IEEE P802.11  
Wireless LANs

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| Telecon Minutes for REVme - June 2022 | | | | |
| Date: 2022-06-24 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | Qualcomm Technologies, Inc. | 10871 N 5750 W Highland, UT 84003 | 1 801 492 4023 | jrosdahl @ ieee. org |
| Stephen McCann | Huawei Technologies Co., Ltd | Southampton, UK |  | [stephen.mccann@ieee.org](mailto:stephen.mccann@ieee.org) |

Abstract

Minutes for the Telecons for TGme (REVme) for June 2022

R0: June 3, 2022, Telecon Minutes.

R1: June 6, 2022, Telecon Minutes added

R2: June 13, 2022, Telecon Minutes added

R3: June 17, 2022, Telecon Minutes added

R4: June 20, 2022, Telecon Minutes added

R5: June 24, 2022, Telecon Minutes Added.

**Action Items:**  
1.6.2.4 ACTION ITEM #1: Editors to review use of hyphen in "non-contiguous" appears both with and without a hyphen in D1.2.

* + - 1. ACTION ITEM #2: Mark RISON to send VISO update for Figure 26-5 to Editor.
      2. ACTION ITEM #3: Mark HAMILTON to send comment and proposed Resolution for CID 1775 (MAC) to the reflector for broader announcement and review.
      3. ACTION ITEM #4: Mark HAMILTON – Check for offline email that is related to CID 1627 and the proposed resolution: Note the locations are 3151.29 and 3151.34 relative to D1.0.
      4. ACTION ITEM #5: Michael MONTEMURRO to contact Dave Halasz about CID 1684 about PV1 operation w/QMF. Also check with them on CID 1681 resolution.
      5. ACTION ITEM #6: Mark HAMILTON to Post an email to the reflector about CID 1819 (MAC). The requirements seem to be a duplicate of 26.4.3. (see p4147.10)

6.8.3.6 ACTION ITEM #7: Dave HALASZ to talk with Dave GOODALL and report back to Mark RISON on the details of CID 1655 and CID 1654

1. **TGme (REVme) Telecon –Friday, June 3, 2022, at 10:00-12:00 ET**
   1. **Called to order** 10:02 am ET by the TG Chair, Michael MONTEMURRO (Huawei).
      1. Introductions of other Officers present:
         1. Vice Chair - Mark HAMILTON (Ruckus/CommScope)
         2. Vice Chair - Mark RISON (Samsung)
         3. Secretary - Jon ROSDAHL (Qualcomm)
   2. **IMAT Reported attendance**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Ajami, Abdel Karim | Qualcomm Incorporated |
| 2 | Coffey, John | Realtek Semiconductor Corp. |
| 3 | Halasz, David | Morse Micro |
| 4 | Hamilton, Mark | Ruckus/CommScope |
| 5 | Handte, Thomas | Sony Group Corporation |
| 6 | Levy, Joseph | InterDigital, Inc. |
| 7 | Lumbatis, Kurt | CommScope, Inc. |
| 8 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| 9 | Naik, Gaurang | Qualcomm Incorporated |
| 10 | Patil, Abhishek | Qualcomm Incorporated |
| 11 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| 12 | RISON, Mark | Samsung Cambridge Solution Centre |
| 13 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 14 | Thakore, Darshak | Cable Television Laboratories Inc. (CableLabs) |
| 15 | Wang, Xiaofei | InterDigital, Inc. |
| 16 | Xin, Yan | Huawei Technologies Co., Ltd |

* 1. **Review Patent Policy and Copyright policy and Participation Policies.**
     1. **See slides 4-19 in** <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
     2. No issues were noted.
  2. **Review agenda**:11-22/808r3:
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-03-000m-may-july-teleconference-agenda.docx>
     2. Comment resolution for today:

1. CID 1024, 1113 – doc 11-22/528 – (Abdel) Ajami (Qualcomm)
2. CID 2349 – doc 706 – Xin (Huawei)
3. CID 2345 – doc 11-22/707 – Wang (Interdigital)
4. CID 2347 – doc 11-22/775 – Wang (Interdigital)
5. CIDs 2353, 2362, 2363 – doc 11-22/691 – Fang (Mediatek)
   * 1. No objection to proposed agenda.
   1. **Review doc 11-22/528r1** - CID 1024, 1113 Abdel Karim AJAMI (Qualcomm)
      1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0528-01-000m-resolution-for-cids-1024-and-1113.docx>
      2. CIDs 1024, 1113 (PHY):
         1. Review comment.
         2. Review discussion in submission.
         3. Change to “shall set to 0 or 1”.
         4. Discussion on AP operation in infrastructure mode – only operation possible.
            1. Noninfrastructure IEEE 802.11 network in which none of the Aps belongin to the same ESS operation on the channels identified by Channel Entry Field.
         5. Discussion on other minor changes that were made into R2.
         6. Some Editorials were captured in the chat window to be included in R2 as well.
            1. from [V] Mark RISON Samsung to everyone: 8:28 AM

"subfields values" -> subfields

"is not carried" -> is not present

"includes TWT element(s)" -> includes one or more TWT elements of the AP's

AP, that has -> no comma

"reffered" spelling

"does not have infrastructure BSS(s)" -> does not have any infrastructure BSSs

"Noninfrastructure" lowercase

Flow type subfield -> Flow Type subfield

", shall use the off-channel" -> no comma

"off-channel" -- should this have a hyphen?

set to 2 if -> and what if not?

"set to zero" -> set to 0

"Off-channel TWT Scheduling" -- lowercase

Element -> element

"field value" -> field

* + - 1. Proposed Resolution: CIDs 1024, 1113 (PHY): Revised. Incorporate the changes in 11-22/0528r2.
      2. No Objection – Mark Ready for Motion.
  1. **Review doc 11-22/706r1 -** CID 2349 - Yan XIN (Huawei)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0706-01-000m-lb258-resolution-for-cid-2349.docx>
     2. CID 2349 (PHY):
        1. Review Comment.
        2. Review discussion in submission.
        3. Minor changes made to create R2.
        4. ACTION ITEM #1: Editors to review use of hyphen in "non-contiguous" appears both with and without a hyphen in D1.2.
        5. CID 2349 (PHY): Revised. Incorporate the changes in 11-22/0706r2. NOTE TO EDITOR: "non-contiguous" appears both with and without a hyphen in D1.2.
        6. No objection – Mark Ready for Motion
  2. **Review doc 11-22/775r0** CID 2347 - Xiaofei WANG (InterDigital)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0775-00-000m-cr-for-cid-2347.docx>
     2. CID 2347 (SEC)
        1. Review comment.
        2. Review discussion in submission.
        3. Discussion on if mandatory or optional or not.
        4. CID 2347 (SEC): Direction to list the individual types, with "M" and "O" as appropriate.
        5. Will bring back. Will send email to reflector to solicit more feedback.
  3. **Review doc 11-22/707r0** – CID 2345 - Xiaofei WANG (InterDigital)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0707-00-000m-cr-for-cid-2345.docx>
     2. CID 2345 (MAC)
        1. Review comment.
        2. Review discussion in submission.
        3. Proposed Resolution: CID 2345 (MAC): REVISED (MAC: 2022-06-03 14:52:19Z): Incorporate the changes in 11-22/0707r1 ( <https://mentor.ieee.org/802.11/dcn/22/11-22-0707-01-000m-cr-for-cid-2345.docx>), which clarifies the first BFRP transmission.
        4. No objection – Mark Ready for Motion
  4. **Review Doc 11-22/691r0** - CIDs 2353, 2362, 2363 - Yonggang FANG (MediaTek)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0691-00-000m-resolution-for-2353-2362-2363.docx>
     2. CID 2353, 2362, 2363 (GEN)
        1. Review Comments
        2. Review proposed resolution changes in submission.
        3. Discussion on the latter two CIDs first.
        4. Does the SME need to know the information? Is it not all in the MAC only?
        5. Discussion on purpose of “Dialog Token”. Request to remove it.
        6. Minor editorials were shared in the WebEx chat window.
        7. Discussion on which address can be used – Individual and Broadcast.
        8. Discussion on the values being passed in the primitive.
        9. More work may be needed to resolve the CIDs.
        10. CIDs 2362, 2363 (GEN): More work needed. Take to reflector.
        11. For CID 2353; see p224.9 the Definition is there.
        12. Proposed Resolution CID 2353: REJECTED (GEN: 2022-06-03 15:31:43Z) Definition is included already on p223.18 (d1.0)
        13. No Objection – Mark Ready for motion.
  5. **CID 2359 (GEN)** 
     1. Added to agenda without objection.
     2. CID 2359 (GEN)
        1. Review Comment
        2. Discussion on what the justification for deletion.
        3. Proposed Resolution: REJECTED (GEN: 2022-06-03 15:42:48Z) Commentor has withdrawn the comment.
        4. No Objection – Mark Ready for Motion
  6. **MAC Review CIDs** – Mark HAMILTON (Comscope/Ruckus)
     1. No objection to change agenda.
     2. See doc: 11-21/793r19:
        1. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-19-000m-revme-mac-comments.xls>
     3. CID 1491 (MAC)
        1. Review Comment.
        2. Review proposed change.
        3. Proposed Resolution: Accepted
        4. No Objection – Mark Ready for Motion
        5. CID 1599 (MAC)
        6. Review Comment
        7. Review proposed change.
        8. Proposed Resolution: Accepted
        9. No Objection – Mark Ready for Motion
        10. Discussion on if the wording to indicate capability is correct. OCVC capability is used other locations and we do not use OCVC AP.
     4. CID 1663 (MAC)
        1. Review comment
        2. Review proposed change and context.
        3. Discussion on conditions that may be affected by the deletion.
        4. Maybe 11.8.8.4.4 should say that Extended Channel Switch Announcement must be used to do this. Check with Mesh SME.
        5. Mark Submission Required.
     5. CID 1767 (MAC)
        1. Review Comment.
        2. Review proposed change.
        3. Proposed Resolution: Accepted
        4. No Objection – Mark Ready for Motion
     6. CID 2384 (MAC)
        1. Review comment
        2. Review proposed change and context.
        3. Proposed Resolution: CID 2384 (MAC): REVISED (MAC: 2022-06-03 15:59:10Z): Move this paragraph to 10.3.2.4, between the existing first and second paragraphs. Note to commenter, there is already a reference to 10.3.2.4 just prior to the cited location.
        4. No Objection – Mark Ready for Motion
  7. **Adjourned 12:00pm ET**

