IEEE P802.11  
Wireless LANs

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| Minutes for TG REVmc Teleconferences Nov 2012 - Jan 2013.docx | | | | |
| Date: 2012-12-03 | | | | |
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Abstract

TGmc telecons were approved for November 30, December 7, 14 (2 hours) and Jan 11 (1 hour).

This revision contains the minutes for the following Telecons: Nov 30 and Dec 7th.

1. Minutes for 802.11 TG REVmc Telecon Nov 30. 2012
   1. Attendance: Carlos ALDANA, Qualcomm; Dorothy STANLEY, Aruba; Adrian STEPHENS, Intel; Jon ROSDAHL CSR; Mark RISON, Samsung; Mark HAMILTON, Spetralink; Robert STACEY, Apple
   2. Call to order at 10:05 am by Dorothy Stanley
   3. Questions on the Patent Policy
      1. Jon Rosdahl indicated that an LOA will be posted for the active 802.11 projects in the near future.
   4. Review Agenda:
2. Call to order, patent policy, attendance
3. Editor Report
4. Comment resolution - CIDs listed below:329 - Revisit, Robert Stacy76, 86, 89, 91, 58, 128, 147, 148, 33, 11, 12, 13, 21, 22, 34, 37, 173, 329, 354, 359, 362, 363, , 84, 200, 215, 219, 224, 277, 278, 282, 216 - (MAC) -Mark Hamilton
5. AOB
6. Adjourn
   * 1. Agenda approved
   1. Editor Report –
      1. 130 approved in Nov meeting and edited into .06 and ready for review
      2. Mark Rison has several that are pending\
      3. Total resolved approved comments are 138
      4. 220 that are not resolved.
      5. 105 are in Gen, 97 in MAC. 18 Editorial
      6. 133 not touch yet.
   2. Comment Resolution:
      1. Continue with Adrian’s Gen Comment Submission list as Robert Stacy and Mark H. are not yet on the call.
      2. Continue with Doc 11-12/1229r2
         1. CID 114
            1. Review comment and end notes.
            2. Suggest we take Alternate Proposal 3:

Revised. Add the following statement at 104.30, after “the specific manner in which these MAC and PHY LMEs are integrated into the overall MAC sublayer and PHY is not specified within this standard.” add:“A STA includes only one instance of a PHY entity.”

