IEEE P802.11
Wireless LANs

|  |
| --- |
| REVmc Minutes for May 2014 - Waikaloa |
| Date: 2014-05-13 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Jon Rosdahl | CSR Technologies Inc. | 10871 N 5750 WHighland, UT 84003 | +1-801-492-4023 | jrosdahl@ieee.org |
|  |  |  |  |  |

Abstract

Minutes from TG REVmc meetings during the 802 Wireless Interim Session May 2014 in Waikoloa, HI.

1.0 802.11 TG REVmc called to order by Dorothy STANLEY (Aruba) at 1:30pm HT

* 1. Proposed Agenda for Monday PM1:
1. Chair’s Welcome, Status, Review of Objectives, Approve agenda, minutes
2. Editor’s Report
3. Timeline and Schedule
4. Comment resolution:11-14-207 (Adrian), 11-14-0632 (Eldad)
	1. See document 475r4
	2. Review Patent Policy
		1. No issues or identified items from Patent presentation
	3. Review Meeting Guidelines
	4. Introductions include Affiliation – Chair, Vicr-chairs and Editor
	5. Review Proposed Agenda:
		1. Went around the room to ensure all submissions were scheduled for the week
		2. R4 was approved by unanimous consent
		3. Approval without objection of the Tentative Agenda –( See doc 11-14/475r4)
		4. Approved Agenda:
			1. **Monday PM1**
5. Chair’s Welcome, Status, Review of Objectives, Approve agenda, minutes
6. Editor’s Report
7. Timeline and Schedule
8. Comment resolution:
	1. 11-14-207 (Adrian),
	2. 11-14-0632 (Eldad)
		* 1. **Monday PM2**
9. Comment resolution:
	1. CID 2458 11-14-533r1 (Mark H),
	2. CID 2434 11-13-0115 (Mark H),
	3. Other MAC CIDs (Mark H)
		* 1. **Tuesday PM1**