1. **TGme (REVme) Telecon –Monday, June 6, 2022, at 10:00-12:00 ET**
   1. **Called to order** 10:02 am ET by the TG Chair, Michael MONTEMURRO (Huawei).
      1. Introductions of other Officers present:
         1. Secretary - Jon ROSDAHL (Qualcomm)
   2. **IMAT Reported attendance**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| 2 | McCann, Stephen | Huawei Technologies Co., Ltd |
| 3 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| 4 | Petrick, Albert | InterDigital, Inc. |
| 5 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 6 | Wei, Dong | NXP Semiconductors |

* 1. **Review Patent Policy and Copyright policy and Participation Policies.**
     1. **See slides 4-19 in** <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
     2. No issues were noted.
  2. **Review agenda**:11-22/808r5:
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-05-000m-may-july-teleconference-agenda.docx>
     2. Comment resolution:

1. CIDs 1231, 2310 – doc 11-22/765 – McCann (Huawei)
2. GEN CIDs – doc 11-22/839 – Montemurro (Huawei)
3. GEN Review CIDs – Rosdahl (Qualcomm)
   * 1. No objection to proposed Agenda.
   1. **Editor report** – Emily QI/Edward AU
      1. Not Present – No Report.
   2. **Review doc 11-22/765r1** – CIDs 1231, 2310 – Stephen MCCANN (Huawei)
      1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0765-01-000m-comment-resolution-for-cids-1231-2310.docx>
      2. CID 1231 (GEN) and CID 2310 (MAC)
         1. Review comment
         2. Review Proposed Changes
         3. Review discussion.
         4. CID 2310 (MAC) was pulled from motion in May.
         5. Proposed Resolution: CID 1231 (GEN) and CID 2310 (MAC) REVISED (GEN: 2022-06-06 14:17:23Z) – Incorporate the changes in 11-22/765r2:

<https://mentor.ieee.org/802.11/dcn/22/11-22-0765-02-000m-comment-resolution-for-cids-1231-2310.docx>

* + 1. No Objection – Mark Ready for Motion
  1. **Assigned Chair to Chair Pro-Tem to Stephen MCCANN**
  2. **Review doc 11-22/839- GEN CIDs –** Michael MONTEMURRO (Huawei)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0839-00-000m-tgme-lb258-misc-gen-comment-resolutions.docx>
     2. CID 1039 (GEN)
        1. Review Comment
        2. Commentor has withdrawn comment
        3. Proposed Resolution: REJECTED (GEN: 2022-06-06 14:22:05Z) Commenter has withdrawn the comment
        4. No Objection – Mark Ready for Motion
     3. CID 1281, 2255, 1869 (GEN)
        1. Review Comments
        2. 11ax and 11ay both added a definition for SISO.
        3. Review MIMO definition
        4. Proposed Resolution: CID 2255: ACCEPTED (GEN: 2022-06-06 14:25:18Z)
        5. Proposed Resolution: CID 1281 and 1869: REVISED (GEN: 2022-06-06 14:27:14Z). Remove the "SISO" definition at 202.60. Remove the "(SISO)" on P4318L32. Note to editor. The resolution to this CID is the same as CID 2255.
        6. No Objection – Mark ready for Motion
     4. CID 1379 (GEN)
        1. Review Comment
        2. Proposed Resolution: ACCEPTED (GEN: 2022-06-06 14:28:35Z).
        3. No Objection – Mark ready for Motion
     5. CID 1389 (GEN)
        1. Review Comment
        2. Review proposed change.
        3. Review discussion in submission.
        4. Proposed Resolution: REJECTED (GEN: 2022-06-06 14:32:00Z) Multicast traffic does pass through the controlled port and requires a negotiated GTKSA. The note is neither correct nor required
        5. No Objection – Mark ready for Motion
     6. CID 1432 (GEN)
        1. Review Comment
        2. Review proposed change.
        3. Review discussion in submission.
        4. Proposed Resolution: REJECTED (GEN: 2022-06-06 14:33:44Z). The convention used in this specification is consistent with the IEEE Standards Style Manual, see <https://mentor.ieee.org/myproject/Public/mytools/draft/styleman.pdf>
        5. No Objection – Mark ready for Motion
     7. CID 1657 (GEN)
        1. Review Comment
        2. Review proposed change.
        3. Review discussion in submission.
        4. Review Context on page 274
        5. Proposed Resolution: REJECTED (GEN: 2022-06-06 14:36:36Z) The proposed changes are already included in other parts of the specification. See clauses 11.20.1 and 4.3.24. No changes are required at the cited location.
        6. No Objection – Mark ready for Motion
     8. CID 1661 (GEN)
        1. Review Comment
        2. Review proposed change.
        3. Review discussion in submission.
        4. Review context on page 490
        5. Proposed Resolution: ACCEPTED (GEN: 2022-06-06 14:38:50Z)
        6. No Objection – Mark ready for Motion
     9. CID 1739 (GEN)
        1. Review Comment
        2. Review proposed change.
        3. Review discussion in submission.
        4. Proposed Resolution: REVISED (GEN: 2022-06-06 14:41:53Z) Change the definition of direct link to cover an IBSS.

At the cited location, change

“direct link: A bidirectional link from one quality-of-service (QoS) station (STA) to another QoS STA operating in the same infrastructure QoS basic service set (BSS) that does not pass through a QoS access point (AP).”

to

“direct link: A bidirectional link from one quality-of-service (QoS) station (STA) to another QoS STA operating in the same QoS independent basic service set (IBSS), or infrastructure QoS basic service set (BSS) that does not pass through a QoS access point (AP).”

* + - 1. No Objection – Mark ready for Motion
    1. CID 2212 (GEN)
       1. Review Comment
       2. Review proposed change.
       3. Review discussion in submission.
       4. Proposed Resolution:
       5. No Objection – Mark ready for Motion
    2. CID 2213 (GEN)
       1. Review Comment
       2. Review proposed change.
       3. Review discussion in submission.
       4. Proposed Resolution: REVISED (GEN: 2022-06-06 14:45:58Z)

The “specific context” in the definition of the trigger frame is not required.

At cited location, change:

“trigger frame: A frame type or a frame transmission occurrence within a specific context, intended to solicit the peer entity into a responding action.

to

“trigger frame: A frame type or a frame transmission intended to solicit the peer entity into a responding action.”

