IEEE P802.11
Wireless LANs

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| REVmc Minutes for Jan 2014 - LA |
| Date: 2014-01-24 |
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Abstract

Minutes of the 802.11 REVmc meetings during the January 2014 802 Wireless Interim.

Motion numbers: #44 – Comment Resolution,

 #45 – Comment Resolution,

 #46 – Telecon Minutes,

 #47 – Liasion Letter

1. Monday PM1 – 802.11 REVmc - January 20, 2014
	1. Called to order by Dorothy STANLEY (Aruba).
	2. Review Agenda
		1. Monday
* Chair’s Welcome, Status, Review of Objectives, Approve agenda, minutes
* Editor’s Report
* Timeline and Schedule
* Comment resolution
	+ 1. Tuesday PM1

Comment Resolution

CID 2199, 2466 (30r0, 49r0) Carlos C.

CID 2486, 2487, 2474 (1399r07

* + 1. Tuesday PM2
		2. Wednesday PM1
		3. Wednesday PM2
		4. Thursday PM1
		5. Thursday PM2
		6. Agenda approved for the week
	1. Patent Policy
		1. The Patent Policy was reviewed
		2. No one raised any items
	2. Approval of Minutes
		1. The minutes from Dallas
			1. <https://mentor.ieee.org/802.11/dcn/13/11-13-1357-00-000m-revmc-minutes-for-nov-2013-dallas.doc>
			2. Approved by Unanimous consent without objection
		2. Minutes from the Telecons since Dallas
			1. <https://mentor.ieee.org/802.11/dcn/13/11-13-1499-04-000m-tgmc-telecon-minutes-dec-13-jan-14.docx>
			2. Minutes have an r5 that need to be uploaded.
			3. Some comments and issues had been identified, and a new revision needs to be posted.
			4. Will come up later in the week for consideration
	3. Review Doc 14/41r0 Dan HARKINS (ARUBA) Security Related CIDs
		1. CID 2416
			1. Review comment
			2. Proposed Resolution: Revised – incorporate the changes in 11-14/41r1
		2. CID 2426
			1. Review comment
			2. Proposed resolution: Revised incorporate the changes in 11-14/41r1 (see 13.5.7)
		3. CID 2436
			1. Review comment
			2. Discussion on whether bits are ordered or not
			3. Bit streams are Big-Endian, and Bit fields are Little-Endian - This seems to add to confusion. Clause 8 was written many years ago, and it seems only recently that there is purported confusion
			4. Security fields are Big-Endian, and the security folks understand that.
			5. We could have a sentence that says Nonce’s are Big-Endian...
			6. It seems that “as a bit stream” is causing confusion
			7. So changing 8.2.2 to have convention without “bit streams”.
			8. Proposed resolution: Revised; incorporate the changes in 11-14/41r1
		4. CID 2445
			1. Review comment
			2. Proposed resolution: Revised; incorporate the changes in 11-14/41r1
	4. Editor Report - 11-13/95r8 – Adrian STEPHENS
		1. Thanks to volunteers
		2. Status of Draft reviewed (slide 3)
		3. Page count up to 3151 for D2.2
		4. Review Comment counts
		5. Thanks to Adrian for getting 11ac rolled in
	5. Comment Resolution: 11-13/703r3 Adrian STEPHENS
		1. This document fixes a missed issue from before.
		2. Changes to 3GPP
		3. Reviewed the changes that corrected several typo-graphic errors
		4. Missed a group “dot11BSSSStatisticsGroup” not called out.
		5. Would like a motion to approve this document to fix some errors.
		6. Dorothy will include 11-13/703r3 in the motions on Wednesday
	6. Comment Resolution: 11-13/1314
		1. CID 2039
			1. Review comment
			2. NAV update
			3. Main change is to change the arrow character to a “is set to”
			4. More thought is needed to ensure it is accurate
			5. The question on if we want to be more “C” like or more textual
			6. The target was to have something more harmonized with other sections of the draft.
			7. Clause 11 has some pseudo code, but these changes may need to be completed to be more closely aligned with Clause 11.
		2. CID 2189
			1. Review comment
			2. We went through these definitions before, but Adrian found more changes that need to be evaluated
			3. Review definition again
			4. Discussion on BSS and how it could be defined generically, or is it too specific to 802.11
			5. Fundamental items to 802.11 may be targets for Clause 3.2.
			6. Do we want to have a large number of items in 3.1 or in 3.2?
			7. We are not able to come to an agreement on the criteria for what should go in 3.1 or 3.2...
			8. Proposal to reject the comment was discussed.
			9. Objection to just rejecting all of it just because of one definition being controversial
			10. Determine to continue to review proposed change, but rather than change definitions, it is just does it belong in 3.1 or 3.2.
			11. Proposed Resolution: Revised Incorporate the changes in 11-13/1314r14
			12. No objection, but people were asked to do homework to review the definitions that we had not reviewed during this mtg slot.
	7. Recessed at 3:30pm
1. Tuesday PM1 – 802.11 REVmc - January 21, 2014
	1. Called to order by Dorothy STANLEY (Aruba) at 1:30pm
	2. Proposed Agenda:
		1. Comment Resolution
		2. CID 2199, 2466 (11-13/30r0, 11-13/49r0) Carlos CORDEIRO (Intel)
		3. CIDs 2486, 2487,2474 (11-13/1399r07)
		4. CIDs 2065, 2169, 2054, 2187, 2170
	3. Comment Resolution:
	4. CID 2466: MAC
		1. Review comment
		2. Presentation of 11-14/0049r0

 **In response to the commenter’s first point:**

*“What does this text mean? "all the streams within the Switching Stream element that have the LLT Type field set to 1 shall be switched using the Stream-based Link Loss Countdown," - it sounds like it is saying that the session transfer will take place based on the LLC timer, but nowhere does it really say this - nowhere does it say, make the transition when the counter reaches zero”*

The paragraph below in P1624L45-47 states “The FST transition for the STA, if STA-based, or the stream, if stream-based, from the Setup Completion state to the Transition Done state shall occur immediately after the corresponding Link Loss countdown timer transitions from 1 to 0 within any of the initiator or responder of the FST session.”

Therefore, there is already a rule to state that the transition happens when the counter reaches zero.

**2nd point**

“*, and furthermore, the counter counts down as long as no frame is received - what if a frame is received? Then the counter will be reloaded and so, if frames keep arriving for this stream, the stream will never transition! Is the intention that the source of the frames of the stream will stop sending the frames and this will cause the timer to reach 0? If so, this is very implicit and should be stated more clearly*”

Section 10.33.2.2 specifies that there are two possible ways to perform FST and transition sessions:

1. Using a timer-based approach through the LLT timer: P1624L25-28
2. Using FST Setup Request/Response frame exchange in which there is no timer, but instead is based on an explicit frame exchange: P1624L30 and a few paragraphs after that

The text being alluded to by the commenter explains the behavior for case (1). In such case, the intended behavior is precisely only to perform FST if the timer expires, which is an indication of link breakage. This is the reason why the timer is reloaded after a frame is received. If the link never breaks and frames are received before the timer expires, then the FST should never be performed. So, the behavior is correct as specified and the text seems to fully describe such behavior.

