IEEE P802.11  
Wireless LANs

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| REVmc BRC May 13 Telecon Minutes | | | | |
| Date: 2016-05-13 | | | | |
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Abstract

Minutes for the 13 May 2016 REVmc BRC Telecon – 12:00-15:00 ET.

1. **REVmc BRC Telecon Friday, 13 May 2016 12:00-15:00**
   1. Called to order at 12:04pm by the chair, Dorothy STANLEY (HPE)
   2. Attendance: Dorothy STANLEY (HPE); Adrian STEPHENS (Intel); Emily QI (Intel); Graham SMITH (SR Technologies); Mark HAMILTON (Ruckus Wireless); Jon ROSDAHL (Qualcomm); Callin User\_4, Sean Coffey (Realtek); ;Mark RISON (Samsung); Warren Kumari (Google); Menzo WENTINK (Qualcomm); Peter ECCLESINE (Cisco)
   3. **Review Agenda** 11-16/572r3
      1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0572-03-000m-tgmc-may-2016-teleconference-agenda-planning-document.docx>
      2. No objection to Agenda
   4. **Editor Report** – Adrian STEPHENS (Intel)
      1. No major change from Friday
   5. **Review 11-16/569r0** Solom TRAININ (Intel)
      1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0569-00-000m-awake-window-access-fixes-in-dmg-network.docx>
      2. Abstract:

Link access during awake window that is scheduled as part of CBAP interval is not properly defined in current text. Proposed fixes resolve the issue

* + 1. Discussion:

An awake window plays a central role in power management of DMG network. The awake window is used to allow devices that are in low power mode to connect each other and synchronize awake periods. The awake window is dedicated for transmissions of very short ATIM frames used for power management (PM) purposes. The awake window is scheduled as part of CBAP interval there the CBAP interval may be of CBAP only BI allocation or may be allocated in a scheduled BI. Being part of wider CBAP interval makes link access of the awake window very special that is not covered by any other link access rules defined in DMG networks however awake window link access rules are presented only in general, for example: “ATIM frames shall be transmitted only during the … awake window”, “NOTE—Transmission rules during the awake window are the same as the transmission rules for the CBAP that the awake window belongs to.(#6816)”, “During the awake window(#3261), a STA shall transmit only ATIM frames.” Lack of specified backoff rules may result in capturing effect that multiple STA will release non-ATIM frames at end of awake window causing excessive collisions.

* + 1. Question on a similar issue in a specific CID, but it was discussed that the issues are really different issues.
    2. Question on why this is DCF but talks about EDCF parameters.
    3. DMG uses DCF and EDCF, so there should not be any contradictions.
    4. The reference to 10.3.3 gives the ambiguity, but if we add a reference 10.22.2 for the EDCAF parameters. Using an “or” to couple the two references.
    5. An R1 will be posted and a separate motion will be prepared for next week.
  1. **Review doc 11-16/580r1** Solomon TRAININ (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0580-01-000m-dmg-cid-7165.docx>
     2. Abstract: Resolution to CID7165 proposes an extension to DMG unscheduled power management mechanism that allows non-AP and non-PCP STA extracting BU from AP or PCP still keeping doze state.
     3. CID 7165 (MAC)
        1. Review comment
        2. Review submission figure.
        3. Review proposed changes
        4. Discussion on what the UAPSD change that is required for the Triggered approach to help power management.
        5. Discussion on the backward compatibility of the proposed change.
           1. "How does this mechanism provide backward compatibility for existing devices?
           2. Answer: The AP or PCP indicates support via the new Capability bit. For non-AP non-PCP STAs, the new mechanism is only triggered with a QoS-Null frame with PM=1, which was not allowed previously to these changes."
        6. Discussion on text of “is present in subfield”. Often we say the field is reserved in certain cases, so the field is always present, but the meaning of the field is reserved in certain cases.
           1. “The Buffered AC subfield is reserved except in QoS Data frames….”
        7. Discussion on minor edits – missing articles – “in DMG” that should be “in a DMG”; remove “e.g.” from parenthetical; question on the field name - “Capability Information Field” name.
        8. Discussion on correcting the P1641L48 section –correct the frame and field names used.
           1. Proposed rewording of first sub-bullet: “of a frame sent by the non-AP and non-PCP STA”
        9. More discussion needed – will pickup discussion next week.
     4. Please post the changes from today as R2 and Reminder that 11-16/566r1 and 11-16/567r1.
     5. ACTION ITEM #1: Solomon to post the changes from today as R2 and update the discussion for further debate next week.
  2. **Review 11-16/273r11** – Adrian STEPHENS (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0273-11-000m-sb1-stephens-resolutions-part-3.doc>
     2. CID 7073 (EDITOR)
        1. Had been done, but needed to be updated to include the reference required.
        2. Update Resolution: Revised: At cited location, change: “may” to “can”. At the end of the cited sentence, before the period, add: “(see 11.24.16.3.8 GCR-SP)”
        3. Discussion on if there was a better reference anyone could find.
        4. This was deemed a better reference
        5. No objection – Mark Ready for Motion
  3. **Review 11-16/260r5** – Adrian STEPHENS (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0260-05-000m-sb1-stephens-resolutions-part-2.doc>
     2. CID 7075 (MAC)
        1. Review comment
        2. Review proposed changes:
        3. Proposed Resolution: REVISED (MAC: 2016-05-13 17:09:55Z): Delete the sentence starting at 738.44:

"The Requested Element IDs ... as described by the notes in Table 9-34 (Probe Response frame body)."

Insert as a NOTE at 738.53:

"NOTE--Some implementations might unnecessarily include in a Probe Request frame a Request element that contains the element ID of an element that will be included in the Probe Response frame even in the absence of the element ID in the Request element; see the notes in Table 9-34 (Probe Response frame body). Some implementations might include in a Probe Request frame a Request element that contains the element ID of an element that will not be included in the Probe Response frame even in the presence of the element ID in the Request element."

* + 1. No objection – Mark Ready for Motion
  1. **Review 11-16/273r11** Adrian STEPHENS (Intel)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0273-11-000m-sb1-stephens-resolutions-part-3.doc>
     2. CID 7780 (EDITOR)
        1. Review comment
        2. Review proposed changes
        3. Proposed resolution: CID 7780 (EDITOR): Revised.

Remove the table row for vendor-specific subelement at pages 1134, 1147 and 1204.

Delete the “Optional Subelements” field at 1204.39.

Delete the text from 1204.57 “The Optional Subelements field…” to 1205.26 “… optionally present in the list of optional subelements.”

At 1205.11, delete Table 9-358.

* + - 1. No Objection – Mark Ready for Motion
    1. CID 7770 (MAC)
       1. Review comment
       2. Review proposed change
       3. Discussion the use of “can” or “is expected to”
          1. Straw Poll:

A) use “can”

B) use “is expected to”

C) Abstain

* + - * 1. Results: 5-2-3
        2. Go with the use of “can”
      1. Proposed Resolution: REVISED (MAC: 2016-05-13 17:18:30Z): At 615.38 change "identified by the AID in the STA Info field" to "that can provide feedback (see 10.34.5.2)".
      2. Mark Ready for Motion
  1. **Review 11-16/556r1** Graham SMITH (SR Technologies)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0556-01-000m-resolution-of-cid-7772-on-d5.docx>
     2. CID 7772 (MAC)
        1. Review comment
        2. Review proposed changes
        3. Proposed Resolution: REVISED (MAC: 2016-05-13 17:30:33Z):

At 1630.26 add

“p) If  the  ResultCode  in  the  MLME-REASSOCIATE.response  primitive  is  SUCCESS and the CurrentAPAddress parameter in the MLME-REASSOCIATION.indication  primitive  had  the  new  AP's  MAC  address  in  the CurrentAPAddress parameter (reassociation to the same AP), the AP shall match the non-AP STAs treatment of the listed agreements and allocations as described in 11.3.5.4 list item c). The AP deletes or resets to initial values those items that the non-AP STA is required in 11.3.5.4 list item c) to delete or reset to initial values, and the AP does not modify the states, agreements and allocations that are listed as not affected by the reassociation procedure.”

AND

At P1627.23 insert bullet “10) SMKSAs, STKSAs and TPKSAs established with any peers”

At P1627.31 delete bullet “5) SMKSAs, STKSAs and TPKSAs established with any peers”