* + - 1. No Objection – Mark ready for Motion
    1. CID 1083 (GEN)
       1. Review Comment
       2. Review proposed change.
       3. Review discussion in submission.
       4. See Table 12-8 for context.
       5. From the Submission Discussion:
* Note that this proposed change is implemented in a more comprehensive contribution: <https://mentor.ieee.org/802.11/dcn/18/11-18-0652-01-000m-resolution-for-wep-tkip-removal-cids.docx> that proposed to remove all of WEP and TKIP.
* This CID should be resolved along with other CIDs that propose to remove WEP and TKIP.
* Removal of TKIP and WEP were considered in REVmd and the comments were resolved with REJECTED (PHY: 2019-03-12 21:07:33Z)

“The task group discussed removal of WEP and/or TKIP from the standard and decided to not change the standard based on strawpolls in the direction for the resolution. The strawpolls were held during the Warsaw meeting (2018-05-08) and the option to keep WEP and TKIP text as-is received most support. See https://mentor.ieee.org/802.11/dcn/18/11-18-0616-00-000m-minutes-revmd-may-2018-warsaw.docx”

* + - 1. More work will need to be done on the group CIDs.
  1. **Return Chair to Michael MONTEMURRO**
     1. **Thank you to Stephen MCCANN for taking minutes the rest of the telecon.**
  2. **GEN Review CIDs** – Jon ROSDAHL (Qualcomm)
     1. See doc 11-22/67r11
     2. <https://mentor.ieee.org/802.11/dcn/22/11-22-0067-11-000m-gen-adhoc-revme-wg-lb258-comments.xlsx>
     3. CID 2188 (GEN)
        1. Stephen McCann to revisit email exchange with Menzo Wentink.
     4. CID 1060 (GEN)
        1. The proposed resolution is ACCEPTED.
        2. No Objection – Mark CID Ready for Motion.
     5. CID 2236 (GEN)
        1. The proposed resolution is ACCEPTED.

Note to Editor - formatting corrected:

The FCC adopted on 12 December 2019 a Notice of Proposed Rulemaking proposing to make the 5.9 GHz band’s lower 45 MHz available for unlicensed operations.

TO

"The FCC adopted on 18 November 2020 a First Report and Order to make the 5.9 GHz band's

lower 45 MHz available for unlicensed operations."

* + - 1. No Objection – Mark CID Ready for Motion.
    1. CID 2235 (GEN)
       1. The proposed resolution is ACCEPTED.
       2. No Objection – Mark CID Ready for Motion.
    2. CID 2052 (GEN Clause 3 - Discuss)
       1. Q: How often are these terms (e.g. 2G4) actually used in the standard?
       2. A: Not often, but they are used.
       3. C: I think this comment should be rejected. Any change should occur when the regulatory bodies change their rules. For now, it’s ok.
       4. The proposed resolution is:

“REJECTED (GEN: 2022-06-06 15:08:34Z) The comment indicates that things may be "brittle", but until the regulation changes or a problem is specifically identified, no change should be made at this time.”

* + - 1. No Objection – Mark CID Ready for Motion.
    1. CID 1752 (GEN Clause 3 - Discuss)
       1. C: I’m not sure if we can do option 1.
       2. C: There are some other CID resolutions which also affect this comment.
       3. C: It should either be rejected or marked “submission required”.
       4. C: Option 2 would be ok.
       5. The proposed resolution is:

REVISED (GEN: 2022-06-06 15:17:19Z) Change cited definition to "peer-to-peer link: A station-to-station (STA-to-STA) link between tunnelled direct-link setup (TDLS) peer STAs in an infrastructure basic service set (BSS) or between STAs in an independent basic service set (IBSS)."

* + - 1. No Objection – Mark CID Ready for Motion.
    1. CID 1355 (GEN Clause 3 - Discuss)
       1. C: There are other resolved CIDs that can be used here.
       2. The proposed resolution is:
       3. REVISED (GEN: 2022-06-06 15:19:49Z) ) Change the definition of direct link to cover an IBSS.At the cited location, change“direct link: A bidirectional link from one quality-of-service (QoS) station (STA) to another QoS STA operating in the same infrastructure QoS basic service set (BSS) that does not pass through a QoS access point (AP).”to “direct link: A bidirectional link from one quality-of-service (QoS) station (STA) to another QoS STA operating in the same QoS independent basic service set (IBSS), or infrastructure QoS basic service set (BSS) that does not pass through a QoS access point (AP).”Note to Editor: This is the same resolution as CID 1739.
       4. No Objection – Mark CID Ready for Motion.
    2. CID 1864 (GEN Clause 3 - Discuss)
       1. Chair: Perhaps Youhan KIM can assist with this one.
       2. Assign to Youhan KIM – Mark CID as Discuss
    3. CID 1870 (GEN Clause 3 - Discuss)
       1. C: There is a proposed change to the grammar of the sentence.
       2. C: The addition of the words “set” is not very clear. The original definition is ok.
       3. The proposed resolution is:
       4. “REJECTED (GEN: 2022-06-06 15:30:14Z) - The existing definition is not incorrect, and the proposed change does not address the commenters stated concern. The TG discussed the issue and no change was deemed necessary to address the concern. This is the generic definition of MIMO. Note that "the set of receivers" is ambiguous and does not add value to the definition.”
       5. No Objection – Mark CID Ready for Motion.
    4. CID 1886 (GEN Clause 3 - Discuss)
       1. C: I think we can add a forward reference to the definition.
       2. The proposed resolution is:
       3. “REVISED. Add a reference to the description of self-protected action frames as part of the definition. At the end of the cited definition, add "See 9.6.15.1."
       4. No Objection – Mark CID Ready for Motion.
    5. CID 2074 (GEN Discuss direction)
       1. The proposed resolution is:
       2. “REJECTED (GEN: 2022-06-06 15:50:53Z) The cited paragraph provides a convention in the standard for requests that implicitly indicate the specific type of frame to be used. The cited text cannot be removed without rewriting other parts of the standard.”
       3. No Objection – Mark CID Ready for Motion.
    6. CID 2005 (GEN Discuss direction)
       1. C: I think the best resolution will be reject, although we don’t have enough time today.
       2. *Post meeting, the following options were conveyed in email capturing alternative ideas proposed during the telecon.:*

Two alternative Proposals to Review:

1. REJECTED. The issue proposed in the comment is addressed by the text in 1.4 on page 182, lines 47-55. The convention for "<x> is" would equally apply to "<x> is not" and the usage of "is present" text does not need to be included in the "word usage" sub-clause since "is present" is not ambiguous

--- Alternatively, we could add an additional bullet to the paragraph at 182.47.

1. REVISED. Add a sentence to the existing text to cover the "is not" case. The usage of "is present" text does not need to be included in the "word usage" sub-clause since "is present" is not ambiguous.

At 182.51, insert the following bullet after the first bullet:

"if “<x> is not” is used in a context that relates to the testing or setting the value of “<x>” this usage is to be interpreted as though written “the value of <x> is not”

* 1. **Adjourned at 12:00pm ET**

1. **TGme (REVme) Telecon –Monday, June 13, 2022, at 10:00-12:00 ET**
   1. **Called to order** 10:00 am ET by the TG Chair, Michael MONTEMURRO (Huawei).
      1. Introductions of other Officers present:
         1. Vice Chair - Mark HAMILTON (Ruckus/CommScope)
         2. Vice Chair - Mark RISON (Samsung)
         3. Editor - Emily QI (Intel)
         4. Editor – Edward AU (Huawei)
         5. Secretary - Jon ROSDAHL (Qualcomm)
      2. Thanks to Stephen MCCANN for taking minutes today.
   2. **IMAT Reported attendance**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| 2 | Coffey, John | Realtek Semiconductor Corp. |
| 3 | Derham, Thomas | Broadcom Corporation |
| 4 | Halasz, David | Morse Micro |
| 5 | Levy, Joseph | InterDigital, Inc. |
| 6 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| 7 | Lumbatis, Kurt | CommScope, Inc. |
| 8 | McCann, Stephen | Huawei Technologies Co., Ltd |
| 9 | Mukkapati, Lakshmi Narayana | Wi-Fi Alliance |
| 10 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| 11 | Petrick, Albert | InterDigital, Inc. |
| 12 | Qi, Emily | Intel Corporation |
| 13 | RISON, Mark | Samsung Cambridge Solution Centre |
| 14 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 15 | Wei, Dong | NXP Semiconductors |

