmit emission floor starts to dominate. Hence, taking the higher of the two interim masks is the way to allow transmissions using low TX power not to be subject to the dBr relative interim TX spectrum mask.
			2. No Objection – Mark Ready for Motion
		4. CID 3473 (PHY)
			1. Review Comment
			2. Review Context p3682
			3. Proposed Resolution: Accepted.
			4. No Objection – Mark Ready for Motion.
		5. CID 3480 (PHY)
			1. Review Comment
			2. Review Context p3206.
			3. Prior CID 1058: REVISED (MAC: 2022-09-15 02:27:03Z): Incorporate the changes in in https://mentor.ieee.org/802.11/dcn/22/11-22-0576-11-000m-misc-phy-and-lower-level-cids.docx, for CID 1058.
			4. Need to check on why the shift was done. Is it possible that it was too far?
			5. Mark CID Mark as More Work Required.
			6. AdHoc Notes: PHY: 2022-12-06 21:58:24Z - status set to: More Work Required

Bring back in interim

MarkR to ask Brian why it's OK to generate the CCA.ind well after the CCA has changed

* 1. **Recess at 5:00pm**
1. **TGme (REVme AdHoc) Mixed-mode – Wednesday, December 7, 2022, at 9:00-12:00 ET**
	1. Called to order at 9:06am ET by the chair, Michael Montemurro (Huawei).
	2. **Introductions:**
		1. **IMAT Report for Wednesday:**

|  |  |  |
| --- | --- | --- |
| 1 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| 2 | Bahn, Christy | IEEE STAFF |
| 3 | Coffey, John | Realtek Semiconductor Corp. |
| 4 | Das, Subir | Peraton Labs |
| 5 | Di Taranto, Rocco | Ericsson AB |
| 6 | Hamilton, Mark | Ruckus/CommScope |
| 7 | Kim, Youhan | Qualcomm Technologies, Inc. |
| 8 | Levy, Joseph | InterDigital, Inc. |
| 9 | McCann, Stephen | Huawei Technologies Co., Ltd |
| 10 | Pettersson, Charlie | Ericsson AB |
| 11 | Qi, Emily | Intel |
| 12 | RISON, Mark | Samsung Cambridge Solution Centre |
| 13 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 14 | Shellhammer, Stephen | Qualcomm Incorporated |
| 15 | Smith, Graham | SR Technologies |
| 16 | Sundman, Dennis | Ericsson AB |
| 17 | Wei, Dong | NXP Semiconductors |
| 18 | Wilhelmsson, Leif | Ericsson AB |

* 1. **Review Patent Policy,** Copyright policy and participation policies.
		1. No Issues noted.
	2. **Review Agenda – 11-22/2061r6:**
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-06-000m-revme-december-2022-adhoc-agenda.docx>
		2. Review Agenda for Today:

**Wednesday December 7, 2022**

**11. AM1 – 09:00-12:00 ET**

f. CID 3819 – 11-22/2076 – Kim (Qualcomm)

a. CID 3532 (ED2) – Rison (Samsung)

~~b. CID 3413 (ED2) – Au (Huawei)~~

c. CID 3022 (ED2) – Au (Huawei)

d. ED2 CIDs – 11-22/2063 – Au (Huawei)

e. ED2 CIDs – 11-22/2071 – Au (Huawei)

**12. PM1 – 13:00-16:00 ET**

a. MC-OOK - CIDs 3067-3068, 3070-3072, 3095-3096, 3283, 3458 – Coffey (Realtek)

b. PHY Review CIDs

13: Adjourn – Hardstop 4pm

* + 1. Adjustments made to order of agenda items
		2. Edward asked for delay CID 3413
		3. ED1 Review CIDs not ready yet.
		4. No Objection to the modified agenda
	1. **Review Doc 11-22/2076** – LB270 DSSS TX Mask Floor - Youhan KIM (Qualcomm)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2076-01-000m-lb270-dsss-tx-mask-floor.docx>
		2. CID 3816 (PHY)
			1. Review Comment
			2. Review Discussion in submission
			3. Proposed Resolution:

CID 3816 (PHY) - REVISED

Instruction to TGme Editor:

Implement the proposed text update for CID 3816 in <https://mentor.ieee.org/802.11/dcn/22/11-22-2076-02-000m-lb270-dsss-tx-mask-floor.docx> .

