IEEE P802.11
Wireless LANs

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| TG REVmc Telecon Minutes Nov-Dec 2014, Jan 2015 |
| Date: 2014-12-12 |
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Abstract

IEEE 802.11 REVmc Task Group Teleconference minutes for Nov 21, 2014 to Jan 9th.
Assignment of comment resolution topics to the scheduled teleconferences:

R0: November 21, 2014:

1. 11-14-1413
2. 11-14-1041
3. 11-14-1104

R1: December 5th

1. 11-14- 1041 – CIDs 3394, 3087, 3014
2. 11-14-1104 - CIDs 3483 and more

R2: December 12th

1. 11-14-1413 CIDs 3232, 3499, 3392, 3692
2. 11-14-1104 – DMG CIDs

R3: December 19th

1. Available CIDs

R4: January 9th

1. Available CIDs

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

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|   [IEEE Patent Policy](http://standards.ieee.org/board/pat/pat-slideset.ppt)  |    [Anti-Trust FAQ](http://standards.ieee.org/resources/antitrust-guidelines.pdf) |      [802 WG P&P](http://grouper.ieee.org/groups/802/PNP/approved/IEEE_802_WG_PandP_v15.pdf) |
|   [Patent FAQ](http://standards.ieee.org/board/pat/faq.pdf)  |     [Ethics](http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf) |       [IEEE 802.11 WG OM](https://mentor.ieee.org/802.11/dcn/13/11-13-0001-03-0000-802-11-operations-manual.docx) |
|    [Letter of Assurance Form](http://standards.ieee.org/board/pat/loa.pdf) |     [802 LMSC P&P](http://standards.ieee.org/board/aud/LMSC.pdf) |  |
|    [Affiliation FAQ](http://standards.ieee.org/faqs/affiliationFAQ.html)  |      [802 LMSC OM](http://grouper.ieee.org/groups/802/PNP/approved/IEEE_802_OM_v13.pdf) |  |

1. **Minutes for 802.11 TG REVmc on Friday November 21, 2014 –**
	1. **Called To Order** by Dorothy STANLEY (Aruba), Chair, at 10:01ET
	2. **Review Patent Policy** – no issues noted
	3. **Review Agenda**
		* 1. The agenda as previously announced:
			1. Call to order, patent policy, attendance
			2. Editor report