* + - * 1. No objection on the call - move to tab Motion GEN-C
    1. CID 152
       1. Review the comment and previous discussion
       2. Proposed resolution reviewed
          1. After discussion, the proposed changes are captured in doc12-11/1229r3.
       3. No objection – move to tab Motion GEN-C
    2. CID 129 –
       1. Review the comment
       2. Status is deferred to when Mark H is present for discussion.
    3. CID 134
       1. Review comment
       2. Proposed Resolution: stock reject.
       3. Mark Rison suggested he would look at this more and provide an alternate resolution.
          1. If Transmit Power and Transmit Power Level are used consistently.
          2. Concern that the use of Power vs. Power Level was not consistent.
          3. See page 1646 for one example
       4. Mark to suggest a resolution for those instances that do not have a “level” or “on/off” or “up/down” after the word power.
    4. CID 146
       1. Review comment
       2. Review the 3 locations to make the change at.
          1. Proposed Resolution:Revised.At 6.15 Change “containing multiple MPDUs” to “containing one or more MPDUs”At 6.20 change “containing multiple MSDUs” to “containing one or more MSDUs”At 812.20 change “multiple” to “one or more”
       3. No objection – move to tab Motion GEN-C
    5. CID 116
       1. Review comment and the proposed Resolution:
          1. Mark Hamilton just joined.
          2. Check question on page 854. And the re-association case may not be addressed. – Corner case where not re-association was a failure.
          3. The proposed change would make the text better, but the problem is not really addressed.
          4. The STBC MCS issue is not as interesting.
          5. We are proposing the “most recently” but we are not addressing the case where it fails. Concern that there was an out-of-band discussion was not included.
          6. While the proposed change was addressed, the commenter indicated he did not feel it addressed the comment, and would like to work on this comment resolution.
       2. Assigned to Mark Rison for further work.
    6. CID 320
       1. Review Comment and Proposed Resolution.
          1. Proposed Resolution:Revised. The intent of the original was to include a constraint.At the end of the cited sentence add: “; otherwise the AP shall not transmit a group addressed BSS Transition Management Request frame.”
       2. No objection – move to tab Motion GEN-C
    7. CID 329
       1. Review comment
          1. Security concerns were voiced, but the commenter declined to recognize that there was an issue.
          2. The possible use of stale keys was causing the security issue. If the STA has an old key, he can only decode those packets that are still in the valid key set.
          3. The thought was that when you go to sleep, you had the penalty that the key was to be deleted.
          4. Concern is that we may want to get more feedback from the security folks. It may be an issue when encrypting, but less so when decrypting.
          5. Robert was asked to exchange some e-mail and have more dialog on this topic.
    8. CID 60
       1. Review the comment
       2. Robert suggests that this set of changes would not be the right set to roll into REVmc.
       3. There is not benefit to doing the work now, it will have 11ac changes rolled in later.
       4. We did edit the baseline to help differentiate the new features from the old.
       5. Commenter suggested that we are ok to decline the comment.
       6. One possible change could be prefix “HT” to NDP frame names to differentiate from VHT.
          1. The change that is being made in TGac is to change all the 11n NDP to HT-NDP in all cases to make it unambiguous.
          2. Question if Robert as Editor of TGac of any issue that was outside of the scope of TGac, and supply to REVmc via comment.
       7. Proposed Resolution: REJECTED (GEN: 2012-11-30 16:11:03Z) no additional comments were identified that would benefit at this time. The change of prefixing HT to NDP by 11ac is a change that will be rolled in later, and so not needed now.
       8. No objection – move to tab Motion GEN-C
  1. Continue with MAC comments
     1. CID 76
        1. Review the comment.
        2. Concern that the OUI-36 and OUI and IAB are different name spaces and need to distinguish the difference.
        3. The OUI-36 is used for setting MAC addresses.
        4. What P1906 has, what they need, and what we need in 802.11 may be different, and may need to make the appropriate change.
        5. Changing the IAB to OUI-36 may be a simple editorial change.
        6. The type of making it a generic may be problematic as the namespaces need to be controlled.
        7. We need to look to define the name space as well.
        8. The RAC has identified that there is an error here, and a proposal that was discussed with the RAC was to remove the IAB reference.
        9. Proposed change: Revised; Remove “and IAB” from 8.4.1.31.
        10. Question on how the field should be filled in. The question is that the O&A is different from what we have shown in the example. If we change it we will cause more confusion than we currently may have.
     2. CID 21
        1. Review comment
        2. Proposed Resolution: REVISED (MAC: 2012-11-30 16:31:30Z): Remove "and IAB" from 8.4.1.31.
     3. CID 86
        1. Review comment
        2. Review general discussion in AdHoc Notes and the question is if the direction of changing the reserved or not, and the changes would need to be reviewed carefully to see what problems we create for ourselves.
        3. While the concept of having the bufferable frames all have the PM bit set would be good, there are one or two exceptions.