Motions – Teleconference comments

Officer elections

Comment resolution

* + - 1. **Tuesday PM2**
1. Comment Resolution –
	1. 11ad -- Doc 11-14-549 (Carlos C.),
	2. Doc 11-14-640 (Dan HARKINS)
	3. More comment resolution
		* 1. **Wednesday PM1**
2. Comment Resolution –
	1. Location: 11-14-541 (Gabor)
	2. 11-14-525. (Carlos A),
	3. 11-14-526 (Brian),
	4. 11-14-573 (Ganesh),
	5. 11-14-630 (Gilb)
		* 1. **Wednesday PM2**
3. Comment Resolution – deprecation CIDs, Motions
4. 3GPP Liaison response
5. CID 2462
	* + 1. **Thursday AM2**
6. Comment Resolution,
7. Final approval motions
	* + 1. **Thursday PM2**
8. Comment Resolution, Motions
9. Plans for July, Schedule
10. AOB
11. Adjourn
	1. Approval of Minutes of previous Meetings
		1. Minutes are contained in Documents 11-14/316r0 (March Plenary) and 11-14/492r2 (April-May Telecons).
		2. No objection – Minutes are approved by unanimous consent
	2. Editor Report
		1. See document 11-13/95r10
		2. Current Draft is D2.8
			1. Includes TGaf Roll-in, edits from March d2.6 and Defects resolved from D2.6 and D2.7.
			2. Additionally it includes edits for “ready for Motion” comments except CID 2401
		3. Reference Documents
		4. There are 32 assigned but not resolved comments left
		5. We have 6 assignees left with the comments
		6. Editor Transition Plans
			1. Emily Qi and Edward Au have agreed to transition over a period of time in taking over the editor duties over time.. By the end of REVmc, Adrian will drop out, and by the start of REVmd, Edward and Emily will be fully in charge.
			2. Acclamation and thanks for Adrian for his hard work as Editor
	3. Review of TGmc Plan of Record (slide 8 – 11-14/0475r4)
		1. No issues on timeline/schedule
	4. Comment Resolution:
		1. Start on MAC comments doc 11-14/207r7 – start on page 21 – CID 2051 – 1174.06
		2. CID 2051 MAC
			1. Note xxx.nn where xxx is page number and nn is line number
			2. 1174.06 – no issues with the new proposal as in r7.
			3. 117.31 – The statement mixed normative and non-normative information.
				1. no issues with proposed change
			4. 1175.49 – no issues with proposed change
			5. 1176.31 – discussion on what some other possible changes, but no issues with proposed change.
			6. 1245.01 – question on the use of “can be” or “is” -- short discussion,
				1. We do not want to infer that it has to be done, but rather that if it is to be done, it is to be done a certain way.
				2. Suggestion to replace “desired” with “performed”
				3. Other suggestion is “When calibration is performed”
				4. Other suggestion change sentence to be “In order to perform calibration, the STA follows the procedure described below:
				5. – no issues with the new proposed text.
			7. 1285.62 – question on replacing a “desire” and a “should” with a “may”
				1. -- no issues with proposed text.
			8. 1289.44 – Review the original text
				1. -- no issues with proposed text
			9. 1291.30 – no issues with proposed change
			10. 1310.25 – no issues with proposed change
			11. 1310.53 – similar to the last change -- no issues with proposed change
			12. 1313.14 – question on if this is a control or informative.
				1. Suggest changing “to indicate the presence of”
				2. no issues with proposed new change see r7.
			13. 1330.26 – similar to the last change..make similar adjustment
				1. no issues with proposed change
			14. 1326.47 -- no issues with proposed change
			15. 1365.12 – change to the figure was discussed. – better wording noted.
			16. 1440.20 -- no issues with proposed change, but there seems to be an issue with the ADDTS Request frame – is it sent from a non-AP STA to a non-AP STA?
				1. The answer is yes…the concern was resolved.
				2. No issues with proposed change.
			17. 1587.49 – no proposed change to the “desired”
			18. 1607.26 -- no issues with proposed change
				1. Question on the value of the two sentences, because it is just before a timer expires and just after…same action.
			19. 1607.37 -- no issues with proposed change
			20. 1619.26 – no issues with proposed change
			21. 1664.50 -- no issues with proposed change
			22. 1940.26 -- no issues with proposed change
				1. Alternative would be to change it to a note
				2. Change to “is attemptin” as well
				3. No issue with the new proposed change as it is in a “NOTE”.
			23. 1975.33 – need to change from “provides” to “provide”
				1. No issue with the new proposed text.
			24. 2011.43
				1. Remove the “(“) and quote marks
				2. Question of the order of the parameters cited.
				3. “corresponding to the TXVECTOR parameter RATE”
				4. The editor will look at the editorial issues when implementing the proposed changes
			25. 2011.47
				1. Similar change needed here as the last one.
				2. Check on the particular location – Clause 18 there is only RATE not Data RATE.
			26. 2012.09
				1. Question on “operating channel” and the context of its use in 18.3.3.2
				2. no issues with the proposed changes
			27. 2015.57 (2016.1)
				1. Concern with the context of the location of “desired”
				2. Discussion on how to approach the removal of “desired”
				3. Action item: Eldad to look for a proposed resolution with consensus of the PHY expert group
			28. 2020.49
				1. Make change to “TXVECTOR parameter RATE”
				2. Use updated proposed change.
			29. 2036.03 – this use of desired seems correct. – no change
				1. Likewise for a list of other locations: 2036.52, 2056.65, 2140.16, 2140.26, 2140.46, 2140.55
			30. 2036.06 – this use of desired seems correct. – no change
				1. Likewise 2036.55, 2057.04, 2140.19, 2140.29, 2140.50, 2140.59
			31. 2079.11
				1. Discussion of the order of the parameter set order
				2. In clause 20 it is “L\_DATARATE”
				3. No objection to the proposed change
			32. 2410.08
				1. Operational rate set
				2. No objection to the proposed change
			33. 2476.58
				1. Discussion on extraneous comment in this are.
				2. No objection to the proposed change
			34. 2504.09
				1. No proposed change
			35. 2808.50
				1. No objection to the proposed change
			36. 2989.07
				1. No objection to the proposed change
			37. 3007.18
				1. Question of if this is in a note? No it is in an annex
				2. Suggest that this have an Note, but as it is in an informative Annex, the “NOTE” is not necessary.
				3. We may leave “desire” rather than change to “Requirement”…
				4. Somehow we need to distinguish between to things at the UI level.
				5. Suggestion – use “convention” instead of “requirement” – still not making sense.
				6. How about “need” – this shows that we should just leave it as “desired”
				7. There was at least one strong desire to use “need”.
				8. No objection to the use of “need”.
			38. 3011.35
				1. After our previous discussion, we thought that the word “desired” is proper in this instance. - -no change to be made.
			39. 3044.20
				1. Surplus Bandwidth allocation. Annex N.
				2. Leave as Desired as is – no change.
			40. 3106.40 – Finally the last one.
				1. Annex W – informative annex
				2. Question on use of may vs might
				3. The proposed “may” had to be removed. And “might” used in both locations.
				4. Change to singlur from plural grammar in all sub-bullets.
				5. No objection to the proposed change
			41. Proposed resolution for CID for 2051 (MAC ): Make changes under CID 2015 as noted in 11-14/207r7.
			42. Move to MAC-Y and mark ready for motion.
	5. Review Doc 11-14/632r0 Eldad PERAHIA
		1. N\_LTF correction to Clause 20 and Clause 22
		2. These proposed changes have been circulated with other PHY experts.
		3. Clause 22 Correction
			1. This is no N\_LTF, but should be “N\_VHTLTF”
		4. Clause 20 correction
			1. Equation 20-94 refers to equation 20-22…but
			2. Equation 20-22 – does not have N\_LTF
			3. So change all instances of N\_LTF by N\_HTLTF in clause 20
		5. This removes all the N\_LTF instances.
		6. The Chair will include in the motion on Tuesday to incorporate these proposed changes.
	6. Review doc 11-14/490r0 -- CID 2463 and 2060
		1. Changes to figures with only textual descriptions has been a problem in the past.
		2. Figure O-3, O-5 etc have been a problem to get right in the past.
		3. There are a few “bit map control field” to “Bitmap Control Field”
		4. Review of the new figure and the proposed changes.
		5. Other ways to distinguish the bits in the vector without the arrow.
		6. Change from an arrow to something else….maybe a box around the bits being referenced.
		7. The call-out on Figure O-5 for the two items on the left seem close enough to be seen as one item, the editor to look at how to make it more definitive for what is being called out.
		8. Similar changes in O-7
		9. The changes will be uploaded to an R1
		10. Proposed Resolution: Incorporate the changes in 11-14/490r1.
		11. No objection – mark ready for motion.
	7. Status
		1. We have a few may ignore comments left,
		2. Bogus reference…
	8. Recess 3:30pm HT
12. TG REVmc called to order by Dorothy STANLEY (Aruba) at 4:00pm HT Monday PM2
	1. Reminder of Patent Policy
		1. No items identified.
	2. Proposed Agenda
		1. CID 2183 – Bogus References
		2. CID 2458 11-14/533r1
	3. CID 2183 (GEN) -- Bogus References
		1. See doc 11-14/207r7
		2. There was some work done in two places (Dorothy 11-14/221 and Carlos proposed resolution combined into Adrian’s proposal
		3. Review DMG-M4.4 should have only two references – see r7 for list
		4. Review DMG-M5 – no objection
		5. Review DMG-M7.3 – no objection
		6. Review DMG-M7 – no objection
		7. Proposed Resolution; Revised – make changes under CID 2183 in 11-14/207r7.
		8. No objection – mark ready for motion
	4. Review Doc 11-13/115r11 (posted under ARC SC)
		1. CID 2434 GEN
		2. This is the Figure 5.1 change proposal
		3. Review the proposed updated figures.
		4. There is a missing “loop back” arrow on the 4th box down in the new figure.
		5. Suggestion of showing how the dotted box is an expanded
		6. Maybe the expanded 4 option boxes could be made into separate boxes and then have the dotted box reference out by name instead…
		7. The plan is to revise the figure again, and if it is ready for inclusion by end of week.
		8. The short plan is to fix just the missing arrow in r12, and then if r13 can be made, then great if not, we can incorporate r12 into the document for now.
	5. Review Doc -11-14/533r2
		1. CID 2458 (MAC)
		2. Review the flow of new section numbers
		3. Review the specific changes to the new paragraphs
		4. Question on AP side of things in 9.21.2.2? How to word without “within an AP” wording?
		5. Change to “when an EDCAF” to start prior to the “within an AP”
		6. CCA sampling is not quite right, but we will not make the correction this time around, but rather allow a new comment to address it in the future.
		7. Discussion on paragraph 78 – 9.21.2.3 referenced.
		8. Why did we add to a, b, c, the “In addition to the primary channel being idle per the rules for obtaining a TXOP.”?
			1. We could remove it as it is redundant.
			2. Then it would be more consistent
		9. The “Also” also need to go, as they are not needed. (also remove the “all also”)
		10. Discussion on removing the “may” –
		11. It was determined that the “a) through e)” to return to the original text.
		12. This was agonized over a lot during 11ac…so we decided to move on.
		13. Paragraph 34 – believe that all these cases are included in Annex G…more checking to be done.
		14. There may need to be a case that is missing, not sure how to address.
		15. Annex G itself references TXOP sequence, then we may have a circular issue.
		16. Discussion on “TXOP Sequence” vs TXOP continuation.
		17. The use of “At least one of repeated” seemed to be an issue that causes you not to use Annex G in total.
		18. **Action item**: Mark HAMILTON will remove the 9.21.2.5 changes and consider for a future comment. This will cause a new revision to be posted 11-14/533r3
		19. In 9.21.2.x – The change of the order of the sentence missed defining the “TXOP holder” as was done in the original first sentence…this definition had to be added to the new first sentence and removed from the new 2nd sentence.
		20. In the new 9.35.5 paragraph – there was a “may be obtained only” that should not be there, or is at least a red flag item.
			1. Change to “A TXOP shall not be obtained outside…”
		21. Suggest that 9.21.2 and 9.21.3 have the title spelled out the same way…the acronym
			1. The model is to explain what it is and then the acronym..
			2. An other alternative would be to have 9.21.2 be just EDCA and 9.22 to be MCF…but not sure why things are not the same.
			3. In all three cases, have the name of the thing followed by the acronym.
			4. No decision on any change here…leave it to the editor.
		22. Proposed Resolution: Revised Replace the text of Clause 9.21.1 and 9.21.2 (Draft 6 numbering) with the text in doc 11-14/533r3 in the section labeled, “Modified Text (the final proposed version).”
		23. No objection – Mark ready for motion – MAC-Y
	6. MAC Comment Resolution
		1. CID 2009 MAC
			1. Review the comment
			2. MME-JOIN.request primitive proposed to be removed.
			3. Discussion on the value of JOIN process.
			4. Proposed Resolution: REJECTED (MAC: 2014-05-13 03:47:03Z): MLME-JOIN serves an explicit purpose, as described in 10.1.4.5. In particular, the non-AP STA will synchronize its TSF to the AP (Allowing it to follow Beacon Timing from this point in time). This Primitive is also used to set a number of operating parameters which are otherwise not in any MLME primitive issued by a non-AP STA (for example, the rate set parameters, including HTOperationalMCSSet). In this way, the MLME-JOIN is parallel to the MLME-START in terms of initializing the MAC to specific (Perhaps non-default) operating parameters.

It is agreed that there is some redundancy between MLME-JOIN and later primitives (especially MLME-ASSOCIATE). The commenter did not include sufficient detail to address the parameter cleanup of MLME-JOIN.

