IEEE P802.11  
Wireless LANs

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| TGmc Telecon minutes April-May 2014 | | | | |
| Date: 2014-04-11 | | | | |
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Abstract

Minutes from Telecons for 802.11REVmc:

April 4th: Comment Resolution –

- 11-14-0029 (QOS Map Set) Stephen MCCANN

- CIDs 2463 and 2060 in 11-14-0344r1 (Annex O) Dorothy STANLEY

- CID 2401 in 11-14-0263r5, includes 11-14-0044 (Annex N) Dorothy STANLEY

11-14/207r5 – mostly MAC comments

April 11th – Comment Resolution - CID 2425, 11-13-1345 (PICS)

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[IEEE-SA PATENT POLICY](http://standards.ieee.org/board/pat/pat-slideset.ppt)  
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[IEEE-STANDARDS ASSOCIATION (IEEE-SA) AFFILATION FAQ](http://standards.ieee.org/faqs/affiliationFAQ.html)   
[IEEE-SA ANTITRUST AND COMPETITION POLICY](http://standards.ieee.org/resources/antitrust-guidelines.pdf)   
[IEEE-SA LETTER OF ASSURANCE (LOA) FORM](http://standards.ieee.org/board/pat/loa.pdf)   
[IEEE-SA STANDARDS BOARD PATENT COMMITTEE (PATCOM) INFORMATION](http://standards.ieee.org/board/pat/index.html)   
[IEEE-SA PATENT FAQ](http://standards.ieee.org/board/pat/faq.pdf)   
[IEEE 802 LAN/MAN STANDARDS COMMITTEE POLICIES & PROCEDURES](http://www.ieee802.org/policies-and-procedures.pdf)   
[IEEE](http://www.ieee802.org/PNP/2008-11/LMSC_OM_approved_081114.pdf) 802.11 Working Group Policies and procedures

1. IEEE 802.11 TG REVmc telecon 4 April 2014
   1. Proposed Agenda:

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

- 11-14-0029 (QOS Map Set) Stephen MCCANN

- CIDs 2463 and 2060 in 11-14-0344r1 (Annex O) Dorothy STANLEY

- CID 2401 in 11-14-0263r5, includes 11-14-0044 (Annex N) Dorothy STANLEY

- CID 2413 - Graham SMITH

- Mark HAMILTON CIDs

Note proposed discussion topics for subsequent telecons:  
April 11: 11-13-1345 (PICS)

May 2: 11-14-0275 ("shall ignore"), 11-14-0207

4. AOB  
5. Adjourn

* 1. **Call to order by Dorothy STANLEY (Aruba) at 8:04 am ET**
  2. **Patent Policy was reviewed and noted**
     1. **No items from call for Patents**
  3. **Attendance**: Adrian STEPHENS (Intel), Dorothy STANLEY (Aruba), Edward Au (Huwei), Stephen McCann (Blackberry), Jon ROSDAHL (CSR), Mark RISON (Samsung)
  4. **Editor Report**
     1. D2.6 is ready for approval and contains approved resolutions from March
     2. D2.7 will include TGaf roll-in
     3. D2.8 will be targeted for defects as identified
     4. Target 2.7 for May, but may be able to have D2.8 by then as well.
     5. Will look for reviewers for D2.6 from the contributors
     6. Will look for TGaf experts for D2.7 review when it is ready for review
  5. **Comment Review Plan**
     1. Note proposed discussion topics for subsequent telecons:  
        April 11: 11-13-1345 (PICS)