3. Comment resolution:

11-14-1413

11-14-1041

11-14-1104

Remaining Editorial CIDs

4. AOB

5. Adjourn

* + 1. No objection to the agenda
	1. **Attendance**: Edward AU (Marvell); Carlos Cordeiro (Intel); Mark HAMILTON (Spectralink); Mark RISON (Samsung); Emily QI (Intel); Dorothy STANLEY (Aruba); Adrian STEPHENS (Intel); Graham SMITH (SR Technologies).
	2. **Editor Report**:
		1. D3.4 Editing of November 2014 approved resolutions nearly completed. Editors and submission authors will review editing.
		2. Several approved comment resolutions need to be revisited – editing instructions incomplete.
		3. Editor objected-to comments – Editors in discussion with commenter.
		4. Adrian to post updated version of 11-13-0233
	3. **Review 11-14/1413r3** – Carlos CORDEIRO (Intel)
		1. CID 3232 (MAC)
			1. Reviewed proposed resolution. Current text is underspecified; tables should list all included elements.
			2. Discussion on “order”. Requirement exists earlier in the text.
			3. Carlos to develop resolution text to modify tables to include elements.
			4. Review on Dec 12th teleconference.
		2. CID 3392 (MAC)
			1. Cited text duplicates text in 9.5.
			2. Consider deleting text in 9.5
			3. Review on Dec 12th teleconference.
		3. CID 3084 (MAC)
			1. Reviewed comment and proposed resolution.
			2. Agree to reject due to insufficient detail as shown in 11-14-1413r3.
		4. CID3264 (MAC)
			1. Reviewed comment and proposed resolution.
			2. Agree to reject due to insufficient detail as shown in 11-14-1413r3.
		5. CID 3241 (MAC)
			1. Reviewed comment and proposed resolution.
			2. Minor edits to proposed text, agree to revised resolution as shown in 11-14-1413r3.
		6. CID 3499 (MAC)
			1. Reviewed comment and proposed resolution.
			2. Comment is on same table as in CID 3232.
			3. Single resolution to address both comments.
			4. Review on Dec 12th teleconference.
		7. CID 3692 (MAC)
			1. Reviewed comment and proposed resolution.
			2. Identified additional locations with similar text – list items c and g. Need to review to determine if similar changes needed to those sections also.
			3. Review on Dec 12th teleconference.
	4. **Review 11-14-1041r8** Dorothy STANLEY (Aruba Networks)
		1. CID 3087 (GEN)
			1. Reviewed comment and proposed resolution.
			2. Discussion – new text unclear; is existing text even needed.
			3. Proposed text edits from Dan Harkins, review on Dec 5th teleconference.
		2. CID 3014 (MAC)
			1. This CID was resolved in November.
			2. Resolution didn’t include changes at 1099.41, 1102.47,1103.27,1104.52
			3. Bring back resolution to include changes at the additional locations and consistent with approved changes.
			4. Discuss on December 5th teleconference.
		3. CID 3512 (GEN)
			1. Reviewed comment and context
			2. Topic was not discussed in ARC.
			3. Agree to reject resolution as shown in 11-14-1041r8, insufficient detail.
		4. CID 3292 (MAC)
			1. Reviewed comment and proposed resolution
			2. Similar comment CID 3069 resolved in 11-14-0780r3 that deleted the cited element. Agree to adopt the same resolution.
			3. Agree to revised resolution: Incorporate the changes in 11-14-0780r3 under CID 3069
		5. CID 3394 (MAC)
			1. Review comment and proposed resolution
			2. Information intended for management system use.
			3. Consensus to not change the format.
			4. Agree to add an example. Mark Rison to draft.
			5. Discuss on Dec 5th teleconference.
		6. CID 3353 (GEN)
			1. Review Comment and context
			2. Agree to the proposed revised resolution as shown in 11-14-1041r8.
	5. **Review Document 11-14/1104** Mark RISON (Samsung)
		1. CID 3483 (MAC)
			1. Reviewed proposed resolution.
			2. Edits made to proposed text.
			3. Ran out of time, consider on next call.
	6. **AOB:**
		1. Items for next call in 2 weeks, December 5th, 2014:
			1. 11-14-1041 CIDs 3087, 3014, 3394
			2. 11-14-1104 CID 3483
			3. Additional available CIDs
	7. **Adjourned** 12:01pm
1. **Minutes for 802.11 TG REVmc on Friday 5 December, 2014 –**
	1. **Called To Order** by Dorothy STANLEY (Aruba), Chair, at 10:04ET
	2. **Review Patent Policy** – no issues noted
	3. **Review Agenda**
		1. December 5th Agenda
			1. The agenda as previously announced:
			1. Call to order, patent policy, attendance
			2. Editor report

