IEEE P802.11  
Wireless LANs

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| REVmc Minutes for May 2013 - Hawaii | | | | |
| Date: 2013-05-17 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | CSR Technologies Inc. | 10871 N 5750 W  Highland, UT 84003 | +1-801-492-4023 | jrosdahl@ieee.org |
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Abstract

Minutes from the 2013 May Interim Meeting in Waikoloa, Hawaii.

1.0 802.11 TG REVmc called to order at 1:30pm Monday May 13, 2013

* 1. Review Patent Policy
     1. No issues noted.
  2. Review Agenda for week – see doc 11-13/401r2
     1. **Monday PM1**
        1. Chair’s Welcome, Status, Review of Objectives, Approve agenda, minutes
        2. Editor’s Report
        3. Timeline and Schedule
        4. Comment resolution – 439r1, 466r0
     2. **Monday** **PM2**
        1. Comment resolution
     3. **Tuesday** **PM1**
        1. Comment resolution CID 287 – Menzo
     4. **Tuesday** **PM2**
        1. Comment Resolution – M. Fischer - 448r0, 449r0
     5. **Wednesday** **PM1**
        1. Motions
        2. Comment resolution- PHY (Vinko)
     6. **Wednesday** **PM2**
        1. Comment Resolution – TFS, Sleep Mode, DMS - Qi Wang
     7. **Thursday** **PM1**
        1. Motion
        2. Comment resolution: Graham CID 1458, 1136, 1118 – Doc 11-13/415r0
     8. **Thursday** **PM2**
        1. Comment Resolution –Motions
        2. Plans for July, AOB
        3. Adjourn
  3. **Editor Report**
     1. Review Doc 11-13/0095r4
     2. New pie chart explained.
     3. Discussion on how to handle the ISO sourced comments.
        1. We will look to put them into the core database to process similar to roque comments.
        2. Action Item: Dorothy to put into the EPoll format for importing by Adrian.
     4. Status of editorial Comments reviewed.
  4. **Review Plan of Record**
     1. Draft 1.1 was reviewed by 11ad folks, and they were to look at the status of the roll-in. There were some inconsistancies that were caused due to the fact that the 11ad was based on 11-2012, and the now we have removed the PMD, and so it now is different. Also they have noted some new changes that need to be done either now or when we prepare the next draft. So we could create 50-60 comments into ballot comments to submit for processing, or address them separately.
     2. If we had someone look at the comments, we could add them as appropriate (either before or after draft 2).
        1. Volunteers are being saught to help with the processing of 11ad comments.
     3. Question is do we believe we can get all the PHY comments done this week?
        1. We hope to discuss them on Wed PM1 and clear as many as we can.
        2. If we can it would be good to be done, but we are not expecting to be going to LB this week.
     4. The 11ad folks provided some feedback, and as experts to the material, why are we looking to second guess them?
        1. The Editor should post as soon as possible to show what the comments are, so that the group can get a better understanding of the nature of the comments.
        2. There are 68 comments
        3. Some are misspelled or missing parts of the name
        4. Many of them are in need of group discussion to ensure agreement.
     5. When the spreadsheet is made visable, we could make the reviewer responsible to bring material to justify the change.
     6. Eldad was the one to remove the PMD from 802.11-2012, so we will need to remove it from the new 11ad text now as well.
  5. **Comment Resolution: Doc 439r1**:
     1. We have discussed some of these in previous Telecons. Start at 1037.
     2. CID 1037
        1. Review comment
        2. 13.10.2.2 and 13.10.3 are locations of proposed changes.
        3. Proposed Resolution: Revised. As PREP elements are always carried in individually addressed frames, such qualification is unnecessary. Make changes as shown in <this document><latest revision> under CID 1037 which remove this qualification globally, as well as removing some duplicate specification from 13.10.3.
        4. No objection marked ready for Motion
     3. CID 30
        1. Review comment
        2. Numbers refer to the original 11-2012. – 10.23.7 FMS multicast rate processing.
        3. Dicussion on how to define what the PPDU format should be defined.
        4. We have a lot of text that describes selecting values for some fields, and how to use the PPDU for other features, but in this case the FMS is not providing the full definition of all the values.
        5. If FMS is a special case, could we not expect it to be based on other definition?
           1. No, the existing rules do not allow higher rates.
        6. FMS is higher rate and not at every DTIM.
        7. What is the highest lowest rate that is being selected? And how is that defined.
        8. The FMS could not be treated like other broadcast frames, as it does different rules we may have an issue with changes when compared from exisiting Broadcast and FMS.
        9. The proposal to change 9.7 may cause more comments, but if we keep the structure of 9.7 as in tact as possible, we can then look to make changes where needed later, but in the changes we are making here should be consistent with what 11ac that is making changes to this section that will be rolled-in later. Keeping the structure will make the 11ac roll-in better/easier.
        10. Do we want to dumb down the list a bit to allow for some possible things that may not be in the list to be also made compatible?
        11. Change the new paragraph to say:”The selection of the following TXVECTOR parameters shall be compatible with capabilities declared by the existing STAs and the requestion STA.”
        12. If the lilst is not normative, then we can have a note or “e.g.” to list the potential parameters.
        13. The parameter list should be included to make sure we note those parameters that are required, and deal with the compatibilities.