May 2: 11-14-0275 ("shall ignore"), 11-14-0207

* 1. **Doc 11-14/0029r4 (QOS Map Set) – Stephen MCCANN**
     1. Review document showing the changes proposed
     2. The two clauses have needed to be rewritten (8.4.2.94 and 10.25.9)
     3. 11-14/0029r2 was presented in January in LA.
     4. 11-14/0029r3 was prepared for March, but did not get a chance to present.
     5. There is a “magic number” 21 that has not been corrected, but not sure where that number came from, but hesitant to change as it may affect existing implementations.
     6. No Objection to incorporating 11-14/29r4 text changes during the May meeting.
     7. Thanks to Mark RISON for his assistance in review and editing this version.
  2. **Doc 11-14/344r1 Dorothy STANLEY**
     1. CID 2463 GEN
        1. Review comment
        2. This was also in Adrian’s Doc 11-14/207
        3. Review Qi’s proposed changes to the bit maps
        4. The changes being described are fine, but the Editor is worried he won’t remember in a months time without some graphic description as well.
        5. Request to be made to ask for clearer description of the changes
        6. Discussion on what the resolution from March was.
  3. **Doc 11-14/0263r6 Dorothy STANLEY**
     1. CID 2401
        1. Review Comment
        2. Don’t use Recommended Practice in title as this is a type of document
        3. It is ok to use “should”,
        4. We should use active voice more consistently
        5. Delete the “It should also be noted that”...
        6. Suggest we change “it is recommend that” to use should in active voice.
        7. No objection to incorporate changes from the document
        8. **Doc 11-14/044r0**
           1. Review document
        9. REVISED (GEN: 2014-04-04) Incorporate the text changes in 11-14-0263r6 for CID 2401 and incorporate the text changes in 11-14-0044r1 (fixes to N.2.2). Note to editor: apply the 11-14-0044 changes before the changes in 11-14/263r6.
        10. No objection to the updated resolution. Mark CID ready for motion
  4. Review CID 2413
     1. With Graham not on the call we will skip for now.
  5. Review CID status for those who are on the call
     1. Propose we look at the remaining comments of 11-14/207
     2. Mark RISON confirmed that next week we could dedicate to the PICs
  6. **Doc 11-14/207r4 Adrian STEPHENS**
     1. Projected is r5 as we collect the changes today.
     2. CID 2051 MAC was the last one reviewed
     3. CID 2058 MAC
     4. Review Comment
     5. Proposed Resolution: Revised: Replace “TXTIME(CF-End)” with “T\_CF-End” ( \_ denoting subscript) and add “, where T\_CF-End is the duration of a CF-End frame”).

Make matching change at 1289.45.

