IEEE P802.11
Wireless LANs

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| REVmc BRC April 15 Telecon Minutes |
| Date: 2016-04-15 |
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Abstract

Minutes for the REVmc BRC Telecon April 15th , 2016:

Fri, Apr 15, 7:00 am | 3 hr San Francisco (Pacific Daylight Time, GMT-07:00)

When it’s time, join the meeting from here:

<https://meetings.webex.com/collabs/meetings/join?uuid=M6MS87YTJTJFE2A86451187DTG-4O2>

Agenda

TGmc BRC comment resolution

Meeting number: 197 016 072 +1-415-655-0001 US TOLL Access code: 197 016 072

Draft agenda:

1. Call to order, attendance, and patent policy

2. Editor report

3. Comment resolution for Available CIDs:

11-16-384 (Dan H),

11-16-273 (Adrian),

11-16-303 (Graham),

11-16-276 (Mark R),

11-290 (Mark H)

4. AOB

5. Adjourn

Note that BRC meetings and teleconferences are subject to IEEE policies and procedures, see:

–        [IEEE Patent Policy](http://standards.ieee.org/board/pat/pat-slideset.ppt) –        [Patent FAQ](http://standards.ieee.org/board/pat/faq.pdf) –        [Letter of Assurance Form](http://standards.ieee.org/board/pat/loa.pdf)
–        [Affiliation FAQ](http://standards.ieee.org/faqs/affiliationFAQ.html) –        [Anti-Trust FAQ](http://standards.ieee.org/resources/antitrust-guidelines.pdf)
–        [Ethics](http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf) –        [802 LMSC P&P](http://standards.ieee.org/board/aud/LMSC.pdf) –        [802LMSC OM](http://grouper.ieee.org/groups/802/PNP/approved/IEEE_802_OM_v16.pdf)

1. REVmc BRC Telecon April 15, 2016
	1. **Called to order** at 8:03am ET by Dorothy STANLEY, Chair of REVmc TG.
	2. **Attendance:** Dorothy STANLEY (HPE), Adrian STEPHENS (Intel), Edward AU (Huawei); Jingjing JIANG (Marvell); Jon ROSDAHL (Qualcomm), Jouni Malinen (Qualcomm), Paul NIKOLICH (Yasband), Sigurd SCHELSTRAETE (Quantenna); Mark RISON (Samsung); Emily QI (Intel); Osama (Huawei); Sean COFFEY (Realtek);
	3. **Review Patent Policy**
		1. No Issues noted.
	4. **Review Draft agenda**:

1. Call to order, attendance, and patent policy

2. Editor report

3. Comment resolution

Available CIDs:

11-16-501r1 (Edward) PICS and MIB comments – CID 7556 (5mins)
11-16-273r6 (Adrian) – CIDs 7481, 7691, 7694, 7770, 7783 (45mins)
11-16-260r1(Adrian) CID 7075

CIDS 7106, 7107 – reassign
11-16-303 (Graham) – 1 hour
11-16-228, 11-16-385, 11-16-304, 11-16-237, 11-16-221, 11-16-278 (Graham)

11-16-276 (Mark R) – 1 hour

Another day: 11-16-384 (Dan H), 11-16-292 (Mark H)
4. Motions

Approve Jan & Feb minutes:

–        [https://mentor.ieee.org/802.11/dcn/16/11-16-0123-00-000m-revmc-brc-minutes-for-january-2016-atlanta.docx](https://mentor.ieee.org/802.11/dcn/16/11-16-0244-01-000m-revmc-brc-telecon-minutes-feb-2016.docx)

–        <https://mentor.ieee.org/802.11/dcn/16/11-16-0244-01-000m-revmc-brc-telecon-minutes-feb-2016.docx>

–        <https://mentor.ieee.org/802.11/dcn/16/11-16-0249-01-000m-revmc-brc-minutes-for-f2f-feb-srt-hosted-ft-lauderdale.docx>

Moved:

Last motion number in March was 202, so continue with 203:

Motion 203: Approve the comment resolutions in the following document tabs and incorporate the text changes into the TGmc draft:

-          <https://mentor.ieee.org/802.11/dcn/15/11-15-0565-40-000m-revmc-sb-mac-comments.xls> “Motion MAC-BQ” tab

-          <https://mentor.ieee.org/802.11/dcn/15/11-15-0665-28-000m-revmc-sb-gen-adhoc-comments.xlsx> “Motion GEN-Macau-B” and “GEN-April Telecon” tabs

 5. AOB

Next call THURSDAY April 21, 1.5 hours, 10am Pacific – continue comment resolution