        14. Proposed resolution: REVISED (MAC: 2013-05-14 00:15:29Z): Make changes as shown in 11-13/439r2 for CID 30.
  6. **Comment Resolution: Doc 11-13/466r0**
     1. Dorothy picked 10 comments for this doc.
     2. CID 1005
        1. Review comment
        2. Review Table 8-201, 8-202, 8-205.
        3. Review the issue of what the “order” really means.
        4. From doc 11-13/466r0 “The “Order” field indicates the order in which the listed fields appear in the frame. In Table 8-201 for example, the TCLAS element is optional; there may be say 2 of these fields. Then “n” would be 6, with fields 5 and 6 containing TCLAS fields, 7th field containing the TCLAS processing field, etc. “
        5. If we have 5,6,7,8,9 and optional, would that not indicate the order if it is present, or the order of the frame.
        6. If we were to delete the order field, we would need to add some extra text that indicates that the table is in fact showing the proper order.
        7. A number of elements that need a particular order is implied in table 8-205.
        8. “3-n” means “3 to n” or “3 through n”
        9. In 8-202, this table does not make sense as written. How to know what the rational order of the elements.
           1. The issue is that you may have to have an order that includes the element numbering that causes issues.
        10. What if we left the “n” out, then we would not have had the artefact that causes the question.
        11. If we were to use figure instead of table, then the “n” can be removed.
        12. Numbering the figure is not done, so it would be the same as the table format without the “order” colum. We can add to the general section that the order of elements in the table are shown in the order top to bottom of the elements.
        13. If we just drop the use of “n” we could lesson the impact on the spec. droping the whole order column would impact more tables.
        14. Question on the use of Optional in tables in other frames, for example the beacon is one that has optional ordered fields, and so we may want to look at the similar manner that is done there to be consistent here.
        15. Page 498 in D1.0 – we have “2-(last-1)” which is strange as well.
        16. The order is not the number of things, but rather what the relative order it is going to be in the frame.
        17. Having an instance of a multiplicity represented in relative order is simplier.
        18. The answer to the question is that the Order indicates simple order.
        19. Proposed Resolution: REVISED (MAC: 2013-05-14 00:50:29Z): Make changes as shown in 11-13/466r1 for CID 1005.
        20. Mark ready for motion.
     3. CID 1043
        1. Review Comment
        2. Review Figure 8-1 –
        3. Do we need the word “optional” if the diagram has “0 or 16” for example. Look at Mesh Peering Management for example: … we have examples that include “optional” and 0 or 16, and we have some places where it is only the 0” andothers with just optional…clear up as noted in this comment.
        4. Proposed Resolution: Accept
        5. Mark ready for motion
     4. CID 1059
        1. Review comment
        2. Proposed resolution: Revised (MAC: 2013-05-14 00:58:36Z): At 1022.48, change from "9.13 (PPDU duration constraint)" to "9.23 (Protection Mechanisms)"And From"9.3.2.5 (RTS/CTS with fragmentation)" to "9.3.2.7 (Dual CTS protection)"
        3. Mark ready for motion
     5. CID 1061
        1. Review comment
        2. Proposed Resolution: Accept
        3. Mark Ready for motion
     6. CID 1063
        1. Review comment
        2. Proposed Resolution: Accept
        3. Mark Ready for motion
     7. CID 1064
        1. Review comment
        2. Proposed Resolution: Accept
        3. Mark Ready for motion
     8. CID 1069
        1. Review comment
        2. Proposed Resolution: Accept
        3. Mark Ready for motion
     9. CID 1070
        1. Review Comment
        2. Review similar language that was used previously to clarify what the value is being done.
        3. Proposed Resolution: **Revised** Insert the following sentence at 1306.59: “The resulting 6 octet value is converted to a positive integer treating the first octet as the most significant octet of the integer.”
        4. Mark ready for motion
     10. CID 1080
         1. Review Comment
         2. Note also that “shall be optional” seems strange. So change it to “is optional”. Not clear that this is part of this comment so leave as indicated.
         3. Proposed Resolution: REVISED Make changes as shown in 11-13/439r2 for CID 1080.
         4. Mark ready for motion
     11. CID 1104
         1. Review comment
         2. Proposed Resolution: Accept
         3. Mark Ready for motion
  7. Editor discussion CIDs
     1. CID 1595
        1. Review comment
        2. We have discussed this a bit before, and it is speculative edited in D1.2 They are in D1.4, but these changes are not approved.
     2. CID 1284
        1. Review comment
        2. The text as cited does not occur where cited,
        3. Page 926 of D1.0 –
        4. CID 1283 fixed something similar, and now it was fixed.
        5. It seems that the Database was not updated, and missed the motion number “23” and had actually been fixed already.
     3. Return to CID 1595
        1. MPDU not synomoous with frame
        2. 169 changes were made.
        3. One resolution was to get rid of PHY frame, the other alternative is to change to not have “frame” be synonymous with MPDU.
        4. Currently it has been changed with the understanding that “frame” == “MMPDU”
        5. In 18.3.2.5, frame is used in a third way, and means some part of a PHY frame.
  8. Reminder on Attendance
  9. There are a lot going to go to HEW, if we don’t have too many, then we may work in adhoc fashion to prepare for a regular discussion when we have more in attendance.
  10. Recess at 3:30pm