**Point 3**

“*and it is completely unclear which entity in the system will perform the gating to stop letting frames from this stream pass out to the network. I suspect that the entity that would do this is actually not a part of the 802.11 system, but some entity above 802.11 - in which case, it would still be nice to have some statement in here pointing to that fact.*”

There is some misunderstanding here. There is no such “gating” entity. For the timer-based approach, the reason why frames are not successfully received is primarily due to link breakage, which could be something that happens more frequently in 60 GHz than in lower bands. As such, this special provision is made to ensure a timely transition to lower bands.

* + 1. The group agreed with analysis in 11-14/0049r0. Thus, recommending Reject response. The proposed resolution was to just point to the presentation or to cut and paste the text into the proposed resolution...The Chair and author decided to take it off line for a summary to be proposed for the resolution. (The contents of the document was considered to be too much.)
	1. CID 2199 MAC
		1. Review Comment
		2. Presentation of doc: 11-14/0030r2
		3. Clarification about the comment: DMG STAs start directly in State 2 (see Figure 10-12), which means they can’t do FT or SAE. Yes, they do still do RSN, and that is not the intent of the comment.
		4. Discussion on the presentation
			1. Do we have sufficient implementations to worry about backward compatibility in the 11ad areana, can we just look for the right answer instead
			2. Not sure if compatibility is the real reason.
			3. How to determine if support of SAE vs OSA?
			4. Debate on if Authentication frame is used for OSA or SAE.
			5. There is a capability bit that should be able to handle this authentication.
			6. Proposal is to have a resolution prepared on option 1 and bring back to the group.
	2. CID s 2486, 2487,
		1. Using Doc 11-13/1399r7
		2. CID 2486 MAC
			1. From our previous discussion we had nearly agreed to “Accept”.
			2. Discussion on with Carlos on why unprotected DMG as AC\_VO?, and what is time critical in an unprotected DMG?
			3. The proposed change inserts 4 rows into the Default QMF policy table.
			4. These give defaults...
			5. Proposed Resolution: Accept
			6. Question – why do we have all these states that seem redundant? To provide clarity
			7. No objection – Mark Ready for Motion
		3. CID 2487 GEN
			1. Review comment
			2. Proposed resolution from before needed to be checked with Carlos...the proposed resolution is correct.
			3. Proposed resolution: Revised: Incorporate the changes in 11-13/1399r8 for CID 2487
			4. Question do we care about the negative statement of what it is not rather than what it is...ok to leave as is.
			5. No objection – Mark ready for Motion
		4. CID 2474 GEN
			1. Review comment
			2. Review 11-13/1399r7 discussion
			3. Proposed Resolution: Revised: Note to commenter: S-PCPs are used only with Decentralized clustering; see P56L61 and the CCSR is defined only using S-APs, see P56L62. Delete the cited sentence at P57L30: “There are no S-PCPs in an ECPAC since a PCP has no mechanism to communicate with the CCSR.”

And delete the sentence fragment at P57L6 “— The wireless medium to an associated STA that contains the CCSR”

* + - 1. No objection Mark ready for Motion
		1. CID 2065 MAC
			1. Review Comment
			2. Review 11-13/1399r7 discussion on 2065
			3. Proposed Resolution: Revised: Replace the text at 119L5-12 with the text in 1200L17-30, delete the cited section 9.22.7.2 and revert the 9.22.7.2 section heading changes.
			4. No objection – Mark Ready for Motion
		2. CID 2169 MAC
			1. Review Comment
			2. Initial feedback is the cited text was not needed
			3. Association Request Element already has the MMS element, so no need to call it out. Index 26
			4. Proposed Resolution: Revised; Delete the three cited Sentences (1633.09, 1633.38, 1633.46)
			5. No objection – Mark ready for motion
		3. CID 2054 MAC
			1. Review comment
			2. Discussion: There are five instances of non-DMG network and one instance of DMG network in the draft. This could all be replaced with other wording, or the term could be defined. Needs a submission.
			3. Mark to take it offline to see about a solution.
		4. CID 2187 MAC
			1. Review Comment
			2. Discussion on when definitions need to be created or not.
			3. Proposed Resolution: Reject; 10.29.2.1 first sentence says, "A STA is PCP handover capable if the PCP Handover field within the STA’s DMG Capabilities element (8.4.2.127 (DMG Capabilities element)) is 1. The STA is PCP handover incapable otherwise." This seems to already do what is requested to be added.
		5. CID 2170 MAC
			1. Review Comment
			2. Discussion: Agreed, this needs to be corrected. However, we need a DMG Relay expert to explain how this is supposed to work - it is not obvious from the existing text how to possibly determine this.
			3. Pair-wise authentication tends to be on a single link?
				1. But in the case you have intermediaries; we may not have multiple links but a single one end to end. But then the in between STA need to be able to support this
			4. In an 802.11 Relay, do you have separate security handling of the STA in the relay... or just in the end points?
				1. Does a STA need to know a MIB value or the RSN element in a STA as the endpoints do not see the Beacons or probe response because of the number of intermediaries?
			5. More research may need to be done on this
			6. Assign the comment to Carlos CORDIERO
			7. An Alternative Resolution would be to delete 10.36 DMG Relay Procedures...
		6. CID 2184 GEN
			1. Review Comment
			2. It is more general than editorial
			3. Need to identify the terms that need to be lower-cased.
			4. Look for volunteer for CID – Carlos CORDIERO
			5. Proposed Resolution: Revise:
		7. CID 2008 GEN
			1. Review Comment
			2. Discussion on the difference of PBSS and IBSS
			3. The statement cited may not make sense, but it is not necessarily wrong.
			4. What is the real point of the statement?
				1. This statement came from the process of resolving comments...and trying to say that there are no special cases for IBSS.
			5. We could make it a note and make it IBSS specific, or just delete it.
			6. Discussion on the statement
			7. Proposed Resolution: Revised –delete the cited Sentence.
			8. No objection – mark ready for motion
	1. Review 11-14/0057r3 – Adrian STEPHENS (Intel)
		1. CID 2129 MAC
			1. Review Comment
			2. Review proposed changes identified in document.
			3. Question on 1.b – A Multi-band capable non-AP STA for which the last received probe request included a Multi-band element?
				1. The matching text in the original was reviewed
				2. It is in the list of STAs that can respond
				3. If we delete the sentence, we may loose some 11ad behaviour...
				4. Could we add an editor note to get some attention to it in the next ballot..

No, we have the experts here now, let’s look at it.