* + - 1. After 15 minutes of discussion, the reject resolution was agreed to.
			2. Move to MAC-Y comment group and mark ready for motion.
		1. CID 2005 MAC
			1. Review comment
			2. Proposed Resolution: REVISED (MAC: 2014-05-13 03:49:05Z): Change the definition of EAPOL-Start to be "A Data MPDU that carries all or part of an 802.1X EAPOL PDU of type EAPOL-Start."
			3. Move to MAC-Y comment group and mark ready for motion.
		2. CID 2119 MAC
			1. Review comment
			2. The cited statement indicates that the NAV may not get set across all the MACs in the same PHY…
			3. There may be certain MAC things that should be shared with all the MACs that are sharing the PHY…but we do not have a complete set of items identified.
			4. So, should we modify the text? This may be more broken more than the commenter or any of us have realized before.
			5. These are effectively “hidden nodes” even though they are in the same device.
			6. RTS/CTS is commonly used in implementations.
			7. So first point is if the proposed change a good thing
				1. Change “STAs do not directly exchange frames with each other” to “ Change STAs cannot directly exchange frames with each other”.
			8. Could we say MAC frames.
			9. We are now at the timelimit
	1. One last item – Graham SMITH as agreed to have his comment 2413 rejected by withdrawing
	2. Recessed at 6:01pm
1. TG REVmc called to order by Dorothy STANLEY (Aruba) at 1:30pm HT Tuesday PM1
	1. Reminder of Patent Policy
		1. No items identified.
	2. Review Proposed Agenda:
		* 1. **Tuesday PM1**

Motions – Teleconference comments

Officer elections

Comment resolution

* 1. Motions:
		1. **Motion #52:** Teleconference comment resolutions:

Approve resolutions to comments in

[Doc: 11-13/0361r29](https://mentor.ieee.org/802.11/dcn/13/11-13-0361-29-000m-revmc-mac-comments.xls) Tab “Motion MAC-X”

[Doc 11-13/1160r10](https://mentor.ieee.org/802.11/dcn/13/11-13-1160-10-000m-lb199-gen-adhoc-comments.xls) Tab “Gen Motion Telecon April-May ”

[11-13/0233r30](https://mentor.ieee.org/802.11/dcn/13/11-13-0233-30-000m-revmc-wg-ballot-comments.xls) Tab “Editor Motion May 2014”

* + - 1. Moved: Mark Hamilton 2nd: Jon ROSDAHL
			2. Result: 10-0-2 Motion Passes
	1. Officer Elections
		1. Final Call for Nominations:
		2. Current Nominees:
			1. Chair: Dorothy Stanley (Aruba Networks)
			2. Vice Chair: Mark Hamilton (Spectralink)
			3. Vice Chair/Secretary: Jon Rosdahl (CSR)
		3. No new Nominees identified
		4. Nominations closed
		5. Adrian STEPHENS took control of the Chair, and ran the election process
		6. Move to approve the TGmc officers shown below:
1. Chair: Dorothy Stanley (Aruba Networks)
2. Vice Chair: Mark Hamilton (Spectralink)
3. Vice Chair/Secretary: Jon Rosdahl (CSR)
	* + - 1. Moved: Michael Montemurro; 2nd David Hunter
				2. Results: Approved by Unanimous consent (22 members present)

See Slide 14 doc 11-14/475r5

* 1. TG Editor and Appointment and Confirmation
		1. Chair Re-appoints Adrain STEPHENS as editor of TG REVmc
			1. Request to appoint two sub-Editors (Emily QI (Intel) and Edward AU (Huawei))
			2. Chair appoints Emily and Edward as sub-Editors
			3. The rationale is that this is the last TG that Adrian will be the Technical Editor of. With the transition, the plan is that by the end of REVmc Emily and Edward will be doing all or most of the work. Then at the start of REVmd, they will be fully in charge and doing all the work.
			4. Questions: - there is a misspelling on Emily’s name…it was corrected.
		2. Confirmation Vote from the TG
			1. Is there any objection to the appointments?
			2. No objection – confirmed by Unanimous consent (22 members present)
	2. Continue Comment Resolution:
		1. CID 2119 (MAC)
			1. Review comment
			2. To fix the ambiguity of the statement, we should point out that “STAs cannot directly exchange frames with each other”, and if we do so does this make the situation worse or better.
			3. See Figure 4-20 for context
			4. It is technically correct to say that they “cannot” directly exchange frames with each other, but not sure if this is an interoperable problem or not.
			5. The plan is to go with Mark H proposal unless there is objection.
			6. Question on is “exchange” well defined?
				1. It was used in about 2 dozen places

10.28.3 HCCA is one place.

* + - 1. No objection to the plan
			2. Proposed Resolution: REVISED (MAC: 2014-05-14 00:00:13Z): Change, "STAs do not directly exchange frames with each other" to "STAs cannot directly exchange frames with each other."

This addresses the ambiguity of the statement.

As for the MAC Service, nowhere does the MAC Service say or imply that all STAs can exchange frames directly with each other - consider hidden nodes, for example. Thus, no further change is needed.

* + - 1. No Objection – Mark ready for motion
		1. CID 2455 (MAC)
			1. Review comment
			2. Figure 9-1 and Figure 9-2 reviewed.
			3. Proposed Resolution: REVISED (MAC: 2014-05-14 00:03:15Z): Redraw with the two referenced labels moved to the side and down, as shown in 14-0422r0.
			4. No objection – Mark ready for motion
		2. CID 2454 (MAC)
			1. Review Comment
			2. This has been done already.
			3. Proposed Resolution: Accept
			4. No objection – Mark ready for motion
		3. CID 2054 (MAC)
			1. Review comment
			2. Review context – 9.11 (1152.11)
			3. Reviewed other locations of “non-DMG network”
			4. Proposed plan to remove all instances.
			5. Propose Resolution: REVISED (MAC: 2014-05-14 00:11:20Z): Accept proposed changes. Also, at 1116L18, delete "in a non-DMG network"; at 1158L7, replace "non-DMG network" with "non-DMG BSS"; at 1167L60, replace "non-DMG network" with "non-DMG BSS"; at 1227L21, replace "non-DMG network" with "non-DMG BSS"; at 1227L25, replace "DMG network" with "DMG BSS".
			6. No objection – Mark ready for motion
		4. CID 2094
			1. Review Comment
			2. We had nearly completed this, the word “capable” caused the group to pause.
			3. Today we have no objection to the change.
			4. Proposed Resolution: REVISED (MAC: 2014-05-14 00:15:50Z): Make changes under CID 2094 in 11-14/275r0(?). These changes call out the exceptions resulting from the “may ignore”.
			5. No objection – Mark ready for motion
		5. CID 2154 (MAC)
			1. Review Comment
			2. Clause 9 is for data plane stuff, and Clause 10 is for Management plane stuff…
			3. Move this one to Clause 9
			4. Need to determine where in clause 9 this bit of text should be added.
			5. It was determined to put a new clause after 9.10, titled “MSDU Processing”.
			6. Proposed Resolution: [6:24:12 PM] REVISED (MAC: 2014-05-14 00:21:06Z): Create a new subclause following 9.10, titled "MSDU processing". Move the cited text to this new sub-clause, and change it to: "Before transmission, the MAC shall strip the LLC header from all MSDUs corresponding to a TID that was successfully negotiated through the ADDTS exchange with a U-PID element with the No-LLC field equal to 1, and the negotiated header shall by added by the peer MAC before delivery at the peer MAC-SAP."
				1. However, Mark HAMILTON is still working on CID 2154: not approved, yet. Still wordsmithing. -- as this has need of more context, the proposal will be worked on prior to bringing forward.
		6. CID 2155 (MAC)
			1. Review comment
			2. Review Figure 10-16
			3. Proposed Resolution: CID 2155: REVISED (MAC: 2014-05-14 00:28:27Z): In 10.4.7, change "the MLME shall send a DELTS" to "the SME shall issue a DELTS.request" (two locations).

Change Figure 10-16 to remove the MLME-ADDTS.confirm primitive and arrow, and instead show an MLME-DELTS.request with the arrow left-to-right, and occurring just before (above) the DELTS Request frame transmission.