1. TG REVmc Called to order at 4:08pm by Dorothy STANLEY, Aruba Networks, Monday 13 May 2013.
   1. Comment Resolution: Gen Adhoc Status “Review”
      1. CID 1692
         1. Review comment
         2. May be safe not to change the ones with a specific date, but we should know what is specifically is in the RFC to make sure we understand why the specific was called out and why we would not use the update and visa versa.
         3. We had this discussion in 11mb, and we were concerned it was not compatible with the 802.11 standard.
         4. More homework need
         5. The one with the specific date is worrisome; it may call out a specific format.
         6. In general, we’re concerned that we don’t understand what may have changed.
         7. Assign to Dorothy, to research the changes.
      2. CID 1691:
         1. Same as CID 1692, assign to Dorothy.
         2. CID 1125:
         3. Review comment
         4. Proposed Resolution: Accept
         5. Mark Ready for motion
      3. CID 1197:
         1. Checked the usage. This is not a type of frame, but a classification of Action frames. Thus, it is appropriate to have a definition in clause 3.
         2. REJECTED (GEN: 2013-05-14 02:29:31Z) - robust Action frame is not the name of a frame. The capitalization has been corrected in some of the locations in D1.4
         3. Mark Ready for Motion
      4. CID 1408:
         1. Review comment
         2. Proposed Resolution: Accept
         3. Mark Ready for motion
      5. CID 1205:
         1. Review comment
         2. Proposed Resolution: Accept
         3. Mark Ready for motion
      6. CID 1212:
         1. CID 130 had a request to make all such usages consistent.
         2. CID 1215 Is the same thing, in a different location. The group agreed to Reject CID 1215 because it isn’t incorrect, and while unnecessary, it would take a lot of work to remove them all.
         3. Reject. The cited text is not incorrect. There are a substantial number of "IEEE Std 802.11" and the group has determined that it prefers not to remove them.
         4. Mark Ready for Motion
      7. CID 1219:
         1. Agreed that this list is not needed.
         2. The whole part about “appends all MAC specified fields” seems unnecessary, and perhaps wrong depending on the strict meaning of “append”. Suggest deleting this phrase and re-wording around it.
         3. Revised. Change  
            "If the request can be fulfilled according to the requested parameters, the MAC sublayer entity appends all MAC specified fields (including DA, SA, FCS, and all fields that are unique to IEEE Std 802.11), passes the properly formatted frame to the lower layers for transfer to a peer MAC sublayer entity or entities (see 5.1.4 (MSDU format)), and indicates this action to the LLC sublayer entity using an MA-UNITDATASTATUS.indication primitive with transmission status set to Successful”  
            to  
            "If the request can be fulfilled according to the requested parameters, the MAC sublayer entity properly formats a frame and passes it to the lower layers for transfer to a peer MAC sublayer entity or entities (see 5.1.4 (MSDU format)), and indicates this action to the LLC sublayer entity using an MA-UNITDATASTATUS.indication primitive with transmission status set to Successful"
         4. Mark Ready for motion
      8. CID 1015:
         1. Review comment
         2. Proposed Resolution: Accept
         3. Mark Ready for motion
      9. CID 1413:
         1. Believe the intent is to:
            1. Delete “when a timeout of failure occurs or” from 6.3.60.3.3.
            2. Delete “when transmission of the TFS Request frame is acknowledged, when (re)transmission of the TFS Request frame fails, when a failure reason is unspecified, or” and “This primitive is also generated when the MLME-TFS.request contains invalid parameters and when a timeout or failure occurs.” From 6.3.63.3.3.
            3. Delete “This primitive is generated by the MLME as a result of an MLME-CHANNELUSAGE.request and indicates the results of the request.” and “when the MLME-CHANNELUSAGE.request contains invalid parameters, when a timeout or failure occurs, or” from 6.3.67.3.3.
            4. 6.3.68.3.3 is the same change as 6.3.67.3.3.
         2. Revised. For 6.3.60.3.3: delete "when a timeout or failure occurs or"  
            For 6.3.63.3.3 delete "when transmission of the TFS Request frame is acknowledged, when (re)transmission of the TFS Request frame fails, when a failure reason is unspecified, or" and the second paragraph.  
            For 6.3.67.3.3 Change: "This primitive is generated by the MLME as a result of an MLME-CHANNELUSAGE.request and indicates the results of the request. This primitive is generated when the MLME-CHANNELUSAGE.request contains invalid parameters, when a timeout or failure occurs, or when the STA receives a Channel Usage Response frame from the AP." to "This primitive is generated when the STA receives a Channel Usage Response frame from the AP."  
            For 6.3.68.3.3 change "This primitive is generated by the MLME as a result of an MLME-GATS.request and indicates the results of the request. This primitive is generated when the MLME-GATS.request contains invalid parameters, when a timeout or failure occurs, or when the STA receives a DMS Response frame from the AP." To "This primitive is generated when the STA receives a DMS Response frame from the AP."