* + - 1. Too many “and” in “1” – Guido gets points for noticing and correcting from Adrian (page 3 of 8).
			2. Request to take some time to review the document some more.
			3. If we structure this in to separate clause to address who responds, and what is responded with.
				1. Seems sensible – Marc EMMELMANN (self) and Jarkko KNECKT (Nokia) would volunteer to work with Adrian to help structure the proposal.
			4. Next Steps – those interested (Adrian, Mark, Jarkko, and Carlos) will structure a new proposal, and bring to a telecom and ready for submission during the F2F.
			5. Previous efforts tried to make this a list of all positive oriented criteria, and it was too long...it is simpler to have it have the negative form.
			6. Are there any circumstances that a Probe Request to a peer STA is sent or responded to?
				1. None that the group knew of.
			7. Why cannot the STA not just respond to the Probe Request that is addressed to it?
				1. The proposal scope is not to fix everything, but to address the comment.
				2. Not looking to making any functional change, but rather make the spec easier to read on the existing functions.
			8. TDLS discovery process goes to Peer-STAs.
	1. Recess at 3:30pm
1. Tuesday PM1 – 802.11 REVmc - January 21, 2014
	1. Called to order by Dorothy STANLEY (Aruba) at 1:30pm
	2. Proposed Agenda:
* Motions – Approve Resolved CIDs
* Comment Resolution
	+ CID 2263: 11-13/1455r0
	+ Adrian: 11-13/875r13
	+ MAC Prepared Resolutions/discussion
	1. Motion Telecon Comment Resolutions
		1. **Motion #44**
			1. Approve comment resolutions to comments in

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-21-000m-revmc-mac-comments.xls> Tab “Motion MAC-R” and

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-03-000m-lb199-gen-adhoc-comments.xls> Tabs “Gen Motion Dallas C” and “Gen Motion Telecon 1”

and

Incorporate the changes indicated in <https://mentor.ieee.org/802.11/dcn/14/11-14-0006-00-000m-fixes-to-dmg-operation.docx>

* + - 1. Moved: Jon ROSDAHL 2nd: Mike MONTEMURRO
			2. Result: 7-0-1 motion passes
	1. Doc 11-13/1455r0 – Mike MONTEMURRO
		1. CID 2263 GEN
			1. Review Comment
			2. Change “scan results” to “beacon, probe response, and measurement pilot information “
			3. Proposed Resolution: Revise; incorporate the changes in 11-13/1455r1.
			4. No-objection – mark ready for motion
	2. Doc 11-13/0875r7 – Adrian STEPHENS
		1. Caching duplicates issue
		2. CID 2048, 2023, 2496, 2140
			1. Review comment again
			2. Review doc again
			3. ATIM Frames should not be cached and should not be dependent on QMF functions
			4. Simplified table reviewed
			5. Review Receiver Cache rules
			6. We have reviewed this now 5 times.
			7. The RR numbers would need to be adjusted to be consistent
			8. Propose to have Adrian make a clean version that the authors
			9. Plan to bring back later in the week.
	3. Comment Resolution MAC (17 comments ready to go)
		1. CID 2494
			1. Review comment
			2. Menzo has reviewed and supports the proposed resolution
			3. Proposed Resolution: Reject: Per 9.7.6.5.5: A STA shall not transmit a control response frame with TXVECTOR parameter GI\_TYPE set to SHORT\_GI unless it is in response to a reception of a frame with the RXVECTOR parameter GI\_TYPE equal to SHORT\_GI.

This does not dictate the reverse. That is, an ACK to a SHORT\_GI frame may or may not be sent using SHORT\_GI. Thus, the receiver that missed such an ACK can't know which was used, and has to assume the maximum duration for the ACK.

* + - 1. No objection – move ready to motion
		1. CID 2358
			1. Review comment
			2. Review context 10.11.2
			3. Proposed Resolution: Accept
			4. No objection – Move ready to Motion
		2. CID 2362
			1. Review Comment
			2. Proposed Resolution: Accept
			3. No Objection – Move ready to Motion
		3. CID 2363
			1. Review Comment
			2. Discussion: MAC: 2014-01-19 05:55:15Z: Propose: Revise to delete the note completely, and the ones at 1487.47 and 1538.53. (See CIDs 2365, 2372). This note is both providing guidance on how to use the information derived from 802.11 operations, which could be said about many types of 802.11-derived information, why do we specifically address this particular situation? Secondly, beyond the type of information considered by the note, it is specifically addressing only application behavior, way out of scope for 802.11.
			3. This was put in due to location, and this was put in to address location privacy.
			4. Proposed Resolution: Revise; Delete the Note entirely. (Same thing at 1487.47 and 1538.53 (See CID 2365 and 2372).
			5. No Objection – Mark ready to Motion
		4. CID 2364
			1. Review Comment
			2. Proposed Resolution: Revised; Replace “may” with “can”
			3. No Objection – Mark ready to Motion
		5. CID 2365
			1. Review Comment
			2. Proposed Resolution: Revise; Delete the Note entirely.
			3. No Objection – Mark ready to Motion
		6. CID 2366
			1. Review comment
			2. Proposed Resolution: Revise: Replace “may” with “might” in both occurrences in the cited sentence.
			3. No objection – Mark ready to Motion
		7. CID 2367
			1. Review comment
			2. Proposed Resolution: Revise; make changes as requested, plus also change “one-message” to “one-frame” at 1496L9.
			3. No objection – Mark ready to Motion
		8. CID 2368
			1. Review comment
			2. Proposed Resolution: Revise. Replace "an enablement response message" with "the DSE Enablement frame"
			3. No objection – Mark ready for Motion
		9. CID 2370
			1. Review comment
			2. Proposed Resolution: Accept
			3. No objection – Mark Ready for Motion
		10. CID 2371
			1. Review comment
			2. Proposed Resolution REVISED (MAC: 2014-01-22 01:05:47Z): Replace "TDLS Setup messages" with "TDLS Setup frames"
			3. No objection – Mark Ready for Motion
		11. CID 2372
			1. Review Comment (3 copy of the note we are deleting).
			2. Proposed Resolution: Accept
			3. No objection – Mark Ready for Motion
		12. CID 2165
			1. Review Comment
			2. Proposed Resolution: REVISED (MAC: 2014-01-22 01:05:47Z): Replace "TDLS Setup messages" with "TDLS Setup frames"
			3. No objection – Mark Ready for Motion
		13. CID 2374
			1. Review Comment
			2. Proposed Resolution: Accept
			3. No objection – Mark Ready for Motion
		14. CID 2376
			1. Review Comment
			2. Proposed Resolution: [6:14:49 PM] Mark Hamilton: REVISED (MAC: 2014-01-22 01:13:44Z): Make changes as proposed. Also add "frame" following "GAS Query Request" and "GAS Query Response"
			3. No Objection – Mark Ready for Motion
		15. CID 2391
			1. Review comment
			2. Proposed Resolution: Accept
			3. No objection – Mark Ready for Motion
		16. CID 2171
			1. Review comment
			2. Proposed Resolution: REVISED (MAC: 2014-01-22 01:19:03Z): Change the cited location to, "While waiting to receive a group addressed frame that was previously indicated in a TIM element or More Data field, a mesh STA that detects CCA is IDLE for the duration of the PHY specific Group Delivery Idle Time may assume that no more frames ..."
			3. No Objection – Mark ready for Motion
	1. MAC Discuss Comments
		1. CID 2360
			1. Review comment
			2. Measurement Request and reports did something like this before
			3. 643L37 is the example.
			4. After discussion Mark will take offline and come back with a proposed resolution.
		2. CID 2369
			1. Review Comment
			2. The except PCO was to indicate that this feature is not able to be done by the TDLS STAs
			3. Proposed Resolution: REVISED (MAC: 2014-01-22 01:32:47Z): Change the cited sentence to, ""Features, excluding PCO, that are not supported by the BSS .. may be used .. between those STAs."
			4. No Objection – Mark ready for Motion
		3. CID 2168
			1. Review Comment
			2. Error codes needs names in the Table added.
			3. “Magic Numbers” should be named...
			4. Assign CID to Mark HAMILTON to come up with names
			5. Strawpoll : Do you find this a meaningful activity: 6 yes 3 no
		4. CID 2466
			1. Review Comment – We did this before
			2. We looked at summarizing the answer from doc 11-14/049r0
			3. Proposed Resolution: REJECTED (MAC: 2014-01-22 01:43:29Z): From 11-14/49r0:

The paragraph below in P1624L45-47 states “The FST transition for the STA, if STA-based, or the stream, if stream-based, from the Setup Completion state to the Transition Done state shall occur immediately after the corresponding Link Loss countdown timer transitions from 1 to 0 within any of the initiator or responder of the FST session.”