Note to Commenter:

The text update referenced above adds a transmit spectrum mask floor of -53 dBm/MHz for DSSS and HR/DSSS transmit spectrum masks. No text change is needed for ERP-DSSS (18.4.7.3) as the ERP-DSSS transmit spectrum mask simply refers to that of HR/DSSS.

* + - 1. Review the Actual Changes
			2. No Objection – Mark Ready for motion.
	1. **Review Doc 11-22/1993r3** – Youhan KIM (Qualcomm)
		1. Document: <https://mentor.ieee.org/802.11/dcn/22/11-22-1993-03-000m-definition-acronym.docx>
		2. CID 3819 (ED1)
			1. Review Comment
			2. Discussion on how the Searchable terms could be done.
			3. Discussion on the alternatives
			4. Discussion on process to make the changes.
			5. Place “[abbreviation]” after the colon.
			6. For now, make incremental change and put searchable terms on right side of colon and not
			7. Schedule for Telecon after the Interim.
			8. While more changes may be made in the future, we will start with this.
			9. The rule in the SA manual:
				1. Within text, the acronym or abbreviation should follow the first use of the full term (the first time in the introduction, then the first time in the body of the document, and then the first time in any annexes in which the acronym appears). The abbreviation or acronym should be placed in parentheses when following the full term.
	2. **Review Doc 11-22/2069r0** – Mark RISON (Samsung)
		1. Document: <https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx>
		2. CID 3532 (ED2)
			1. Review Comment
			2. Error in the table number cited.
			3. Review the changes that place the Cipher Suite in Alphabetic order instead of creation order (historical).
			4. use alphanumeric order for Table 12-8 (Cipher suite key lengths).
			5. Proposed Resolution:

CID 3532 (ED2): Incorporate the changes in 11-22/2069r0 <https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx> for CID 3532

* + - 1. No Objection – Mark Ready for Motion
	1. **Review Doc 11-22/2001r4 –** Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2001-04-000m-proposed-resolution-for-miscellaneous-lb270-comments.docx>
		2. CID 3022 (ED2)
			1. Review comment
			2. Proposed Resolution: CID 3022 (ED2): At 2603.11, replace “off-channel TWT scheduling support bit” with “Off-channel TWT Scheduling Support field”.
			3. No objection – Mark Ready for Motion
		3. CIDs 3506 and 3507 (both ED2):
			1. Review comment
			2. Review discussion in submission.
			3. This comment resolution is being re-visited.
			4. The L function operates on a bit string, not characters. There is no standard function to do this and that is why it has been defined in 802.11.
			5. Would like to change L to something that is more readable.
			6. It is self-contained within the 802.11 specification.
			7. Discussion on what the name of the function should be.
			8. We may defer this until security topic
			9. Mark More Work Required.
			10. Schedule for January Interim
	2. **Review Doc 11-22/2063r1** – Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2063-01-000m-proposed-resolution-for-miscellaneous-lb270-comments-part-2.docx>
		2. CID 3274 (ED2)
			1. Review comment
			2. Review discussion in submission
			3. Proposed Resolution: Accept.
			4. Discussion on if you receive a valid frame or not.
			5. More Discussion to be held offline.
			6. No Objection – Mark Ready for Motion
		3. CID 3483 (ED2)
			1. Review comment
			2. Review discussion in the document.
			3. Proposed Resolution:

CID 3483 (ED2): Revised. At 3949.8, replace “the power boost factor POWER\_BOOST\_FACTOR” with “the POWER\_BOOST\_FACTOR parameter”.At 3949.12, 3949.14, and 3914.18, replace “the POWER\_BOOST\_FACTOR” with “the POWER\_BOOST\_FACTOR parameter”.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3726 (ED2)
			1. Review Comment
			2. Review discussion in submission
			3. Proposed Resolution; Rejected: the phrases “MIB variable” and “MIB attribute” are used interchangeably.
			4. Propose to Refer to ARC SC for more discussion.
			5. Discussion on if we should be standardized on “attributes” or “variables”.
			6. When used as a variable to allow outside entity to put a value into the 802.11 object, and other times they are just attributes. There are some cases that this is not consistent. But not sure if the effort is worth it.
			7. While the reason is not correct in the rejection, so we would need to have a submission.
			8. Assign CID to Mark RISON
			9. Mark CID More Work Required.
			10. Scheduled for Jan Interim
		2. CID 3115 (ED2)
			1. Review Comment
			2. Review context
			3. Proposed Resolution: Accepted.
			4. No objection – Mark Ready for Motion
			5. There may be a second location 1105.56.
			6. Updated Resolution: Revised.At 1105.64 and 2395.33, replace “Counter” with “counter”.
			7. No objection – Mark Ready for Motion
	1. **Review doc 11-22/2071r2** – Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2071-02-000m-proposed-resolution-for-miscellaneous-lb270-comments-part-3.docx>
		2. CID 3109 (ED2)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		3. CID 3239 (ED2)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		4. CID 3423 (ED2)
			1. Review Comment
			2. Proposed Resolution: Accepted
			3. No Objection – Mark Ready for Motion
		5. CID 3475 (ED2)
			1. Review Comment
			2. Review discussion in submission.
			3. Proposed Resolution; Accepted.
			4. No Objection – Mark Ready for Motion
		6. CID 3626 (ED2)
			1. Review comment
			2. Review Context in submission.
			3. Discussion on the value of this change leaving a sentence that item a is shown in figure which is just below.
			4. Proposed Resolution:

CID 3626 (ED2): Revised. Incorporate the changes as shown in 11-22/2071r3 (https://mentor.ieee.org/802.11/dcn/22/11-22-2071-03-000m-proposed-resolution-for-miscellaneous-lb270-comments-part-3.docx) for CID 3626.

* + - 1. Some concern with the resultant text.
			2. Mark Ready for Motion
		1. CID 3270 (ED2)
			1. Review Comment
			2. Review context.
			3. Proposed Resolution:

CID 3270 (ED2): Revised. At 2888.65, 2889.52, 2891.39, 2891.48, 2927.62, 3041.27, replace “cipher-suite” with “cipher suite”.

At 754.19 [x2], 3045.4, 4957.26, replace “ciphersuite” with “cipher suite”.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3311 (ED2)
			1. Review Comment
			2. Review proposed changes.
			3. Proposed resolution:

CID 3311 (ED2): Revised. Replace “Channel Usage” with “channel usage” at 387.55 (rightmost), 397.32 (rightmost), 1636.42, 2109.13, 2602.36/37/40(2x)/59/61/63/64, 2603.24, 2604.2(2x)/28, 4988.12/25/26, 5770.32.

Replace “Channel Usage” with “Channel usage” at 375.20, and 4774.61.

Note to Commenter: These are the exact locations provided by the commenter.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3487 (ED2)
			1. Review Comment
			2. Proposed Resolution; Accepted.
			3. No Objection – Mark Ready for Motion
		2. CID 3633 (ED2)
			1. Review Comment
			2. Review Discussion in submission.
			3. Discussion on if we have a value after the “=” to be consistent.
			4. Restructuring to have not present after the value being assigned.
			5. Mark CID More Work Required
			6. Schedule for Dec 16
		3. Return to CID 3270 –
			1. Missed two instances for being changed.
			2. Add to resolution: At 2913.31, replace Cipher-suite with Cipher suite”
				1. Updated Resolution: for CID 3270:Revised.At 2888.65, 2889.52, 2891.39, 2891.48, 2927.62, 3041.27, replace “cipher-suite” with “cipher suite”.At 754.19 [x2], 3045.4, 4957.26, replace “ciphersuite” with “cipher suite”.At 2913.31 and 2916.7, replace “Cipher-suite” with “Cipher suite”.
			3. Still marked Ready for Motion.
		4. CID 3425 (ED2)
			1. Review Comment
			2. Proposed Resolution; Accepted.
			3. No Objection – Mark Ready for Motion
		5. CID 3693 (ED2)
			1. Review Comment
			2. Review Discussion in Submission
			3. Initial proposed resolution is to reject.
			4. Discussion on use of field vs subfields.
			5. If we only call things fields, and not subfields, then we may simplify our drafts.
			6. Assign to Mark RISON
			7. Mark CID More Work Required
			8. Schedule 2nd telecon after the Interim.
			9. This CID will be removed from this document.
			10. Question on doing a search and replace globally.
			11. Not as easy one would think,
		6. CID 3702 (ED2)
			1. Review comment
			2. Review Discussion in submission.
			3. If it is specific standard, it should have the “std”
			4. There are rules in IEEE SA on how the references are put in and how they are to be cited.
			5. We should rely on the editor to identify the correct form. If someone sees a potential question, then it can be checked as required.
			6. Possible Resolution: CID 3702 (ED2): Rejected. The IEEE publication editor reviews the draft to ensure "Std" is used in the appropriate places.
			7. No Objection – Mark Ready for Motion.
		7. CID 3111 (ED2)
			1. Review Comment
			2. Review discussion in submission.
			3. From the Conventions: 1.4: If <x> represents a scalar field, scalar subfield, scalar parameter or scalar MIB attribute:— if “<x> is” is used in a context that relates to the testing or setting the value of “<x>” this usage is tobe interpreted as though written “the value of <x> is”— “<x> indicate(s)” is to be interpreted as though written “the value of <x> indicate(s)”— “indicated by <x>” is to be interpreted as though written “indicated by the value of <x>”— “<x> that indicate” is to be interpreted as though written “<x> whose value indicates”
			4. Sometimes we can use “<x>” without field or value.
			5. Discussion how 1.4 is interpreted.
			6. Proposed resolution.