* 1. **Review Patent Policy and Copyright policy and Participation Policies.**
     1. **See slides 4-19 in** <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
     2. No issues were noted.
  2. **Review agenda**:11-22/808r6:
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-06-000m-may-july-teleconference-agenda.docx>
  3. **August 2022 Ad-Hoc update**
     1. Hopefully a venue will be sorted out in San Diego, CA, USA. A final decision should be made within 72 hours.
  4. **Editor report** – Emily QI/Edward AU
     1. A candidate version of D1.3 may be ready this week.
     2. There are 10 editorial CIDs assigned to someone who is sick with Covid-19 at the moment. If anyone can help out, please contact Emily QI.
  5. **Review doc 11-21/1128** – Mark RISON (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/21/11-21-1128-04-000m-on-frattacks-and-related-matters.docx>
     2. CID 1956 (SEC) and 2128 (PHY):
        1. Q: So, some of the changes apply to one CID and other changes to others? It’s tricky to work out which one is which.
        2. A: They are all CID 1956.
        3. C: Please can you also delete all the comment notes in this submission.
        4. A: Yes, I’ll try.
        5. Q: There was something about the “control port”? This statement is already in 802.1X-2010.
        6. A: Perhaps we can make it a note.
        7. The text was modified and then the submission is modified as 11-21-1128r5.
        8. C: I would also like to request that all the submission notes are removed please, as it’s confusing for the editors.
        9. C: Can we see it in final mode please?
     3. CID 1956 (SEC), CID 1957(SEC) and CID 2128 (PHY):
        1. Second block of changes, for CIDs 2128 (PHY), 1956 (SEC) and 1957 (SEC). These build on top of already agreed CIDs 199, 200, 202 and 587 (all in EDITOR, since they are already motioned)
        2. Those were approved per document: 11-21/0829r10 <<https://mentor.ieee.org/802.11/dcn/21/11-21-0829-10-000m-resolutions-for-some-comments-on-11me-d0-0-cc35.docx>>
        3. Chair: Please can you post an r5 and then a clean r6. Then we can motion the r6.
        4. The proposed resolutions for CIDs 2128 (PHY), 1956 (SEC), 1957 (SEC): REVISED - Incorporate the changes in 11-21/1128r6 <<https://mentor.ieee.org/802.11/dcn/21/11-21-1128-06-000m-on-frattacks-and-related-matters.docx>>
        5. No objection to marking these 3 CIDs: Ready for Motion.
  6. **Review doc 11-22/353** – Mark RISON (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0353-01-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>
     2. CIDs 1780, 1781 (MAC):
        1. Review Comments
        2. Proposed Resolution:
        3. REVISED (MAC: 2022-06-13 14:39:39Z):

Delete “REFUSED,” at the referenced location and at 2262.21.

Change “REFUSED” to “REFUSED\_REASON\_UNSPECIFIED” at 404.3, 407.7, 516.16, 519.26/29/32, 537.39, 545.4, 546.37, 548.39, 550.33, 678.9, 679.29, 727.25, 729.62, 753.62, 755.55, 764.10, 766.3, 2782.52.

Change “result code” to “status code” at 2745.48/59 (assoc rsp), 2782.45/52/56 (addba rsp), 5689.19 (addts rsp).

Change “result code” to “reason code” at 2776.65, 2777.2/8/10 (delts).

At 3100.2 change “status field” to “Status Code field”; at 3100.7 change “the result code shall not take the value “successful.”” to “the Status Code field shall not be SUCCESS.”; at 1051.11 change “Status code” to “Status Code” (auth).

Delete the full stop in the Valid Range cell at 764.11, 766.4.

* + - 1. Then also add the following note to CID 1780:

“NOTE TO EDITOR: This is the same set of changes as for CID 1781.“

* + - 1. Add the following to CID 1781

“NOTE TO EDITOR: This is the same set of changes as for CID 1780.”

* + - 1. No objection to marking these 2 CIDs: Ready for Motion
    1. CID 1637 (MAC)
       1. Review Comment
       2. Proposed Resolution: REVISED (MAC: 2022-06-13 14:42:12Z):

At 238.62 change “The protection on each Self-protected Action frame is provided by the protocol that uses the frame.” to “The protection on each Self-protected Action frame is optionally provided by the protocol that uses the frame.”

At 1965.50 change “NOTE—In Self-protected Action frames, the MIC element and the Authenticated Mesh Peering Exchange element are present after the Action field when the frame is protected (see 9.3.3.13 (Action frame format)).” to “NOTE—A Self-protected Action frame is not necessarily protected. When it is, the MIC element and the Authenticated Mesh Peering Exchange element are present after the Action field (see 9.3.3.13 (Action frame format)).”

* + - 1. No questions.
      2. No objection to marking this CID: Ready for Motion.
    1. CID 1881 (SEC):
       1. Review Comment
       2. Q: In several places, the changes no longer refer to field names. Why is that?
       3. A: I was trying to avoid inserting the word “field” in many places.
       4. C: I think it’s important when you send/transmit a field.
       5. C: This clause explains SAE, so I don’t think it needs to be explicitly referenced within the text.
       6. Proposed Resolution: REVISED (SEC: 2022-06-15 16:16:01Z) - Make the changes shown under “Proposed changes” for CID 1881 in 11-22/353r2 <<https://mentor.ieee.org/802.11/dcn/22/11-22-0353-02-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>>, which make the changes proposed by the commenter, with minor editorial tweaks.
       7. No objection to marking this CID: Ready for Motion.
    2. CID 1592 (ED2), 1810 (SEC), 1798 (SEC), 1811 (SEC):
       1. Review Comments
       2. Q: Is “SAE session” used a lot in the specification? I would prefer “SAE authentication instance” instead.
       3. A: That is ok.
       4. Submission revised to 11-22-0353r2
       5. C: CID 1592 references another document.
       6. A: That document has been incorporated into this submission.
       7. Proposed Resolution: REVISED (SEC: 2022-06-13 18:15:17Z) - Incorporate the changes in 11-22/353r2 <<https://mentor.ieee.org/802.11/dcn/22/11-22-0353-02-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx> > for CIDs 1592, 1798, 1810 and 1811.
       8. No objection to marking these CIDs: Ready for Motion.
    3. CID 1980 (ED2)
       1. Review Comment
       2. Note again this submission (11-22-0353r2) supersedes the original referenced submission in CID 1980.
       3. No questions.
       4. Proposed Resolution: REVISED (ED2: 2022-06-13 15:34:22Z) Incorporate the changes as shown in 11-22/353r2 <<https://mentor.ieee.org/802.11/dcn/22/11-22-0353-02-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>.>
       5. No objection to marking this CID: Ready for Motion.
    4. CID 2297 (ED1)
       1. Review Comment
       2. It appears that the proposed resolution #2 is the way forward.
       3. Proposed Resolution: Revised. Change “high-throughput” to “high throughput” at 207.27/41, 208.23/38/44, 209.30/42/47/51/54/59/63, 210.10, 211.10, 224.22/26/31/34/38/44/48/54/58, 225.1/3, 227.34, 228.25, 240.6, 255.35/37/38/40/41, 3532.9, 4922.13/14.

Change “High-throughput” to “High throughput” at 279.37, 3532.1, 4928.52, 5047.27.

Change “High Throughput SIGNAL field” to “high throughput SIGNAL field” at 239.59.

* + - 1. C: I think the proposed resolution #2 is fine. Thanks for creating both options.
      2. No objection to marking this CID: Ready for Motion.
    1. CID 1948 (GEN):
       1. Review Comment.
       2. C: I’m concerned about adding new PHY types to the definitions, every time a new one is created.
       3. Chair: Noted.
       4. Proposed Resolution: Revised: Add the following definition in Clause 3.2:

non-high-efficiency (non-HE) physical layer (PHY) protocol data unit (PPDU): A PPDU that is transmitted by a Clause 15 (DSSS PHY specification for the 2.4 GHz band designated for ISM applications), Clause 16 (High rate direct sequence spread spectrum (HR/DSSS) PHY specification), Clause 17 (Orthogonal frequency division multiplexing (OFDM) PHY specification), or Clause 18 (Extended Rate PHY (ERP) specification) PHY, or not using a TXVECTOR FORMAT parameter equal to HE.

And change non-high-thought (non-HT) physical layer (PHY) protocol data unit (PPDU): non-high-throughput (non-HT) physical layer (PHY) protocol data unit (PPDU): A PPDU that is transmitted by a Clause 15 (DSSS PHY specification for the 2.4 GHz band designated for ISM applications), Clause 16 (High rate direct sequence spread spectrum (HR/DSSS) PHY specification), Clause 17 (Orthogonal frequency division multiplexing (OFDM) PHY specification), or Clause 18 (Extended Rate PHY (ERP) specification) PHY, or not using a TXVECTOR FORMAT parameter equal to HT\_MF, HT\_GF, VHT. or HE

