IEEE P802.11  
Wireless LANs

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| Minutes REVmd - May and June Telecons | | | | |
| Date: 2017-06-30 | | | | |
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Abstract

This file contains the minutes for the 3 telecons scheduled between the May Wireless Interim and the July Plenary (May 30, June 23 and June 30)

R0: Minutes from the May 30th Telecon –

R1: Minutes from the June 23rd Telecon – (minutes taken by Michael MONTEMURRO)

R2: Minutes from the June 30th Telecon -

1. **802.11 REVmd Telecon – May 30, 2017 11:00-12:00 ET**
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 11:03am ET.
   2. **Attendance:**
      1. Dorothy STANLEY (chair) - HPE
      2. Francesco GRINGOLI – (UniBS) University of Brescia Italy
      3. Pablo SERRANO – (UC3M) Universidad Carlos III de Madrid
      4. Graham SMITH – ST Technologies
      5. Menzo WENTINK - Qualcomm
      6. Osama ABOUL-MAGD - Huawei
      7. Adrian STEPHENS – Intel Corporation
      8. Emily QI – Intel Corporation
      9. Sue LIEICHT – NSA
      10. Mark RISON – Samsung
      11. Jon ROSDAHL - Qualcomm
      12. Mike MONTEMURRO – Blackberry (TBC)
      13. Juan Carlos ZUNIGA (Sigfox)
   3. **Review Patent Policy**
      1. Patent policy slideset was reviewed
      2. Call for patents issued. Nobody came forward
   4. **Approve Agenda:**
      1. The draft agenda announced for the May 30th teleconference is:

1.       Call to order, attendance, and patent policy  
2.       Editor report  
3.       Presentation and discussion:

a. IETF 802.11 Multicast testbed and results:

<https://www.ietf.org/proceedings/98/slides/slides-98-intarea-80211-multicast-testbed-and-results-00.pdf> , Pablo SERRANO YAÑEZ-MINGOT  
b.      Additional presentations if available

4.       AOB  
5.       Adjourn

* + 1. Agenda as posted was reviewed.
    2. No comments.
    3. Approved by unanimous consent.
  1. **Presentation**: IETF 802.11 Multicast testbed and results, Pablo SERRANO (YAÑEZ-MINGOT)
     1. Document presented: <https://www.ietf.org/proceedings/98/slides/slides-98-intarea-80211-multicast-testbed-and-results-00.pdf>
     2. Presenter: Pablo SERRANO
     3. Discussion:
        1. Q: In DMS case, can you block-ack the individual transmission acks? (slide 2)
           1. A: Don’t think so.
        2. Q: In DMS case, can you reduce overhead of channel access by transmitting to multiple receiver addresses in a single TXOP?
           1. A: that might be possible. Hadn’t thought of it.
        3. Q: Is the purpose of the presentation for information, or are you proposing changes?
           1. A: it is unclear whether we can use MPDU aggregation or not?
           2. A: we have more information, on EDCA differentiation, and we are seeing things that do and do not work. EDCA doesn’t appear to help video quality. Given the test-bed we can experiment and see if changes to the standard improve performance.
        4. Q: We considered DMS sweet spot at 3-4 [clients]. Block ack at 5+ clients. Unsolicited retry at larger numbers of clients. Are you aware of these numbers? Perhaps the Block Ack mechanism is better than you indicate based on the numbers of clients. There is a choice of which mechanism to use based on numbers of clients.
           1. A: This was part of the motivation of the work, as we couldn’t find this data before we started.
        5. Q: One recommendation from this might be in TGmd – multiple frame transmission in on TXOP.
           1. Chair: changes to TGmd are in scope. If this work implies changes/clarifications in the standard, that is in scope.
        6. Q: In BA case, are you asking all receivers to reply?
           1. A: Yes.
           2. Q: then that is not what we were thinking of during 802.11aa. The AP does some kind of round-robin polling of different STAs during each video frame. Presentation by A Ashley in TGaa speaks to this.
     4. Chair thanks the authors for bringing this presentation from IETF to TGmd and offers the opportunity to continue the dialogue.
     5. Graham SMITH noted a tutorial on the use of Group Block Ack: 22-08/766r0: <https://mentor.ieee.org/802.11/dcn/08/11-08-0766-00-00aa-group-block-acknowledgements-for-multicast-traffic.ppt>
  2. **Other presentations**.
     1. Menzo WENTINK (Qualcomm) asks to present doc [11-17/871r0](https://mentor.ieee.org/802.11/dcn/17/11-17-0871-00-000m-extended-nss-editorial-errata.docx) “Extended NSS Editorial Errata”. No objection to this presentation.
  3. **Presentation:** Extended NSS Editorial Errata – Menzo WENTNIK (Qualcomm)
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0871-00-000m-extended-nss-editorial-errata.docx>
     2. Presentation of document by Menzo
     3. No questions
     4. The Chair will prepare a motion for approving the changes in the July Session.
     5. Editor Question: Is this presentation also included in the comments collection and the comments being submitted.
        1. Yes, a comment has been submitted and it references this document.
  4. **Next calls noted:**
     1. **June 23 and 30 we’ll use the** [**join.me**](http://join.me) **bridge:** <https://join.me/ieee802.11> , see <http://grouper.ieee.org/groups/802/11/joinme.html> for more detailed instructions.
  5. **Adjourned** 11:55am ET