CID 3111(ED2): Revised.Original text at 3043.48 in D2.0:Change “the Key Replay Counter” with “the Key Replay Counter field”.Original text at 3044.15 in D2.0:Change “The Key Replay Counter” with “The Key Replay Counter field”.Original text at 3044.44 in D2.0:Change “the Key Replay Counter value” with “The Key Replay Counter field”.Original text at 3044.48 in D2.0:Change “a new Key Replay Counter value” with “a new Key Replay Counter field”.Original text at 3044.51 in D2.0:Change “a new Key Replay Counter value” with “a new Key Replay Counter field”.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3207 (ED2)
			1. Review Comment.
			2. Review Discussion in submission.
			3. Proposed resolution:

At 2812.35, 2812.53, 2812.58, 2812.61 (x2), 2812.62, 2813.1, 2813.37, 2813.40, 2819.62, 2820.23, 2820.29, 2820.40, 2820.45, 2821.40, 2831.37, and 2831.55, update the style of PWE from bold and italic to nonbold and nonitalic.

* + - 1. No Objection – Mark Ready for Motion.
	1. **ED2 Review CID** – Edward AU
		1. CID 3629 (ED2)
			1. Review CID – from CID 164.
			2. Comment is deemed invalid, as there is only a pointer to an Email instead of identifying a comment text.
			3. CID 164 was resolved during the Comment Collection.
			4. Assign to Mark RISON
			5. Mark CID Submission required
			6. Move CID to GEN
		2. Others are not ready for discussion.
	2. **PHY Review CIDs (11)**  Mark RISON (Samsung)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0727-18-000m-revme-phy-comments.xls>
		2. CID 3795 (PHY)
			1. Review Doc 11-22/2069r0:
				1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx>
			2. Review Discussion for CID 3795 (PHY) in the submission.
			3. Proposed Resolution: CID 3795 (ED2): Revised. At the referenced location change “not CFDMG” to “NOT CFOCB:O”.
			4. No Objection – Mark Ready for Motion
		3. CID 3291 (PHY)
			1. Review Comment
			2. Review the context of the change made for CID 1057.
			3. There is a similar change required in another table 21-1.
			4. Discussion on if there is a sentence prior to the table indicating what is not needed.
			5. Mark CID More Work Required.
			6. Assign to Youhan KIM
			7. Schedule for January Interim
		4. CID 3321 (PHY)
			1. Review Comment
			2. Review Discussion for CID 3321 (PHY) in 11-22/2069r0.
			3. Proposed Resolution;

CID 3321 (PHY): Revised. At 5283.50 change “The SPIdleTimeout subfield indicates time during which a STA” to “This attribute indicates the time during which a DMG STA”.