Therefore, there is already a rule to state that the transition happens when the counter reaches zero.

Section 10.33.2.2 specifies that there are two possible ways to perform FST and transition sessions:

1) Using a timer-based approach through the LLT timer: P1624L25-28

2) Using FST Setup Request/Response frame exchange in which there is no timer, but instead is based on an explicit frame exchange: P1624L30 and a few paragraphs after that

The text being alluded to by the commenter explains the behavior for case (1). In such case, the intended behavior is precisely only to perform FST if the timer expires, which is an indication of link breakage. This is the reason why the timer is reloaded after a frame is received. If the link never breaks and frames are received before the timer expires, then the FST should never be performed. So, the behavior is correct as specified and the text seems to fully describe such behavior.

There is some misunderstanding here. There is no such “gating” entity. For the timer-based approach, the reason why frames are not successfully received is primarily due to link breakage, which could be something that happens more frequently in 60 GHz than in lower bands. As such, this special provision is made to ensure a timely transition to lower bands.

* + - 1. No Objection – Mark Ready for Motion
	1. GEN Comment
		1. CID 2226
			1. Review comment
			2. Proposed Resolution: REVISED (GEN: 2014-01-22 01:52:04Z) delete "contiguous"
			3. No Objection – Mark Ready for Motion
		2. CID 2002:
			1. Review Comment
			2. Proposed Resolution: REVISED: Delete “contiguous”
			3. No Objection – Mark Ready for Motion
		3. CID 2227: GEN
			1. Review Comment
			2. Proposed Resolution: ACCEPTED
			3. No Objection – Mark Ready for Motion
		4. CID 2235: GEN
			1. Review Comment
			2. Proposed Resolution: Discussed. This is a more complicated change, perhaps. Ran out of time.
	2. Recessed 6:00pm
1. Wednesday PM1 – 802.11 REVmc - January 22, 2014
	1. Called to order by Dorothy STANLEY (Aruba) at 1:30pm
	2. Proposed Agenda:

CIDs 2423, 2424 – ERP PHY

CIDs 2411, 2412 – DSSS deprecation

* + 1. This meeting slot was determined to discuss the 4 CIDs.
			1. Reviewed the previous state
				1. See doc 11-13/1500r4 slide 4 and 5
			2. Reviewed Timeline info (slide 6)
		2. No objection to the agenda – no additions requested
	1. Review document 11-13/1533r1 – Graham SMITH (DSP Group)
		1. CIDs 2423, 2424, 2411, 2412 (GEN)
		2. The four CIDs suggest Deprecation
		3. Review a possible 3 Step rule for removal –
			1. Deprecated – Obsolete – Remove
		4. 3 Proposals described
			1. Noted error of listing 11Mb/s as mandatory in list that should not be.
			2. Option C is the recommended option
			3. Proposed Resolution is listed in the document
		5. Questions
			1. “Optional and deprecated” vs “optional and discouraged”
				1. Thought to be less offensive
			2. Question on getting rid of 5.5 Mb/s and 11 Mb/s?
				1. Why not have beacons at 1Mb/s be stopped?
				2. Note that step one is to make 5.5Mb/s and 1 Mb/s not be required to be supported may be too early, but making them receive only may allow for a more orderly reduction of use.
			3. Devices that only support...never mind
			4. Question on why not use Option B?
				1. There is time, and as there may be time between now and when the spec is published, we may want to be moving a bit more aggressive
				2. A Straw poll on the three options should be run later today
		6. A Straw poll will be done but after the next presentation.
	2. Review document 11-14/0099r0 Brian HART (CISCO)
		1. Time to start Phasing out non-OFDM rates
		2. Reasons for deprecation given
			1. For example, at the London Olympics the use of 1Mb/s by many devices meant very little actual data was sent in the main stadium
			2. Sniffer traces were taken in the main stadium during the Opening Ceremony
			3. Much of the traffic appeared to be Beacons, Probe Requests and Probe Responses management frames sent at 1Mb/s
		3. Other examples listed and quotes on support for deprecation
		4. It may be unreasonable to delete non-OFDM rates from the 802.11 stds.
		5. Review the roles of 802.11 and Wi-Fi Alliance.
		6. Suggestion for “Green” Wi-Fi device
			1. Market face and trade organization
			2. Compare features of Green AP with non-OFDM-only client and Green client with non-OFDM-only AP
		7. This proposal extends the goals and mechanisms of Proposal B in 11-13/1533r0
		8. Proposal to agree in principle and then liaise with the Wi-Fi Alliance.
		9. Suggest that a document should be created that lists the known issues with deprecating non-OFDM rates and a menu of potential mitigation measures (including no mitigation).
		10. Question/discussion:
			1. Are you suggesting that we not include the word Deprecation?
				1. Yes
			2. This seems stronger in one way, but not as strong in other.
			3. Hinting toward deprecation is probably ok, but we need to be careful on the impact of our choices
				1. These proposals are very close
			4. Discussion on how the non-OFDM-only client interaction and does it only drop, or can it come back in?
				1. Yes it should be able to drop in and out
				2. How that is to be documented should still be discussed
			5. Do you see a need to liaise even before it is optional here?
				1. Option C from Graham is safe option, but Option B gives the Wi-Fi alliance the ability to progress this faster or slower as they see the market needs.
			6. Prefer to have a Liaise with the WFA before we make it optional to ensure that we have a receptive group
			7. We could get a liaise on the roadmap and if the WFA agrees we could get that feedback in March and work out the details.
			8. While we do not discuss what is really being done in WFA, we have a lot of folks that are working in both areas, but .11 should make the point to make it optional, and move forward and allow the demise of the 11b.
			9. Marking the 11b deprecated, we make that first step to the removal of 11b. If we add a “Should” statement to have newer devices initiating the 11b negotiation...and allow only the 11b devices initiate the 11b rate negotiations.
				1. We do not want to slow down the decision process on this removing process...it is a different process than what we are used to doing (adding new features).
			10. Slowing down may be the right answer, for many markets 11b is not the best option, but there is some pushback from IoT (Internet of Things) market that sees that 11b is a positive option. The customers of IoT have 11b already in their homes. The infrastructure is there to allow IoT market to grow.
				1. Deprecation is often hard to swallow
				2. How to get the existing Market to have a great experience while allowing the new IoT Market to grow
				3. There may be a range issue or some other restriction sets that we could indicate rather than just removing the functions.
			11. We should not be too careful to indicate to the market what we believe is the way to improve the experience. Just because we deprecate something does not make the existing or current build of devices still implement all these features, and so it is not going to impact the existing market. Making the proposed changes may signal the old technology is being replaced, but we can still have some uses of the old.
			12. We have the same arguments before and we have discussed this in 11-13/1446 and shown that 6Mb/s vs 1Mb/s is not a major problem, and the distance is not discernibly different. The argument of the range has not been indicated any error.
				1. There is some real world measurement reports that 11b has significant range over 11g.
			13. Argument of using 11b for IoT is a good thing for a new market. We should not restrict the market in an effort to clean up the 2.4 Mhz
	3. Deprecation Straw Poll
		1. I prefer
			1. 1. Option B in 11-13/1533r1 (Graham) – Deprecate
			2. 2. Option C in 11-13/1533r1 (Graham) – deprecate, tx/rx difference
			3. 3. Option (D) in 11-14/0099 (Brian/Andrew) – Optional
			4. 4. No Change to existing Text
			5. 5. Abstain
		2. Discussion on editing the straw poll
			1. Unsure how to determine what the decision should be until we liaise with the Wi-Fi Alliance to get more data. – would like to have the decision stalled. – Liaison to WFA now, no action till then
			2. There is no motion intended to day from the agenda, but rather a straw –poll today. Many of these items have been discussed with WFA and we know a lot of the feedback individually
			3. Objection to adding the “Liaison to WFA now, no action till then” option to the Straw poll
			4. Question will be using Chicago voting – yes
			5. Leaving the additional item should be done to get more information, but we need to use Chicago voting to determine the information.
			6. We should not include the “Liaison..” in this poll, but have it a different Straw-poll.
			7. Change the new number one “No change to existing Text at present, Liaison to WFA Now, no action till then.
			8. Change Option B in 11-13/1533r1 (Graham) – Deprecate 16&17, optional rates in 19 + Liase”
			9. Change Option C in 11-13/1533r1 (Graham) – deprecate 16&17, tx optional difference + Liase
		3. Strawpoll:

I Prefer (Can select all)

1. No change to existing text at present, Liaison to WFA now

2. Option B in 11-13-1533r1 (Graham) – Deprecate 16&17, optional rates in 19 + Liase”

3. Option C in 11-13-1533r1 (Graham) – deprecate 16&17, tx optional difference + Liase

4. Option (D) in 11-14-0099 (Brian/Andrew) – Optional + Liaise

5. No change to existing Text

6. Abstain

* + - 1. Results: 1. 30 2. 14 3. 15 4. 21 5. 22 6. 9
		1. Would like another straw poll about the idea of if the group wants to defer to WFA input?
			1. New Straw poll:
				1. I prefer to defer a motion on deprecation until WFA feedback received:
1. Yes, 2. No, 3. Abstain
	* + - 1. Note that there are some comments that we will have to resolve the comments, and it will be independent from the WFA possible feedback.
				2. We should not put today what we agreed in November to do in January.
				3. Change to “on the 4 Deprecation CIDs”...
				4. We should not be making external dependencies that tied dependency to halt our progress.
				5. We as a body should be able to make decision that determine our own destiny. We should not be looking to just stall or we should look to make a decision one way or the other.
				6. While this may be noted as possibly passing the buck back to the WFA, but this is a Liaise document that gives two way communications and gets marketing input to our revision process (11mc).

Depending on the timing we may or may not have the WFA feedback in time to get the comments resolved.

There is no rush to complete sooner than later.

* + - * 1. Straw polls are supposed to be a tool to get a feeling for what the group thought on some question is. It is not supposed to be like motion where we lobby each other.
				2. Some dislike the strawpoll -- others like the strawpoll.
			1. I prefer to defer a motion on the 4 Deprecation CIDs until WFA feedback received:

Yes - 19 No – 21 Abstain - 19

* 1. Work items:
		1. Look to create a Liaison with the WFA
			1. Is there a volunteer to create the letter?
			2. Brian HART (with Andrew MYLES in absentia) and Sean COFFEY
		2. Is there a text change to allow the non-deprecation as an alternative to resolve the comments?
			1. Menzo WENTINK was volunteered by VK JONES as well as Carlos ALDANA.
		3. Is there a “Should not” statement that we could put into the draft to address better behaviour in the existing draft.
			1. Sean COFFEY volunteered to craft text.
	2. Next meeting slot we will be in Park, and discussing doc 11-13/1509r2 and 11-14/160r2.
	3. GEN Comments
		1. CID 2210:
			1. Noted that the PCP acronym is derived from the PBSS acronym.   So, it should change to DCP.
			2. Is “directional” the right/best term?  The primary attribute of the PBSS is that it doesn’t connect to a DS.  That is orthogonal to the PHY being directional.  We could either find a better term that conveys the right meaning, or reject this and keep “personal” as the best term we have.  The term “personal” came from consideration of use cases.
			3. Straw Poll between a REVISED resolution with the change extended to PCP, or a REJECTED resolution.  Results: 4-10.
			4. Resolution: REJECTED: Personal is a descriptive term that reflects the anticipated use cases.
		2. CID 2212:
			1. Same as 2210.  Will come back with actual edited resolution ready.
			2. Not resolved.
		3. CID 2223:
			1. Not sure that this is a ‘might’ situation, as we (802.11) are defining where this happens, whether within our scope, and if so where.  So, we are actually saying it is permissible to do it in these places.
			2. Disagreement.  We know that classification does happen, and it happens in one of these three places, so ‘is’ is the right term.
			3. Actually, saying that TCLAS classification happens above the MAC\_SAP doesn’t make sense at all, since it is a method by which the MAC behavior is controlled, not an entity above the MAC\_SAP.
	4. Recess until Wed PM2
1. Wednesday PM2 – 802.11 REVmc - January 22, 2014
	1. Called to order by Dorothy STANLEY (Aruba) at 4:05pm
	2. Proposed Agenda:

Comment Resolution –Location CIDs

 11-14-160r2 (Carlos ALDANA)

11-13-1509r2 (Brian HART)

* + 1. No objection to agenda
		2. The main topic this slot is Location topics
	1. Review Doc: 11-14/160r2 – Carlos ALDANA (Qualcomm)
		1. CID 2164
			1. Review proposed resolution
			2. Question on what does Non-HT?
				1. It applies to all bands, so if you get a frame in 5Ghz, that is obviously an 11a frame.
			3. Discussion on if “may” should be a “shall” in 10.24.6 Fine Timing Measurement on page 7.
				1. Updates to the text will be made and a new revision will be brought back with some more justification for the final wording
			4. Question on removing “successfully received” –
				1. Need to remove – there should be a concept of a session where the dialog tokens all belong
			5. Need to define what a “session” is and make it better defined.
			6. What side captures the timestamp?
				1. T1 and t4 may not have time to capture the timestamp, so it is indicated in the frame.
				2. You always get a t1 frame in the proper, but you may not have had time to get the timestamp in time, and you indicate that in the response.
				3. This is to allow when timestamps are not exact.
			7. When the Dialog Token reaches 255 the next value is 1. This is a reuse of the Dialog Token number, and the other case is normal retry case.
			8. Discussion on the 10ms response
		2. Would a picture showing how to do off-channel functions should be done help the description? Can we include a better overview description of how all this occurs.
		3. The Fine Timing measurement was added in D2.0, and then some information was added to 2.1, and a new appendix was added, does this presentation affect T3?
			1. It may, but not expected to have an issue.
			2. The authors are asked to follow-up and check.
		4. The Changing terminology needs to be checked to ensure consistent through the spec for all the Fine Timing Measurement.
	2. Review Document 11-13/1509r2 Brian HART (CISCO)
		1. CID 2404 and 2403 are the primary focus of this submission.
		2. Discussion on 2404

1) Parsibility of response is fragile – could become difficult to distinguish start of Civic Location type from another optional subelement. Issue also affects Public Identifier URI field in Location Identifier Report.