Delete the word "remaining" in 10.4.7 (1433L53)

* + - 1. No objection – mark ready for motion
		1. CID 2410 (MAC)
			1. Review Comment
			2. Check 17.3.8.5
			3. Proposed Resolution: REVISED (MAC: 2014-05-14 00:32:16Z): Change dot11CCAModeSupported to dot11HRCCAMode Supported in Table 17-3 at P1989L46. Same change at P2003L21.
			4. No objection – mark ready for motion
	1. Review remaining MAC Comments:
		1. CID 2464 – ongoing work, no consensus at this point
		2. CID 2479, – from Matthew FISCHER – still waiting full proposal
		3. CID 2460 – From Mark H – ongoing work, but not complete
		4. CID 2473 -- from Matthew FISCHER – still waiting full proposal
		5. CID 2481 -- from Matthew FISCHER – still waiting full proposal
		6. CID 2471 -- from Matthew FISCHER – still waiting full proposal
		7. CID 2462 – Reassocation to same AP – planned for Wednesday this week
		8. CID 2360 – Statistics measurement frames –
		9. CID 2168 – embedded magic numbers –goes with CID 2460
		10. 6 or 7 of these may have to be punted
	2. Action item report from Eldad P.
		1. No consensus,
		2. Leave as is
	3. Review GEN CIDS
		1. CID 2185 – Adrian is ready to show
		2. CID 2231
			1. David said he could bring a presentation that shows how links are defined, but there is no definition for this link
			2. Carlos claims that there is a link definition – See MMSL for the definition.
		3. CID 2459 – move to MAC – may not be done this week.
		4. CID 2411/2412 – deprecation comment to discuss on Wednesday
			1. Heads up : Proposed Resolution for Tomorrow: Resolve CIDs 2411 and 2412 as “Rejected” with a comment resolution of “The TG discussed the commenter’s proposed changes at length and did not come to consensus to make the proposed change. Concerns raised include loss of backward compatibility and inability to serve emerging market applications.”
		5. CID 2423 and 2424 have been withdrawn – no further action.
		6. CID 2463 goes with CID 2060 – Annex O – Should be assigned to Dorothy and 11-14/490
	4. Doc 11-14/490r1 Dorothy STANLEY
		1. Review document
		2. Covers CID 2463 and CID 2060
		3. Review proposed changes
		4. There was a couple typo in D2.8 that should be incorporated into this proposal
		5. We will go over these later this week.
	5. Review CID 2185 – Adrian – 11-14/275r1
		1. CID 2185
			1. Continue review of document at 1359.62 tag – “shall ignore”
			2. 1359.62 – add parenthetical to exclude items from the next sentence
			3. 1410.56 – no change proposed
			4. 1477.01 – no objection to proposed change
			5. 1488.33/1488.58 – no change proposed
			6. 1488.38 – Proposed to make changes that make the sentence a more general one. Propose moving to a sub-element subclause. (see addition at 1224.48)
			7. 1506.03 -- review proposed change
				1. 1461.36 – related to 1506.03 and 1461.56 – no objection to proposed change
				2. Question on why are we leaving this “shall ignore”…
				3. Change to just “ignores” in 1506.03…
				4. What if we move it to another place – New can of worms…no one wants to go fishing.
				5. Discussion on if present tense is the difference of whether it is normative or informative.
				6. Keep proposed change but with the “ignores” change applied will need to be r2
			8. 1524.12 – remove “or receiving a” and add a more verbose description later on.
				1. No objection to proposed change
			9. 1531.51 (also two other places) – redundant text to be removed – no objection
			10. 1580.45 – Specific to GAS –
			11. 1580.59 no change
			12. 1711.20 – no change (we are not removing all “Shall ignores”, but rather only those that are causing problem(conflicts)).
			13. 1720.51 -- no objection to proposed change
			14. 1723.18 -- no change
			15. 1739.63 – no objection to the proposed change
			16. 1740.61 – no objection to proposed change
			17. 1741.01 – no objection to proposed change
			18. 1743.28 – no change
			19. 1743.34/1832.15 – no change
			20. 1775.21 – no change – probably a bug here, but need further review
				1. Now we look at the “May ignore”
			21. 1026.30 – change “may” to might
				1. Discussion on if this should be a “shall” or “can” or “might”
				2. This may be better to use “may” ( no change)
				3. No change is proposed (after the discussion).
			22. 1235.63 – no change proposed
			23. 1249.35 – no change proposed
			24. 1294.18 (covered by CID 2094)
		2. Time was called
	6. Recess until PM2
1. TG REVmc called to order by Dorothy STANLEY (Aruba) at 4:05pm HT Tuesday PM2
	1. Reminder of Patent Policy
		1. No items identified.
	2. Agenda:
2. 11ad -- Doc 11-14-549 (Carlos C.),
3. Doc 11-14-640 (Dan HARKINS)
4. More comment resolution
	1. Review Document 11-14/549r0 0 Carlos CODEIRA
		1. Discussion on inconsistency in BSS Type Field in 8.4.1.146
		2. Question if we should say “no BSS or outside a BSS”
		3. Not happy with “not yet a member” as it seems to predict the future.
		4. Another Note in the table may be helpful
		5. The original proposed change seemed sufficient
		6. Motion tomorrow to incorporate the changes in 11-14/549r0 will be on the agenda
	2. Review Doc 11-14/640 Dan HARKINS – not present…will come back if he comes in
	3. Update on Comment status
		1. 17 Assigned Comments left – Assigned CIDS 10 MAC and 7 GEN
	4. Return to reviewing 11-14/275r1 –
		1. pending to become r2 after all changes are noted/made.
		2. May Ignore (continued)
			1. 1366.37 – no objection to proposed change
			2. 1458.56 – discussion on the wording proposed
				1. Proposal “A STA that receives an individually addressed …”
				2. And delete the last sentence…
				3. No objection
			3. 1459.32
				1. Discussion on section
				2. No proposed change
				3. No objection
			4. 1464.59 No change proposed, but there are related changes in other areas.
				1. 10.9.8.2 change title to be explicitly “non-DMG”
				2. Other changes displayed and explained
				3. Question on how the title is getting larger.
				4. Rewrote first sentence.
				5. Updated sentence was agreed to be better.
			5. 1561.47
				1. Badly worded text made less bad.
				2. Discussion on the new text
				3. The proposed Note was dropped as it did not seem to add helpful (non confusing info).
		3. Should Ignore
			1. 1488.38-- no objection to proposed change
			2. 1756.59 – no definitive change proposed, so this may need more thought
		4. Be Ignored
			1. 1113.48 – no change proposed
			2. 1207.58 – no change proposed
			3. 1208.01 – no change proposed
			4. 1372.62 – move interesting “shall be ignored” sentence into a “NOTE” – no objection.
			5. 1523.44 – no objection to proposed change
			6. 1669.01 – no change proposed
			7. 1688.59 – similar to 2186.45, 2191.47 and 2202.38 – no change proposed
			8. 1743.37/1779.50/1789.22 all security related sections – no change proposed
				1. There is a few ways to look at this, but no conflict was detected.
				2. A Letter ballot comment may be in order in the future, but only if we see a real solution to improve the text.
			9. 1868.09 et. al -- proposed change “Shall be” to “are” in each location (see r2)
			10. 2480.40/2685.25 and one other location – no objection to the proposed change
		5. Other “ignores”
			1. 1379.36 –
				1. Discussion ensured about the actions of a PS-Poll reception.
				2. Moving the cited sentence up as a new second sentence and start a new paragraph.
				3. Discussion on how to combine the concepts/sentence.
				4. New text was agreed to, some not perfectly happy, but concensus it was good enough – see 11-14/275r2.
			2. 1648.51 – another security issue – no change proposed
			3. 1740.10 – no change proposed
			4. 2019.04 – no change proposed
		6. Fine…..
		7. Proposed Resolution: Make changes in 11-14/275r2 under CID 2185
	5. Return to MAC Comment Processing
		1. CID 2154 (MAC)
			1. We left off earlier to have a new sub-clause be created, but needed a new sentence to set the proper context.
			2. Proposed Resolution: REVISED (MAC: 2014-05-14 00:21:06Z): Create a new subclause following 9.10, titled "MSDU processing". Move the cited text to this new sub-clause, and change it to: "A STA can use the U-PID element transmitted in ADDTS Request and ADDTS Response frames to indicate the protocol responsible for handling MSDUs corresponding to the TID indicated within the frame carrying the U-PID element (see 10.4.4.4.). Following a successful negotiation through an ADDTS exchange that included a U-PID element with the No-LLC field equal to 1, before transmission the MAC shall strip the LLC header from all MSDUs corresponding to the TID indicated in the ADDTS exchange and the negotiated header shall be added by the peer MAC before delivery at the peer MAC-SAP."
			3. No objection – mark ready for motion
	6. Review Doc 11-14/640r0 Dan HARKINS –
		1. He came back – review document.
		2. Security issue – possible side channel attack detected.
		3. Description of the side channel issue
		4. SAE Password detection and blinding technique process.
		5. Replace “it is recommended” with “a STA should…” – rewrite of the sentence was done, and a new revision will be posted.
		6. Discussion the use of “can”
		7. Fixed equation issue –
		8. New Version R1 will be posted and a motion to incorporate the text changes into the draft will be included later in the week.
	7. Comment Resolution:
		1. Review Document 11-14/490r2 for CID 2463 and 2060
		2. New edits were incorporated from Mark R.
		3. O.2 p3542 reviewed proposed change
		4. O.3 page 3667 reviewed proposed change
		5. O.3 page 3668 reviewed proposed change
		6. O.3 page 3670 reviewed proposed change
		7. Question on “traffic-indication virtual bitmap”…does the hyphen need to be there?
			1. The right thing is to remove the hyphen given the current popular style
		8. Question on the title of Annex O
			1. Does “TIM” belong in the title?
			2. There was discussion on the various ways to order the title words.
			3. The issue is that this is a Partial Virtual Bitmap that is a field in the TIM
		9. The reality is that Annex O is showing two fields being encoded, but together it is not named.
		10. New title “ Examples and sample code for encoding a TIM Partial Virtual Bitmap”.
		11. A new R3 will be posted for the resolution.
		12. Proposed Resolution: Revised; incorporate the changes in 11-14/490r3.
	8. Review Comment status:
		1. Punting MAC CIDS
			1. CID 2464 – MMDU is Bufferable…
				1. Proposed Resolution: Rejected: the referenced documents are incomplete
			2. CID 2460 – status codes and results codes
				1. Proposed Resolution: the commenter did not provide sufficient detail to resolve the comment.
			3. CID 2168 – embedded “magic numbers”
				1. Proposed Resolution: the commenter did not provide sufficient detail to resolve the comment.
		2. All rejected CIDs were done with consensus and no objection.
	9. Plan for Tomorrow:
		1. PM1 – Location presentations
			1. If time is left over, will pick up on the 9 remaining CIDs
		2. PM2 – Deprecation CIDS and motion
	10. Recess at 6:01pm
5. TG REVmc called to order by Dorothy STANLEY (Aruba) at 1:32pm HT Wednesday PM1
	1. Reminder of Patent Policy
		1. No items identified.
	2. Review Proposed Agenda:

Comment Resolution –

1. Location: 11-14-541 (Gabor)
2. 11-14/525. (Carlos A),
3. 11-14/526 (Brian),
4. 11-14/573 & 11-14/646 (Ganesh),
5. 11-14/630 (Gilb)
	* 1. Approved agenda by unanimous consent
	1. Review document 11-14/541
		1. Presented by James YEE
		2. Question on rfc-6225
			1. The RFC does note talk about rounding
			2. More question on if rounding or “floor” functions should be used.
		3. The changes proposed use the “round” function
		4. Note need comma before “respectfully”. On page 3
		5. There is a “- - “ that should have a “-( …)” so that the double minus is not seen as a typo. (page 2)
		6. There is a “2C” that should be a “2c”.
		7. Question on the example of how much above the elispsoid vs sea level.
		8. Round function away from zero…is a more common use, but is not that common in how people code in “C”….
			1. Further discussion on how best to describe the round function
			2. Suggest getting more examples in clause 1.5.
		9. We have already defined Floor and ceil, so why not define round in terms of Floor and Ceil.
			1. As the IETF is more vague, the proposed definition is better
		10. James to take suggestions and bring back a new draft document.
	2. Review Document 11-14/525r3 – Carlos ALDANA
		1. Review the proposed changes from last time it was discussed.
		2. The Location Civic Field is not to be encoded as noted in the IETF RFC 4776-2006, so it should state that explicitly. Some names of areas are not capable of being put into the limtited size of the element field.
		3. No action on this document – he will make more changes based on today’s discussion.
	3. Review Document 11-14/526 Brian HART,
		1. Review proposed changes from last presentation time
		2. Note some of the changes proposed are dependant on 11-14/525r3 (or later) being adopted as well.
		3. 10.11.10.3 – correct error
		4. R1 will need to be posted
		5. The R1 will be included in a motion for adoption during the motions later in the week.
	4. Review Document 11-14/573r Ganesh VENKATESAN
		1. This document updates the Clause 21 and Clause 22 PHYs in order for them to be usable in the Timing Measurement Protocol defined in in 10.24.5.
		2. Review proposed changes
		3. Questions –
			1. At the top of 2nd page – used to say N/Y now there are cases of N/Y and N/N – yes, this is to allow the timing value to be captured when enabled, and not worried about when not active.
			2. This was done similarly in other PHY
			3. Doesn’t the 11ad PHY need this also
				1. Yes, this is nothing new.
				2. The 11ad PHY had the vector field defined, but not the information of when it was to be included or not.
		4. Summarizing the motivation for these changes:
			1. You need help from the PHY to do the timing and in order to capture the timing points accurately and getting the parameters in the PHYs is important.
		5. No objection to including this document 11-14/573r0 in the list of text changes to be included in the motion of documents to adopt.
	5. Reivew Document 11-14/646r0 Ganesh VENKATESAN
		1. MIB Variable Inconsistency issue
		2. MIB variable to look at dot11MgmtOptionTimingMgmtActivated
		3. Proposal to have all dot11MGMOptionTimingMsmtActivated replaced with dot11MsmtActivated
		4. Question on why not do both…
		5. If we are trying to get rid of “MGMOption” there are some others…should we consider changing them as well?
			1. Maybe, but that is not the focus of this
			2. As they are not relative to the Timing Measurement
			3. Discussion on why this is the case
			4. There are other MIB Variables that need to remove the MGMoption from the name, so we should include that in the document 646 r1 that Ganesh will be posting anyway.
			5. At 2180.16 in D2.8 Change dot11MgmtOptionTODImplemented to dot11TODImplemented for both instances.
		6. This will fix the issues and included in R1
		7. Note that the “MgmtOption” string is better to use as some of the MIB names are broken by page break and won’t show in a straight search.
	6. Review Document 11-14/630r0 James GILB
		1. Proposed Corrections reviewed
		2. Figure 8-261 extra B15 should be B14
		3. The field length is described in both the text and the figure.
		4. The ROI on the proposed change is not sufficient for the Task Group Editor to do it.
		5. Agreement on duplicate information is bad, but concerned about the level of value.
		6. This would not be done for D3.0, but would be done later.
		7. As the proximity of the redundant information is close enough that there is very low.
		8. The full sentence of the “xxx field is 2 octets” would be deleted.
		9. Some support for the change (let James do work), and some comments that the benefit is not worth the effort.
		10. Strawpoll:
			1. Should we make the change as suggested in Clause 8?
				1. Yes: 6 No: 6 a: 1
		11. The Chair votes with the No votes so there is not sufficient support to make the change.
	7. Action Item report from Eldad: PHY change for Removing Desired.
		1. The “PHY team” agreed to replace “After performing an IFFT, the output is cyclically extended to the desired length.” With “After performing an IFFT, the output is cyclically extended and the resulting waveform is windowed to the required OFDM symbol length.”
		2. The cited sentence is on page 2015 line 57
		3. No objection to this additional change.
		4. This will be included in 11-14/207r8 that has not been posted yet.
		5. CID 2183 resolution is updated to use r8.
	8. Comment Resolution GEN
		1. CID 2231 –
			1. Proposed Resolution: REJECTED (GEN: 2014-05-15 01:20:31Z) Commenter has provided insufficient detail to resolve the comment.
	9. Comment Resolution MAC
		1. CID 2462
			1. Review comment
			2. See document 11-14/666r0
			3. Review document
			4. Ran out of time
	10. Reminder we aer in the larger room for PM2
		1. Start with Deprecation CIDs and the motions from Monday/Tuesday
	11. Recess 3:31pm
6. TG REVmc called to order by Dorothy STANLEY (Aruba) at 4:00pm HT Tuesday Wednesday PM2
	1. Reminder of Patent Policy
		1. No items identified.
	2. Review Agenda
		1. Comment Resolution – deprecation CIDs, Motions
		2. 3GPP Liaison response
		3. CID 2462
	3. Motions from main agenda document 11-14/475r7 (r8 as changes were made).
		1. CID 2411 and CID 2412
			1. Have had lots of discussion
			2. Have requested input form WI-Fi Allince
		2. **Motion #53**
			1. Resolve the CID 2411 and 2412 with a comment resolution of “REJECTED (GEN: 2014-05-15 02:04:50Z) The TG discussed the commenter’s proposed changes at length and did not come to consensus to make the proposed change. Concerns raised include loss of backward compatibility and inability to serve emerging market applications.
			2. Moved VK JONES 2nd: Eldad PERAHIA
			3. 23-0-8 motion passes
		3. **Motion #54**