At 5283.34 change “The MinPPDuration subfield” to “This attribute”.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3409 (PHY)
			1. Review Comment.
			2. Review discussion for 3409 (PHY) in 11-22/2069r0.
			3. Review context in Clause 17.
			4. Proposed Resolution:

CID 3409 (PHY): Revised. Make the changes shown under “Proposed changes” for CID 3409 in https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx, which clarify that on rx the value is the SERVICE field prior to descrambling, and fix the case of “SERVICE field”.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 3481 (PHY)
			1. Review Comment
			2. Discussion on the Proposed changes.
			3. Discussion on ERP-OFDM “format” or not.
			4. Proposed Resolution: Accepted.
			5. No Objection – Mark Ready for Motion
		2. CID 3485 (PHY)
			1. Review Comment
			2. Review context
			3. It looked like a possible MIB variable being deleted.
			4. Mark CID as More Work Required.
			5. Assign for Mark RISON
			6. Schedule for January Interim.
		3. CID 3488 (PHY)
			1. Review Comment
			2. Review Context on p5136.
			3. The change does not look right.
			4. Look to identify what the field being pointed to .
			5. Assign to Mark RISON
			6. Mark CID to More Work Required.
			7. Schedule 2nd Telecon after the January Interim.
	1. **Recess 12:00pm ET**
1. **TGme (REVme AdHoc) Mixed-mode – Wednesday, December 7, 2022, at 13:00-15:45 ET**
	1. **Called to order** at 13:00 ET by the chair, Michael Montemurro (Huawei).
	2. **Reminder of Patent Policies**
		1. No Issues noted.
	3. **Review Agenda:** 11-22/2061r6:
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2061-06-000m-revme-december-2022-adhoc-agenda.docx>
		2. Request to stop at 15:45 today
		3. No Objection – Agenda is approved.
	4. **Review Doc – 11-22/2083r1** – Sean COFFEY
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2083-01-000m-re-wur-mc-ook-and-multicarrier-signals.pptx>
		2. CIDs addressed: LB 270 CIDs 3067-3068, 3070-3072, 3095-3096, 3278, 3283, 3458, 3278
		3. Abstract:

“Clause 30 (Wake-Up Radio PHY specification) requires a WUR non-AP STA to be able to receive WUR PPDUs at given power levels.

But what is a WUR PPDU? This is not clear.

In particular:

1. A WUR PPDU contains a component that is called “MC-OOK”
2. “MC-OOK” stands for “multicarrier on-off keying”
3. But the normative requirements say only that “MC-OOK” ***should*** be generated as (one kind of) a multicarrier signal—implying that other choices are permissible
4. Other sections say that MC-OOK ***is*** a multicarrier signal, but without corresponding normative language saying that it *shall be*
5. WUR non-AP STAs are required to be able to receive any compliant WUR PPDU, including PPDUs that do not follow the multicarrier format—even though the spec strongly suggests that this is the only format required to be received

**It is essential for the specification to provide adequate notice to potential implementers on what is required of a compliant portion; the current draft does not do this.”**

* + 1. Review Submission
		2. Summary
* Slides 4-6 review what is (or seems to be) required under the spec as it is
* Slides 7-9 review MC-OOK and its associated “should” statements
* Slides 10-11 review MC-OOK and “multicarrier” and their associated descriptive statements
* Slide 12 reviews Annex AC
* Slides 13-22 review the CIDs and the proposed resolutions
* Slides 23-26 provide straw polls that may help clarify which direction to take to resolve all CIDs except CID 3278
* Slides 27-28 discuss CID 3278

Note—for slides 4-12, cf. doc. IEEE 802.11-22/1035r1, “Proposed TGme Comment Resolution CID 2346”, J. Levy, September 2022 (similar and consistent, but not identical)

* + 1. Discussion – Given the submissions that are also posted, there are some straw polls prepared, but wait to hear some of the other proposals that may address Sean’s concerns.
		2. There is a document that may address the comments directly from Steve, Minyoung and Miquel.
		3. Discussion on concern on changing the “should” to “shall”. Assertion that making this type of a change would mean only one specific method is allowed.
	1. **Review doc 11-22/2090r0** – Steve Shellhammer (Qualcomm)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2090-00-000m-cr-on-lb270-wur-comments.docx>
		2. Abstract:

The document provides comment resolutions for CIDs: 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3095, 3096, 3278, 3283, and 3458.

