
CI 00 SC 0 P L # 214

Chaplin, Clint F

Comment Type ER Comment Status A Editor & CRgroup

Page iv: "The following is a list of participants in the... Working Group." The name of the working group needs to be filled in.

SuggestedRemedy

Fill in the name of the working group

Response Response Status C

ACCEPT.

CI 00 SC 0 P L # 215

Chaplin, Clint F

Comment Type ER Comment Status A Editor & CRgroup

Page iv: Tim Godfrey is no longer the secretary of IEEE 802.11

SuggestedRemedy

Replace the name with the current secretary of 802.11.

Response Response Status C

ACCEPT.

CI 00 SC 0 P L # 245

Kwak, Joseph A

Comment Type ER Comment Status A Paine

Timeline shows dependency on TGn. This is not correct. Rumor has it that there is a reference in TGk to a TGn clause. If there is such a reference, it is in error and should be corrected

SuggestedRemedy

Research and find any inadvertent reference to TGn. Correct any TGn reference found. Correct the timeline to remove dependency on TGn.

Response Response Status C

ACCEPT IN PRINCIPLE. Additional research has shown that there is no reference to TGn in the TGk draft. No text change is needed.

CI 00 SC 0 P1 L22 # 33

PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#21-Marshall: Amendment number is missing.

SuggestedRemedy

Change to "Amendment 1"

Response Response Status C

ACCEPT.

CI 00 SC 0 P1 L28 # 34

PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#22-Marshall: 802.11 Revision will be 2007, not 2007.

SuggestedRemedy

Change to 2007

Response Response Status C

ACCEPT.

CI 00 SC 0 P1 L51 # 35

PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#23-Marshall: Copyright in page footer needs to be updated for 2007

SuggestedRemedy

Change year to "2007"

Response Response Status C

ACCEPT.

CI 00 SC 0 P119 L # 248

Kwak, Joseph A

Comment Type E Comment Status A Editor

Annex D descriptions do not match descriptions elsewhere in text.

SuggestedRemedy

Correct Annex D MIB descriptions to reflect definitions and descriptions in clauses 7 and 11.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 00 SC 0 P2 L49 # 226

Hansen, C J

Comment Type TR Comment Status A Kwak

RSNI definition is imprecise. In practice, received signal power will be measured during the reception of a frame or set of frames. The noise is measured as an average over a different set of time when no frames are being received and no frames are expected. This is defined in section 7.3.2.41

SuggestedRemedy

Clarify this definition here and throughout document. RSNI is not measured on an individual frame but is a combination of a received power measurement on a frame (or set of frames) and an average noise measurement.

Response Response Status C

ACCEPT IN PRINCIPLE. For RSNI calculation, RCPI is always measured on a received frame. ANPI may be measured over any time period. ANPI is defined to permit many implementations, no single measurement implementation for ANPI is required.. Clause 11.10.8.4 provides several suggestions on means to measure ANPI separately from the received frame during idle channel time. There are other permitted ANPI implementations. Techniques exist which can estimate ANPI/RSNI accurately from digital signal processing on the samples of a received frame. These techniques to measure ANPI during a received frame are also permitted. P3L2: add new sentence: "Note that RCPI and ANPI might not be measured simultaneously; see 11.10.8.4 for details."

CI 00 SC 0 P2 L8 # 110

Kays, Ruediger

Comment Type E Comment Status A Editor

Numbering of definitions not consistent.

SuggestedRemedy

Change "3.7a access point..."
to
"3.3a access point..."

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 01 SC 1 P1 L29 # 109

Kays, Ruediger

Comment Type G Comment Status A Editor

IEEE 802.11-2006 is not available outside WG 802.11 and is outdated by 802.11-2007. Reference should therefore be made to 802.11-2007 only

SuggestedRemedy

1. Change line to:
"This amendment is based on IEEE Std 802.11TM-2007"
2. Introduce numbering scheme for figures and tables as defined in 802.11-2007 through the complete document.

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 109

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 03 SC 3 P2 L # 15
PAINE, RICHARD H

Comment Type E Comment Status A Editor

LB103#03-Stephens: "For the purposes of this document, the following terms and definitions apply. The Authoritative Dictionary of IEEE Standard Terms [Bn] should be referenced for terms not defined in this clause."

It is not clear what this is doing here. Is it an insert, or part of the baseline?

SuggestedRemedy

Either remove (if part of the baseline) or precede by an appropriate editorial instruction.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 03 SC 3 P2 L3 # 36
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#24-Marshall: New definitions are inserted by their number, not alphabetically

SuggestedRemedy

Delete "in alphabetical order" from editing instructions

Response Response Status C

ACCEPT.