Approve resolutions in 11-13/361r30 Tab Motion MAC-Y and 11-13/1160r11 GEN Motion Hawaii Tab Except CID 2183

Incorporate 11-14/632r0, 11-14/549r0, and 11-14/640r1

* + - 1. Moved Adrian STEPHENS 2nd Mike Montemurro
			2. 27-0-2 Motion Passes
	1. 3GPP Liaison discussion
		1. The liaison request is here: <https://mentor.ieee.org/802.11/dcn/14/11-14-0519-00-0000-liaison-from-3gpp-on-rcpi.doc>
		2. **Draft response 1:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0572-00-000m-ls-response-to-letter-from-3gpp.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-0572-00-000m-ls-response-to-letter-from-3gpp.docx)
		3. **Draft response 2:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0658-01-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-0658-01-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx)
		4. **Draft response 3:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0678-01-000m-liaison-response-to-3gpp-on-rcpi.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-0678-01-000m-liaison-response-to-3gpp-on-rcpi.docx)
		5. Review of doc11-14/519 by Stephen MCCANN was done.
			1. Comment that this may not be considered important to get done this week, but we have more information that maybe it is important is important as a topic of next’s weeks meeting for the 3GPP meeting next week.
			2. No questions on the Liaison request
		6. Review of 11-14/572r0 by Joe KWAK
			1. Abstract:

This is a reply to the letter from 3GPP, R2-141855 - LS on WLAN signal measurements for WLAN/3GPP Radio interworking. This reply provides a technically sound and comprehensive response to the questions asked in the LS from 3GPP.

* + - 1. Summary:

The authors developed this reply letter for discussion by the 11mc TG and approval by the 802.11 Working Group. This letter provides responses to the questions above within a comprehensive technical framework explaining the use of metrics for network selection.

The 11mc TG is invited to consider, critique and improve this draft letter for submission to the 802.11 Working Group.

* + - 1. Questions:
				1. There was a lot of focus on selecting BSS, but would rather see more info on selecting on the ESS level.

If there is a streaming level that we can do it on an ESS level, if we can find a metric from the standard that will do that we should include that as well.

* + - * 1. Interesting description on lots information, but goes beyond the mark in that it tells 3GPP too much information, and may be seen as proscriptive to 3GPP.

That is the point of this presentation, and does provide more info as we may only get this one chance to provide information to 3GPP. While they asked a simple question, we should provide a complete answer to help them understand the complexity.

While we do not include examples in the standard, we need to give that to help them understand what the method is for selecting the BSS

* + - * 1. We should not use the “Wi-Fi” in this document, it should be IEEE 802.11 STA instead.
				2. The response may have gone too far and given more “intra-BSS” information than is called for. Not everyone believes that the question from 3GPP was not done naively, but rather they asked for something specific.
				3. It is impossible to determine if it was naïve or not, as not all of us were there, and we should err on the side of giving a complete an answer as we can.
				4. There are metrics in our standards, and we have included a description on how to use them.
				5. The overall content seems well prepared, but while it may have extra information, but the tables listed may be too much. – Maybe we could shorten the example a bit and that would be more acceptable
				6. The question on if the two first questions were can we rely on the metrics should be simple, but the 3rd question we should explain the extra metrics and that is a good thing. Maybe making the first answers simplier and then leave the 3rd more verbose.
				7. The discussion of the algorithm was not done in 802.11 before, so we may want to have it prepared in a separate submission and then refer the 3GPP folks to the new document as a possible submission rather than having this be a 802.11 approved algorithm.
				8. The one point we should include is that IEEE 802.11 does not do conformance testing.
				9. RCPI measurement needs correction

The settings may or may not be correct, but should be checked.

* + - * 1. Discussion on possible RSNI table question and the response
				2. The response has a lot of BSS selection and focus on parameters for link selection that seem ok.
		1. Review of doc 11-14/658r2 by Guido HIERTZ
			1. Abstract: Reply to the liaison from 3GPP RAN R2-141855. Also see 11-14-0519r0.
			2. Summary: IEEE 802.11 Task Group mc developed this reply letter for approval by the IEEE 802.11 Working Group. The letter confirms that the measurement values in question are considered suitable for the envisaged use case.
			3. No questions
		2. Review of doc 11-14/678r1 by Matthew FISCHER
			1. Abstract: Reply to the liaison from 3GPP RAN R2-141855. Also see 11-14-0519r0
			2. Summary: IEEE 802.11 Task Group mc developed this reply letter for approval by the IEEE 802.11 Working Group. The letter replies that the WLAN RCPI and RSNI are not considered suitable for the envisaged use case. Instead the letter suggests the use of estimated and/or measured WLAN throughput.
			3. Questions/Comments
				1. More details help those trying to implement, but the question is only on the signal strength and quality. We should not try to read more into this than it is. The RSSI value and RCPI values should not have a procedure defined in restrict the 3GPP implementation.

At first your statement was aligned with this letter, but now not sure it is aligned in a positive way. The items that you are asking for are all included in the letter. The letter does not prescribe how to do it.

* + - * 1. The response to question number three is especially well done. When you look at the first two questions, your statement of “unsuitable” does not seem well to say to them. Could we look to merge some of the answers from all three proposals?

Yes, there is some work to merge the responses.

We can allow them to test on the metrics that they choose, but we may want to give more information

* + - * 1. The third answer you seem to give an estimate of the throughput. We may have a difficult time to explain the throughput of the network.

There is nothing here on how to combine the parameters. If you look at only one parameter or another alone it is not sufficient.

* + - * 1. Confused that what is written vs what was stated? The text does not have the complete context to match what was presented.

After having heard some of the discussion from the other two presentations, there was some extra words that may have been spoken, but that is from the extra understanding gained through the discussion.

We can expand the text to hopefully capture all the good discussion points.

* + - * 1. Discussion on what the response for Q1-2 from Guido, and the 3rd from Joe/Matthew would better response
				2. Having the short answers with the background should be provided.
				3. Interesting points that we are agreeing to, but what we need is the metrics to give them to use. We need to give other Metrics that are used to select the network.

Basically you are wanting only actual .11 standard metric…yes

* + - * 1. Question 3 is good here, but needs to be written differently. The merged document should not have any algorithm described.

Keep table and responses in the letter, and the discussion in a separate document.

Keeping the separate document outside the letter maybe better

Throughput on a particular link may be considered, but the Receiver method may be a bigger issue – not sure what the device is going to do for sure, so not all metrics are going to give the same value.

Throughput metric should come from the WLAN for the best value

* + - * 1. Confused on just what would be in the letter

The final letter would contain an answer, a table and a reference to an external submission with more of the background material.

* + - * 1. The throughput idea is interesting, but if they are trying to traffic steer, then RSNI and RCPI are only two of the values to put into the equation to make a decision.

Other conditions should be determined to be met before the use of the other metrics that could be used at the end of the decision process.

It would be good to tell them that Throughput would be a good metric to use as the main switch.

Does it support QoS? Does it support my carriers network? Then the last point would be if the throughput is sufficient. Unsure as to why RSNI or RCPI wold be the final test.