* + 1. No objection - mark ready for motion
    2. CID 2063MAC
       1. Review Comment
       2. There is a spot in 2014.33 that needs some expert PHY review, so no change was made, but seems odd.
       3. There was a question on the “normative” use of a table vs the equations that were noted as informataive, and that this seemed backward.
          1. Outside the scope of the proprosed changes here, but something to think about in a future comment
       4. 2900.39 the “square window” is not realistice, but no change is being proposed
       5. DMG TSPECs are different from TSPECS.
       6. The resolution could be improved with the PHY feedback, but it is an improvement as now stated.
       7. Proposed Resolution: Revised. Make changes under CID 2063 in doc 11-14/207r5.
       8. No objection - mark ready for motion
    3. CID 2079 MAC
       1. Review Comment
       2. Proposed Resolution: Revised Remove reference to 9.3.2.9
       3. No objection – mark ready for motion
    4. CID 2086 MAC
       1. Review Comment
       2. Proposed Resolution: Revised. Make changes under CID 2086 in 11-14/207r5. This changes provide the differentiation sought
       3. No objection - mark ready for motion
    5. CID 2089 MAC
       1. Review Comment
       2. Proposed Resolution: Revised. Make changes under CID 2086 in 11-14/207r5.
       3. No objection - mark ready for motion
    6. CID 2153 MAC
       1. Review Comment
       2. Proposed Resolution: Revised. Replace cited sentence with: “A Beacon SP is empty if no DMG Beacon frame is received during the Beacon SP over an interval of length aMinChannelTime.”
       3. No objection - mark ready for motion
    7. CID 2093 MAC
       1. Review Comment
       2. As Annex E is supposed to hide the specific frequencies from being cited this text is clearly wrong.
       3. The number 56.16 GHz is in E1, but we will not have the number show up in the main body of the standard.
       4. Proposed resolution: Revised. Delete “the Channel Starting Frequency of the intended operating class of the STA is defined in Annex E to be 56.16 GHz and” at the cited location (twice).
       5. No objection - mark ready for motion
    8. CID 2100 MAC
       1. Review comment
       2. Proposed resolution: Revised. Add “as defined in 9.36.1” after “successfully completed”.
       3. No objection - mark ready for motion
    9. CID 2101 MAC
       1. Review comment
       2. Proposed resolution: Revised. Add “as defined in 9.36.1” after “successfully completed”.
       3. No objection - mark ready for motion
    10. CID 2102 MAC
        1. Review Comment
        2. Proposed resolution: Revised. Add “, as defined in 9.36.1,” after “successful completion”.
        3. No objection - mark ready for motion
    11. CID 2162 MAC
        1. Review comment
        2. Proposed Resolution: Accepted.
        3. No objection - mark ready for motion
    12. CID 2125
        1. Has already been handled – remove from this document
    13. CID 2109 MAC
        1. Review Comment
        2. Proposed Resolution: Revised. Move 9.37 to become 9.22.11.
        3. No objection - mark ready for motion
    14. CID 2129
        1. Has been handled – remove from this document
    15. CID 2138 MAC
        1. Review comment
        2. These changes proposed are just what we agreeded to in REVmb, but somehow got reversed in the TGad draft.
        3. Proposed Resolution: Revised. Make changes under CID 2138 in 11-14/207r5. These changes adopt “BU” terminology.
    16. No objection - mark ready for motion
  1. CID 2143
     1. Has been handled – remove from this doc
  2. CID 2158 MAC
     1. Review comment
     2. Proposed Resolution: Revised. At 1437.52, delete “in which the PCP/AP is the destination DMG STA of the TS”. In Figure 10-18 change “HC/non-AP” to “HC” (in four places)
     3. No objection - mark ready for motion
  3. CID 2160 MAC
     1. Review Comment
     2. Proposed Resolution: Revised Make changes under CID 2160 in 11-14/207r5
     3. No objection - mark ready for motion
  4. CID 2167 MAC
     1. Review Comment
     2. Proposed resolution: Revised. Delete “non-DMG” at 1559.35 and 1559.39. These remove the only redundant qualifications in this para.
     3. No objection - mark ready for motion
  5. CID 2157 MAC
     1. Review Comment
     2. From the discussion: “There are arguably many locations that should be changed. The challenge is to find an efficient way to allow them to be reviewed, and for the changes finally made to accurately reflect the proposal made.

Using the flag “(#DMG)”, I have identified where changes are to be made in D2.5 of the draft, which is also awaiting editorial review of technical changes. There are ~140 such flags, which is a small fraction of the ~1000 terms involving DMG that are not names of fields or frames. “

* + 1. Reviewed many of the hash tags that were put into d2.5
    2. In the announcement of D2.6, Dorothy will call attention to this CID and ask for review.
    3. Proposed resolution: Revised. Remove DMG or non-DMG qualifiers at the locations indicated by a (#DMG) flag in P802.11REVmc-D2.5 and reword surrounding text as necessary for grammar.
    4. Will revisit this during the May telecom
  1. CID 2039 MAC
     1. Review comment
     2. Proposed resolution: 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.
     3. No objection - mark ready for motion
  2. CID 2182 GEN
     1. Review comment
     2. Matches changes in the other PHY clauses
     3. REVISED (GEN: 2014-04-04 15:44:10Z) Revised. Replace cited para with: “In the case of signal loss before the decoding of the header or in the case of an invalid header, the PHY shall not generate a PHY-CCA.indication(IDLE) primitive until the received level drops below a value that is 20 dB higher than the receive sensitivity of MCS 1. In the case of signal loss after decoding of a valid header, the PHY shall not generate a PHY-CCA.indication(IDLE) primitive until the expected end of the packet, including AGC and TRN-T/R fields.”
     4. No objection - mark ready for motion
  3. CID 2177 GEN
     1. Review comment
     2. Could we put all this information in one place as this is a copy of the same material in all PHYs?
        1. We could and then have the PHY just reference the text in one place
        2. Is this really PHY specific, or is this a generic description
        3. Currently all the PHYs have similar properties, so this is why this is the same.
     3. Make change to Clause 16 and then remove the RCPI specification and put in reference back to the Clause 16 text to avoid redant text being copied to the other PHY clauses.
     4. Proposed resolution: REVISED (GEN: 2014-04-04 15:46:53Z) Make changes in 11-14/207r5 under CID 2177. These changes change the form of expression of RCPI to avoid redundancy and correct errors.
     5. No objection - mark ready for motion
  4. Status Check:
     1. Need to get comment databases updated and get minutes and comment status updates posted to the reflector.
     2. Updated 11-13/233 to be posted with the status update.
     3. Next week will be on PICs
  5. Adjourned at 11:58 ET