1. **802.11 REVmd Telecon – June 23, 2017 11:00-12:00 ET**
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 11:05am ET.
   2. Call to order, attendance, and patent policy, participation slide (Chair)
   3. **Attendance**
      1. Dorothy STANLEY (HPE),
      2. Graham Smith (SR Technologies),
      3. Mark Hamilton (Brocade),
      4. Edward Au (Huawei),
      5. Joe Levy (Interdigital),
      6. Chris Hansen (Peraso),
      7. Mark Rison (Samsung),
      8. Osama AboulMagd (Huawei),
      9. Emily Qi (Intel),
      10. Michael MONTEMURRO (BlackBerry),
      11. Peter Ecclesine (Cisco)
   4. **Review Patent Policy**
      1. Call for Potential Essential Patents - None announced.
   5. **Review Participation Guidelines**
   6. **Agenda Approval** – Agenda is adopted by unanimous consent
   7. **Editor’s report** – Document 11-17/920r0 – Emily Qi (Intel)
      1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-00-000m-802-11revmd-editor-s-report.ppt>
      2. Thanks for Adrian Stephens and Edward Au for help in generating the draft and creating the comment database.
      3. Given that this is comment collection, the voting is not considered in these results.
      4. Action Item #1: Dorothy STANLEY to provide a list of candidates to address PHY comments
      5. Action Item #2: Adhoc Chairs and Editors to assign all comments from comment collection by the July 30 meeting.
   8. **Presentations and comment resolution**
      1. Document 11-17/891 – Graham Smith (SR Technologies)
         1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0891-00-000m-estimated-throughput-and-metrics-for-handover-decision.pptx>
         2. Video really refers to interactive video in this case.
         3. The estimate for throughput is much better after the device is associated
         4. The traffic in this presentation is voice and video – most traffic is bi-directional TCP/IP.
         5. The 3GPP request was for a handover metric to decide which network to associate with.
         6. The group needs to carefully consider use cases when looking at what metrics to define/apply.
   9. **AOB**
      1. The next call will go through comment assignment status.
   10. **Adjourned** at 11:58am ET
2. **802.11 REVmd Telecon – June 30, 2017 10:00-11:00 ET**
   1. **Called to order** by the chair, Dorothy STANLEY (HPE) at 10:02am ET.
   2. **Attendance**:
      1. Dorothy STANLEY (HPE),
      2. Mark HAMILTON (Brocade),
      3. Edward AU (Huawei),
      4. Chris HANSEN (Peraso),
      5. Mark RISON (Samsung),
      6. Osama ABOULMAGD (Huawei),
      7. Michael MONTEMURRO (BlackBerry),
      8. Peter ECCLESINE (Cisco)
      9. Menzo WENTINK (Qualcomm)
      10. Jon ROSDAHL (Qualcomm)
   3. **Approve Agenda**
      1. The draft agenda for the June 30th teleconference is:
      2. Call to order, attendance, and patent policy, participation slide
      3. Editor Report
      4. Presentations and comment resolution
         1. 11-17-0950 Operating classes (Peter ECCLESINE)
         2. 11-17/0927 “Obsolete” tab (Mark HAMILTON)
         3. 11-17-0929 – Edward AU – review one comment
         4. 11-17-0930r1 – Mike M. – removal comments, +2 Operating Classes Documents
      5. Schedule, see agenda document [https://mentor.ieee.org/802.11/dcn/17/11-17-0872-01-000m-july-2017-tgmd-agenda.pptx slides 12-15](https://mentor.ieee.org/802.11/dcn/17/11-17-0872-01-000m-july-2017-tgmd-agenda.pptx%20slides%2012-15)
      6. AOB
      7. Adjourn
      8. After discussion and addition of presentations to the agenda as noted above, no objection to following the agenda proposed in 3.3.1.
   4. **Call for potentially essential patents**:

**If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**

I.      Either speak up now or

 ii.      Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or

iii.      Cause an LOA to be submitted

* + 1. No items noted
  1. Note **Participation slide** for review:
     1. <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pptx>
  2. **Editor report** – Emily was excused today as she is on Holiday. Emily has posted the comment collection comments and editor report. No report planned this week.

a.       <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-00-000m-802-11revmd-editor-s-report.ppt> - Emily Qi

b.      Comments received in the recent comment collection are posted here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-00-000m-revmd-wg-cc-comments.xls>

c.       MAC, PHY, GEN and Editor spreadsheets are being posted

* 1. **Presentation**: 11-17-0950 Operating classes (Peter Ecclesine – 15 minutes)
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0950-00-000m-cid-337-super-operating-classes.pptx>
     2. Review presentation
        1. Questions
        2. Slide 5 – Super OC Practice question
        3. Sets of super classes may be a question to address
        4. For example, channel 165 or channel 125 that does have it.
        5. The super classes will most likely tied to regulatory rules and the change of rules will need to be addressed in the super classes.
        6. The concept is to be able to signal one super class rather than a long list of specific channels
     3. Suggestion to have more conversations with author and bring back solutions in a updated submission.
  2. **Discussion** of “Obsolete” tab of 11-170927 (Mark Hamilton )
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-02-000m-revmd-mac-comments.xls>
     2. Review obsolete Tab concept
     3. We will need to review these one by one at some point, but wanted to introduce the concept at this point.
     4. Operating Classes in Japan were not used, so we can delete them. – maybe.
     5. Many of them were marked obsolete in the 2016 Revision, so we can review those that have not already been marked deprecated and mark them as deprecated, and those that have been so marked, we can move to remove in the new revision.
     6. A case by case basis would need to be done and a submission on the detail on the removal. We need to know if the group would like to have a submission done, i.e. if the group is willing to remove the feature.
     7. An email to the WG Reflector should be sent to highlight the list to the WG for discussion starting in Berlin.
     8. Need to coordinate the Removal Comments into a single tab – Move to MAC for Mark Hamilton to coordinate.
     9. Concern with having all the obsolete in MAC may not be as obvious – note that they will be on a separate tab, and will notify the group where the topic is located.
  3. **Discussion**: 11-17-0929 – Edward – one comment
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-01-000m-revmd-editor2-comments.xlsx>
     2. Review CID 189 – “backoff timer”
        1. Suggested change is to change “timer” to “counter”
        2. MAC has some similar comments, and would ask that this CID move to MAC and be considered at the same time.
        3. CID 294 one that is similar – Graham SMITH is preparing a submission on resolving that.
     3. Ongoing discussion in preparing for Berlin
  4. **Discussion:** 11-17-0930r1 – Mike M. – removal comments, +2 Operating Classes Documents
     1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0930-01-000m-revmd-cc25-phy-plus-comments.xls>
     2. 6 Comments on proposals made during TGmc, and ask if they should have the presentations be redone for reconsideration.
        1. Agreement to have time scheduled for this set. (11mc proposal Comment Group).
        2. All were from Mark RISON, and so he was asked to schedule time.
        3. Mark R. indicated that due to clashes, he can only attend Tuesday PM1, and we will take CID 191 and 192.
        4. There are some Editorial Comments that are similar, these will need to be moved to PHY to group together and schedule.
        5. The presentations for this set of CIDs are in 16/839r3 and 16/0276r15 .
     3. 2 Proposed resolutions for discussion today:
     4. CID 68:
        1. Review comment
        2. Proposed Resolution:

REVISED (PHY: 2017-06-29 17:20:26Z) CID 68 Remove obsolete Operating Classes from Table E-3Editor p3567 E.1Delete second and third sentences at top of p3567 above Table E-3Change Operating Classes 2, 4, 5, 7, 9, 10, 12, 14, 15, 16, 18, 19, 21, 23, 24, 27, 28, 35, 38, 40, 43, 45, 47, 48, 49, 50, 52, 53, 54 and 55 to have Reserved in all fields except Operating Class, and remove asterisk following each of these Operating Classes.