         3. Mark Ready for motion
      10. CID 1016:
          1. Review comment
          2. Proposed Resolution: Accept
          3. Mark Ready for motion
      11. CID 1017:
          1. Review comment
          2. Proposed Resolution: Accept
          3. Mark Ready for motion
      12. CID 1238:
          1. Just delete the whole first sentence
          2. Revised. Delete the first sentence "The MSGCF and its interaction with other management entities is defined in 6.4 (MAC state generic convergence function (MSGCF))."
          3. Mark Ready for Motion
      13. CID 1021:
          1. Move to MAC, Location tab, for further investigation.
      14. CID 1409:
          1. Review comment
          2. Proposed Resolution: Accept
          3. Mark Ready for motion.
      15. CID 1022:
          1. Review comment
          2. Proposed Resolution: Accept
          3. Mark Ready for motion
      16. CID 1023:
          1. Agreed, but needs a submission to find and correct them all. Assign to Adrian.
      17. CID 1137:
          1. Doesn’t dot11MgmtOptionTODActivated imply dot11MgmtOptionTODImplemented must be true? Didn’t find that on a scan of the Draft. But, did find a typo at 1243L45.
          2. Seems that this usage of Implemented versus Activated should be examined to see if it matches our agreed convention.
          3. Transfer to MAC for study.
      18. CID 1138:
          1. Related to CID 1137.
          2. Transfer to MAC as part of 1137.
          3. Need to check with Vinko if he is addressing this, since it has the PHY group.
      19. CID 1416, CID 1077, CID 1586:
          1. Assign to Vinko.
      20. CID 1079:
          1. It does seem that having a +ndp-announce here is wrong. But, we’re unsure what exactly to delete to fix this.
          2. Assign to Adrian to bring back a more specific resolution.
   2. Recessed at 5:59pm (17:59)
2. 802.11REVmc called to order by Dorothy STANLEY, Aruba Networks at 13:30 on Tuesday May 14, 2014.
   1. Reminder on Patent Policy and meeting rules given –
      1. Remember to log attendance
   2. Agenda for today:
      1. Menzo WENTINK (Qualcomm) Present CID 287 – 11-13/0577r0
      2. David HUNTER (WireFi Networks) CIDs
   3. Presentation of 11-13/577r0 by Menzo WENTINK (Qualcomm)
      1. Review the CID 287
      2. Proposed text reviewed for possible changes
      3. Questions:
         1. How does this affect 9.3.2.3.7?
            1. No this does not affect this clause
         2. Does this assume that the PHY header is correct?
            1. Yes, if it is not correct you don’t have anything but energy.
            2. Assume it is at the lowest PHY rate and it is an ACK not a Block-ACK.
         3. Assuming at the worst case in Table 9.x in doc 11-13/0577?
            1. Yes, it is assuming Long Preamble for 1mbps, and Short Preamble in other cases, but we can revisit that to see if it is necessary with the Long Preamble.
            2. If the ACK is coming with the long vs short preamble, it does make a difference in that the difference is 96ms for the difference in Preamble sizes.
            3. Typically you would not see the Long Preamble for other than the 1mbps cases.
         4. If you don’t have the rate info, then what number should you put in?
            1. This is then an energy detect process.
            2. If you have an energy detect and not a valid PHY Header then you would only the energy detect process.
         5. Is there a reason that the table stops at 16 QAM?
            1. Yes it is the normal highest Mandatory basic rate in most cases.
         6. Frame causing EIFS, is really the one that is before?
            1. Not it is the one that has the crc error.
            2. The estimated duration of the frame that is possible in response to the frame that causes the EIFS.
            3. Aggegation is part of the vector
            4. The word frame on page 2 needs to be changed to PPDU.
            5. Menzo to work it out and cause a new Revision
         7. What is the rule for EIFS?
            1. If you get any of the frames in an PPDU?
            2. The start of the PPDU without the CRC correctly.
      4. Discussion on what the lowest PHY mandatory rate description is meaning.
         1. By forcing the use of the “lowest”, then you are going to be wrong in most cases.
         2. By allowing the EIFS to be shorter by choosing the correct length of the ACK.
      5. If you don’t know what the rate is, you are going to go to use the AIFS afterward.
      6. What is the problem of the packet going elsewhere that is causing the receiver to not see the full packet, but you would expect to hold off for an ACK to allow the other STA to receive the frame.
      7. Looking at 9.3.2.3.7 – The MAC FCS value is not correct, so you should know a lot about the packet. You know most of the information, but there is some issue with the packet.
         1. More discussion on should we have the text vs only the table.
         2. This is not the intent of the presentation, but just adding the extra information is the intent.
      8. Review again on the 9.3.2.3.7 if you do not know what the rate is, then how do you determine what the rate is?
         1. The presentation is not offering to change the case when you only can determine the energy, but not a full frame. This clause is not subject to the presentation change.
      9. The question is where did the numbers in the table come from?