        4. Would need a submission to ensure completeness. CID 80 is related and a submission
        5. Mark R noted that Doc 11-12/1199 was similar topic and there was some concern about the MESH concept not completely done. Mark H suggested they do more collaboration.
           1. The proposed changes in doc 1199 were not included, but it does have a discussion.
           2. We can point to some MESH experts to look at the discussion and help with the proposed changes.
           3. Once we have some more consensuses on the proposed changes.
           4. CID 86/89 are assigned to Mark Hamilton and Mark Rison
     4. CID 91
        1. Review Comment
        2. There is no harm in having names, but we need to then search out all the “magic” numbers and make sure that they are correctly and consistently used.
        3. There were two items to fix this up, the definitions of the values can be done.
        4. The Status Code Fields are different in different Contexts, and have the tables have the context included in the name to avoid confusion and collision of the name space.
        5. Having only one “Status Code Definition” and then other places have “xxx Status Code Definition” would make sense.
        6. Mark to work on a Submission.
        7. Names for the table 8-37 makes sense, then Part B looking for the used values and replacing with the proper new name.
           1. Mark will start at this and take a stab at it, and see where it goes.
     5. CID 58
        1. Review comment.
        2. Mark H had provide the following discussion:
           1. Propose-MAH: Revised. Replace "It is mandatory for a STA in an infrastructure BSS to generate" with "A STA in an infrastructure BSS shall generate"
           2. (In the following, references/pages are to 802.11-2012, and line numbers are a rough guess)
           3. In 8.4.2.24.2 (P520.55), delete the sentence "It is mandatory for a STA to support the generation of this report." (This is a behaviour requirement that belongs in clause 10, and is covered by the statement in 10.9.7.)
           4. In 19.1.3 (P1631.25), Change "it is mandatory that all ERP-compliant equipment be capable" to "all ERP-compliant equipment shall be capable"
           5. In 9.11 (P866.11), change "Support for the reception of an A-MSDU, where the A-MSDU is carried in a QoS data MPDU with Ack Policy
           6. equal to Normal Ack and the A-MSDU is not aggregated within an A-MPDU, is mandatory for an HT STA." to "An HT STA shall support the reception of an A-MSDU, where the A-MSDU is carried in a QoS data MPDU with Ack Policy
           7. Equal to Normal Ack and the A-MSDU is not aggregated within an A-MPDU."
           8. In 9.19.3.2.2 (P882.19), change "it is not mandatory" to "it is not necessary".
           9. In 10.2.1.17 (P1004.6), change "For Clause 19 and Clause 20 PHYs, if the Beacon frame is transmitted using ERP-DSSS/CCK, the AP shall transmit the high data rate TIM frame using ERP-OFDM, and its transmission is mandatory." to "For Clause 19 and Clause 20 PHYs, if the Beacon frame is transmitted using ERP-DSSS/CCK, the AP shall transmit a high data rate TIM frame, and this transmission shall use ERP-OFDM."
           10. In 17.2.2.3 (P1538.54), change "For Clause 19 STAs support of this preamble type is mandatory." to "Clause 19 STAs shall support this preamble type."
           11. Mark Rison adds: How about the "is mandatory"s in 18.1.1, 18.2.2.3, 18.2.3.1, 19.1.2, 19.1.3 (the other ones), 19.3.2.3, 20.1.4, 20.2.3, 20.3.11.4?
           12. There are about 60 uses of "mandatory" in the PHY clauses. The wording is mixed between the phrase "mandatory rates" (or some equivalent) and other wordings that mean something similar (like "Support of … data rates is mandatory") in many of these. Whether any of these uses is acceptable needs discussion. A few uses of "mandatory" are completely different, and should perhaps be re-worded. A more thorough scrub is needed.
        3. There was discussion on what some of the clauses in the PHY clauses.
           1. See page 1583 line 3 in third paragraph.
           2. Concern about how the PHY clauses should be reworded.
           3. If the ones marked by Mark Rison are not obvious, then Mark H will come back for more discussion.
     6. CID 128
        1. Review the Comment
        2. Proposed Resolution: Reject. The commenter didn't provide sufficient analysis of the affects of this change. For example, many AP devices support multiple BSSs with a shared antenna connector, and these BSSs often have synchronized TBTTs. Given that Beacons can be large, and transmit at relatively low data rates, to allow multiples of them to be queued for transmission at the same time and only separated by a PIFS could result in no opportunity for any other STAs to access the medium for a long period of time. This leads to high jitter/low QoS for non-AP STAs.
        3. Question on why is it safe for TIMS but not Beacons on to send on PIFS?
           1. Beacons should be allowed to get out quickly.
           2. Concerned that over look of PIFS with TIMs is a good rationale for using it for Beacons.
           3. The use of PIFS by TIMS but not Beacons is an independent issue. Overuse of PIFS could be dangerous.
        4. The TIM frame expert would be Menzo
        5. ACTION ITEM Mark Rison to contact Menzo and find out why TIMS get to use PIFS.
  2. Next meeting will be Dec 7
     1. We will continue with the MAC comments, and will move on to GEN for one hour.
     2. Mark Rison has a set of presentations that he would like to start; they are scheduled to start on Dec 14. We need to look at how to get as many of the comments as possible by January.
  3. Adjourned at 12:03ET