and renumber remaining bullets in list

* + - 1. No Objection – Mark Ready for Motion
  1. **Review doc 11-278r6** Graham SMITH (SR Technologies)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0278-06-000m-resolutions-for-cids-assigned-to-graham-d5.docx>
     2. CID 7550 (MAC)
        1. Review comment
        2. Review proposed changes –
        3. Discussion on fixing some of the changes – remove redundant bullet, correct field name, issue with change bars that are with respect to the document and the changes to the spec.
        4. Will need to sort out and post a new R7.
        5. Proposed Resolution: REVISED (MAC: 2016-05-13 17:32:18Z): Make changes as shown in 11-16/0278r7 (<https://mentor.ieee.org/802.11/dcn/16/11-16-0278-07-000m-resolutions-for-cids-assigned-to-graham-d5.docx> ). This adds text for the capability as requested by the commenter.
        6. Mark Ready for Motion pending posting R7.
  2. **Review Graham SMITH assigned CIDs**
     1. Reject/Withdraw the following CIDs:
        1. CID 7079 (MAC)
           1. Order column – issue with the actual order being invented rather than what is sent.
           2. Discussion on the normative use of Order was deferred.
           3. Proposed Resolution: REJECTED (MAC: 2016-05-13 17:39:14Z): The commenter failed to provide sufficient detail to make changes that would satisfy the comment.
           4. No Objection – Mark Ready for Motion
        2. CID 7080 (MAC)
           1. Review the comment
           2. The proposed change is technical, and the wording was put in the spec specifically.
           3. Proposed Resolution: REJECTED (MAC: 2016-05-13 17:41:04Z): The commenter has not demonstrated the need for the change.
           4. No Objection – Mark Ready for Motion
        3. CID 7084 (MAC)
           1. Review comment
           2. Commenter wishes to withdraw, but we need to point out why the comment is wrong.
           3. The equation is correct by definition, figure does not need to change.
           4. Proposed Resolution: REJECTED (MAC: 2016-05-13 17:44:09Z): D2+CCAdel+M2+Rx/TX do add up to a slot time, by definition, so the figure is basically correct.
           5. No Objection – Mark Ready for Motion
  3. **Review doc 11-16/290r5** – Mark HAMILTON (Ruckus Wireless)
     1. CID 7790 (MAC)
        1. Review comment
        2. Similar to CID 7086 (11-16/221r3) and in the same clause
        3. For this CID, should only need to delete the word “pending”
        4. Proposed Resolution: Revised; After applying the changes in 11-16/221r3 (for CID 7086), delete the word “pending” in the first line of the revised paragraph. (Also changing “a” to “an”.)
        5. No Objection – Mark Ready for Motion
     2. CID 7150 (MAC) and 7808 (MAC)
        1. Review comments
        2. At This point in the process, it was not thought to make this type of change.
        3. Proposed Resolution CIDs 7150 (MAC), 7808 (MAC): Rejected. The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.
        4. No objection – Mark Ready for Motion
     3. CID 7146 (MAC)
        1. Review comment
        2. Need more input on DMG relay mechanism
        3. Some believe that it is a PHY issue, but the PHY experts say it is a MAC issue
        4. Propose to reject for now.
        5. ACTION ITEM #2: Mark HAMILTON to look one more time for a possible solution.
     4. CID 7324 (MAC)
        1. Not in the document – was pulled from a Motion
        2. ACTION ITEM #3: Mark HAMILTON to review
     5. CID 7814 (MAC)
        1. Review comment
        2. Review discussion and the context
        3. Proposed Resolution: REVISED (MAC: 2016-05-13 18:13:10Z): Incorporate the changes in 11-16/290r6 for CID 7814 (<https://mentor.ieee.org/802.11/dcn/16/11-16-0290-06-000m-resolutions-for-some-comments-on-11mc-d5-0.docx>).  The changes incorporate the exclusion into normative text.
        4. No Objection - Mark Ready for Motion
     6. CID 7827 (GEN)
        1. Not in the document – was working with Stephen MCCAAN on this one.
        2. This may have been fixed with the change to Annex R.
        3. ACTION ITEM #4: Mark HAMILTON to review and bring resolution next week.
  4. **Review doc 11-16/298r3** Dorothy STANLEY (HPE)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0298-03-000m-ds-assigned-cids-march-2016.docx>
     2. CID 7552 (EDITOR)
        1. Was motioned
        2. Editor review noted an update was required
        3. This was discussed last week.
        4. The strawpoll was 2-2-4 for removing “pairwise”
        5. Discussion on if the “pairwise” word is necessary or not.
           1. It was the second instance of “pairwise” that is causing the debate.
        6. Proposed Resolution: **Revised;** Incorporate the changes in 11-16/281r1 (<https://mentor.ieee.org/802.11/dcn/16/11-16-0281-01-000m-resolution-of-cid-4859.docx>). These changes expand the acronyms uniformly as suggested by the commenter. Use of “pairwise” is accurate.
        7. Mark Ready for Motion
     3. CID 7553 (MAC)
        1. Review comment
        2. Review history of discussion
        3. The changes proposed on Monday were left for review until today’s discussion.
        4. Mesh PMKSAs are cached and defined.
        5. Discussion on the definition of “cached” and the possible overload of the term.
        6. A Proposed Resolution: : Revised; At 104.48, change “mesh TKSA, and mesh PMKSA that exist in the STA” to “and mesh TKSA that exist in the STA”

This change corrects the text to indicate that mesh PMKSA caching is defined (see 1960.35 and 1962.23).