* + - 1. No objection to marking this CID: Ready for Motion.
    1. CIDs 1273,1476, 1848, 1449, 1450, 1451, 1452 1846 (all SEC), and 1942 (ED2):
       1. Review comment
       2. C: I prefer Alternative 1b and Alternative 2c.
       3. C: Alternative 2a is also ok.
       4. C: I don’t think we need to give any rational for the change to clause 12.7.6.6. I can create a comment in the next round.
       5. C: Please can we delete the alternatives that we have not selected.
       6. Proposed Resolution: REVISED (SEC: 2022-06-13 18:19:07Z) - Incorporate the changes shown in 11-22/0353r2 <<https://mentor.ieee.org/802.11/dcn/22/11-22-0353-02-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>> for CIDs 1273, 1476, 1848, 1449, 1450, 1451, 1452, 1846 and 1942.
       7. No objection to marking these CIDs: Ready for Motion.
       8. C: Please can the side comments also be removed from this submission.
    2. CID 1382 (SEC):
       1. Review Comment
       2. No questions
       3. Proposed Resolution: REVISED (SEC: 2022-06-13 18:26:05Z) - Make the changes shown under “Proposed changes” for CID 1382 in 11-22/352r2 <<https://mentor.ieee.org/802.11/dcn/22/11-22-0353-02-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>> , which make changes in the direction suggested by the commenter..
       4. No objection to marking this CID: Ready for Motion.
    3. CID 1397 (SEC), 1398 (PHY):
       1. Review Comments
       2. Q: I think the behaviour of the DS is out of scope of the specification.
       3. A: Hmm, ok.
       4. C: The “NOTE 1” is important for other organisations.
       5. A: That’s ok.
       6. C: I’m also not happy about the DS doing something with a “shall”.
       7. C: It’s ok, as this is specifying some external behavior of the DS.
       8. Q: Regarding the note at 3168.25, is this splitting an existing note into 2 parts?
       9. A: Yes
       10. C: Regarding the change at 3270.24, there’s no relationship between an R0KH and R1KH. All you can say is that there is an assumption. In other words, the communication channel between them is beyond the scope of the standard. The standard does not define how any relationship is established.
       11. C: I’m concerned that we are defining some external behavior for these key holders. Perhaps they should be treated in the same way as the DS.
       12. C: I don’t think we can provide normative text for these external key holders. We can only say “assume” at best.
       13. Chair: Can we have a straw poll to determine the way forward.
       14. Straw Poll:
       15. Do you support changing occurrences of the word assume to normative requirement shall in the context of 802.11r?
       16. Yes: 5, No: 3, Abstain: 1 (no answer:3)
       17. C: Can we change some of these to “Notes”?
       18. Chair: Yes, that may work.
       19. Out to Time, need to review in future.
  1. **Adjourned at 12:00pm ET**

1. **TGme (REVme) Telecon –Friday, June 17, 2022, at 10:00-12:00 ET**
   1. **Called to order** 10:06 am ET by the TG Chair, Michael MONTEMURRO (Huawei).
      1. Introductions of other Officers present:
         1. Vice Chair - Mark HAMILTON (Ruckus/CommScope)
         2. Vice Chair - Mark RISON (Samsung)
         3. Editor - Emily QI (Intel)
         4. Editor – Edward AU (Huawei) – Joined 30 minutes late
         5. Secretary - Jon ROSDAHL (Qualcomm)
   2. **IMAT Reported attendance**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Andersdotter, Amelia | Sky UK Group |
| 2 | Au, Kwok Shum | Huawei Technologies Co., Ltd |
| 3 | Coffey, John | Realtek Semiconductor Corp. |
| 4 | Derham, Thomas | Broadcom Corporation |
| 5 | Halasz, David | Morse Micro |
| 6 | Hamilton, Mark | Ruckus/CommScope |
| 7 | Huang, Po-Kai | Intel Corporation |
| 8 | Koundourakis, Michail | Samsung Cambridge Solution Centre |
| 9 | Levy, Joseph | InterDigital, Inc. |
| 10 | McCann, Stephen | Huawei Technologies Co., Ltd |
| 11 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| 12 | Patil, Abhishek | Qualcomm Incorporated |
| 13 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| 14 | Petry, Brian | Broadcom Corporation |
| 15 | Qi, Emily | Intel Corporation |
| 16 | RISON, Mark | Samsung Cambridge Solution Centre |
| 17 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 18 | Smith, Graham | SR Technologies |
| 19 | Wei, Dong | NXP Semiconductors |

* 1. **Review Patent Policy and Copyright policy and Participation Policies.**
     1. **See slides 4-19 in** <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
     2. No issues were noted.
  2. **Announcement:**
     1. We will have motions on June 27th on all “Ready for Motions” prepared through June 24th Telecon.
        1. An Email to follow-up the announcement will also be sent.
  3. **Review agenda**:11-22/808r7:
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-07-000m-may-july-teleconference-agenda.docx>
     2. Today’s Comment Resolution:

4. Comment resolution

a. CIDs 1002, 1821, 1017, 1014, 1745, 1808, 1013, 1015, 1016 – doc 11-22/689 – Koundourakis (Samsung)

* + - 1. b. MAC CIDs – Mark HAMILTON (Ruckus/CommScope)
    1. No objection
  1. **Editor report** – Emily QI/Edward AU
     1. New Draft D1.3 was reviewed and prepared to be posted.
     2. Thanks to AdHoc Leaders for Reviewing candidate draft.
  2. **Review doc 11-22/689r3** - CIDs 1002, 1821, 1017, 1014, 1745, 1808, 1013, 1015, 1016 Michail KOUNDOURAKIS (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0689-03-000m-rogue-mpdu-detection-in-rsna-proposal.pptx>
     2. Abstract –

CIDs 1002, 1821, 1017, 1014, 1745, 1808, 1013, 1015 and 1016 raise issues related to valid MPDUs not getting acknowledged, as a result of malicious attacks.

Efforts are made to improve the security and resolve some of these issues using Protected Block Ack, but there are still vulnerabilities which need further work.

Offline discussion between some members established that there is a common understanding about the issues and a number of different solutions have been considered. We invite members to participate in the discussion, so that the group can identify the best way forward.

* + 1. Review Summary of issues (slide 3).
    2. CIDs 1002, 1821, 1017, 1014 and 1745 are already motioned.
    3. CIDs 1808, 1013, 1015, 1016 are in MAC.
    4. Review 3 Proposals (slide 6)
    5. Specification Changes reviewed.
    6. Claimed Conclusion (Slide 12):
* Security can be improved using either a protected SN, or the protected PN
* Discussion so far raise confidence that issues can be addressed
* Option 2 is worth considering, if members believe:
  + issues shall be addressed without defining a new feature (protected SN), and
  + Proposed Option 2 (PN-only checks) is implementable by existing devices
* Otherwise, Option 1 would be the preferred way forward note that it would be a new feature that might not be possible via firmware upgrade
  + 1. There is work offline ongoing and is not likely to be ready for July.
    2. Apply Insufficient Details to the CIDs not already resolved, and they can be brought back in a subsequent ballot.
    3. Proposed Resolution for CIDs 1808, 1013, 1015, 1016 (MAC): Reject; the group could not come to consensus on a resolution.
    4. Thanks to Michail for his efforts.
    5. Discussion on question on duplicate detection.
    6. Concern expressed on direction and possible complication that may be involved when adding TGbe.
  1. **MAC Review CIDs** - Mark HAMILTON (Ruckus/CommScope)
     1. Using the Database directly, but others could follow in doc 11-21/793r19: <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-19-000m-revme-mac-comments.xls>
     2. CID 1536 (MAC)
        1. Review Comment
        2. Discuss the operation and review context on pages 2207-2208.
        3. Proposed resolution: Accepted.
        4. No Objection – Mark Ready for Motion
     3. Several CIDs will need follow-up with Graham SMITH
        1. CIDs waiting for a submission should be marked as such, not as “Review”
     4. CID 1866 (MAC)
        1. Review Comment
        2. Review context on page 4173
        3. Discussion on how precise the line for TXOP starts and finishes in the figure.
        4. Need Visio Figure to update.
        5. Proposed Resolution: Accepted; Note to EDITOR: Commentor to send VISO File update.
        6. ACTION ITEM #2: Mark RISON to send VISO update for Figure 26-5 to Editor.
        7. No Objection – Mark Ready for Motion
     5. CID 1769 (MAC)
        1. Review Comment
        2. Proposed Resolution: Accepted
        3. No Objection – Mark Ready for Motion
     6. CID 1490 (MAC)
        1. Assigned to Dave HALASZ
     7. CID 1775 (MAC)
        1. Review Comment
        2. Review proposed changes, but there is a typo issue.
        3. Change applies to 9.3.2.1.1
        4. Discussion on if a subject matter expert would be available in next 3 weeks.
        5. ACTION ITEM #3: Mark HAMILTON to send comment and proposed Resolution for CID 1775 (MAC) to the reflector for broader announcement and review.
        6. Proposed Resolution: CID 1775: REVISED (MAC: 2022-06-17 14:55:34Z): In the paragraph at the cited location, change "nonconcealed GCR broadcast Data frames" and "nonconcealed GCR group addressed Data frames" to "group addressed Data frames that are not GCR frames"

and

change "concealed GCR frames" to "GCR frames"

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1670 (MAC)
       1. Review Comment
       2. Discussion on why the text should be moved to Clause 10
       3. Proposed Resolution: Accepted.
       4. No Objection – Mark Ready for Motion
    2. Return to CID 1769 (MAC)
       1. GCR-A is a defined method.
       2. Discussion on if there are GCR-A Frames, or just GCR-A procedures.
       3. No changes.
    3. Return to CID 1775 (MAC)
       1. In clause 3, there is a definition on concealed GCR frame, so does this have to be updated?
       2. If there is no use of the definition, it can be a comment in next round.
    4. Return Again to CID 1769 (MAC)
       1. Suggestion to add reference.
       2. Updated Proposed Resolution: CID 1769 (MAC): REVISED (MAC: 2022-06-17 15:06:00Z) -

Change the cited sentence to "NOTE--As GCR frames sent using the GCR-A procedures are sent outside of any SP (see 11.21.16.3.8 (GCR-SP)), the EOSP subfield is set to 0 in such frames."