1. Friday
   1. Called to order at 10:03 am
   2. Reminder of Patent Policy and Meeting Rules.
   3. Attendance: Attendance: Dorothy STANLEY, Aruba; Adrian STEPHENS, Intel; Jon ROSDAHL CSR; Mark RISON, Samsung; Mark HAMILTON, Spetralink;
   4. Proposed Agenda:

1. Call to order, patent policy, and attendance.  
2. Editor Report  
3. Comment resolution:

GEN comments:  
CIDs 338, 339, 340 - Propose to resolve with same resolution as CID 341, which was approved in Nov  
CID 67 - Proposed Accept, see P38 in 11-12-1229  
CIDs 69, 70, 72, 74, 356, 357  
Continue with comments from 11-12-1229  
  
MAC comments:  
CID 371 - Propose Accept  
CID 349 - Propose Revised (per ad-hoc notes)  
CID 303 - Propose Rejected, "The commenter has not indicated the specific changes that would satisfy the commenter."   
147, 148, 33, 11, 12, 13, 22, 34, 37, 173, 329, 354, 359, 362, 363, 84, 200, 215, 219, 224, 277, 278, 282, 216  -Mark Hamilton  
  
4. AOB  
5. Adjourn  
6. Reference: <https://mentor.ieee.org/802.11/dcn/12/11-12-1189-08-000m-mac-adhoc-pre-ballot-comment-collection-resolutions.xls> and <https://mentor.ieee.org/802.11/dcn/12/11-12-1082-11-0000-revmc-pre-ballot-comments.xls> .

* 1. Editor Report:
     1. Have not received updates from the Comment AdHocs –
        1. Action AdHocs to send updates to Adrian.
     2. A Draft .06 should be ready to post the week of the 16th. (19th or so).
     3. Dorothy will be on Holiday after the 20th.
  2. Comment Resolution:
     1. In looking at the final comments by commenter, we can plan to get a good set resolved.
     2. CID 338, 339, 340
        1. Should be resolved with the same resolution as 341.
        2. Proposed Resolution: REJECTED (EDITOR: 2012-09-28 14:24:24Z) - Per liaison 11-12/0977r0, the additional parameters will be added to the IKE v1 registry. So the reference to RFC 2409 is still valid.
        3. No objection – move to tab Motion GEN-D
     3. CID 67
        1. It is included 11-12-1229r2
        2. Proposed Resolution: Accept.
        3. No objection – move to tab Motion GEN-D
     4. CID 165
        1. Reviewed Comment
        2. Straw Poll question of whether you would want the “-QoS”
           1. a couple voiced concern about the use of “-QoS”
           2. The preference would be to use option one “non-Qos” and a definition on 381.
        3. Question on what happens to the instances where there is a set that QoS data is the specific frame?
           1. See page 389, the use of QoS Data frame is just for a data type
           2. In some cases it is about the sub-type and in some cases it is the general case of the Frame type. When resolving an ambiguity, there is always a chance that you introduce an error.
           3. Couple ways to handle this is to make the changes and flag with editor notes and then double check the possible errors.
           4. The upper case “Data” may be more likely to be the generic type, but we have lost the case distinction. If we go back and use the baseline as a starting point.
           5. There are 17 instances of upper case “Data” in the 2012 baseline. Mark R is willing to go through and check those and respond to Adrian on what the possible corrections should be on that.
        4. Deferred on the comment for now.
     5. CID 322
        1. Review the comment
        2. Similar to 320, but is on a different paragraph.
        3. Proposed resolution: Revised. The existing statement adds value because it highlights the timing of any such transmission. Better to leave that alone and add the prohibition.Add to the end of the cited sentence “; otherwise the AP shall not send an unsolicited BSS Transition Management Request frame to the STA.”
        4. No objection – move to tab Motion GEN-D
     6. CID 234
        1. Review the comment
        2. Stock rejection has been prepared, but we need to decide in our own mind if this is ambiguous or not.
        3. Figure 0-2 may have an error, but may not be a lot of real issue.
           1. Review the figure

B0 of the bit map had a discussion on what is expected and what is it is supposed to be.