1. IEEE 802.11 TG REVmc telecon 11 April 2014
   1. Proposed Agenda:

1. Call to order, patent policy, and attendance  
2. Editor report  
3. Comment resolution: 11-13-1345 (PICS)

May 2: CID 2157 “excess “DMG” designations

CID 2413 – Graham Smith

Mark Hamilton CIDs

11-14-0275 ("shall ignore"),

Remaining 11-14-0207

4. AOB  
5. Adjourn

* 1. **Call to order by Dorothy STANLEY (Aruba) at 8:06 am ET**
  2. **Patent Policy was reviewed and noted**
     1. **No items from call for Patents**
  3. **Attendance**: Adrian STEPHENS (Intel), Dorothy STANLEY (Aruba), Jon ROSDAHL (CSR), Mark RISON (Samsung) Mark Hamilton (Spetralink) , Graham SMITH (DSP Group)
  4. **Editor Report**
     1. D2,7 is now on the server
     2. 4 volunteers in each category looking at possible defects
     3. Both D2.6 and D2.7 are being reviewed.
     4. Plan to get the defects corrected in D2.8 in time for the May interim
     5. Concern with editing changes in the May session (and the telecom resolutions)
     6. Will speculatively edit the Telecon resolutions to try to meet deadlines.
  5. **11-13-1345r3 (PICS) – Mark RISON**
     1. Review where we were from previous review.
     2. Continue with the review of proposed changes
     3. Comments that need confirmed: Page 9 – 11ad expert to confirm whether 11ad STAs are required to support PBSS operation
     4. CF27 – Optionally – needs more explicit definition of mandatory part (similar to CF25) – ACTION ITEM: Mark RISON to try to fix.
     5. PC1.2 – Action item – need to correct to match discussion from Beijing – PCI and not CF28:M?? Mark RISON to verify.
        1. We believe this to be correct
     6. PC1.1 needed to add a “N/A” option
     7. PC11 – Mesh is covered in MP4 – Mesh is for the most part distinct and separate
        1. Given the reference to 10.1, this looks correct
        2. PC11.1 – we have not captured the PBSS case here as it is not parallel with the text.
        3. Need to look at MESH and 11ad that has not properly put the PICS in place. This may be an editor note or something to pick-up on subsequent review comments
        4. PC11.3 – Do we need to distinguish between Beacon from DMG Beacon?
           1. Review 10.1.3.3 vs 10.1.3 there is a separate clause for each type
           2. Consider adding “or DMG Beacon” here
           3. Leave ambiguous was the consensus as there is too much work to make it different.
           4. Get rid of Comment MGR15 as done.
        5. PC11.4
     8. Updated CF2.4, CF2.41 and removed the MGR comments as complete
     9. PC11.8
        1. Non-PCP can scan actively, so we need an “or CF2.4.2”
        2. Need to make it optional to Actively scan – O.1
        3. Also make similar change to PC11.7 to be O.1
        4. Delete mgr comment from here
     10. PC12 – add “N/A” to the options
     11. PC12.4 and PC12.5 - Something did not seem right.
         1. Action item – Mark RISON to recheck on PC12.3, PC12.4 and PC12.5 again
            1. There may be an “off by one” issue on the clause noted
            2. Inconsistency needs to be addressed.
            3. We may want 10.2.2.8 ?
            4. New Can of Worms
            5. Change titles for PC12.5 and PC12.6
            6. Now we can say CF2.1 :M
            7. This would match the AP things.
            8. Verify what was in the 802.11-2012 doc – PC12.5
         2. The one off number was checked, and corrected in PC12.3-PC12.5
     12. PC13.3 – PBSS does not use ATIM – no change needed here
     13. PC14 – 11ad question on when Association and Reassociation occurs
         1. Change to address optionality
         2. PCP are you required to support
         3. Check Clause 10.21 – need to update reference