         1. Most of the table has some numbers that seem consistent, but there is some values that seem different.
         2. The SIFs is dependant on the Band, so the short slot column would need to be removed.
      10. Suggestion to change the order to make the equations match.
          1. The order of the equation is being proposed to match the order things occur. But the existing equation is not in that order, so we would expect a comment in the future to change it as this presentation is not looking to change it.
      11. Last sentence in page 2 needs to be removed to remove the “must” case.
      12. Why not make some of these changes we are talking about now rather than later?
          1. This is not
      13. CID 287 Proposed Resolution: REVISED (MAC: 2013-05-15 00:12:39Z): Make changes as shown in 577r1.
      14. Menzo to post the new revision.
   4. David HUNTER (WireFi Networks) CIDs
      1. CID 24
         1. There was a Resolution that was included in D1.0
         2. Question on the second part of the resolution.
         3. Question: Whether a reference is informative even if it is used in the application of a MIB variable?
         4. The IANA registry happens to be defined in the RFC is informative.
         5. We need to at least add the reference to the Bibliography.
         6. This was done already in D1.0
      2. CID 58 and 1322
         1. Review the Comment
         2. We looked at “It is Mandatory” and “It is Optional” and so a submission is necessary, but the commentor was looking to address just this one place.
         3. If we change one, we should change them all, or else we are setting us up for further changes. The question is to determine if the phrase is acceptable or not and then we can decline the comment.
         4. Some of the uses of the word “Mandatory” (60 times in the PHY clauses). Then we would need a submission to make the change.
         5. There are around 15 comments on this topic, and we have accepted about half of them and replaced the “shall”with something appropriate.
         6. David is thinking he will prepare a submission.
      3. CID 1251
         1. Review comment
         2. The “HT Control Field is present..” is not actually a correct statement, but the change seems correct.
         3. The proposed Tect includes the word “all” and it should not be used.
         4. If the logic of the comment is wrong, then why is the proposed change correct?
            1. There are HT control field in other frames
         5. So if we remove how do we not change the meaning?
         6. What is wrong with the current text?
            1. Discusion on the wording
         7. This comment is just splitting the sentence into two sentances.
         8. Proposed Resolution: REVISED (MAC: 2013-05-15 00:12:39Z): Make changes as shown in 577r1.
         9. Mark ready for Motion
      4. CID 1257
         1. Review comment
         2. Proposed Resolution: REJECTED (MAC: 2013-05-15 00:31:18Z): Inserting this information in this table would be duplicating infomraiton expressed in other subclauses.
   5. Discussion on MIB variables
      1. The receiver does not have to know the state of the MIB to receive a frame.
      2. There is a parsing issue, and if we do have it, then we need to fix it.
      3. For example the SCAN.confirm, if you are not a HT STA, then you cannot report on the HT elements as you do not know what they are.
      4. This is not really a topic for today, but is some helpful discussion for David to prepare his submission for later.
   6. GEN “discuss” comments resolution
      1. CID 1147:
         1. Agreed, both uses are found. The frame control version is only in clause 11 and Annex M. But, it seems to be the first and longest usage. So, begrudgingly agree to change the 40 MHz capable usage instead. Settled on 40MC.
         2. REVISED: Change the FC where it is meant to be “40 MHz Capable” to be “40MC” and add an appropriate acronym.
         3. Mark Ready for motion
      2. CID 1186:
         1. DTIM should mean a “map” not a “message”.
         2. REVISED: Change “message” to “map” at 27L34.
         3. Mark Ready for motion
      3. CID1126:
         1. We note that the three prior definitions all say exactly the same thing as each other, which seems wrong, and would match this one (making 4 in a row) if we made this change.
         2. Can we fix this to actually describe what differentiates these? Would MODULATION be the right differentiator?
         3. Do we need to differentiate them? These definitions are correct, if not specific. This would satisfy the commenter.
         4. ACCEPT.
         5. Mark Ready for motion
      4. CID 1521:
         1. Generally agree. Same thing on the previous two definitions.
         2. Actually, we don’t definitions for this or RSNA-enabled. We do this a lot, in body text, not definitions.
         3. We shouldn’t use the word “equipment” in this context either. Either use STA or nothing. (There are other “equipment” things that could be looked at, too, like pre-RSNA, or ERP-capable.)
         4. Check of Clause 11 to see if we have this already, and we discover that these are not defined there, but are used (often without the “equipment” adjective). Also note that usage has both RSNA-capable and RSNA-enabled, and they appear to be mixed relatively randomly.
         5. There is also “non-RSNA-capable equipment”.
         6. Dorothy will work on this off-line
   7. Recess at 3:30pm