Proposed fix is to prefix these fields by Element ID and Length octets.

Examples of payloads

|  |
| --- |
| D 0 1 2 3H 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1C +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+P | GEOCONF\_CIVIC | N | what | country |V +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+4 | code | civic address elements ... +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+D 0 1 2 3H 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1C +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+P | OPTION\_GEOCONF\_CIVIC | option-len |V +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+6 | what | country code | . +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+ . . civic address elements . . ... . +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+GEOCONF\_CIVIC = 99; OPTION\_GEOCONF\_CIVIC = 36, presumably in network byte order (big endian) so 0x00-34. So if we defined a sub-element with Element ID = 0 or 99, parsing would be very difficult / impossible. Or if IETF prepared a new RFC (e.g. “DHCPv9”) with a new leading octet, parsing would also be much more difficult. Basically we are creating an unnecessary coupling between layers. |

2) The RFC is an IETF standard, with network coding (big-endian) ordering, unlike 802.11, so we need to be explicit if this is little-endian or big-endian. Propose little endian as per 8.2.2 (same as LCI)

3) Then, when the Civic Location is unknown, then set the Length to 0. This aligns with a discussion with an IETF representative (Marc Linsner), who says “In the IETF, lack of data indicates I don't know.”

4) Location Civic is also useful for FTM procedure. Add optional Civic request/response within FTM request/next FTM frame

5) Location Civic is also useful within the Neighbor Report. Add optional Civic request/response within Neighbor Report Req/Resp exchange

6) Fix up URI encoding

|  |
| --- |
| For the URI, consider <http://www.example.com>, ftp.example.com, gopher:, mailto:, news:, telnet: etc etc. So if we defined a sub-element with Subelement ID = 104, 102, 103, 109, 110, 116, parsing would be very difficult / impossible. Or if a new URI prefix became popular (e.g. “!!!://”) with a new leading octet, parsing would also be much more difficult. Basically we are creating an unnecessary coupling between layers. |

* + 1. Discussion on 2403:

7) Presentation doc 11-14/32r0 to address CIDs 2402, 2492, 2491 and 2493 adopts the newer “uncertainty” fields over the older “resolution” fields and makes other changes.

Although it is possible to indicate an unknown location by 1) max-ing out the uncertainty and 2) including an invalid lat/long, this is long, clumsy and not really consistent with “In the IETF, lack of data indicates I don't know.” Therefore use the same solution as for Civic – turn this into a subelement, where a zero-length subelement indicates “I don’t know”.

8) Related, the LCI figure includes an element ID and length but there is no text on how they are set, no element ID is assigned and in fact this figure is for the LCI field that is a suffix to the Measurement Report element where no element ID or length is needed. Clean this up by converting this element ID to a subelement ID (set to zero, so it is first).

3) LCI lacks AP height above floor and floor number (Civic provides floor string but not floor number). Add suitable optional subelement.

4) LCI is also useful for FTM procedure. Add optional LCI request/response within FTM request/next FTM frame

5) LCI is also useful within the Neighbor Report. Add optional LCI request/response within Neighbor Report Req/Resp exchange

* + 1. There should be fixes to the figure that make the size things 0 or 6.
			1. Need to say 0 or X for optional field size.
		2. The use of yellow color is causing some confusion – next rev without the color
		3. Change” as defined” to “as specified” on page 5.
		4. Note that there was a change done by CID 1692 that may have been applied to the wrong instance of LCI as there are 3 different LCIs...Brian to fix up as part of this resolution proposal that will come back in the next revision.
		5. Discussion on how floor levels are indicated.
		6. Review the proposed changes that address the points of the CIDs.
		7. There is an issue with the way the action frame element is shown in the draft text.
		8. Subelement should be element and NeighborReportRequest frame needs to be able to have the format changed.
			1. Need to make changes that don’t rewrite element IDs...
		9. Change the “equal to” to “set to” page 11 two locations.
		10. Discussion on how to label an optional field vs “0 or 1”
		11. Discussion on how a NeighborReport has lots of optional fields.
			1. Possible option of gratuitously inclusion of the field suggested.
		12. 10.24.6 needs to harmonize with Carlos’s Numbering and with Gabor’s LCI.
		13. Discussion on “undue delay” – not very precise.
		14. Error code discussion - bit 8 “Unable to detect AP” but may not be precisely worded.
		15. We should have time to continue tomorrow to finish the feedback to Brian.
		16. Expectation is to have more work done on the presentation and a final revision brought back in March.
	1. For tomorrow, The Arc Presentation CID 2434 11-13/115r7 and then continue Location discussion (Brian and Gabor) and then Gen Comments
	2. Recess until Thursday PM1
1. Thursday PM1 – 802.11 REVmc - January 23, 2014
	1. Called to order by Dorothy STANLEY (Aruba) at 1:30pm
	2. Proposed Agenda:

Comment Resolution -

CID 2434 (11-13-115-07), location 11-13-1509r2, 14-32r0, 875r7, GEN

* + 1. No objection to the agenda
		2. Liaison Letter to the WFA to be discussed in PM2
	1. Review doc: 11-13/115r07 Mark HAMILTON (Spectralink)
		1. Noted that the header still says r6.
		2. Title: Considerations on AP Architectural Models
		3. CID 2434 GEN
			1. Review Comment
			2. Figure 5-1 was the starting point of the discussion.
			3. Review the various figures in the document.
			4. Concern that we may have missed some security being disconnected. The rebuttal was that the optional features are not all shown, and not intended to be shown.
			5. Sequence number vs Packet Number – Need to get the distinction made, and to include both, and the location relative to the security needs to be addressed.
			6. 11ad features are documented into figure 5-2, but we may want to try to make a single figure...not sure if it would be better as one or two figures.
			7. The Mesh forwarding got lost in making the new figures...need to revisit and add.
			8. Question on where PCP fits in this figure or another figure
			9. 11ad relay is also missing from the diagram.—not really a mesh, and doesn’t go through the DS.
				1. An addition to the standard diagrams rather than an error in the diagram at this point.
			10. Many feel the figure is good enough, but these little issues can be included with the next Letter ballot, but as we are not going to ballot this week, having it have some more time and include it later would be ok.
		4. The first figure addresses the Comment, but there is another figure that came out of the discussion.
		5. What is happening in the DS, portal and other entities?
			1. This other figure is an abstract that shows how things relate one to another, but is not a physical box (device) abstract.
		6. Positive Response on the state of the figures.
		7. Question on when and where to include the figures.
			1. We need to add some words to describe these later figures as logical construct/abstracts
			2. We have a step wise set of figures that describe ESS and BSS...so where does this really go?
			3. Figure 5-1 is the primary focus of extra work, but look at what changes are needed in 5-2 and then we can look if time on the remaining figures.
			4. Suggestion is to swap 5-1 with what is there now
				1. Mark would like to wait until March to do that to allow him to get the identified items resolved.
			5. We can review figures, but we have a priority to resolve comments.
	2. Revisit 11-13/875r7 – Adrian STEPHENS (Intel)
		1. We left off on this for Adrian to get some more feedback.
			1. He sent some e-mail and got no response.
		2. Plan going forward – let’s just go over it once and for all and see if we can agree to this as an improvement and if including it is agreeable.
		3. CID 2048 is the main CID that caused this document and discussion.
		4. There is some confusion as there are two different resolutions listed, so an R8 will be posted with only one resolution.
		5. Proposed Resolutions:
			1. CID 2048 – Revised. Replace 9.3.2.10 with the replacement in 11/13/0875r8
			2. CID 2023 - Revised. Make changes shown in 11-13/875r8. These changes make the “don’t cache ATIM frames” behaviour independent of .11ae / .11aa support.
			3. CID 2140 and 2496 - Revised. Replace 9.3.2.10 with the replacement text in 11-13/875r8. This replacement ensures that group-addressed frames received by a DMG STA are cached, and thereby subject to duplicate detection and removal.
		6. No objection – mark all 4 CIDs ready for motion
	3. Location – 11-13/1509r2 Brian HART (CISCO)
		1. We will finish off where we stopped yesterday in reviewing this document.
		2. Review the presentation
		3. Question on the Error range 4 to 255 meter reporting possible.
		4. Why the choice of not “to an AP” in the case of a soft AP for Fine Timing Measurement range report?
			1. AP are supposed to be listening to the proper channel and not going off channel for getting measurements
			2. The attempt is not to create any new capabilities fields...so if we add it to the AP, you could always just say refused....unless it is a Soft AP that could do something about it.
			3. The author is convinced that it should be allowed by any STA.
		5. More work and follow-up will come back.
	4. Location – 11-14/32r0 -- Presented by Brian HART
		1. Finish up looking at the document from Gabor even though he is not here.
		2. CID 2402, 2490, 2491, 2492,
		3. Review changes proposed
		4. Safe to assume not many implementations of the LCI request – 8.4.2.20.10....
		5. 8.4.2.20.10 - Weak interest in keeping these – e.g. coarse vs fine –
		6. Need to harmonize figure 8-xxx and table 8-yyy from Brian’s presentation and Gabor’s.
			1. Avoid “Unknown location” error
		7. Reference of the RFC and remove example was proposed
			1. Some prefer to keeping the example
		8. Figure 8-187 proposed changes seem good overall
		9. Figure changes for the next few figures seemed reasonable
		10. More general harmonization may be needed in general.
		11. Some of the changes may come from knowledge of IETF work, and the more current description of fields and bits.
		12. Deletion on page 5 may need to check coarse/fin question posed earlier
		13. Note #2 – proposed deletion may need to be undone – may be ok to delete
		14. If we delete the resolution and the request, then it may be that the proposed deletion on page 6 is ok.
		15. How far are we away from accepting the text from the two documents to resolve the 4 CIDs...
		16. Brian and Gabor are to synch up and then present on a telecom.
	5. Would like to take Qi comment now, Mark RISON to have PICs doc review in PM2 (12-13/1345r1), and Stephen M. Presentation later. In PM2
	6. Comment Resolutions:
		1. CID 2031
			1. Review comment
			2. Proposed resolution: Revise; add “The format of the TFS subelement is shown in Figure 8-378 subelement format.” After the sentence “if present, TFS Subelements field contains the alternative filter parameters preferred by the AP.”
			3. The discussion was that this is not addressing the comment adequately.
			4. There is no place that TFS Subelements field contains TFS Subelements.
			5. Cited text reviewed –
				1. There is nothing that states what goes into that field.
			6. Check 8.4.2.79 for example of proper description
				1. The TFS Subelements field contains one or more TFS Request subelements containing.....
			7. Proposed Resolution 2: Revise; ange from

If present, the TFS Subelements field contains the alternative filtering parameters preferred by the AP.

to

If present, the TFS Subelements field contains one or more TFS Request subelements containing the alternative filtering parameters preferred by the AP.

* + - 1. No objection – mark ready for motion
	1. Gen comment Resolution:
		1. CID 2236
			1. ACCEPTED.
			2. No objection – mark ready for motion
		2. CID 2237:
			1. ACCEPTED.
			2. No objection – mark ready for motion
		3. CID 2238:
			1. ACCEPTED.
			2. No objection – mark ready for motion
		4. CID 2241:
			1. ACCEPTED.
			2. No objection – mark ready for motion
		5. CID 2242:
			1. REVISED: Delete “A minimum IEEE Std 802.11 LAN may consist of only two STAs”
			2. No objection – mark ready for motion
		6. CID 2245:
			1. Consider deleting more of the sentence.
			2. Ran out of time – consider later.
	2. Recess
1. Thursday PM2 – 802.11 REVmc - January 23, 2014
	1. Called to order by Dorothy STANLEY (Aruba) at 4:05pm
	2. Proposed Agenda:
2. Motions
3. Comment resolution Liaison 11-14/182r1
4. Doc 11-14/29, 11-12/1345r1
5. Plans for March, AOB
6. Adjourn
	* 1. No objection to use the agenda
	1. Motions:
		1. **Motion #45**
			1. Move to approve resolutions to comments in 11-13/361r24 tabs “Motion MAC-S” and “Motion MAC-T” and 11-13/1160r4 Tab “Gen Motion LA 1”
			2. Moved Mike MONTEMURRO 2nd Mark HAMILTON
			3. Results: 11-0-1 Motion Passes
		2. **Motion #46**
			1. Approve the teleconference minutes in 11-13/1499r5.
			2. Moved: Jon ROSDAHL 2nd Stehpen MCCANN
			3. Results: no objection – unanimous consent
	2. Review Document 11-14/182r2
		1. Abstract:

During the January 2014 meeting of IEEE 802.11 TGmc there was considerable discussion on ways to reduce the unnecessary use of DSSS/CCK (1/2/5.5/11 Mb/s) rates.

No decision was made, and it is clear from discussion that more information is needed on current and likely future use cases and market requirements for the DSSS/CCK rates before any decision can be made. The Wi-Fi Alliance is a possible source of such information. At least some contributions suggested that the Wi-Fi Alliance might also have a role in any process to discourage the unnecessary use of DSSS/CCK rates.

This document contains a proposed liaison to the Wi-Fi Alliance asking for:

* Information about the future use cases and market requirements for DSSS/CCK rates
* Suggestions for mechanisms to discourage the nnecessary use of DSSS/CCK rates
	+ 1. Letter was reviewed
		2. Discussion:
			1. Letter need to have added “if any” for the possible markets
			2. No objection for sending a letter, but not willing to be held hostage.
			3. Change Mbps to Mb/s throughout the document
			4. We should set a deadline for the response.
			5. We could add a paragraph “This discussion is ongoing in the IEEE 802.11 Working Group. We request Wi-Fi Alliance input by 14 July 2014.
			6. We should set a timeline and setting a target of March (not a lot of support) or July more likely support.
			7. We should get input sooner than later to avoid getting it too late.
			8. Some editorial changes were noted and corrected.
			9. Discussion on the value of “if any”
				1. More discussion
				2. We had some ask for it removal some asked to put it back
				3. Change the “if any” to “any current”
			10. More support for deadline – make it 14 July 2014
		3. Ok with the document will be posted to Mentor as 11-14/182r2.
		4. Motion to approve the liaison letter to WFA in doc 11-14/182r2. Prepared
	1. **Motion #47**
		1. Approve the liaison to Wi-Fi Alliance in 11-14/182r2
		2. Moved Andrew Myles 2nd Sean COFFEY
		3. Result: 13-0-0
	2. Review document 11-14/0029r1 Stephen MCCAAN (Blackberry)
		1. Review Document
		2. Abstract:

During the creation of test events for the Wi-Fi Alliance Hotspot 2.0 program, several editorial errors were discovered in the QoS Map Set element definition in clauses 8.4.2.94 and 10.25.9. This submission contains a proposal to resolve these errors and clarify the text.