CI 03 SC 3 P2 L37 # 6
PAINE, RICHARD H

Comment Type T Comment Status A CRgroup

LB96#17-Aboba: The term "validated" has been removed from the neighbor AP definition, yet the definition of "validated AP" is still present. Validation is an important concept because rogue Access Points must not be included in the list of potential transition candidates.

SuggestedRemedy

Restore the use of the term "validated".

Response Response Status C

ACCEPT IN PRINCIPLE. P60L9. The Neighbor Report only contains validated APs. However, the terms and definitions have been clarified so that a Neighbor AP is defined generically as any AP within radio range, but Neighbor Report elements shall contain only validated APs. This should be explicitly noted in the Neighbor Report response frame format. P60L9 replace "contains the Neighbor Report elements" with "contains the Neighbor Report elements for validated APs".

CI 03 SC 3 P2 L37 # 117
Ecclesine, Peter

Comment Type TR Comment Status A Kwak

Definition of neighbor AP uses the term 'potential transition candidate' which is not defined in 5.4.2.1. Define or describe what 'transition' means in P802.11k context - e.g. BSS-transition or 11.2.2.3 STA Power-state transitions.

SuggestedRemedy

It should be included in the definition, or be defined in Clause 3.

Response Response Status C

ACCEPT. Add a new definition in Clause 3: "BSS transition: A STA movement from one BSS to another BSS." Also change P2L37 from "potential transition candidate" to "potential BSS transition candidate".

CI 03 SC 3 P2 L5 # 38
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#26-Marshall: This paragraph is not a definition, and does not belong in a clause of definitions

SuggestedRemedy

Delete the paragraph starting at line 5

Response Response Status C

ACCEPT.

CI 03 SC 3 P2 L5 # 37
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#25-Marshall: Authorative Dictionary of IEEE Standard Terms is already being cited for all IEEE documents through the 2005 Style Guide. Reference to it in individual drafts is not needed.

SuggestedRemedy

Delete the paragraph starting at line 5

Response Response Status C

ACCEPT.

CI 03 SC 3 P2 L8 # 39
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#27-Marshall: Numbering for definition of "access point reachability" incorrect

SuggestedRemedy

change to "3.4a"

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to editor. EDITOR--P2L8 Change "3.7a" to "3.3a".

CI 03 SC 3.75a P2 L29 # 14
PAINE, RICHARD H

Comment Type E Comment Status A Editor

LB103#02-Stephens: "i.e." should always be followed by a comma

SuggestedRemedy

Scan whole draft and ensure every i.e. and e.g. is followed by a comma.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 04 SC 4 P3 L30 # 83
Hart, Brian D

Comment Type TR Comment Status R Hart

Comment applies beginning p3L30 and ends p174

As discussed in 07/535r0, the MP is presently broken since it misses some vital fields. 07/535r0 investigates improving the MP, and describes its revised contents. But when the use cases for MPs are looked into, considering both the costs and benefits of MPs, 07/535r0 finds insufficient justification for MPs at all. A straw-poll at Montreal indicating the following consensus "Straw Poll - Are you in favour of removing Measurement Pilot [Y/N/A =] 10/0/0". Commenter will provide editor instructions

SuggestedRemedy

Therefore remove the MP from the draft.

Response Response Status U

REJECT. Measurement Pilots are modified as described in 07/0535r5, which addresses many of the commenter's concerns.

CI 04 SC 4 P3 L31 # 221
Eastlake, 3rd, Donald E

Comment Type E Comment Status A Editor

VoIP is used in this admendment but not defined in the amendment or in the base standard, 802-11-2007.

SuggestedRemedy

Add VoIP as an acronym to Section 4.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 221

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 04 SC 4 P5 L30 # 84
Hart, Brian D

Comment Type TR Comment Status A Hart

07/0535r2 considers the use cases for MPs and finds little benefit in MPs once their costs are properly accounted for. MPs need to be removed or at least fixed. 1) MPs consume too much medium time. 2) There is no way to determine that any client is actually using the MPs. 3) Even so, MPs still consume too much medium time, so not all APs can transmit MPs all the time.