1. 802.11 REVmc called to order at 4pm by Dorothy STANLEY, Aruba Networks on Tuesday 14 May 2013 PM2.
   1. Return to Menzo and Doc 11-13-577r1
      1. Review updates to the table and the sentence suggested from the earlier discussion.
      2. Both the Long and Short Preamble explicit entries, and changed “bytes” to “octets”.
      3. These changes seemed good, and this will be included in the MAC Group for motion to approve tomorrow.
   2. Gen Adhoc – Discuss Comments:
      1. CID 1203:
         1. “data message” occurs 5 times. Several are in 4.5.1. “message” appears in 4.5.1 quite a lot, and all could arguably be “frame”. There are over 600 “message” usages in the Draft.
         2. Agreed to change “message” to “frame” throughout 4.5.1.
         3. 4.5.2.1 needs detailed look at “message”. Some (all?) of these should be “MSDU”,
         4. We have “GAS message”, “EAS message”, “Deauthenticate response message”, etc.
         5. Hunter volunteers to scrub for these.
   3. Matthew FISCHER review 11-13/448r0
      1. CID 1003
         1. Review comment
         2. Discussion on when a Beacon may or may not include IEs.
         3. Review Page 483 L26 and then look at 8.4.2.26
         4. We should see that this capability Element should be present when present all the time.
         5. We do not want the “optional” word here now.
         6. There are many features that are requiring a STA to know these capability is available.
         7. Proposed Resolution: Accept
         8. Mark Ready for Motion
      2. CID 277
         1. Review Comment
         2. See 9.2.2 for definition of “Successful transmission”.
         3. What is the real problem with the existing text?
            1. Not able to reset the retry counter
         4. Discussion on proper behaviour of when we want to reset the counter.
         5. SSRC counter and SLRC counter
         6. Concern the change is very broad, and some would like more discussion on this before we proceed with a change.
         7. Others said it is not a real big change, but rather a way to document the way the present state of affairs.
         8. A CTS/RTS exchange is another reason to allow the reseting of the counter.
         9. Under EDCA it seems to allow reseting the CWmin
         10. The idea is to allow the resetting of the SSRC and the SLRC. – that is missing in the current text.
         11. Proposed Resoluton: Reject: - Commenter withdrew the comment.
         12. Mark ready for motion
      3. CID 278
         1. Review comment
         2. Another presentation for this CID was prepared.
         3. Propose to extend the maximum BA window from 64 to 256 to support greater efficiency of operation at high PHY rates – see LB193 CID 278 presentation in Doc: 11-13/449r0
         4. The need for making a change is not clear.
         5. This was discussed in 11ac, and at that time it was determined not to make this proposed change (13-449r0).
         6. More time would need to be used in discussion.
         7. In general, all changes have to be approved by 75% when it comes to vote, and we need to be careful to the topics we agree to debate and change.
         8. We may want to consider bringing this to a next Generation PHY instead of here.
         9. Presentation of 11-13/449r0
            1. Preentation of data to show gains
            2. The aggregation of small packets may change the curves that you are showing here in the presentation
            3. Wide chanels and fast modulations may be the place this would work well. When we look at one to one this makes more sense. If we look at one to many, this may not make as much sense. Jitter occurs when the load from multiple clients in the system.
            4. Benefits are most extreme when the packets are small.
            5. The benefit of Fragmentation done within a single MMPDU you can use a higher MSC. The optimization has a broad peak. Chose a MSC that has plenty of headroom, or else the algorithm will most likely loose the packet altogether.
            6. Discussion on what constitutes a good assumption and how the acquisition of the channel affects the transmission.
            7. If it is made bigger, what else has to change to accommodate for the buffer processing and it is negotiated, and the buffering could be an issue as well.
            8. Discussion on the MPDU error rate not the AMPDU error rate that is on the slides.
            9. Question on the Straw Poll? Not today.
            10. There are slides that show how the change would be incorporated and left to people to review later.
         10. Question on would this even be in scope? Given it had been rejected by 11ac.
             1. Yes it is in scope for 11REVmc
             2. We generally let contentious item get lots of air time and then a planned vote to allow a large breadth of interest to participate.
      4. CID 280
         1. Review Comment
         2. This seems like a change in the security section and we should have the security subject experts look this change over.
         3. Need to allow for some more time for people to review and bring back to Mathew for discussion on Thursday PM2
      5. CID 283
         1. Review Comment
         2. The standard gives one alternative if the number of data symbols in the PSDU, then it has to be transmitted at the computed MSC.
         3. Discussion on the transmission rates and the idea of being able to send ACK at a lower rate than what the frame was sent before.
         4. When the number of data symbols is the same for two different rates, then you can choose the lower rate.
         5. This would complicate the issue changing the EIFS calculations.
         6. Some would like to think about it more.
         7. We should always allow the reponse to be at a lower rate, and this is a serious concern for users with sweaty palms….
         8. There needs to be not only an MCS exchange, but also a Power Exchange.
         9. Still needs a submission.
   4. End of Time:
      1. We will start tomorrow with motion on the resolutions that have been posted for consideration.
   5. Recessed at 5:58pm
2. REVmc called to order at 1:32pm by the chair, Dorothy STANLEY, Aruba Networks
   1. Agenda:
      1. Motions for pending Comment Resolutions
      2. Vinko PHY CIDs
   2. Editor Review of Comments prepared ready for motion.
      1. Confirm Motion MAC-H and CID 119 and GEN Motion May A and Gen Motion May B tabs on the consolidated spreadsheet ready for motion.
      2. 11-13/233r10
   3. **MOTION 26**:
      1. Approve comment resolutions to comments in