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1594 (MAC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    2. CID 1725 (MAC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    3. CID 1900 (MAC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    4. CID 1617 (MAC)
       1. Review Comment
       2. Review context of cited location.
       3. Proposed Resolution: Accepted
       4. No Objection – Mark Ready for Motion
    5. CID 1636 (MAC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    6. CID 1549 (MAC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    7. Return to CID 1636 (MAC)
       1. Review context.
       2. No Change
    8. CID 1658 (MAC)
       1. Review Comment
       2. Review context on page 1024.
       3. There may be a similar comment regarding S1G, so the change may cause more changes.
       4. The Related CID is 1469(see doc 11-22/680)
          1. Will be considered in the submission.
       5. Check the line number – the change should be made at 1024.6 and 1024.13.
       6. Discussion on how the final box text should be.
       7. Assign to David HALASZ and he will include in his document.
       8. A proposed resolution was included in the AdHoc Notes.
       9. Mark Submission required.
    9. Return Again to CID 1636 (MAC)
       1. Return to the context
       2. Suggestion to delete “at the AP”.
       3. Suggestion for changing enabled to negotiating
       4. Updated Resolution: CID 1636 (MAC): REVISED (MAC: 2022-06-17 15:27:05Z): Replace "enabled at the AP" with "negotiated".
       5. No Objection – Mark Ready for Motion
    10. CID 1598 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Proposed Resolution: Accepted
        4. No Objection – Mark Ready for Motion
    11. CID 1573 (MAC)
        1. This one is assigned to Menzo WENTINK
    12. CID 1693 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Proposed Resolution: Accepted
        4. No Objection – Mark Ready for Motion
    13. CID 1629 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Proposed Resolution: Accepted
        4. No Objection – Mark Ready for Motion
    14. CID 1211 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Suggestion that it be “set to 255”
        4. The problem is that this range does not include 0 or 255.
        5. Discussion on the case of the AID field usage.
        6. Proposed Resolution: CID 1211: REVISED (MAC: 2022-06-17 15:36:46Z):; Change "The value 255 is reserved as the Broadcast AID" to "The value 255 corresponds the Broadcast AID".
        7. No Objection – Mark Ready for Motion
    15. CID 1529 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Change “placed” with “included”
        4. No other CID has this issue on the previous page.
        5. Proposed Resolution: CID 1529: REVISED (MAC: 2022-06-17 15:44:36Z): Change to "This element is included in a frame to request that the responding STA include the requested elements in the response frame." Same thing at P1191.47.
        6. No Objection – Mark Ready for Motion
    16. CID 1462 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. “Integrity protection” instead of “Verification of Integrity.”
        4. Proposed Resolution: CID 1462: REVISED (MAC: 2022-06-17 15:48:31Z): Change to "The MIC element provides integrity protection for Management frames."
        5. No Objection – Mark Ready for Motion
    17. CID 2322 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Discussion on other specific countries indicated.
        4. Proposed Resolution: Accepted
        5. No Objection – Mark Ready for Motion
    18. CID 1394 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Need to note the location to the Editor.
        4. Proposed Resolution: Accepted – Note to Editors: The insertion location is p1585L47CID
        5. No Objection – Mark Ready for Motion
    19. CID 1690 (MAC)
        1. Review Comment
        2. Review context of cited location.
        3. Discussion on what is being referred to. (Generic format statement).
        4. Discussion on value of field being included. The Value is not typically indicated in Clause 9.
        5. Ran out of time.
        6. Assign to Mark HAMILTON – Submission required.
  1. **Adjourned at 12:01pm ET.**

1. **TGme (REVme) Telecon –Monday, June 20, 2022, at 10:00-12:00 ET**
   1. **Called to order** 10:01 am ET by the TG Chair, Michael MONTEMURRO (Huawei).
      1. Introductions of other Officers present:
         1. Vice Chair - Mark HAMILTON (Ruckus/CommScope)
         2. Vice Chair - Mark RISON (Samsung)
         3. Editor - Emily QI (Intel)
         4. Editor – Edward AU (Huawei) will be 30 minutes late.
         5. Secretary - Jon ROSDAHL (Qualcomm)
      2. Thanks to Stephen MCCANN for taking minutes today.
   2. **IMAT Reported attendance**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Coffey, John | Realtek Semiconductor Corp. |
| 2 | Hamilton, Mark | Ruckus/CommScope |
| 3 | Huang, Po-Kai | Intel Corporation |
| 4 | Levy, Joseph | InterDigital, Inc. |
| 5 | Malinen, Jouni | Qualcomm Incorporated |
| 6 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| 7 | Mukkapati, Lakshmi Narayana | Wi-Fi Alliance |
| 8 | Patwardhan, Gaurav | Hewlett Packard Enterprise |
| 9 | Petrick, Albert | InterDigital, Inc. |
| 10 | Qi, Emily | Intel Corporation |
| 11 | RISON, Mark | Samsung Cambridge Solution Centre |
| 12 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 13 | Smith, Graham | SR Technologies |
| 14 | Stanley, Dorothy | Hewlett Packard Enterprise |

* 1. **Review Patent Policy and Copyright policy and Participation Policies.**
     1. **See slides 4-19 in** <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
     2. No issues were noted.
  2. **Review agenda**:11-22/808r9:
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-09-000m-may-july-teleconference-agenda.docx>
     2. Comment resolution (priority to Security-related CIDs):

1. CIDs 2382 and 2383 withdrawn
2. No CID (SEC) – doc 11-22/399 – Huang (Intel) [10 min as requested]
3. SEC CIDs – Montemurro (Huawei)
   * 1. No objection to proposed Agenda.
   1. **CIDs 2382 and 2383 withdrawn**
      1. Mark the Resolutions: CIDs 2382/2383: REJECTED (MAC: 2022-06-20 14:04:16Z): Withdrawn by the commenter.
   2. **Review doc 11-22/399r6** – SAE PMK – Po-Kai HUANG (Intel)
      1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0399-06-000m-determine-sae-pmk-length.docx>
      2. Review submission changes.
      3. Will prepare for Motion on June 24th
      4. Need to request an ANA assignment.
         1. Once the motion is approved, then the ANA can be requested.
         2. In the meantime, once approved, the editors will start implementing into the draft.
   3. **Change of Chair** for this section: Mark HAMILTON to chair
   4. **SEC CIDs** – Michael MONTEMURRO (Huawei)
      1. See doc 11-22/105r12:
         1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0105-12-000m-revme-lb258-sec-adhoc-comments.xlsx>
      2. CID 1794 (SEC)
         1. Review comment
         2. Review proposed changes
         3. Discussion on the resulting text.
         4. This CID is related to CID 1397 (SEC), 1398 (PHY):
            1. Review Straw Poll from June 13:

Do you support changing occurrences of the word assume to normative requirement shall in the context of 802.11r?

Yes: 5, No: 3, Abstain: 1 (no answer:3)

* + - 1. Assign to Mark Rison, Submission Required.
      2. Group with other 2 CIDs in doc 11-22/353.
    1. CID 1952 (SEC)
       1. Review Comment
       2. CID 1953 deletes the text from the other message bodies leaving the bold text in each handshake titles.
       3. Need to have a submission to harmonize the complete resolution.
       4. Assign CID 1952 to Mark RISON and submission required.
       5. We need to group them together for good resolution.
       6. A redline text is requested before we agree to the proposal.
       7. Question on the text that says, “three exchanges”, but there seems to be more. Could this be addressed in the submission.
    2. Continue with “Security Related” TAB
    3. CID 1627 (SEC)
       1. Review comment
       2. Review the context of the changes.
       3. Concern that the replay information needs to be described before making this change.
       4. Discussion on the possible misunderstanding and if it is per PHY and what is actually incorrect in the text being addressed.
       5. Proposed Resolution: ACCEPTED (SEC: 2022-06-20 14:38:10Z)

Note to Editor, the locations are 3151.29 and 3151.34 relative to D1.0.