            1. Not relevant and should be removed
            2. Annex J will also be removed, but by the Editor in the process to remove Annex J in total
         4. PC14.x by convention is related, but not formally required
     14. FT5 – correction ok
     15. FT6 -
         1. Action Item for Adrian – Check the Mandatory list for completeness
         2. Eg. STA of AP or of PCP
     16. FT7 –
         1. May need to have a separate location for DMG Beacon
         2. Review list of Mandatory Features.
     17. FT8 –
         1. Change to CF2.2 M only
     18. FT9 –
         1. Adrian to check if PCP is required to support this
         2. Other proposed changes ok
     19. We can change CF1 or CF 2.1 is really CF14 – Mark to make the changes offline throughout.
     20. FT10 – ok, but with the change to CF14
     21. FT12 – Adrian to check if a PCP STA sends PS-Poll
     22. FT14 –There is a DMG CTS, so only the non-DMG STA needs to send the CTS
     23. In checking the 11ad standard, there is no PS-POLL, so we can say that DMG does not use PS-POLL
     24. FT12 – PS-POLL - the text was correct before – remove change
     25. FT16 – DMG STA do send CF-END, but not mandatory change from M to O
         1. ACTION ITEM: Mark RISON – Are DMG STAs required to send CF-Ends?
     26. FT28
     27. FT29 –
         1. Need to review if it is mandatory to TX BAR or even be a BA originator?
     28. FT30 –Discussion of which set is mandatory
         1. Maybe CF16:M would be better than HTM3.1
     29. IF PICs are about support or about what is currently doing?
         1. In the DMG stuff, we need to not have operating in a particular way.
     30. FT39 – discussion on if there is a distinction of CF28 vs its optional modes
         1. Result was that we would have just CF28 here.
     31. Discussion on DMG STA being PCP capable or not.
         1. An AP causes DS to be required
         2. The meaning of PCP means that Scheduling is all supported
         3. All DMG STAs need PCP support? Not sure
         4. If DMG, then you are either AP or non-AP ST, if non-AP STA, then you are either PCP capable or not
         5. A PCP manages a group of STA in a particular area, but who is the controller of the PCP may change dynamically
     32. ACTION ITEM: Mark RISON – check on DMG conditions – See FR1 comment
     33. There may be some more time to consider FR5-FR7
     34. We will need an additional hour of time to resolve the outstanding items on the Telecon on May 2.
  6. AOB
     1. In order to bring Editing of this submission into the draft, how stable is this draft?
     2. There are a few items that we will want to correct as we have noted in the 6 open action items, so r4 is not necessarily the best one, the next one would be better.
  7. Plan for May 2nd
     1. Start with 11-13/1345r4 and try to find consensus
     2. Then continue with the excess DMG designation
     3. Better to find any CIDs with Global changes to be discussed sooner than later
  8. Adjourned 12:01am ET



**References:**

April 4 Presentations:

<https://mentor.ieee.org/802.11/dcn/14/11-14-0029-04-000m-corrections-to-qos-map-set-clause-8-4-2-94.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0344-01-000m-lb-199-comments.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0263-06-000m-more-lb199-gen-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0044-00-000m-annex-n-2-2-deriving-medium-time-proposal.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0207-05-000m-lb199-stephens-comments.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0207-04-000m-lb199-stephens-comments.doc>

April 11 Presentations:

<https://mentor.ieee.org/802.11/dcn/12/11-12-1345-03-000m-pre-ballot-802-11-2012-resolutions-for-pics.docx>