<https://mentor.ieee.org/802.11/dcn/13/11-13-0233-10-000m-revmc-wg-ballot-comments.xls> CID 1119 and

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-07-000m-revmc-mac-comments.xls> “Motion MAC-H” tab and

<https://mentor.ieee.org/802.11/dcn/13/11-13-0562-01-000m-gen-adhoc-lb193-comment-resolutions.xls> “GEN Motion May A” and “GEN Motion May B” tab

* + 1. Results: 8-0-2 motion passes
  1. Vinko presentation of 11-13-598r0
     1. <https://mentor.ieee.org/802.11/dcn/13/11-13-0598-00-000m-phy-cids-resolutions.xls>
  2. CID 1010:
     1. This is controversial. Defer.
     2. Check 11k, which considered a “squelch” feature.
     3. Mark as “Submission Required” and assign to Vinko.
  3. CID 1076:
     1. Revised. Remove the cited sentence.
     2. Reconsidered:
     3. Table 18-17 doesn’t have the concept that this is “if dot11OperatingClassesRequired is true”. That makes the table just incorrect, by itself. Add that concept in the three boxes in the SlotTime row of Table 18-17, and delete the sentence.
     4. Vinko will work on exact wording and bring this back.
  4. CID 1077:
     1. Review comment
     2. Proposed Resolution: Accept
     3. Mark Ready for motion.
  5. CID 1082:
     1. Discussion about whether the Standard is correct and the equipment should change.
     2. Suggest putting in a NOTE that some equipment manufacturers will use a correction factor, but in most cases it is expected to be zero.
     3. Another suggestion: “Vcorrection may be needed to compensate for the error induced by the test equipment reference receiver system.”
     4. If this is defining how to compute a result for a real-world signal, we should just say exactly how that works. How or if a manufacturer needs to apply compensation factors to get the right answer is not part of the Standard’s definition. But, saying that in a NOTE would be okay, if is helps implementers understand.
     5. Settled on taking it out of the formula and 1624L52, and putting in a “NOTE – A correction factor might be needed to compensate for the error induced by a test reference receiver system.”
     6. Vinko will bring back after checking with Brian Hart.
  6. CID 1083:
     1. Same as CID 1082 above.
  7. CID 1143:
     1. This is similar to CID 1010, with slightly different use cases. Consider in combination with the CID 1010 resolution presentation.
  8. CID 1394:
     1. Already handled in March. Nothing more to do.
  9. ID 1403:
     1. Revise. Change “this preamble type” to “the short PPDU format”
     2. Mark Ready for Motion
  10. CID 1415:
      1. Revised. Change "hold the CCA signal busy" to "indicate a channel busy condition" at the following locations: P1795.30, P1795.33, P1795.58, P1796.1, P1796.3, and P1796.5. Editor make the equivalent effective change at P1796.1 and P1796.5 where the wording is slightly different.
  11. CID 1416:
      1. Review comment
      2. Accept.
      3. Mark Ready for Motion
  12. CID 1417:
      1. There is history behind this. Could change “A receiver” to “An HT STA” to clarify at least that this doesn’t apply to pre-HT devices. Otherwise, leave this as is.
      2. Carlos and Vinko will check that this is okay.
  13. CID 1537:
      1. We don’t want to change the equation (which is probably what implementations do). Rather fix the text to say what the equation says.
      2. Also fix typo “dbm” to “dBm” on P1658.1.
      3. On P1657.52, change “with indicated values rounded to the nearest 0.5 dB as follows:” to “with indicated values in steps of 0.5 dB as follows:” Same change on P1626.53, P1692.14, and P1796.19.
  14. CID 1581:
      1. Delete “Transmit beamforming” at P1735.31?
      2. Better, change “including” to “for”?
      3. Conclusion. Just delete the “including” and the bullets.
      4. Revised. On page 1735, delete “including” and lines 31 – 36.
      5. Mark Ready for Motion
  15. CID 1586:
      1. Review comment
      2. Accept.
      3. Mark Ready for Motion
  16. Recessed at 3:30pm

1. Called to order at 4:pm by the chair, Dorothy STANLEY, Aruba Networks
   1. Reviewed agenda plan for the remaining sessions (13/401r6). No changes.
   2. TFS related comments (13/583r0) (Qi Wang):
      1. CID list is in document.
      2. Four categories of issues addressed: frame structure; accept/deny/modify process; automatic filter delete behavior details; notify frame generation.
      3. Backward compatibility considered. Believe there are no existing implementations. The current text is practically unimplementable.
      4. Many word-smith changes made. Changes during discussion saved as 13/583r1.
      5. Some themes:
         1. Use Traffic Filter Set (the defined term) when appropriate, instead of vague language like “a set of filters”.
         2. “Delete after match” only makes sense if it deletes all the filters. Otherwise, a match of one filter (set), which deletes that filter (set), results in throwing away all frames that match that filter from then on, because they don’t match any surviving filter (sets). This is probably not useful – the non-AP STA probably wants these frames to not be filtered at this point.
         3. Send a Notify frame only upon the first match of a filter (set). Don’t send any more Notify frames until the non-AP STA responds with a Notify Response, which then “retriggers” the AP to send a Notify again.
         4. Clarify the structure: TFS Request frame has a TFS Request Elements field with one or more TFS Request elements. The TFS Request elements each have a TFS Request Subelements field with one or more TFS Request subelements. A TFS Request subelement TFSID attaches to the structure at the TFS Request element level. The Status attaches to the structure at the TFS Request subelement level. The TFS Response frame structure matches the TFS Request frame structure, and language is added to clarify that the two can be matched up in both structure and order of the sub)elements.
   3. Recess at 18:00.
2. REVmc called to order at 1:30pm by the chair, Dorothy STANLEY, Aruba Networks on Thursday 16 May 2013
   1. Agenda for this slot:
      1. Comment Resolution – Graham CIDs 1458, 1136, 1118 – 415r0
   2. Comment Resolution Graham:
      1. CID 1118
         1. there was a discussion on this comment on the telecom. Mark Hamilton took an action to propose a resolution. Although there is some discrepancy in the definition, there would be an impact to existing implementations if the Access Delay definition had changed. The start time of the Access Delay is unclear.
         2. The definition of measurement starts when the packet leaves the head of the queue until the start of transmission. Resolution "Reject. The average access delay measures the time from the head of the queue to the start of the transmission."
         3. Add "Changing the encoding of Average Access Delay would cause incompatibilities with existing implementations."
         4. Proposed Resolutoin: REJECTED (MAC: 2013-05-17 00:03:27Z):

The average access delay definition is clear, and measures the time from reaching the head of the queue until the start of each transmission. It does not include time for retries. No change is needed to the definition.