3. Comment resolution:

 11-14- 1041 – CIDs 3394, 3087, 3014

 11-14-1104 - CIDs 3483 and more

* + - 1. No objections -
		1. **Attendance**: ); Dorothy STANLEY (Aruba); Adrian STEPHENS (Intel); Jon Rosdahl (CSR); Mark HAMILTON (Spectralink); Mark RISON (Samsung); Graham SMITH (SR Technologies). Osama ABOULMAGD (Huawei); Scott Marin (Nokia); Emily QI (Intel)
	1. **Editor Report**:
		1. Previous editorial comments that had concerns has new a set of proposed resolutions in 11-13/233r44
			1. There are about 20 CIDs that need review or more input
		2. Review of D3.4 is ongoing – 11 Dec due date to provide a D3.4 before Christmas
	2. Review doc 11-14- 1041r9 – Dorothy Stanley
		1. – CIDs 3394, 3087, 3014
		2. CID 3394 – page 29 - MAC
			1. Review discussion history
			2. Review new proposed resolution
			3. Proposed Resolution – CID 3394: REVISED (MAC: 2014-12-05 15:13:48Z): Incorporate changes as shown in 11-14/1041r9 for CID 3394.
			4. No objection to use the revised resolution – mark ready for motion
	3. Review Doc 11-14-1104r7 – Mark Rison
		1. CIDs 3483 MAC
			1. Review comment
			2. Proposed Resolution: REVISED (MAC: 2014-12-05 15:18:10Z): Make the changes described in 11-14/1104r6 under "Proposed changes:" for CID 3483, which allow opportunistic use of this feature by non-VHT STAs.
			3. No objection to the proposed Resolution
		2. CID 3359 MAC, 3360 MAC, 3377 MAC, 3020 Editor
			1. Review Comment
			2. The comment discussion is based on D3.0
			3. CID 3020 would be a reject -
			4. Review the proposed resolution
			5. Small adjustment to add some white space to make it a bit more readable
			6. Discussion on supporting which rates – Eventually we got to a two-way discussion on “is supported by the AP and the non-AP STA”
				1. Will mark this part of the proposal for further discussion
			7. Operational Rate set in D2 was what you could transmit at. – Used to limit some transmission mode – in D3, there was a change to be less prescriptive for the operational rate set.
				1. Debate on if the operational rate set is for limits on the Transmitter or the Reporting of the Receiver
				2. In the Join it calls out that the operational rate set is a receive constraint
				3. One example was in 9.7.5.6 – there is a transmission rate limit – this comment resolution fixes this particular clause
				4. When this was broken was not clear – nor is the final solution.
				5. In 802.11-2012 shows the foundation is on receive not transmit
				6. Resolved to let the changes be as proposed
			8. Discussion of the use of the Basic Rate set vs Operational Rate Set by the DMG or lack thereof
			9. Discussion on 1-127 vs 2-127 for consistency
			10. Proposed Resolution for CID 3359, 3360, 3377 REVISED (MAC: 2014-12-05 15:28:25Z): Make the changes described in 11-14/1104r7 under "Proposed Changes" for CID 3359, 3360 and 3377. These delete the text which links the operational rate set with MCSs and which omits the MLME-START.request primitive (1287.41).
			11. There is one area in yellow that needs to be addressed
				1. The Operational rate set tells you what a device can receive
				2. This was then noted that more discussion that needs to be done on this next week on the telecom
			12. The resolutions for 3359, 3360, 3377 is on hold
			13. Proposed Resolution CID 3020 (EDITOR): REJECTED. Everything ends up in a parameter. The BSSBasicRateSet is a parameter, and the Basic MCS Set field is in the HT Operation parameter or in the (HT Operation row of the) SelectedBSS parameter
			14. No objection to the rejection – mark ready for motion.
		3. CID 3051 GEN
			1. Review comment
			2. Proposed Resolution: REVISED Delete “CF29:M” at 2731.14. Add “CF29:M” to the Status for CF16 at 2629.27. Change “O” to “O.2” at 2630.35.
			3. No objection to proposed resolution – Mark ready for motion
	4. Review Editor Comment CIDS
		1. 11-13/0233r44
		2. CID 3319 EDITOR
			1. Review comment
			2. Discussion on use of PAD vs Padding
			3. Straw Poll
				1. 1. Keep text as is
				2. 2. Change Pad to Padding throughout
				3. Results: 101122A == 1=3, 3=3, abstain = 1
			4. Rationale for vote discussed
				1. Not seeing this as a needed change
				2. Not a global change necessarily
				3. Not that confusing, but there are only 2 instances that need to change
			5. Editor to look at the changes and bring back a proposal for a particular change.
		3. CID 3331
			1. Similar comment should be resolved the same way as CID 3319
			2. Editor to take it offline
			3. 1214.44 - EOF-PAD; 1848.22 PAD subfield( but it is in the deprecated so ok to not change) – this was discussed in the past, but a new proposal will be brought back later
		4. CID 3384
			1. Review comment
			2. Proposed Resolution: REVISED (EDITOR\_A: 2014-09-08 10:54:32Z) Replace "Re(,)" with "Re{.}".
			3. But we may want to have subject matter expert consideration
			4. Discussion on that the change may mean
			5. There are three alternatives – with curly braces, with parenthesis, or “Re(X) is a function which yields the real part of the complex number x”
			6. Discussion on proposed final text
			7. Proposed resolution REVISED (EDITOR: 2014-12-05 16:46:24Z) - Add to 1.5:
			8. Re (x) is the real part of the complex number x.
			9. Im (x) is the imaginary part of the complex number x.
			10. And:
			11. Throughout the draft remove other definitions of Re(.)
			12. No objection – mark ready for motion
		5. CID 3590
			1. Review Comment
			2. Review 4.3.4.5
			3. It was noted reply to the commenter, clause 4 is not strictly limited to informative text although most of it is.
			4. Proposed Resolution: Revised (Editor 2014-12-05 16:54:54Z) – replace cited text with “A CCSS is suited to an area and a frequency band having the following propagation characteristics: a) the BSAs of the SAPs within a CCSS cover the area and b) transmissions within the area are isolated to a high degree.”
		6. That was the end of the CIDs needing direct input
		7. There are 8 that need a possible presentation (they have been included in D3.4)
			1. CID 3604 – Block Ack – need to revisit to match convention
			2. CID 3280
			3. CID 3748 –
			4. CID 3402 – This is a change of the case of “incapable bit” to “Incapable bit” – need to check to see that changes related were actually made. – The changes noted in D3.4 seem to have taken the case the wrong way. – This was supposed to have 7 instances to be “upper cased”.
			5. CID 3041
	5. We are at time
	6. Review Agenda for next week
		1. December 12th