6. Adjourn

* + 1. Note that BRC meetings and teleconferences are subject to IEEE policies and procedures, see:

–        [IEEE Patent Policy](http://standards.ieee.org/board/pat/pat-slideset.ppt) –        [Patent FAQ](http://standards.ieee.org/board/pat/faq.pdf)
–        [Letter of Assurance Form](http://standards.ieee.org/board/pat/loa.pdf) –        [Affiliation FAQ](http://standards.ieee.org/faqs/affiliationFAQ.html)

–        [Anti-Trust FAQ](http://standards.ieee.org/resources/antitrust-guidelines.pdf) –        [Ethics](http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf)

–        [802 LMSC P&P](http://standards.ieee.org/board/aud/LMSC.pdf) –        [802LMSC OM](http://grouper.ieee.org/groups/802/PNP/approved/IEEE_802_OM_v16.pdf)

* + 1. After discussion on who was ready and the order of presentations, agree to give 1 hour 45 mins to Mark RISON and hold a few minutes for motions at the end of the call. We would proceed with those that were present as listed in the draft agenda.
	1. **Editor Report** – Adrian STEPHENS
		1. Review of comments that were approved done by editor team
		2. Technical issues with the implemented changes will need to come back for further discussion in about a week’s time to REVmc BRC.
		3. Q: Latest Draft is 5.2 in pdf on the server, and want to know if a draft in rtf could be made available?
			1. Need to have some time to post a new revision
			2. Propose to have both pdf and rtf in 5.3 is posted in about a week.
	2. **Review doc 11-16/499r2** Edward AU (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0499-02-000m-cid-7452.docx>
		2. CID 7452 (EDITOR)
			1. Review comment
			2. Review discussion
			3. Discussion on the boxed text from the submission.
			4. Discussion on improving the proposed resolution context.
			5. Proposed Resolution: Change the sentence “The RXVECTOR represents a list of parameters that the PHY provides the local MAC entity upon receipt of a valid PHY header or upon receipt of the last PSDU data bit in the received frame.” to “The RXVECTOR represents a list of parameters that the PHY provides the local MAC entity.” at 560.39 in clause 8.3.5.14.2.
			6. No objection – Mark Ready for Motion
	3. **Review doc 11-16/273r7** Adrian STEPHENS (Intel)
		1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0273-07-000m-sb1-stephens-resolutions-part-3.doc>
		2. CID 7481 (MAC)
			1. Review Comment
			2. Previous discussion was to follow the general diection, but needed to also add a couple correction. This is now in the proposed resolution.
			3. Alternate proposal offered by Mark RISON – that addresses all the 2 to the 13th issues.
				1. We can look at the 2 to the 13th issues separately or at this time in conjunction with this CID.
				2. We could just accept the comment and let Mark’s submission address the other issues.
				3. From the submission the proposed resolution: Revised. At 1253.56, after “FORMAT HT\_MF or HT\_GF” add “or within an MPDU carried in a non-HT PPDU”

At 590.37, change the exponent of “Non-HT non-VHT non-DMG PPDU and non-HT duplicate PPDU” from 13 to 12.

At 590.46, change reference from “Table 16-6” to “Table 16-4 (HR/DSSS PHY characteristics)”

This makes the change indicated by the comment and fixes two adjacent related errors.