Further, changing the encoding of the average access delay would cause incompatibilities with existing implementations.

* + - 1. CID 1458:
         1. Reviewed Comment
         2. Changed status to "Needs submission", assigned to Graham Smith, referencing 11-13/0013
         3. The intention is to consider, and likely adopt, 11-13/0013r1 as resolution to CIDs 1112, 1113, 1114, 1115, 1116, 1117, and 1458.
  1. Comment Resolution – Qi
     1. CID 1169
        1. Review Comment
        2. How fast should the AP disassociate after a timeout?
        3. Change Shall to May to soften the requirement.
        4. How does the requirement affect the STA and the Non-AP STA?
        5. Proposed Resolution: Accept.
        6. Mark ready for motion
  2. Comment Resolution – Vinko:
     1. CID 1010
        1. Defered for July
     2. CID 1076
        1. New Resolution: Revise:
  3. Review for Last mtg slot:
     1. Start with Dan, and then Qi
     2. Stop at top of the Hour to make motion to approve comment resolutions
  4. Recess until 4pm

1. Called to order at 4:02 by the chair, Dorothy STANLEY, Aruba Networks, on May 16, Thursday PM2
   1. Agenda:
      1. Motions
      2. Comment Resolution: Dan Harkins and Qi Wang
      3. Future Busiiness
   2. **MOTION 27**:
      1. Approve comment resolutions to comments in 11-13/562r3 “Gen Motion May C” and Gen Motion May D” and

Resolve CID 1118 as REJECTED (MAC: 2013-05-17 00:03:27Z):

“The average access delay definition is clear, and measures the time from reaching the head of the queue until the start of each transmission. It does not include time for retries. No change is needed to the definition.

Further, changing the encoding of the average access delay would cause incompatibilities with existing implementations.”

And Resolve CID 1169 as “Accepted”.

* + 1. Moved: Mark Hamilton, 2nd David Hunter
    2. Results: 7-0-0 Motion Passes.
  1. Comment Resolution: Dan Harkins doc 11=13/513r0
     1. Submission CIDs 1709 and CID 1710
     2. Changes made to 11.10.1 and 11.10.2.
     3. Clarifies text to explain protocol
     4. Reviewed by several, some like it and some don’t.
     5. Discussion on if we send request-request-response vs request-response-response.
     6. If we get Request in response to a Request, if it is agreeable, then the communication can start then. If STA b get a Request in response to the Request from STA a, then STA b believe it is due to STA a not wanting to use the STA b.
     7. The proposed text did not seem to handle the case where you think that a dropped packet occurred but it did not.
     8. Discussion on if the presentation will work or not.
     9. More work will work on it.
     10. Request that 1711 be added to this proposal as it is similar to the other two
  2. Comment Resolution: Qi Wang – 11-13/583r0
     1. Continue discussion from Wed Pm2 on this submission.
     2. Changes are in progress to create an r1, but it is not complete.
     3. Discussion on text formats
     4. The way we defined AMPDU is probably a good way to do the TFS elements.
     5. Another way to do it is the Action Frames method.
     6. Look at page 560 for an example of one possible method.
     7. Sub-element field is defined in 8-14 and then we can follow like the Channel load element description.
     8. More offline work will be needed to complete the submission.
     9. A general direction was given for Qi to work on.
     10. Walked through the proposal looking to make consistent the wording. Removed “feeling” words, and magic number usage.
  3. Conference Calls 10am Eastern 2 hours
     1. May 31, June 7, 21
  4. Ad-Hoc meeting – none
  5. Schedule review
  6. Adjourn at 5:58pm

**References:**

Closing Report:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0629-00-000m-may-2013-closing-report.pptx>

Agenda Slides:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-00-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-01-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-02-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-03-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-04-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-05-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-06-000m-agenda-may-2013.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0401-07-000m-agenda-may-2013.ppt>

Editor Reports:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0095-04-000m-editor-reports.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0095-03-000m-editor-reports.ppt>

Editorial Review notes:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0592-00-000m-revmc-editorial-reviews.xlsx>

WG Ballot Comment files:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0233-09-000m-revmc-wg-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0233-10-000m-revmc-wg-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0233-11-000m-revmc-wg-ballot-comments.xls>

MAC Comment File:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-07-000m-revmc-mac-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-06-000m-revmc-mac-comments.xls>

Gen Adhoc Comment Processing file:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0562-00-000m-gen-adhoc-lb193-comment-resolutions.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0562-01-000m-gen-adhoc-lb193-comment-resolutions.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0562-02-000m-gen-adhoc-lb193-comment-resolutions.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0562-03-000m-gen-adhoc-lb193-comment-resolutions.xls>

PHY Comments:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0598-02-000m-phy-cids-resolutions.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0598-01-000m-phy-cids-resolutions.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0598-00-000m-phy-cids-resolutions.xls>

Annex N Proposed Text:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0013-01-000m-annex-n-proposed-text.docx>

TFS Comments:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0583-00-000m-proposed-lb193mc-tfs-comment-resolutions.doc>

EIFS Comments:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0577-01-000m-eifs-issues-normative-text.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0577-00-000m-eifs-issues-normative-text.docx>