11-14-1413 CIDs 3232, 3499, 3392, 3692

11-14-1104 – DMG CIDs

* 1. Adjourned 12:01pm
1. **Minutes for 802.11 TG REVmc on Friday December 12th, 2014** –
	1. Called to order at 10:03AM, by Dorothy STANLEY
	2. **Attendance:** Dorothy STANLEY (Aruba), Adrian STEPHENS (Intel), Carlos CORDEIRO (Intel), Mark HAMILTON (Spectralink), Mark RISON (Samsung)
	3. **Agenda**
	4. Call to order, patent policy, attendance
	5. Editor report
	6. Comment resolution: Available CIDs and presenters:

11-14-1594 - Carlos - 3232, 3392, 3499, 3692; 11-14-1570

11-14-1041 - Dorothy Stanley - CIDs 3014, 3394, 3512

11-14-1104 - Mark Rison, CID 3211

* 1. Remaining Editorial CIDs - Adrian
	2. AOB
	3. Adjourn
	4. **Patent policy reviewed**
		1. Call for patents – none received
	5. **Editor report**
		1. Review period closed.
		2. Adrian in the process of reviewing comments received (and chasing down anyone who hasn’t completed their assignments yet).
	6. **Presentations/CIDs**
	7. **Presentation 11-14/1594r0** (Carlos CORDEIRO)
		1. Since Mark RISON has submitted comments in e-mail, Carlos would like to review those off-line, and come back to this.
		2. Dorothy shared the annotated version that Mark RISON e-mailed, so we could see his comments in real-time
		3. CID 3232 (and CID 3499)
			1. The commenter is correct. Added the element to the Beacon
			2. Also needed to add that this element is in the Information Request frame.
			3. Also resolved CID 3499 at the same time, by replacing the open-ended reference at the end of the table, with the specific list of elements.
			4. Mark RISON notes that we don’t need Vendor Specific in the Action field. That row will be deleted, and rest renumbered. Also delete the word “element” from the STA Availability row.
			5. Mark RISON notes that all the fields need to be described in the text, and that is not in the proposed resolution, yet. Carlos agrees, and will work on it off-line.
			6. Need to check that we don’t have the same problem with Information Request/Response that we had with Probe Request/Response, as covered by CID 3355. Carlos will look at this as well.
			7. Considered Mark RISON’s comment (on CID 3499) that DMG Beacon, and some FST frames, have similar text about including “other elements” in a frame without being explicit. What goes in these frames is described in 10.33, for example, where each element lists the frames in which the element is used. Discussion on which approach made sense. Implementations are flexible, the Standard is pretty rigid. Agreed that Carlos will fix these locations as part of CID 3499 for now, and we can consider the bigger picture approach to this at a later time.
			8. Not completed, yet, Carlos will bring back both CID 3232 and CID 3499 after addressing the above.
		4. CID 3692
			1. Reviewed Carlos’ addition to the proposed resolution to make similar changes in 10.1.4.3.2 and 10.1.4.3.3(g). (He had only changed 10.1.4.3.3(f), previously.)
			2. Mark Rison’s comment is that introducing the concept of multiple Probe Requests and multiple Basic Access procedures is confusing to show up in bullet (c).
			3. Looked at baseline, and bullet (b), which discusses the use of Basic Access procedure.
			4. Mark suggests making the SSID List process its own (new) bullet, which mentions doing the Basic Access procedure before each of the additional Probe Requests.
			5. Also, agreed to lower-case “Basic Access” throughout.
			6. Carlos will update and bring back for final review and approval. Target the Jan 9 telecon.
		5. CID 3392
			1. This is not in Carlos’ document. Reviewed prior notes, determined this was discussed, and assigned to Mark Rison. He needs some expert help to resolve this. He has e-mailed his questions and analysis. Everyone asked to review that, and respond.
	8. **Presentation 11-14/1570r1** (Carlos CORDEIRO)
		1. No CID for this change.
		2. This issue was found due to interop problems. Important we fix it.
		3. Noted discussion points 1, 2, 3 and 4.
		4. Because the Duration field isn’t long enough when initiating an ISS, the responder has to do a new channel access for the RSS. Implementations are not doing it that way, and shouldn’t need to.
		5. Reviewed proposed changes, as shown in 1570r1.
		6. On last sentence of the document: Note that 9.38.8 is effectively informative, because the clause starts by saying this is an example state machine. So, while Carlos thinks there might be some minor impacts on the state machines with the other changes, it isn’t that critical.
		7. Suggestion to move this example text to an Informative Annex. Or, maybe we should make sure they are completely correct, and make them normative. Carlos will consider, and bring back. He’ll bring this back as a separate issue.
	9. **Presentation 11-14/1041r9** (Dorothy STANLEY)
		1. Will pass for this week. Some updates are ready, but it is more important to get to Mark RISON’s comments while he is available
	10. **Presentation 11-14/1104r7** (Mark Rison)
		1. CIDs 3212, 3213, 3345, 3374
			1. Noted some other problems found by Carlos in this area, as described at the end of the Discussion section.
			2. Asked for preferences on the way the accuracy of the TSF timer is described (the yellow highlighted text in Mark’s document). Agreement on second option; Mark will update the document to show that version as the proposed change.
			3. Mark will bring back his question in yellow about where Di,n and Om should be defined, on a future ballot. Just delete it for now. No one on today’s call had a comment in response.
			4. Resolution: Incorporate the text changes shown in 11-14/1104r8 for CIDs 3212, 3213, 3345, and 3374.
			5. Approved, ready for motion.
		2. CID 3382
		3. Discussion about the units on dot11EDCATableTXOPLimit. Noted that it is used in equations in the main body text (cf page 580), so consistent units with other things in those equations are needed. But, the other things don’t have clear, explicit units either, although it could be argued that microseconds is implied.
		4. Since adding/correcting all the default values details in the MIB is repeating text that is in the main body, it would be better to reference the main body and not duplicate and create a maintenance problem.
		5. Mark will cleanup and bring back an updated version.
	11. Next telecon is in one week – Dec 19th.
	12. ADJOURN at 12:01.