* + - 1. After lots of discussion, it was noted that we are not ready to close on this issue
  1. **Review doc: 11-16/276r8** – Mark RISON (Samsung)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0276-08-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>
     2. CID 7523 (MAC)
        1. Review comment
        2. An Action item was taken by Mark RISON, and he has worked with Adrian STEPHENS and Brian HART, but not concluded yet.
     3. CIDs 7278(MAC), 7280(MAC), 7281(EDITOR), 7282(EDITOR), 7283(EDITOR), 7284(EDITOR), 7285(EDITOR), 7286(EDITOR), 7287(EDITOR), 7288(EDITOR), 7289(EDITOR), 7290(EDITOR), 7292(MAC)
        1. Review changes that were made in response to the Action items from last time.
        2. These changes were identified, but we should review the final version of the changes. (see pages 54-60).
        3. The resolutions for CIDs 7278(MAC), 7280(MAC), 7281(EDITOR), 7282(EDITOR), 7283(EDITOR), 7284(EDITOR), 7285(EDITOR), 7286(EDITOR), 7287(EDITOR), 7288(EDITOR), 7289(EDITOR), 7290(EDITOR), 7292(MAC) should be marked Ready for Motion related to 11-16/276r8.
     4. CID 7396 (MAC)
        1. Still open
     5. CID 7500 (MAC)
        1. Still open
     6. CID 7572 (MAC)
        1. Still open
     7. CID 7796 (MAC)
        1. Still open
     8. CID 7349 (MAC)
        1. Still in open discussion
     9. No other CIDs ready for today.
  2. **Review doc 11-16/292r3** – Peter ECCLESINE (Cisco)
     1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0292-03-000m-sb1-ecclesine-resolutions.docx>
     2. CID 7103 (EDITOR)
        1. Review comment, we had done this before, the pending proposed resolution is to delete the 3rd column.
        2. No change to the Proposed Resolution in 11-16/532r40
     3. CID 7170 (MAC)
        1. Review Comment
        2. Review changes –
           1. This was discussed before, but not completed.
        3. No Discussion
        4. Proposed Resolution: REVISED (MAC: 2016-05-13 18:52:16Z): Incorporate the changes in 11-16/0292r3 (https://mentor.ieee.org/802.11/dcn/16/11-16-0292-03-000m-sb1-ecclesine-resolutions.docx) under CID 7170, which addresses the comment and adds Future Guidance text.
        5. No Objection - Mark Ready for Motion
     4. CID 7220 (MAC)
        1. Review comment
        2. From the discussion: **Discussion**

SB1 CID 7220 on channel switch announcement description text notes the contradiction that STAs that are not DFS owners in DFS bands should follow control elements from the DFS owner or leave the BSS. Commenter asks after receipt of Channel Switch Mode value of 1, can a STA continue to transmit to devices outside the BSS? For background on restricted bands and client restrictions, see <https://mentor.ieee.org/802.11/dcn/12/11-12-1159-03-00ai-masers-slaves-and-clients.pptx> . We propose clearer wording to express that receipt of a Channel Switch Announcement with Channel Switch Mode value of 1, a non-DMG infrastructure STA shall not transmit, but a DMG or IBSS STA are not constrained.

* + - 1. Discussion on the final wording of the final changes which added “a mesh STA or DMG STA” into the new paragraph
      2. The sentence does not change in meaning, but is reworded to be clearer.
      3. Which then deleted the added quotes.
      4. Update doc to R4, post and then use for resolution.
      5. Proposed Resolution: REVISED (MAC: 2016-05-13 18:58:02Z): Incorporate the changes in 11-16/0292r4 (https://mentor.ieee.org/802.11/dcn/16/11-16-0292-04-000m-sb1-ecclesine-resolutions.docx) under CID 7220, which clarify the wording as requested by the commenter.
      6. No Objection – Mark Ready for Motion
  1. **Review next week’s agenda**
     1. See 11-16/511r1
        1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0511-01-000m-tgmc-agenda-may-2016.pptx>
     2. Note an additional Telecon scheduled for May 27th just in case to address any editor issues if needed.
  2. **Adjourned** 3:04pm

**References:**

<https://mentor.ieee.org/802.11/dcn/16/11-16-0572-03-000m-tgmc-may-2016-teleconference-agenda-planning-document.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0569-00-000m-awake-window-access-fixes-in-dmg-network.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-11-000m-sb1-stephens-resolutions-part-3.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0260-05-000m-sb1-stephens-resolutions-part-2.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0556-01-000m-resolution-of-cid-7772-on-d5.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0278-06-000m-resolutions-for-cids-assigned-to-graham-d5.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0290-06-000m-resolutions-for-some-comments-on-11mc-d5-0.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0278-07-000m-resolutions-for-cids-assigned-to-graham-d5.docx>

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<https://mentor.ieee.org/802.11/dcn/16/11-16-0281-01-000m-resolution-of-cid-4859.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-08-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0292-03-000m-sb1-ecclesine-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0511-01-000m-tgmc-agenda-may-2016.pptx>