* + 1. Primarily editorial suggested changes we will review the document for completeness.
		2. Discussion on including Internet Protocol
		3. Calling it IP datagram is the proper name
		4. Some editorial changes may occur when rolling into the standard.
		5. Discussion on what occurs if there is not a match.
		6. Concern on the string of sentence fragments and might be well to have some listing format used.
		7. Need to take off line and look at bring back polished a bit.
	1. Document 12/1345r2 Mark RISON (Samsung)
		1. Abstract: This document proposes changes covering CIDs 127 and 269 on 802.11-2012, regarding the PICS.
		2. Review document
		3. Discussion on the use of “can be” vs “is” in the “NOTE”...
		4. Changes of a global nature are listed out, but not shown inline
		5. IUT Configuration column was not too controversial – minor change from inside an BSS to outside a BSS in the proper syntax.
		6. Review the Status Column
		7. Is a DMG STA required to operate in a PBSS?
			1. Long discussion for trying to determine
			2. Leave note to check with a DMG expert
		8. Operation as a PCP – is it required for a DMG STA
		9. Spectrum Management support reviewed
			1. Some references that were checked were found to be an error, but this document is not claiming to have checked every reference.
		10. Review status
	2. Item from Jon
		1. Proposed Change to Section 8.4.2.78 of IEEE P802.11-REVmcTM/D2.0, October 2013 (page 835)
		2. “A non-AP STA is considered inactive if the AP has not received a Data frame ~~or~~ ,Management frame or PS-Poll frame of a frame exchange sequence initiated by the STA for a time period equal to or greater than the time specified by the Max Idle Period field value.”
		3. Would like to make the change?
			1. No objection, but want a more formal submission and will take on telecom for inclusion/discussion.
	3. Jan-Mar Meeting Planning
		1. Objectives
			1. Comment Resolution
		2. Conference Calls 10am Eastern 2 Hour
			1. Feb 7, 14, 21, 28
			2. Dorothy to send out call in details
		3. Ad Hoc Meeting?
			1. Not seen as necessary for March due to other meetings
			2. Does it make sense for an AdHoc in May?
				1. If we have gone to ballot we would need to be as late as possible.
			3. Possible LB could be April 10-30 but having an AdHoc in May may be a bit tight to get preparation time ready.
			4. That last two weeks may be better spent on personal preparation time to prepare comment resolutions.
			5. If we are not able to go out in March, then we may decide that we may want to have an AdHoc meeting.
			6. March is the time to determine for sure
		4. Review TGmc Plan of Record
			+ **20 July 2012 – 12 Sept 2012 – Call for Comment/Input**
			+ **29-30 Aug 2012 – NesCom, SASB PAR Approval**
			+ **Sept 2012 – Begin to process input**
			+ **Sept 2012 – 11aa, 11ae integration**
			+ **Jan 2013 – First WG Letter ballot - without 11ad**
			+ **Dec 2012 – March/May 2013 – 11ad integration**
			+ **Sept 2013 – Letter ballot on D2.0**
			+ **Dec 2013 – March 2014 – 11ac integration**
* Letter Ballot on D3.0 (includes 11ac) March 2014
	+ - * **Mar 2014 – April 2014 – 11af integration**
* Letter Ballot on D4.0 (includes 11af) July 2014
	+ - * **July 2014 – Mandatory Draft Review**
			* **Jul - Aug 2014 – Form Sponsor Pool (45 days)**
			* **Nov 14 – Initial Sponsor Ballot**
			* **July 2015– WG/EC Final Approval**
			* **Sept 2015 – RevCom/SASB Approval**
			1. Currently in TGac integration.
			2. No objection to timeline.
	1. Adjourn at 5:43pm **References:**

Meeting Agenda slides:

 <https://mentor.ieee.org/802.11/dcn/13/11-13-1500-06-000m-tgmc-agenda-jan-2014.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1500-05-000m-tgmc-agenda-jan-2014.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1500-04-000m-tgmc-agenda-jan-2014.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1500-03-000m-tgmc-agenda-jan-2014.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1500-02-000m-tgmc-agenda-jan-2014.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1500-01-000m-tgmc-agenda-jan-2014.ppt>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1500-00-000m-tgmc-agenda-jan-2014.ppt>

Closing Report:

<https://mentor.ieee.org/802.11/dcn/14/11-14-0196-00-000m-tgmc-closing-report-jan-2014.pptx>

Minutes from previous Session:

<https://mentor.ieee.org/802.11/dcn/13/11-13-1357-00-000m-revmc-minutes-for-nov-2013-dallas.doc>

Telecon Minutes:

 <https://mentor.ieee.org/802.11/dcn/13/11-13-1499-05-000m-tgmc-telecon-minutes-dec-13-jan-14.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1499-04-000m-tgmc-telecon-minutes-dec-13-jan-14.docx>

Editor Report:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0095-08-000m-editor-reports.ppt>

MAC Comment file:

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-24-000m-revmc-mac-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-23-000m-revmc-mac-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-22-000m-revmc-mac-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0361-21-000m-revmc-mac-comments.xls>

GEN Comment File:

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-04-000m-lb199-gen-adhoc-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-03-000m-lb199-gen-adhoc-comments.xls>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1160-02-000m-lb199-gen-adhoc-comments.xls>

Submissions:

<https://mentor.ieee.org/802.11/dcn/14/11-14-0041-01-000m-mc-security-comment-resolution.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0041-00-000m-mc-security-comment-resolution.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0703-03-000m-mib-addition-in-support-of-3gpp-manageability.doc>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1314-14-000m-some-lb199-proposed-resoluitons.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0049-00-000m-proposed-resolution-to-cid2466.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0030-02-000m-discussion-on-cid2199.pptx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1399-09-000m-some-lb199-proposed-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1399-08-000m-some-lb199-proposed-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1399-07-000m-some-lb199-proposed-comment-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0057-03-000m-cid2129-rewrite-of-probe-response-text.doc>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1455-01-000m-proposed-resolution-to-cid-2263.doc>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1455-00-000m-proposed-resolution-to-cid-2263.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0006-00-000m-fixes-to-dmg-operation.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0875-08-000m-cid-1050-duplicate-cache.doc>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0875-07-000m-cid-1050-duplicate-cache.doc>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1533-01-000m-clause-16-and-17-deprecation.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1533-00-000m-clause-16-and-17-deprecation.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0099-00-000m-renewing-2-4ghz-band.pptx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0160-02-000m-proposed-resolution-for-revmc-cid-2164.doc>

<https://mentor.ieee.org/802.11/dcn/13/11-13-1509-02-000m-location-related-cids.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0032-00-000m-lci-resolutions.docx>

<https://mentor.ieee.org/802.11/dcn/13/11-13-0115-07-0arc-considerations-on-ap-architectural-models.doc>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0182-02-000m-liaison-to-wfa-on-reducing-use-of-cck-and-dsss.docx>

<https://mentor.ieee.org/802.11/dcn/14/11-14-0029-01-000m-corrections-to-qos-map-set-clause-8-4-2-94.doc>

<https://mentor.ieee.org/802.11/dcn/12/11-12-1345-01-000m-pre-ballot-802-11-2012-resolutions-for-pics.docx>