**References:**

<https://mentor.ieee.org/802.11/dcn/13/11-13-0233-43-000m-revmc-wg-ballot-comments.xls>

**2014-11-21**

<https://mentor.ieee.org/802.11/dcn/14/11-14-1413-03-000m-resolution-to-11ad-cids.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-1041-08-000m-lb202-assigned-comments.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-1104-06-000m-resolutions-for-some-mac-pics-and-security-comments-on-11mc-d3-0-lb202.docx>

**2014-0-12-05:**

<https://mentor.ieee.org/802.11/dcn/13/11-13-0233-44-000m-revmc-wg-ballot-comments.xls>

<https://mentor.ieee.org/802.11/dcn/14/11-14-1041-09-000m-lb202-assigned-comments.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-1104-06-000m-resolutions-for-some-mac-pics-and-security-comments-on-11mc-d3-0-lb202.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-1104-07-000m-resolutions-for-some-mac-pics-and-security-comments-on-11mc-d3-0-lb202.docx>

**2014-0-12-12:**

[**https://mentor.ieee.org/802.11/dcn/14/11-14-1594-00-000m-resolution-to-other-11ad-cids.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-1594-00-000m-resolution-to-other-11ad-cids.docx)

[**https://mentor.ieee.org/802.11/dcn/14/11-14-1570-02-000m-duration-field-during-sls.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-1570-02-000m-duration-field-during-sls.docx)

[**https://mentor.ieee.org/802.11/dcn/14/11-14-1570-01-000m-duration-field-during-sls.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-1570-01-000m-duration-field-during-sls.docx)

[**https://mentor.ieee.org/802.11/dcn/14/11-14-1041-09-000m-lb202-assigned-comments.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-1041-09-000m-lb202-assigned-comments.docx)

[**https://mentor.ieee.org/802.11/dcn/14/11-14-1104-08-000m-resolutions-for-some-mac-pics-and-security-comments-on-11mc-d3-0-lb202.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-1104-08-000m-resolutions-for-some-mac-pics-and-security-comments-on-11mc-d3-0-lb202.docx)

**<https://mentor.ieee.org/802.11/dcn/14/11-14-1104-07-000m-resolutions-for-some-mac-pics-and-security-comments-on-11mc-d3-0-lb202.docx>**

**2014-12-19**

**2015-01-09**