* + - 1. AID 0 is it the field in the PVB or in the Bit Map control?
         1. Another potential ambiguity.
      2. Can we get some text to try to identify a correction that would address the ambiguity? We may have a disagreement on what the ambiguity is and how to clarify the text to address it.
      3. Discussion on some other Ambiguity that may be the root of this situation.
      4. Defer for now – Mark R and Mark H to look at seeing if they can agree on what the root is and how to find a potential solution.
    1. CID 319
       1. Review the comment
       2. Proposed Resolution: Rejected. The “optionally” in the cited text is correct. Only a STA that supports this option need respond with transmission of the BSS Transition Management Response frame.
       3. No objection – move to tab Motion GEN-D
    2. CID 271
       1. Review the comment
       2. Proposed Resolution: look to reject as no specifics was given.
       3. Mark R has included this in the presentation due for next week.
    3. CID 356
       1. Review the comment discussion from the e-mail thread.
       2. There was a need to change the “20dBm in Hexadecimal” and change to “20dBm”.
       3. Change may be to change the “100mw” to “20dBm limit (in hexadecimal)”.
       4. Proposed Resolution: Revise - Change from:"NOTE—The following example Country element (see Figure 8-90) describes USA operation (‘55’, ‘53’) using both Table E-1 class 12 (nonglobal) and Table E-4 class 81 (global) for 2.4 GHz band, 11 channels at 100 mW limit (in hexadecimal): ‘07’, ‘0F’, ‘55’, ‘53’, ‘04’, ‘C9’, ‘0C’, ‘0’, ‘01’, ‘0B’, ‘64’, ‘C9’, ‘51’, ‘0’, ‘01’, ‘0B’, ‘64’." to "NOTE—The following example Country element (see Figure 8-90) describes USA operation (‘55’, ‘53’) using both Table E-1 class 12 (nonglobal) and Table E-4 class 81 (global) for 2.4 GHz band, 11 channels at 20 dBm limit (in hexadecimal): ‘07’, ‘0F’, ‘55’, ‘53’, ‘04’, ‘C9’, ‘0C’, ‘0’, ‘01’, ‘0B’, ‘14’, ‘C9’, ‘51’, ‘0’, ‘01’, ‘0B’, ‘14’.
       5. No objection – move to tab Motion GEN-D
    4. Change to MAC comments
  1. MAC Comment Resolution
     1. CID 371
        1. Review the Comment
        2. The size should be 6 not 4.
        3. Proposed Resolution: Accept.
        4. No objection – move to tab Motion MAC-C
     2. CID 349
        1. Review comment
        2. Proposed Resolution: CID 349: REVISED (MAC: 2012-12-07 16:14:55Z): Revised. PS-Poll frames cannot have the More Fragments bit set to 1, so the first sentence applies (and the Duration value must be 0). Thus, editing instructions are simply: Delete "PS-Poll" from the cited location.
        3. No objection – move to tab Motion MAC-C
     3. CID 303
        1. Review comment
        2. Proposed Resolution: CID 303: REJECTED (MAC: 2012-12-07 16:16:25Z): The commenter has not indicated the specific changes that would satisfy the commenter.
        3. No objection – move to tab Motion MAC-C
     4. CID 147
        1. Review Comment
        2. A Submission would be required to resolve this.
        3. Mark R volunteered to try to propose some text.
     5. CID 148
        1. Review Comment
        2. A Submission would be required to resolve this
        3. Someone from the TGaa group may be good to try to resolve this.
        4. Action Item: Mark H to reach out to Graham Smith and Alex Ashley to see if they would be willing to help.
     6. CID 33
        1. Review the comment
        2. Interesting request, but a submission would be required.
        3. Proposed Resolution: REJECTED (MAC: 2012-12-07 16:24:40Z): The commenter has not indicated the specific changes that would satisfy the commenter
        4. No objection – move to tab Motion MAC-C
     7. CID 11
        1. Review the comment
        2. Similar to CID 91 – fill in name column so that all have a name.
        3. This one would go beyond that and put the names in the text and the linkage to the codes and the names/definition.
        4. Action item: Assign to Mark H for submission (incorporated with CID 91).
     8. CID 12
        1. Review the comment
        2. We need to either remove the field or add a description.