* + - 1. Editor question – is the resolution clear enough?
         1. Edward said yes
      2. No objection to the proposed change
      3. **Mark Ready for Motion**
    1. CID 176:
       1. Review Comment
       2. Review Ad-hoc Notes:
          1. PHY: 2017-06-29 17:27:24Z - status set to: DiscussOn channel validity, Section E.1 text notes “Regulatory requirements that do not affect interoperability are not addressed in this standard. Implementers are referred to the regulatory sources in Table D-1 (Regulatory requirement list) and their successors for further information. Operation in countries within defined regulatory domains may be subject to additional or alternative national regulations.” All the global channel sets are normative, and it is useful to implementers of the standard to see the expected channel set for a given global operating class. It is not useful to remove channels 12 and 13 from the Operating Class 81 (2.4 GHz) channel set because they are not valid in all regdoms. We revise the definition of channel set to clarify this distinction for Global Operating Classes, which applies to all regulatory domains.
       3. Proposed Resoution:

REVISED (PHY: 2017-06-29 17:27:50Z) –

Editor E.1 p3562 line 48Insert text after first sentence of sixth paragraph as follows:”The channel set in the global operating classes table (Table E-4—Global operating classes) is the list of integer channel numbers that are legal for a class in one or more regulatory domains.”

* + - 1. Discussion:
         1. Should also put this text in a note next to the E-4 table also.
         2. The Global operating classes seems to be a superset of the classes being supported – this may be not well defined.

At the time of 11j, it was setup for indicating how to setup a receiver

Also there is a supported channels element

* + - 1. More work is needed on this CID and need to review later.
  1. **Notice of Schedule Update**
  2. **Updated agenda document**
     1. [https://mentor.ieee.org/802.11/dcn/17/11-17-0872-01-000m-july-2017-tgmd-agenda.pptx slides 12-15](https://mentor.ieee.org/802.11/dcn/17/11-17-0872-01-000m-july-2017-tgmd-agenda.pptx%20slides%2012-15)
     2. we will discuss in Berlin
  3. **Adjourned** at 11:01am ET

**References:**

1. 802.11 REVmd Telecon – May 30, 2017
2. <https://www.ietf.org/proceedings/98/slides/slides-98-intarea-80211-multicast-testbed-and-results-00.pdf>
3. <https://mentor.ieee.org/802.11/dcn/17/11-17-0871-00-000m-extended-nss-editorial-errata.docx>
4. 802.11 REVmd Telecon – June 23, 2017
5. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-00-000m-802-11revmd-editor-s-report.ppt>
6. <https://mentor.ieee.org/802.11/dcn/17/11-17-0891-00-000m-estimated-throughput-and-metrics-for-handover-decision.pptx>
7. 802.11 REVmd Telecon – June 30, 2017
8. <https://mentor.ieee.org/802.11/dcn/17/11-17-0920-00-000m-802-11revmd-editor-s-report.ppt>
9. <https://mentor.ieee.org/802.11/dcn/17/11-17-0914-00-000m-revmd-wg-cc-comments.xls>
10. <https://mentor.ieee.org/802.11/dcn/17/11-17-0950-00-000m-cid-337-super-operating-classes.pptx>
11. <https://mentor.ieee.org/802.11/dcn/17/11-17-0927-02-000m-revmd-mac-comments.xls>
12. <https://mentor.ieee.org/802.11/dcn/17/11-17-0929-01-000m-revmd-editor2-comments.xlsx>
13. <https://mentor.ieee.org/802.11/dcn/17/11-17-0930-01-000m-revmd-cc25-phy-plus-comments.xls>
14. [https://mentor.ieee.org/802.11/dcn/17/11-17-0872-01-000m-july-2017-tgmd-agenda.pptx slides 12-15](https://mentor.ieee.org/802.11/dcn/17/11-17-0872-01-000m-july-2017-tgmd-agenda.pptx%20slides%2012-15)