SuggestedRemedy

Preferably remove MPs. Otherwise 1) Remove virtual AP inefficiency. 2) MPs should not be TX at high pps if never used. 3) Thus not all APs should transmit MPs. As a first consideration, an AP should not enable MPs if enabling MPs would cause: a) more than 10% of the medium time at the AP to be consumed by beacons and MPs transmitted by any source; b) more than 5% of the medium time at the AP to be consumed by MPs transmitted by any source. As a second consideration, MPs may be most useful when transmitted at ingress and egress points of the ESS to support roaming between an 802.11 ESS and other networks, and relatively less useful elsewhere. As a third consideration, APs transmitting MPs may disable MPs whenever no STAs are expected to be using them. How this is determined is out of scope of this standard, but: a) MPs may be disabled when few STAs are reporting MP Actively Used presently and at similar times in the past; b) MPs may be enabled when many STAs are reporting MP Actively Used presently or at similar times in the past. As a fourth consideration, MPs may be more useful in bands subject to DFS regulations and less useful elsewhere. As a fifth consideration, MPs may be more useful in bands with many channels and less useful elsewhere. As a sixth consideration, MPs may be disabled to provide additional medium time for other traffic particularly call admitted traffic. Non-AP STAs should be advised that due to considerations such as those listed, APs may not transmit MPs at all times or in all bands.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 05 SC 5 P89 L13 # 234
Hansen, C J

Comment Type TR Comment Status R CRgroup

"NOTE--Since measurements on non-operating channels could potentially degrade a station's performance, non-operating channel measurements should be requested sparingly and for short durations." This language is too weak and does not do enough to protect network performance from poorly organized or excessive measurement requests that could severely degrade QoS. Don't leave this to the WiFi alliance to solve. This should be resolved in the IEEE.

SuggestedRemedy

Add specific requirements for when non-operating channel measurements can be made. For example, if an AP has data queued for a particular STA it is not allowed to request non-operating channel measurements for that STA. This needs to be a requirement on the AP, not on the STA. Only STAs have low activity (in terms of communicated data frames in either direction with the AP) should be requested to make non-operating channel measurements.

Response Response Status C

REJECT. The suggested remedy is beyond the scope of 11k, e.g. if the measuring STA is operating on a noisy channel the user's policy may be to find a quieter channel, requiring higher than normal priority for off-channel measurements. For busy STAs, clause 11.10.4 describes how measurements may appropriately be refused.

CI 05 SC 5.2.7 P3 L47 # 40
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#28-Marshall: "The Radio Resource Measurement specification" doesn't exist as a separate document.

SuggestedRemedy

Change "specification" to "service" to better integrate this to the base standard

Response Response Status C

ACCEPT. P3L47 change "specification" to "service".

CI 05 SC 5.2.7 P4 L17 # 154
Ecclesine, Peter

Comment Type TR Comment Status A Hart

Measurement Pilot is a response-only measurement in that it is not requested, and only happens when the responding STA implements the option.

SuggestedRemedy

Create an entry for response-only mechanism - Measurement Pilot, and change second sentence of 5.2.7 accordingly, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 05 SC 5.2.7.10 P6 L6 # 10
PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB96#22-Palm: What is an "RF ping"?

SuggestedRemedy

Define or delete

Response Response Status C

ACCEPT IN PRINCIPLE. See resolution in CID#237.

CI 05 SC 5.2.7.10 P6 L6 # 238
Palm, Stephen R

Comment Type TR Comment Status A Kwak

What is an "RF ping"?

SuggestedRemedy

Define or delete

Response Response Status C

ACCEPT IN PRINCIPLE. See resolution in CID#237.

CI 05 SC 5.2.7.10 P6 L6 # 237
Palm, Stephen R

Comment Type TR Comment Status A Kwak

"is like an" is colloquial

SuggestedRemedy

Reword to specification quality language

Response Response Status C

ACCEPT IN PRINCIPLE. P6L6 replace first sentence of paragraph with "The link measurement request/report exchange provides measurements of the RF characteristics of a STA to STA link."

CI 05 SC 5.2.7.10 P6 L7 # 11
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB96#23-Palm: A measurement does enable "understaning"... It's just a measurement

SuggestedRemedy

Delete sentence

Response Response Status C

ACCEPT IN PRINCIPLE. P6L7 replace "enables understanding" with "measurement indicates".

CI 05 SC 5.2.7.10 P6 L7 # 239
Palm, Stephen R

Comment Type TR Comment Status A Kwak

A measurement does enable "understaning"... It's just a measurement

SuggestedRemedy

Delete sentence

Response Response Status C

ACCEPT IN PRINCIPLE. P6L7 replace "enables understanding" with "measurement indicates". Note this is a repeat of CID#11.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 239

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 05 SC 5.2.7.10 P6 L8 # 8
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB96#19-Palm: What is the meaning of "QoS-type" The usage of "QoS" in this sentence is not consistent with the QoS Facility nor QoS Service as specified in 802.11e now part of 802.11ma.