        3. It is most likely a field that is needed, so we should add a description.
        4. Look at figure 8-173 for similar text to add
        5. Proposed Resolution: REVISED (MAC: 2012-12-07 16:32:33Z): Add "The Z-coordinate field contains a 4-octet single precision floating point value." in the descriptions of Figure 8-179.
        6. No objection – move to tab Motion MAC-C
     9. CID 13
        1. Review The Comment
        2. Missing paragraph is needed, but is a bit complicated, and so some help would need to be elicited to get it all correct.
        3. A submission would be needed to resolve this one.
        4. Action item: Dorothy to ask Jouni to help on this one.
     10. CID 22
         1. Review the comment
         2. CID 116 is similar
         3. There was a proposal to delete many of the “recently” and has been assigned to Mark R for a submission for clarification.
         4. Move the CID to Gen AdHoc for grouping with CID 116.
     11. CID 34
         1. Review the comment
         2. Discussion -- this is outside the scope of what the TG would nominally do.
         3. Proposed Resolution: REJECTED (MAC: 2012-12-07 16:39:52Z): The commenter has not indicated the specific changes that would satisfy the commenter. The commenter is free to bring this up to the WG.
         4. No objection – move to tab Motion MAC-C
     12. CID 37
         1. Review comment
         2. Proposed Resolution: REJECTED (MAC: 2012-12-07 16:47:52Z): The commenter has not indicated the specific changes that would satisfy the commenter.
         3. Mark H will contact Brian Hart to see if he'd like to work on a submission next time.
         4. No objection – move to tab Motion MAC-C
     13. CID 173
         1. Review Comment
         2. Question on if this was a potential backward compatibility issue.
         3. Proposed Resolution: REVISED (MAC: 2012-12-07 16:50:43Z): change the sentence in Table 8-6 from "This combination is also used forgroup addressed frames that use the QoS frame format" to "The Ack Policy subfield is also set to this value in all group addressed frames that use the QoS frame format."
         4. No objection – move to tab Motion MAC-C
     14. CID 329
         1. Review comment
         2. We believe we have resolved the outstanding issue with Robert, so leave as rejected, but will put in a different Resolution:
         3. Proposed Resolution: Reject: The proposed change would create a new class of devices that are incompatible with IEEE Std 802.11-2012 (devices that did not delete their GTKSA, while devices conforming to the previous revision did).The non-AP STA deletion of the GTK was included in the standard to remove any possibility of using the expired key, motivatedfor example by "strict re-keying" scenarios, when the GTK is changed when a non-AP STA leaves the BSS."
         4. No objection – move to tab Motion MAC-C
     15. CID 354
         1. Reviewed comment
         2. Leave in discuss – CID 46-47-48
     16. CID 359
         1. Review Comment
         2. Emily was contacted and asked if there was a submission.
            1. She indicates that 11ah is working on this topic,
         3. Proposed Resolution: CID 359: REJECTED (MAC: 2012-12-07 16:58:40Z): The commenter has not indicated the specific changes that would satisfy the commenter.
         4. No objection – move to tab Motion MAC-C
  2. Next call is for Dec 14
     1. Proposed focus for the call will be the set of presentations from Mark RISON.
     2. Plan for other presentations are mapping into the January Agenda plan
     3. Continue with MAC and GEN comments on the January 11th , 2013 Teleconference.
  3. Adjourn at 12:00pm ET.

**References:**

Full set of Pre-ballot Comments

<https://mentor.ieee.org/802.11/dcn/12/11-12-1082-11-0000-revmc-pre-ballot-comments.xls>

Proposed Resolutions for some Gen Comments:

<https://mentor.ieee.org/802.11/dcn/12/11-12-1229-03-000m-revmc-adrian-pre-ballot-resolutions.doc>

<https://mentor.ieee.org/802.11/dcn/12/11-12-1229-02-000m-revmc-adrian-pre-ballot-resolutions.doc>