* + - 1. Proposed Resolution: Accept
			2. No objection – Mark Ready for Motion
		1. CID 7691 (MAC)
			1. Review Comment
			2. Review discussion
			3. We need existing 11ac to remain compliant, and we need to back out the previous change in this case.
			4. There is another CID that is similar – 7694 but different location.
			5. Is there any value in removing the Table?
				1. Need more discussion with Matthew FISCHER who was the author that put the table in.
			6. ACTION ITEM #1: Adrian to ask Matthew FISCHER if anything is lost by removing Table 10-8, and if so, to find a way to reference it.
			7. Defer for now, and also the next CID 7694.
		2. CID 7770 (MAC)
			1. Need to defer, feedback has not completed.
			2. Need to discuss if this makes sense, and to determine what may be missing.
			3. Add Sigurd to the discussion.
			4. Discussion on the merits of the comment
			5. Note page 616 line 13 as an example of associated case
			6. Possibly the issue is the non-associated case
			7. More discussion is needed, and a thread on the reflector may be better to help resolve this.
			8. ACTION ITEM #2: Adrian to start a thread on the Reflector
		3. CID 7783 (MAC)
			1. Review comment
			2. Review discussion
			3. This was most likely added during the 11w time, so we should be careful in determining a change, as this has not had any complaints over the last 7 years.
			4. There was a point made that there is no need for the Transactionidentifier for the check as the project frame has already determined the validity of the frame. There is no value in this parameter.
			5. Discussion on this was done a long time ago about the use of Protected frames. The proposed change may not cause interoperability issues.
			6. We could reassign the CID to Jouni
			7. Page 1720 line 1 is the sited location, but there are multiple locations that are similar
			8. Association receipt procedures were reviewed, and ReAssociation.
			9. Discussion on if the changes were going to be inline or not.
			10. Action item #3: More Work needed – Reassign CID to Jouni, and have Mark, Jouni, and Adrian work out the details.
		4. CID 7106 (GEN) and 7107 (GEN)
			1. Need to reassign the CID
			2. Assign CID 7106 (GEN) to Sigurd
			3. For CID 7107, we are looking at the BSS bandwidth, and we need to signal across the PHY SAP. It is marked as Submission required.
			4. The proposal would be to revert the changes from last time, or we need to have someone step up and make a change.
			5. This should be something that comes clean when we finish some of the other changes being proposed by Mark RISON
			6. Assign CID 7107 (GEN) Mark RISON
			7. A possible resolution would be to consider that a possible resolution would be to revert the previous changes.
	1. **Review Doc 11-16/276r4** Mark RISON (Samsung) (start 11:10am)
		1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>
		2. CID 6431 (Previous Ballot)
			1. Review comment
			2. The proposed change was incomplete, so we need to complete the changes as noted in the submission.
			3. Because it is from a previous ballot a separate motion would be warranted: Proposed motion: Make the changes shown under “Proposed changes” for CID 6431 in 11-16/276r4 ,< <https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>>.
			4. No objection – Dorothy to prepare a motion for next telecom
			5. ACTION ITEM #4: Dorothy to prepare a motion for making the changes in 11-16/276r4 for CID 6431.
		3. CID 7177 (MAC)
			1. Review comment
			2. Review discussion
			3. Previously had a proposed resolution in 276r1 prepared during a February BRC, but has not been motioned.
			4. Proposed resolution: Revised Make changes as shown in 11-16/0276r4 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx> >, for CID 7177. These changes implement the new feature to support indicating preference for not receiving LDPC.
			5. No objection – Mark Ready for Motion
		4. CID 7398, 7399, 7400 (MAC)
			1. Review comments
			2. Proposal is to change the name to LLC Header Removed field.
			3. Proposed resolution for CID 7398 (MAC): REVISED Make the changes shown under “Proposed changes” for CIDs 7398, 7399 and 7400 in 11-16/0276r4 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx> >, which effect the requested change and make additional clarifications.
			4. Proposed resolution for CID 7399 (MAC): REJECTED The LLC Header Copy field is required to contain an LLC header as defined in IEEE Std 802.2, even if the No-LLC field is 0 (i.e. that LLC is included over the air).
			5. Proposed resolution for CID 7400 (MAC): REJECTED The LLC Header Copy field is required to contain an LLC header as defined in IEEE Std 802.2.
			6. No objection – Mark Ready for motion
			7. Some concern on the “would be acceptable” language, but we may revisit at a later time.
		5. CID 7603 (MAC)
			1. Review comment
			2. Review discussion
			3. Proposed Resolution: REVISED; Make the changes shown under “Proposed changes” for CID 7603 in 11-16/0276r4 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx> >, which effect the requested change.
			4. Discussion on the reason for should vs shall in the proposed change.
			5. No objection – Mark Ready for Motion
		6. Return to 7398 (MAC)
			1. The “would be acceptable” language is odd.
			2. Possble to change the language to “is acceptable to the STA sending the ADDTS.Response or DMG.ADDTS.Response Frame.
			3. Update the Resolution: to R5
			4. **UPDATED Proposed resolution for** CID 7398 (MAC): REVISED Make the changes shown under “Proposed changes” for CIDs 7398, 7399 and 7400 in 11-16/0276r5 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-05-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx> >, which effect the requested change and make additional clarifications.
			5. The updated resolution was agreed to be used.
		7. CID 7468 (MAC)
			1. Review comment
			2. Proposed resolution: Accept
			3. No objection – Mark ready for Motion
		8. CID 7504 (MAC)
			1. Review Comment
			2. Proposed Resolution: Rejected: Such a mechanism is not necessary. If the responding STA wishes to change the parameters, it can terminate the FTM session using an FTM frame with the Dialog Token set to 0, and if the initiating STA wishes to continue doing FTM it will send an FTM Request frame to start a new FTM session, allowing the responding STA to specify new parameters.
			3. No objection – Mark Ready for Motion
		9. CID 7427 (MAC)
			1. Review comment
			2. The proposed change was not complete.
			3. Proposed resolution: REVISED; At 1658.41 change “Since the channel access in a DMG BSS allows DMG STAs to send frames directly to each other, a DMG STA shall not use the DLS protocol.” to “A DMG STA shall not use the DLS protocol.”
			4. No objection – Mark Ready for Motion
		10. Mark needed to leave the call for a time. (11:55am)
	2. **Review doc 11-16/260r2** Adrian STEPHENS (Intel)
		1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0260-02-000m-sb1-stephens-resolutions-part-2.doc>
		2. There is some e-mail that has been received that has not been incorporated yet into this submission.
		3. CID 7075 (MAC)
			1. Review comment and prior discussion
			2. Will need to have more discussion on this CID.
	3. **Motions:**
		1. Motion 15April#1: Move to Approve Jan & Feb minutes: – [https://mentor.ieee.org/802.11/dcn/16/11-16-0123-00-000m-revmc-brc-minutes-for-january-2016-atlanta.docx](https://mentor.ieee.org/802.11/dcn/16/11-16-0244-01-000m-revmc-brc-telecon-minutes-feb-2016.docx) –  <https://mentor.ieee.org/802.11/dcn/16/11-16-0244-01-000m-revmc-brc-telecon-minutes-feb-2016.docx>