It is not believed to have this as the final test, but a combined metric

* + - * 1. When we liaised to Wi-Fi on 11b, we had lots of good submissions that were on the subject, but when we sent the letter, we did not endorse any of the specific submission. It would be better to have the discussion parts and methods available on the server, but not call them out specificly in the letter itself.
				2. We may be writing too far because we are looking at this form an 11k/11v side of things. We may have other metrics that could be used to make informed choices for network selection. How much of the extra metrics will provide any real value to the process. We may have a simple answer in that RSSI signal strength is sufficient when the signal strength is sufficient. It could be that ballpark information could be gained from knowing if the signal is +74dbi vs -90dbi one is good to try, and one is a obvious avoid.

If we do that , then why would we have done 11k or 11v?

This is not that simple answer, the initial selection should be easy, but the other things we have are for the better utilization

* + - * 1. Receive signal strength is not sufficient, bad throughput is not going to make anyone happy.
				2. More discussion on metrics to use
		1. Looking for consensus on how to harmonize the three proposed responses.
			1. From Guido’s version:
				1. Question 1: We consider the RCPI value as defined in IEEE 802.11™-2012 a suitable metric for signal strength and can be used as described in 3GPP TSG RAN WG2’s letter.
				2. Question 2: We consider the RSNI value as defined in IEEE 802.11™-2012 a suitable metric for signal quality and can be used as described in 3GPP TSG RAN WG2’s letter.
				3. Question 3: IEEE Standard 802.11™-2012 defines additional values that you might deem helpful for the envisaged usage scenario. Among them we highlight the channel load and noise histogram that provide channel usage statistics. These statistics can be helpful to identify busy channels complementing RCPI and RSNI measurements. Also Received Signal Strength Indicator (RSSI) measurement methods that mitigate against the effects of short-term channel fading might support the decision making process, however there are no accuracy requirements specified for RSSI. Please note that frequency channel bandwidth, number of spatial streams, and other values also impact user experience.
			2. Discussion on how to capture the discussion and how to make it better, the discussion was done with word-smything being done on the screen, but capturing all the intermediate version does not seem useful.
			3. We should focus on the letter and answer the question in context of the liaison letter. We need to recognize that “other criteria” is called out, but we have not been careful in crafting the response to the specific question being asked.
			4. Discusssion on what the question may or may not really be asking.
			5. We should look to tie all three questions together to get a more complete message delivered.
			6. Review the actual letter. (11-14/519)
				1. The question may be just that they have looked at a lot of metrics and they have selected a pair and want to know if that is the right set or not.
			7. Time check – look for the 3 sets of authors to find a joint proposal for tomorrow.
			8. I would like to make sure we get enough info to the 3GPP to ensure that we don’t set an uncertainty that they would claim is precise.
				1. We may have other parameters to consider in the 3rd question.
				2. We could include a table.
	1. We have two meeting slots tomorrow – AM2 and PM2
		1. The only vocal choice was for PM2 for considering the 3GPP liason response letter for consideration by the WG on Friday.
	2. Recess at 6pm
1. TG REVmc called to order by Dorothy STANLEY (Aruba) at 10:31am HT Thursday AM2
	1. Reminder of Patent Policy
		1. No items identified.
	2. Review Agenda
		1. Doc 11-14-525, 11-14/541
		2. Comment Resolution
		3. Motions
		4. Plans for July
		5. Schedule
		6. No objection to agenda
	3. Comment Resolution:
		1. CID 2481, 2479, 2473, 2471 are to have proposed resolution: REJECTED (MAC: 2014-05-15 20:39:29Z): The commenter has not supplied sufficient information to resolve the comment.
			1. The commentor has indicated he would be ok to have the comments rejected. He can either bring them back again, or use this as an unsatisfied comment for further discussion
	4. Review Document
		1. Review document 11-14/525r5 (Carlos ALDINA)
			1. Review new changes based on yesterday’s discussion
			2. New Note was questioned, but it is ok after discussion
			3. Question on the use of the particular RFC cited – it is the one defined
			4. The Thursday motion will include the changes in 11-14/525r5 as well.
		2. Review document 11-14/541r5 (James YEE)
			1. Review new changes from r4 to r5.
			2. The definition of Round function.
				1. An error: “-“ is missing in the example for Round function.
				2. A new version will have to be posted. R6
			3. The Thursday motion will include the changes in 11-14/541r6 as well.
		3. Comment Resolution -- Mark HAMILTON
			1. CID 2434 GEN
				1. Review document 11-13/115r13
				2. Review the updated changes that were proposed on Monday
				3. One text change was needed to be updated for changes in 5.1.1 clause.
				4. Discussion of the new term DSAF (Distribution system access function)

Not sure the group was fully happy with the new term.

As there was only one instance in the proposal, just use “distribution system access” and let the function be defined later

The capture for the figure would then change to “Role-specific behavior block for AP” and similarly for the other 3 figures

* + - * 1. Proposed Resoution: REVISED (GEN: 2014-05-15 20:48:01Z) The proposed resolution to CID 2434 is to replace Figures 5-1 and 5-2 with the figures in 11-13/115r14 labelled "Figure 11-13/115-14" and "Figure 11-13/115-15", and make the text changes described in the document with those proposed figures.
				2. No objection – mark ready for motion
			1. CID 2459
				1. Review comment
				2. By removing the unspecified\_Failure, we have left functions with only ResultCod parameter with only a value of success..and in the past we have removed the paremeters in that case.
				3. Discussion to ensure correct.
				4. Proposed Resolution: REVISED (MAC: 2014-05-15 21:09:46Z): Delete UNSPECIFIED\_FAILURE in all occurrances in the draft (three). Also delete the Editor's Note referencing this issue. And remove any ResultCode parameters, when the result is only one possible value, "SUCCESS".
				5. No objection – mark ready for motion (MAC-Z)
			2. CID 2360
				1. No work was completed on this one
				2. Proposed Resolution: REVISED (MAC: 2014-05-15 21:09:46Z): Delete UNSPECIFIED\_FAILURE in all occurrances in the draft (three). Also delete the Editor's Note referencing this issue. And remove any ResultCode parameters, when the result is only one possible value, "SUCCESS".
				3. No objection – mark ready for motion (MAC-Z)
			3. CID 2462
				1. Review document 11-14/666r1 changes
				2. Discussion on the ramifications of flushing the associations and if we need to flush the queues in some buffers…so the packet numbers would have to be flushed. – so why would you reset the sequence number and the packet number?

If they have a non-empty transmit queue they would have packets “in-flight”.

If this is advisory (optional) then this may be a way to look at this differently.

The only thing that is bad is if you use the same packet number for a different packet….but if we reset the security settings, then the packet number should be restarted in that case.