* + - 1. No Objection – Mark Ready for Motion
      2. ACTION ITEM #4: Mark HAMILTON – Check for offline email that is related to CID 1627 and the proposed resolution: Note the locations are 3151.29 and 3151.34 relative to D1.0.
    1. CID 1681 (SEC)
       1. Review Comment
       2. Discussion on the proposed changes
       3. The Proposed changes are not on original baseline text, so this is an improvement.
       4. The issues with PV1 frames can be taken up in another comment later.
       5. Proposed Resolution: At 3151.50, change "received individually addressed robust Management frames and robust PV1 Management frames that are received with the To DS subfield equal to 1"

to

"received individually addressed robust Management frames and robust PV1 Management frames, where these frames are received with the To DS subfield equal to 1"

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1684 (SEC)
       1. Review comment
       2. Review context of the proposed changes.
       3. Concern with the PV1 and QMF context being addressed.
       4. The proposed change cannot be done, but more work is needed.
       5. ACTION ITEM #5: Michael MONTEMURRO to contact Dave Halasz about CID 1684 about PV1 operation w/QMF. Also check with them on CID 1681 resolution.
       6. CDI 1684 (SEC): Change to Submission Required.
    2. CID 1903 (SEC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    3. CID 1901 (SEC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    4. CID 1702 (SEC)
       1. Review Comment
       2. Discussion on possible resolutions, including rejection.
       3. Consensus on a proposed change.
       4. Proposed Resolution: REVISED (SEC: 2022-06-20 15:05:59Z) - At 3162.43, change "a STA that received a 4-way handshake"

to

"a STA that has received message 1 of a 4-way handshake"

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1688 (SEC)
       1. Review Comment
       2. Review the proposed changes and the context.
       3. Discussion on the effects of the proposed change.
       4. Alternate text changes explored.
       5. Proposed Resolution: REVISED (SEC: 2022-06-20 15:15:41Z) - At 3171.15, After the first sentence of the cited paragraph. Insert "An AP advertises the available RSNA policies in an infrastructure BSS."

At 3176.28, Insert the following sentence to the cited paragraph after the first sentence: "A PCP advertises the available RSNA policies in a PBSS."

* + - 1. No Objection – Mark Ready for Motion
    1. CID 2182 (SEC)
       1. Review Comment
       2. Proposed Resolution: Accepted
       3. No Objection – Mark Ready for Motion
    2. CID 1704 (SEC)
       1. Review Comment
       2. Discussion on why no change is necessary.
       3. Discussion on if the requirement is here, or if a partial list is sufficient.
       4. Concern on the scope of the comment and the discussion of changes that may be needed to expand the text in Clause 6 and find a way to make the list more complete.
       5. Discussion on what should be deleted for now, and then let other comments come later in the process.
       6. Proposed Resolution: REVISED (SEC: 2022-06-20 15:28:58Z) - At 3183.8, change the cited sentence to:

"A STA joining an IBSS is required to adopt the security configuration of the IBSS (see 12.6.5 (RSNA policy selection in an IBSS))."

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1851 (SEC)
       1. Review Comment.
       2. Review proposed change.
       3. Update the proposed change to allow for multiple TPKSAs.
       4. In the proposed change, the “(11ba)” tag is not needed.
       5. Proposed Resolution: REVISED (SEC: 2022-06-20 15:34:55Z) - At the cited location, change

"In the case of an ESS, the non-AP STA’s SME shall delete the PTKSA, GTKSA, any IGTKSA, any BIGTKSA(11ba), WIGTKSA, and any TPKSA, and the AP’s SME shall delete the PTKSA."

to

"In the case of an ESS, the non-AP STA’s SME shall delete any PTKSA(s), GTKSA(s), IGTKSA(s), BIGTKSA(s), WIGTKSA(s), and TPKSA(s), and the AP’s SME shall delete the PTKSA."

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1919 (SEC)
       1. Review Comment
       2. Review proposed change
       3. Discussion on leaving the text as is.
       4. Proposed Resolution: REJECTED (SEC: 2022-06-20 15:43:22Z) - The receipt of these frames would be unexpected. A clear "shall" requirement is desirable for non-compliant peer behavior for security features.
       5. No Objection – Mark Ready for Motion
    2. CID 1923 (SEC)
       1. Review Comment
       2. Proposed Resolution: REVISED (SEC: 2022-06-20 15:49:05Z) - At 3185.52, change

"A STA shall not transmit robust Action frames until it has installed the PTK for the peer STA, or in the case of group addressed frames, has installed the IGTK. The STA shall discard any robust Action frames received before the PTK and IGTK, as appropriate, are installed."

to

"A STA with dot11RSNAUnprotectedManagementFramesAllowed equal to false, or with dot11RSNAProtectedManagementFramesActivated equal to true and a peer that signals the same, shall not transmit robust Action frames until it has installed the PTK for the peer STA, or in the case of group addressed frames, has installed the IGTK, and shall discard any robust Action frames received before the PTK and IGTK, as appropriate, are installed. (#199)."

* + - 1. No Objection – Mark Ready for Motion
    1. CID 1626 (SEC)
       1. Review comment
       2. Discussion on replacing “Public Action Frame”.
       3. Discussion on the need to reword the paragraph in the future.
       4. Proposed Resolution: Accepted
       5. No Objection – Mark Ready for Motion
    2. CID 1765 (SEC)
       1. Review Comment
       2. More time needed.
  1. **Adjourned 12:01 pm ET**

1. **TGme (REVme) Telecon –Friday, June 24, 2022, at 10:00-12:00 ET**
   1. **Called to order** 10:02 am ET by the TG Chair, Michael MONTEMURRO (Huawei).
      1. Introductions of other Officers:
         1. Vice Chair - Mark HAMILTON (Ruckus/CommScope)
         2. Vice Chair - Mark RISON (Samsung)
         3. Editor - Emily QI (Intel)
         4. Editor – Edward AU (Huawei - absent
         5. Secretary - Jon ROSDAHL (Qualcomm) Joined 10:10am ET
   2. **IMAT Reported attendance**

|  |  |  |
| --- | --- | --- |
|  | Name | Affiliation |
| 1 | Coffey, John | Realtek Semiconductor Corp. |
| 2 | Halasz, David | Morse Micro |
| 3 | Hamilton, Mark | Ruckus/CommScope |
| 4 | Kakani, Naveen | Qualcomm Incorporated |
| 5 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| 6 | Qi, Emily | Intel Corporation |
| 7 | RISON, Mark | Samsung Cambridge Solution Centre |
| 8 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| 9 | Thakore, Darshak | Cable Television Laboratories Inc. (CableLabs) |
| 10 | Wei, Dong | NXP Semiconductors |

* 1. **Review Patent Policy and Copyright policy and Participation Policies.**
     1. **See slides 4-19 in** <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
     2. No issues were noted.
  2. **Review agenda**:11-22/808r10:
     1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-10-000m-may-july-teleconference-agenda.docx>
     2. Review Agenda:

4.0 Comment resolution:

1. CID 2315 (MAC) and CID 1210 (MAC) withdrawn
2. MAC CIDs – Hamilton (Ruckus-Commscope)
   * 1. No objection to agenda plan.
   1. **Announcements:**
      1. REVme AdHoc Mixed Mode meeting – August 23-25, 200 in San Diego
      2. Jon to send information out later today.
   2. **CIDs Withdrawn**
      1. CIDs 2315 and 1210 (both MAC):
         1. Proposed Resolution: Rejected; Withdrawn by the commenter
   3. **MAC Review CIDS – Mark Hamilton**
      1. **See doc 11-22/793r21:**
      2. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-21-000m-revme-mac-comments.xls>
      3. CID 1819 (MAC)
         1. Review Comment
         2. While in Abhi’s submission, it looks straight forward to address.
         3. Discussion on if it could be resolved today.
         4. Need more discussion with SME.
         5. Assigned to Abhi PATIL, mark Submission required.
         6. ACTION ITEM #6: Mark HAMILTON to Post an email to the reflector about CID 1819 (MAC). The requirements seem to be a duplicate of 26.4.3. (see p4147.10)
      4. CID 1782 (MAC)
         1. Review comment
         2. Proposed Resolution: Accepted
         3. No Objection – Mark Ready for Motion
      5. CID 1494 (MAC)
         1. Review Comment
         2. Review Context
         3. Proposed Resolution: Accepted; Note to Editors: the resulting text is still three paragraphs.
         4. No Objection – Mark Ready for Motion
      6. CID 1929 (MAC)
         1. Review Comment
         2. Proposed Resolution: Accepted
         3. No Objection – Mark Ready for Motion
      7. Return to CID 1819 (MAC)
         1. The reference (4147.10) was added to the Action item #6.
         2. Let Abhi have a chance to prepare resolution.
      8. CID 1800 (MAC)
         1. Review comment
         2. Review context page 1300
         3. Discuss the use of PeerKey Enabled (bit 9)
         4. Proposed Resolution: Accepted
         5. No Objection – Mark Ready for Motion
         6. May be reviewed in future.
      9. CID 1527 (MAC)
         1. Review comment
         2. Review Context
         3. Proposed Resolution: Accepted
         4. No Objection – Mark Ready for Motion
      10. CID 1860 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: Accepted
          4. No Objection – Mark Ready for Motion
      11. CID 2324 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: CID 2324 (MAC): REVISED (MAC: 2022-06-24 14:48:13Z): Replace the paragraph (3 sentences) beginning "The Operating Class field..." with the following: "The Operating Class and Channel Number field (and the Condensed Country String subelement, if present) together indicate the primary channel of the BSS being reported. Valid operating classes are listed in Annex E.".
          4. No Objection – Mark Ready for Motion
      12. CID 1928 (MAC)
          1. Review Comment
          2. Discussion on replay detection.
          3. Review P3207 for context
          4. Replay detection is determined by the cipher suite.
          5. Proposed Resolution: Accepted
          6. No Objection – Mark Ready for Motion.
      13. CID 1439 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: Accepted
          4. No Objection – Mark Ready for Motion
      14. CID 1726 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: Accepted; Note to Editor the reverenced table is 9-416.
          4. No Objection – Mark Ready for Motion
      15. CID 1624 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: Accepted
          4. No Objection – Mark Ready for Motion
      16. CID 1546 (MAC)
          1. Review Comment
          2. Review Context
          3. This is assigned to Menzo WENTINK.
          4. Belief is that this CID is included in doc 11-22/0722
          5. Proposed Resolution: Accepted
          6. Wait to discussion Monday when Menzo presents.
      17. CID 2251 (MAC)
          1. CID is assigned to Solomon
          2. Maybe it is being addressed in TGaz,
          3. Need feedback from Solomon.
      18. CID 1761 (MAC)
          1. Review comment.
          2. Review context; see p1561
          3. Discuss short slot time usage.
          4. Review page 1072.39 and 1072.44
          5. The proposed change has an issue in that it changes “for an AP” to delete the “AP”.
          6. Assign to Mark RISON and mark it submission required.
          7. Concern expressed on the time to get a submission.
          8. More work is needed to not delete “An AP”
      19. CID 1395 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: Accepted
          4. No Objection – Mark Ready for Motion
      20. CID 1763 (MAC)
          1. Review comment
          2. Review Context p2048
          3. The cited table 9-633 does not seem to provide much information.
          4. The restrictions for S-MPDU is not explicit.
          5. The proposed change does not seem to be an improvement.
          6. Proposed Resolution: REJECTED (MAC: 2022-06-24 15:20:03Z): The proposed change does not improve the value of the entry, or this table.
          7. No Objection – Mark Ready for Motion
      21. CID 1764 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: CID 1764 (MAC): REVISED (MAC: 2022-06-24 15:24:39Z): Change to "This ack policy is used in all frames in which the sender does not require any acknowledgment."
          4. No Objection – Mark Ready for Motion
      22. CID 1744 (MAC)
          1. Review comment
          2. Review Context on page 2054
          3. Discussion on PV1 usage
          4. Proposed Resolution: Accepted
          5. No Objection – Mark Ready for Motion
      23. CID 1743 (MAC)
          1. Review Comment
          2. Review Context
          3. Proposed Resolution: Accepted
          4. No Objection – Mark Ready for Motion
   4. **MAC Discuss CIDS – Mark Hamilton**
      1. **See doc 11-22/793r21:**
      2. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-21-000m-revme-mac-comments.xls>
      3. CID 1655 (MAC)
         1. Review comment
         2. Discuss the proposed change.
         3. Look to get some more input from a DMG expert.
         4. Assign to Mark RISON – Submission required.
         5. Not same comment similar proposed change to CID 1654.
         6. ACTION ITEM #7: Dave HALASZ to talk with Dave GOODALL and report back to Mark RISON on the details of CID 1655 and CID 1654
      4. CID 1654 (MAC)
         1. Review Comment
         2. Submission Required – See CID 1655
      5. CID 1515 (MAC)
         1. Review Comment
         2. Discuss suggested wording
         3. Review context on page 2082.11
         4. Proposed Resolution: CID 1515 (MAC): REVISED (MAC: 2022-06-24 15:47:57Z): Change to: "A group addressed MPDU shall not carry a fragment of an MSDU or MMPDU even if the MPDU length exceeds dot11FragmentationThreshold."
         5. No Objection – Mark Ready for Motion
      6. CID 1792 (MAC)
         1. Review Comment
         2. This one is in 11-22/878r2
         3. Assign CID to Mike MONTEMURO
      7. CID 1796 (MAC)
         1. Review Comment
         2. Assign to Mike MONTEMURO
         3. This is same sentence being changed as CID 1792.
      8. CID 1888 (MAC)
         1. Review comment
         2. Assign to Dave HALASZ
         3. More work needed.
      9. CID 2054 (MAC)
         1. Review comment
         2. An Email was sent on Jan 21, 2022, and no response.
         3. Proposed Resolution: Accepted.
         4. No Objection – Mark Ready for Motion.
      10. CID 2008 (MAC)
          1. Review comment
          2. Review comment 10.3.2.3
          3. Discussion on keeping with all the \*ifs clauses.
          4. This was to be rejected from action from January 2022.
          5. Still open
          6. Mark HAMILTON to craft rejection reason.
   5. **Adjourned 12:00 ET**

**References:**

1. **June 3, 2022:**
2. <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
3. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-03-000m-may-july-teleconference-agenda.docx>
4. <https://mentor.ieee.org/802.11/dcn/22/11-22-0528-01-000m-resolution-for-cids-1024-and-1113.docx>
5. <https://mentor.ieee.org/802.11/dcn/22/11-22-0706-01-000m-lb258-resolution-for-cid-2349.docx>
6. <https://mentor.ieee.org/802.11/dcn/22/11-22-0775-00-000m-cr-for-cid-2347.docx>
7. <https://mentor.ieee.org/802.11/dcn/22/11-22-0707-00-000m-cr-for-cid-2345.docx>
8. <https://mentor.ieee.org/802.11/dcn/22/11-22-0707-01-000m-cr-for-cid-2345.docx>
9. <https://mentor.ieee.org/802.11/dcn/22/11-22-0691-00-000m-resolution-for-2353-2362-2363.docx>
10. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-19-000m-revme-mac-comments.xls>
11. **June 6, 2022:**
12. <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
13. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-05-000m-may-july-teleconference-agenda.docx>
14. <https://mentor.ieee.org/802.11/dcn/22/11-22-0765-01-000m-comment-resolution-for-cids-1231-2310.docx>
15. <https://mentor.ieee.org/802.11/dcn/22/11-22-0765-02-000m-comment-resolution-for-cids-1231-2310.docx>
16. <https://mentor.ieee.org/802.11/dcn/22/11-22-0839-00-000m-tgme-lb258-misc-gen-comment-resolutions.docx>
17. <https://mentor.ieee.org/802.11/dcn/18/11-18-0652-01-000m-resolution-for-wep-tkip-removal-cids.docx>
18. <https://mentor.ieee.org/802.11/dcn/22/11-22-0067-11-000m-gen-adhoc-revme-wg-lb258-comments.xlsx>
19. **June 13, 2022:**
    1. <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
    2. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-06-000m-may-july-teleconference-agenda.docx>
    3. https://mentor.ieee.org/802.11/dcn/21/11-21-1128-04-000m-on-frattacks-and-related-matters.docx
    4. <https://mentor.ieee.org/802.11/dcn/21/11-21-0829-10-000m-resolutions-for-some-comments-on-11me-d0-0-cc35.docx>
    5. <https://mentor.ieee.org/802.11/dcn/21/11-21-1128-06-000m-on-frattacks-and-related-matters.docx>
    6. <https://mentor.ieee.org/802.11/dcn/22/11-22-0353-01-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>
    7. <https://mentor.ieee.org/802.11/dcn/22/11-22-0353-02-000m-resolutions-for-some-comments-on-11me-d1-0-lb258.docx>
20. **June 17, 2022:**
21. <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
22. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-07-000m-may-july-teleconference-agenda.docx>
23. <https://mentor.ieee.org/802.11/dcn/22/11-22-0689-03-000m-rogue-mpdu-detection-in-rsna-proposal.pptx>
24. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-19-000m-revme-mac-comments.xls>
25. **June 20, 2022:**
26. <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
27. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-09-000m-may-july-teleconference-agenda.docx>
28. <https://mentor.ieee.org/802.11/dcn/22/11-22-0399-06-000m-determine-sae-pmk-length.docx>
29. <https://mentor.ieee.org/802.11/dcn/22/11-22-0105-12-000m-revme-lb258-sec-adhoc-comments.xlsx>
30. **June 24, 2022:**
31. <https://mentor.ieee.org/802.11/dcn/22/11-22-0593-00-0000-2nd-vice-chair-report-may-2022.pptx>
32. <https://mentor.ieee.org/802.11/dcn/22/11-22-0808-10-000m-may-july-teleconference-agenda.docx>
33. <https://mentor.ieee.org/802.11/dcn/21/11-21-0793-21-000m-revme-mac-comments.xls>