–<https://mentor.ieee.org/802.11/dcn/16/11-16-0249-01-000m-revmc-brc-minutes-for-f2f-feb-srt-hosted-ft-lauderdale.docx>

* + - 1. Moved Jon ROSDAHL 2nd Emily QI
			2. Results: 6-0-0 Motion Passes
		1. **Motion #203:**

Approve the comment resolutions in the following document tabs and incorporate the text changes into the TGmc draft:

-11/15/565r40 < <https://mentor.ieee.org/802.11/dcn/15/11-15-0565-40-000m-revmc-sb-mac-comments.xls>> “Motion MAC-BQ” tab except CIDs 7672, 7767, 7437, 7438, 7317, 7324, 7378, 7658, 7648, 7494, 7539, 7702, and 7701.

-11-15/665r28 <<https://mentor.ieee.org/802.11/dcn/15/11-15-0665-28-000m-revmc-sb-gen-adhoc-comments.xlsx>> “Motion GEN-Macau-B” and “GEN-April Telecon” tabs, changing the resolution to CID s 7437 and 7438 to “Revised” with a resolution of “At lines 3128.50, 3256.29, 3370.61, and 3259.20 delete "This field contains the fixed-point part of Altitude." .

- Resolve CID 7749 as

”REJECTED (MAC: 2016-03-15 08:15:44Z): The standard is clear. See 10.24 and 9.2.4.5.4:

A) 10.24 Block acknowledgment (block ack). The sub clause contains all definition related to behavior of the block acknowledgement feature. Definitions across the entire sub clause is devoted to QoS data frames, QoS data MPDU’s and MSDU’s. An Action no Ack frame is of different frame type than QoS data frame so there is nothing that needs clarification that Action No Ack frames are not related to the block acknowledgement feature.

B) 9.2.4.5.4 Ack Policy subfield. As clearly stated in the Table 9-9—Ack Policy subfield in QoS Control field of QoS Data frames in relation to No Ack policy: “This value of the Ack Policy subfield is not used for QoS Data frames with a TID for which a block ack agreement exists.”

No change is needed. “

* + - 1. Discussion on which CIDs to pull or change – motion updated to reflect the concerns.
				1. CID 7543 (MAC)

Not pulled, but there is an editorial issue that the editor will address when implementing the resolution. Capital “Civic” should be lower case “Civic”

This can be fixed as an editorial in the database or by the editors.