* + 1. Review Submission.
		2. CID 3066 – Propose Accept.
		3. CID 3067 --Propose Accept.
		4. Desire to look at the overall direction before we proceed with the different CIDs.
	1. **MC-OOK Discussion**
		1. Concern with the use of MC-OOK as either an example or mandatory.
		2. The On-Off Key portion should not be generated in a specific required manner.
		3. Desire is to have a direction of how to resolve the set of CIDs.
		4. We have a couple directions –
	2. Keep Shoulds and fix some wording. (Stay the course).
	3. Change Shoulds to Shall (As proposed by 11-22/2090).
		1. We need to decide which fork in the road we need to take.
		2. Discussion on whether the Receiver cares or not how the signal waveform is generated, but rather they just want the consistent waveform.
		3. Assertion that other standards have OOK wave forms that do not specify MC specifically.
		4. Straw Poll discussions:
			1. SP1: Which approach would be acceptable to you:
		5. Leave Normative behaviour as is (MC-OOK should, not shall);
		6. Change “should” to “shall” as proposed by 22/2090r0
			1. SP2: Do you believe that the WUR receiver needs to know how the OOK waveform is generated?
			2. SP3: Do you believe that the WUR Transmitter should have requirements on how the OOk waveform is generated?
		7. Should there be a qualifier added to the SP? (Note: The method of generation is in question).
		8. The nature of the requirements on the waveform is what is being debated.
		9. Do we have requirements on the method and mechanisms for the waveform.
		10. How to word the question. Is the bottom line is “should the WUR waveform require to be multi-carrier”
		11. Straw Poll Discussions Continued:
			1. SP4: Should the WUR waveform required to be multi-carrier?
		12. The Requirements that specify the on-off keying is important, and it is important to the transmitter for creating the signal.
		13. Clause 30.3.12.1 through 30.3.12.4 do have normative behavior stated.
			1. If we leave the shoulds then we leave normative behaviour.
		14. Straw Poll Discussion.
			1. Modification of Straw Polls::
			2. SP3: Do you believe that the WUR Transmitter should have requirements on the OOk waveform?
			3. SP4: Should the WUR OOK waveform be required to be a multi-carrier waveform?
		15. Straw Polls to be run by Stephen MCCANN
			1. SP2: Do you believe that the WUR receiver needs to know how the OOK waveform is generated?
				1. 5y-5n -5A
			2. SP3: Do you believe that the WUR Transmitter should have requirements on the OOk waveform?
				1. 13y-0n-2A
			3. SP4: Should the WUR OOK waveform be required to be a multi-carrier waveform?
				1. 9y-2n-3
		16. Given the results, should we process the CIDs with doc 11-22/2090.
		17. Plan to review the doc 11-22/2090 and then process it at the January Interim.
	4. **Review doc 11-22/2090r0** – Steve Shellhammer (Qualcomm)
		1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2090-00-000m-cr-on-lb270-wur-comments.docx>
		2. Return to reviewing the submission.
		3. The Comment resolutions are either Accept or Revised.
		4. The Revised resolutions have the changes in the document.
		5. May need to check to ensure that the Accepted CIDs are reflected in the modified text in this file.
		6. Put Tags in the edits for the resultant text in the document.
		7. Discussion on what happens if you don’t follow the mandatory requirements.
		8. Recommended values in Annex AC which is informative.
		9. The changes being discussed will make a more normative specification.
		10. The Power usage was compromised at about 4MHz which gives the 13 subcarriers.
		11. Discussion on how the choice was made based on the technology that was available at the time.
		12. Question on “constructed as zero” –
		13. Review the same type of text for 2us and for 4us.
		14. Discussion on having WUR FMDA specifically noted.
		15. Will mark up the text for the “accepted” CIDs.
		16. Question on changing of MC-OOk vs WUR Waveform?
		17. Discussion on how to get a review of the proposed changes to the wider WG.
		18. Thanks for working together on getting to this point.
		19. Mark the Set of CIDs as “More Work Needed”
			1. CIDs 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3095, 3096, 3278, 3283, and 3458.
		20. Assign these CIDs to Steve Shellhammer
		21. Schedule for January Interim.
	5. **PHY Review CIDs (11)** Mark RISON (Samsung)
		1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0727-18-000m-revme-phy-comments.xls>
		2. CID 3485 (PHY)
			1. Review Comment
			2. Need to determine if a new compliance group is required.
			3. Can we delete this or not?
			4. We may need this attribute to cover the 6GHz operation.
			5. Leave as More Work Required.
			6. This was added in D1.0 and now we are looking to take back out, Also This allows for a distinction in 80 MHz or 160MHz.
		3. CID 3511 (PHY)
			1. Review comment
			2. Review context.
			3. Discussion on why removing the description text is a good thing.
			4. Proposed Resolution: ACCEPTED (PHY: 2022-12-07 19:53:05Z) - Note to Editor: Delete "The default is time-based, once per day." at 4952.1
			5. No Objection – Mark Ready for Motion
		4. CID 3716 (PHY)
			1. Review Comment
			2. Review Context
			3. Discussion on if Implemented cannot be true if Activated is true.
			4. If something is impossible, do you have to specify it?
			5. There was work that was done to remove the duplication of possible variables.
			6. Discussion on what we mean by the proposed changes.
			7. If Implemented is False, then ACTIVATED will be FALSE.
			8. Alternative proposal-1:

Where a dot11<something>Implemented is false or not present, dot11<something>Activated shall not be true.

* + - 1. Alternative proposal-2:

NOTE---Where a dot11<something>Implemented is false or not present, dot11<something>Activated is necessarily not true.

* + - 1. Straw Poll:
				1. Are you in favor of making a text change to address CID 3716?

Results: 1y-4n-2A

* + - 1. Given the results, provide a reject reason.
			2. Proposed Resolution: Rejected: It is a logical impossibility for a compliant implementation to have the MIB attributes set as described in the concern.
			3. No Objection – Mark Ready for Motion.
		1. CID 3719 (PHY)
			1. Review Comment
			2. Proposed Resolution is contained in Mark’s Document 11-22/2069r0.
				1. Review discussion in submission.
			3. Proposed Resolution: CID 3719 (PHY): Revised. Make the changes shown under “Proposed changes” for CID 3719 in https://mentor.ieee.org/802.11/dcn/22/11-22-2069-00-000m-resolutions-for-some-comments-on-11me-d2-0-lb270.docx, which make the changes requested and also clarify the behaviour following rekeying.
			4. No Objection – Mark Ready for Motion
	1. **ED2 CID –** Edward AU
		1. Revisit CID 3633 (ED2)
			1. Review the updated resolution proposal.
			2. Change “Otherwise” to “or”.
			3. Mark CID 3633 (ED2) as Ready for Motion.
			4. Updated Resolution: CID 3633 (ED2): Revised. Incorporate the changes in [https://mentor.ieee.org/802.11/dcn/22/11-22-2071-04-000m-proposed-resolution-for-miscellaneous-lb270-comments-part-3.docx for CID 3633](https://mentor.ieee.org/802.11/dcn/22/11-22-2071-04-000m-proposed-resolution-for-miscellaneous-lb270-comments-part-3.docx%20for%20CID%203633).
			5. No objection – Mark Ready for Motion
		2. CID 3413 (ED2)
			1. There was a response from the IEEE SA Editors about respectfully.
			2. Doc 11-22/2063r3
				1. <https://mentor.ieee.org/802.11/dcn/22/11-22-2063-03-000m-proposed-resolution-for-miscellaneous-lb270-comments-part-2.docx>
			3. Discussion on how to resolve the comment.
			4. The editor instructions are not really germane to the problem we asked about.
			5. The use of respectfully is confusing the issue.
			6. Consider not having respectfully
			7. The value of x is 3.5 or 18.2, when y is 1 or 2, respectively.
			8. Questions on the Original sentences:(Variable) X has value N1 if the (variable) F has value V1.(Variable) X has value N2 if the (variable) F has value V2. Potential choices we can think of:1. (Variable) X has value N1 and N2 if the (variable) F has value V1 and V2, respectively.2. (Variable) X has value N1 or N2 if the (variable) F has value V1 or V2, respectively.3. Something else?
			9. Discussion on how to map out the matching of values in the two variables.
			10. Another choice: “The value of X is 3.5 when y is 1, or is 18.2 if y is 2.”
	2. **Thank you for all those that participated either in person or virtually with the REVme Mixed-mode AdHoc in Piscataway, NJ.**
	3. **Thanks to the IEEE SA and Christy Bahn for hosting.**
	4. **Adjourned 3:30pm**

**References:**