* + - * 1. The need to flush pending queues would have to be done or packets will just be discarded until the packet number gets back to the value that was there before.
				2. There is a need to put in a “Shall” on P1598.51 to ensure we do flush the proper items states etc.
				3. With the changes we have been making on the fly, we would need to get r1 posted to the server. (an E-mailed draft copy was sent for review my Mark RISON to do in parralell with our discussion).
				4. Discussion on what the real change is being proposed.
				5. Proposed Resolution: CID 2462: REVISED (MAC: 2014-05-15 21:41:13Z): Make changes as shown in 11-14/666r1.
				6. No objection – mark ready for motion (MAC-Z)
	1. Comment Status
		1. All comments seem to have proposed resolution
		2. Missing document at this moment are 11-14/666r1, and
	2. Motions
		1. **Motion #55**
			1. Incorporate the text changes in
			2. [11-14/0526r01-location-related-comments](https://mentor.ieee.org/802.11/dcn/14/11-14-0526-01-000m-location-related-comments.docx)
			3. [11-14/0573r0-updates-to-clauses-21-22-and-24-for-timing-measurement](https://mentor.ieee.org/802.11/dcn/14/11-14-0573-00-000m-updates-to-clauses-21-22-and-24-for-timing-measurement.docx)
			4. [11-14/0646-r1-fine-timing-measurement-fixes-to-clause-16-17-18-and-20-phys](https://mentor.ieee.org/802.11/dcn/14/11-14-0646-01-000m-fine-timing-measurement-fixes-to-clause-16-17-18-and-20-phys.docx)
			5. [11-14/0630r00-corrections-for-d2-8.ppt](https://mentor.ieee.org/802.11/dcn/14/11-14-0630-00-000m-corrections-for-d2-8.ppt) Slide 3, Correction #1
			6. Approve resolutions to comments in [11-13-1160r12-lb199-gen-adhoc-comments.xls](https://mentor.ieee.org/802.11/dcn/13/11-13-1160-12-000m-lb199-gen-adhoc-comments.xls) Tab “Gen Motion Hawaii 2”
			7. Moved: Jon Rosdahl 2nd: Ganesh Venkatesan
			8. Result: 6-0-2 Motion Passes
		2. **Motion #56**
			1. Incorporate the text changes in
			2. [11-14/0525r05-location-related-corrections-to-draft-2-7](https://mentor.ieee.org/802.11/dcn/14/11-14-0525-05-000m-location-related-corrections-to-draft-2-7.doc)
			3. [11-14/0541r06-lci-correction](https://mentor.ieee.org/802.11/dcn/14/11-14-0541-06-000m-lci-correction.docx)
			4. Approve resolutions to comments in
			5. [11-13/0361r31-revmc-mac-comments](https://mentor.ieee.org/802.11/dcn/13/11-13-0361-31-000m-revmc-mac-comments.xls) Tab “Motion MAC-Z”
			6. [11-13/1160r13-lb199-gen-adhoc-comments](https://mentor.ieee.org/802.11/dcn/13/11-13-1160-13-000m-lb199-gen-adhoc-comments.xls) Tab “Gen Motion Hawaii 2” CID 2434
			7. **Moved: Mark Hamilton 2nd: David Hunter**
			8. **Result: 6-0-2 Motion Passes**
		3. **Motion 57**
			1. Having approved comment resolutions for all of the comments received from LB199 on P802.11mc D2.0

Instruct the editor to prepare P802.11mc D3.0 incorporating these resolutions and Approve a 20 day Working Group Recirculation Ballot asking the question “Should P802.11mc D3.0 be forwarded to Sponsor Ballot?”

* + - 1. **Moved: Adrian Stephens 2nd: David Hunter**
			2. **Result: 11-0-0 Motion passes**
	1. **July Meeting Planning**
		1. Objectives: WG ballot on D3.0, comment resolution
	2. **Conference Calls 10am Eastern 2 hour:**

June 20, July 11

* 1. **Ad-Hoc meeting – none**
	2. **Schedule review**
	3. **Availability of 11mc in the IEEE store**
		1. D2.0 is available; D3.0 after successful ballot
	4. **Forward to ISO JTC1/SC6 WG1**
		1. D3.0 after successful ballot; enables submission to ISO prior to October ISO meeting
	5. No other business for this session.
		1. Will reconvene in PM2 to consider 3GPP liaison response.
	6. Recess 12:08 PM HAST
1. TG REVmc called to order by Dorothy STANLEY (Aruba) at 4:00pm HT Thursday PM2
	1. Remind of Patent Policy
		1. No items identified.
	2. Agenda
		1. Review letter to 3GPP
	3. Review doc 11-14/658r4 (Guido HERTZ)
		1. This document has the consensus of the other three papers and was projected and edited in the room online with aobut 60 people in the room
		2. R4 is on the server for consideration
	4. Motion #58 3GPP Liaison
		1. Move to approve the 3GPP liaison reponse in 11-658r4
		2. Moved Mike Montemurro 2nd George Calcev
		3. Result: 37-0-2
	5. Thanks to those that worked over the last 24 hours to get consenus and a final letter.
	6. AOB? – none requested.
	7. Adjourned at 4:18pm

**References:**

**Agenda Files:**

 <https://mentor.ieee.org/802.11/dcn/14/11-14-0475-11-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-10-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-09-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-08-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-07-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-06-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-05-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-04-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-03-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-02-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-01-000m-may-2014-agenda.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0475-00-000m-may-2014-agenda.ppt>

**Editor Reports:**

<https://mentor.ieee.org/802.11/dcn/13/11-13-0095-10-000m-editor-reports.ppt>

**Gen AdHoc Comment Files:**

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-13-000m-lb199-gen-adhoc-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-12-000m-lb199-gen-adhoc-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-11-000m-lb199-gen-adhoc-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-10-000m-lb199-gen-adhoc-comments.xls>

**MAC AdHoc Comment Files:**

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-31-000m-revmc-mac-comments.xls>

 <https://mentor.ieee.org/802.11/dcn/13/11-13-0361-30-000m-revmc-mac-comments.xls>

 <https://mentor.ieee.org/802.11/dcn/13/11-13-0361-29-000m-revmc-mac-comments.xls>

 <https://mentor.ieee.org/802.11/dcn/13/11-13-0361-28-000m-revmc-mac-comments.xls>

**LB 199 Comments:**

<https://mentor.ieee.org/802.11/dcn/14/11-14-0207-08-000m-lb199-stephens-comments.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0207-07-000m-lb199-stephens-comments.doc>

**3GPP discussion Documents:**

* **The liaison request is here:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0519-00-0000-liaison-from-3gpp-on-rcpi.doc**](https://mentor.ieee.org/802.11/dcn/14/11-14-0519-00-0000-liaison-from-3gpp-on-rcpi.doc)
* **Draft response 1:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0572-00-000m-ls-response-to-letter-from-3gpp.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-0572-00-000m-ls-response-to-letter-from-3gpp.docx)
* **Draft response 2:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0658-01-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-0658-01-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx)
* <https://mentor.ieee.org/802.11/dcn/14/11-14-0658-06-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx>
* <https://mentor.ieee.org/802.11/dcn/14/11-14-0658-05-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx>
* **Draft response 3:** [**https://mentor.ieee.org/802.11/dcn/14/11-14-0678-01-000m-liaison-response-to-3gpp-on-rcpi.docx**](https://mentor.ieee.org/802.11/dcn/14/11-14-0678-01-000m-liaison-response-to-3gpp-on-rcpi.docx)
* <https://mentor.ieee.org/802.11/dcn/14/11-14-0699-00-000m-considerations-when-using-802-11-metrics-for-traffic-steering.docx>

**Submissions:**

<https://mentor.ieee.org/802.11/dcn/14/11-14-0541-06-000m-lci-correction.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0541-05-000m-lci-correction.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0541-04-000m-lci-correction.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0541-03-000m-lci-correction.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0541-00-000m-lci-correction.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0525-05-000m-location-related-corrections-to-draft-2-7.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0525-04-000m-location-related-corrections-to-draft-2-7.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0525-03-000m-location-related-corrections-to-draft-2-7.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0525-02-000m-location-related-corrections-to-draft-2-7.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0666-00-000m-proposed-resolution-for-revmc-cid-2462.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0678-01-000m-liaison-response-to-3gpp-on-rcpi.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0678-00-000m-liaison-response-to-3gpp-on-rcpi.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0646-01-000m-fine-timing-measurement-fixes-to-clause-16-17-18-and-20-phys.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0658-02-000m-liaison-response-to-3gpp-tsg-ran-wg2.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0490-03-000m-cids-2463-and-2060-annex-o.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0490-02-000m-cids-2463-and-2060-annex-o.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0490-01-000m-cids-2463-and-2060-annex-o.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0640-01-000m-side-channel-attack.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0640-00-000m-side-channel-attack.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0275-02-000m-lb199-cids-2094-and-2185-resolutions.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0275-01-000m-lb199-cids-2094-and-2185-resolutions.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0044-01-000m-annex-n-2-2-deriving-medium-time-proposal.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0533-03-000m-proposed-resolution-for-revmc-cid-2458.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0646-00-000m-fine-timing-measurement-fixes-to-clause-16-17-18-and-20-phys.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0592-03-000m-revmc-editorial-reviews.xlsx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0549-00-000m-bss-type-definition-in-11ad.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0630-00-000m-corrections-for-d2-8.ppt>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0207-06-000m-lb199-stephens-comments.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0632-00-000m-11n-11ac-phy-correction.docx>