* + - 1. CID 7749 (MAC) was pulled in Macau, so we will use the previously agreed resolution in the motion today.
				1. From the MAC adhoc notes: MAC: 2016-03-18 08:03:50Z - Pulled from Motion MAC-BP. Assigned to Mark Rison.
				2. Reinstate the proposed resolution
			2. Moved: Mark RISON 2nd Jouni Malinen
			3. Results: 7-0-0 Motion passes
	1. **Review Doc 11-16/276r4** Mark RISON (Samsung) (12:23pm)
		1. <https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>
		2. CID 7529 (MAC)
			1. Review Comment
			2. Discussion on Robust Management frames.
			3. More changes may need to be made to the proposed resolution.
			4. If you add the Action No Ack Frames to the list you may break because they are not part of the Action Frame category.
			5. The concept may be true, but the fix would need more research.
		3. CID 7429 (MAC)
			1. Review Comment
			2. Review the discussion
			3. Proposed Resolution: REVISED; Make the changes shown under “Proposed changes” for CID 7429 in 11-16/0276r4 <<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx> >, which make the rules for TSPEC overriding clear.
			4. No objection – Mark Ready for Motion
		4. CID 7347 (MAC)
			1. Review Comment
			2. Review the discussion
			3. Concern with the resolution Note.
			4. Question on if the change is to handle a particular implementation, or is the standard unclear?
				1. We can see that there at least two ways to interpret the statements, so we are not making the change for an implementation specifically, but to make the standard clear.
			5. Proposed Resolution: REVISED; In 9.4.2.25.2 at 830.17 after "The Pairwise Cipher Suite Count field indicates the number of pairwise cipher suite selectors that are contained in the Pairwise Cipher Suite List field." add "The value 0 is reserved."
			In 9.4.2.25.3 at 832.32 after "The AKM Suite Count field indicates the number of AKM suite selectors that are contained in the AKM Suite List field." add "The value 0 is reserved."

In 9.4.2.25.5 change "The PMKID Count specifies the number of PMKIDs in the PMKID List field. The PMKID list contains 0 or more PMKIDs" to "The PMKID Count field indicates the number of PMKIDs that are contained in the PMKID List field. The PMKID List field contains a series (possibly empty) of PMKIDs"

Note to the commenter: PMKIDCount 0 is required if PMKSA caching is not used but PMF is used. It’s only the pairwise cipher and AKM suite counts that can’t be 0.

* + - 1. No Objection – Mark Ready for Motion
		1. CID 7376 (GEN)
			1. Review comment
			2. Discussion on the replay counter.
			3. While this is not perfect wording, no objection to the wording.
			4. Review the logic in the requirement specified.
			5. The comment said we are comparing counters and priorities, so how is this better?
				1. This is showing how the comparisons are made and for the priorities are separate.
			6. Proposed Resolution: REVISED (GEN: 2016-04-15 16:46:09Z) Change the cited sentence to "A transmitter shall not use an IEEE Std 802.11 MSDU or A-MSDU priority if this would cause the total number of priorities used during the lifetime of the SA to exceed the number of replay counters supported by the receiver (for a pairwise SA) or all the receivers (for a group SA) for that SA.".
			7. No objection – Mark Ready for Motion
		2. CID 7527 (GEN)
			1. Review Comment
			2. Redundant acronym and the final word repeated. TPK Key for example.
			3. Proposed Resolution: REVISED;

Change “PMK key” to “PMK” at 2007.4.

Change “PSK key” to “PSK” at 126.47, 126.49 (but see also the resolution to CID 7378).

Change “PTK key” to “PTK” at 1996.54, 2072.48, 2073.1, 2075.2, 2086.45.

Change “PTK Key request” to “PTK rekey request” at 2097.48.

Change “PTK keys” to “PTK” at 2102.35.

Change “GTK keys” to “GTK” at 120.18.

Change “IGTK key” to “IGTK” at 1954.1, 2050.25.

Change “TPK key” to “TPK” at 1984.63.

Change “TPK Key Lifetime” to “TPK lifetime” at 1145.57 (2x), 1174.51 (2x), 1176.35 (2x), 1177.57 (2x).

Change “SMK key” to “SMK” at 2007.5.

Change “STK Key” to “STK” at 2040.53.

Change “STK keys” to “STKs” at 2937.30.

Change “using SKCK key” to “using the SKCK” at 2011.2, 2013.40.

Note to the commenter: “FooK key holder” is not to be understood as “holder for foo key key” but as “key holder for foo key”. Similarly for “IGTK key data encapsulation (KDE)”.

* + - 1. Mark had an issue on his computer, and we did not finish the check of the potential changes or conclude the discussion.
			2. Everyone to look at the proposal and we will come back to this CID later.
	1. Next Telecon Thursday April 21
		1. This is not the normal cadence – please take note is on Thursday for 1.5 hours.
	2. Adjourned at 12:57pm ET

**References:**

<https://mentor.ieee.org/802.11/dcn/16/11-16-0499-02-000m-cid-7452.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0273-07-000m-sb1-stephens-resolutions-part-3.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-04-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0276-05-000m-resolutions-for-some-comments-on-11mc-d5-0-sbmc1.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0260-02-000m-sb1-stephens-resolutions-part-2.doc>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0123-00-000m-revmc-brc-minutes-for-january-2016-atlanta.docx>

<https://mentor.ieee.org/802.11/dcn/16/11-16-0244-01-000m-revmc-brc-telecon-minutes-feb-2016.docx>

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