SuggestedRemedy

Choose a different word than "QoS" since this measurement is unrelated to the QoS functionality

Response Response Status C

ACCEPT. We will delete the use of QoS-type in this sentence. P6L8 replace "capabilities of a link for QoS type requirements." with "quality of a link".

CI 05 SC 5.2.7.10 P6 L8 # 235
Palm, Stephen R

Comment Type TR Comment Status A Kwak

What is the meaning of "QoS-type" The usage of "QoS" in this sentence is not consistent with the QoS Facility nor QoS Service as specified in 802.11e now part of 802.11ma.

SuggestedRemedy

Choose a different word than "QoS" since this measurement is unrelated to the QoS functionality

Response Response Status C

ACCEPT. We will delete the use of QoS-type in this sentence. P6L8 replace "capabilities of a link for QoS type requirements." with "quality of a link". Note this is repeat of CID#8.

CI 05 SC 5.2.7.10 P6 L8 # 236
Palm, Stephen R

Comment Type TR Comment Status A Kwak

Where are "requirements" defined or specified?

SuggestedRemedy

Delete sentence

Response Response Status C

ACCEPT IN PRINCIPLE. We will delete the use of requirements in this sentence. P6L8 replace "capabilities of a link for QoS type requirements." with "quality of a link". Note this is repeat of CID#9.

CI 05 SC 5.2.7.10 P6 L8 # 9
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB96#20-Palm: Where are "requirements" defined or specified?

SuggestedRemedy

Delete sentence

Response Response Status C

ACCEPT IN PRINCIPLE. We will delete the use of requirements in this sentence. P6L8 replace "capabilities of a link for QoS type requirements." with "quality of a link".

CI 05 SC 5.2.7.11 P6 L13 # 240
Palm, Stephen R

Comment Type TR Comment Status A Kwak

"transmit-side performance metrics" is not clear from the context. Why transmit and not received or unmodified?

SuggestedRemedy

Clarify

Response Response Status C

ACCEPT IN PRINCIPLE. The Transmit Stream Measurement is performed by the STA transmitting a simplex TS. This STA can measure transmit delays and can count retries, failures and discards, but cannot measure the received frames. No text change is needed here.

CI 05 SC 5.2.7.2 P5 L5 # 155
Ecclesine, Peter

Comment Type TR Comment Status A Paine

None of the measurements intentionally provide untimely information to a STA.

SuggestedRemedy

Replace final two sentences with something more pertinent, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

ACCEPT IN PRINCIPLE. Remove the last sentence "The purpose of the Measurement Pilot frame is to provide timely information to a STA." and replace it with "The purpose of the Measurement Pilot frame is to assist a STA with scanning."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 155

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 05 SC 5.4 P7 L3 # 41
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#29-Marshall: Instead of inserting a sentence into an existing paragraph, this should be done as a "change" and show the new sentence using underlining.

SuggestedRemedy

Show the complete first paragraph of 5.4, and show the new sentence at the end with underlining.

Response Response Status C

ACCEPT.

CI 07 SC 7.1.3.1.2 P8 L11 # 17
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#05-Stephens: The editing instruction and table caption disagree

SuggestedRemedy

Correct one of them

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to editor. EDITOR--P8L11: Change "Table 1" to "Table 7-1". P8L12: Change "Table 11" to "Table 7-1".

CI 07 SC 7.1.3.1.2 P8 L12 # 42
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#30-Marshall: Table is 1, not 11.

SuggestedRemedy

Change to Table 1

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to editor. EDITOR--P8L11: Change "Table 1" to "Table 7-1". P8L12: Change "Table 11" to "Table 7-1".

CI 07 SC 7.1.3.1.2 P8 L18 # 165
Ecclesine, Peter

Comment Type TR Comment Status A Hart

The use of a new frame type for Measurement Pilot frames is unjustified, e.g. Action frames could fill the function without using a new Management frame subtype.

SuggestedRemedy

Change Measurement Pilot frames to use an existing frame format, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 07 SC 7.2.1.21 P14 L50 # 187
O'Hara, Robert

Comment Type TR Comment Status A Ganesh

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "shall be" with "is"

Response Response Status C

ACCEPT IN PRINCIPLE. Doc 07/2314r0. Definition moved to 7.4.6.3

CI 07 SC 7.2.3.1 P8 L33 # 121
Ecclesine, Peter

Comment Type TR Comment Status A Kwak

Here and elsewhere in this Amendment, normative text about when dot11MultiDomainCapabilityEnabled is true is deleted, without the qualification of dot11RadioMeasurementEnabled being applied. It is not clear that RadioMeasurement procedures work with FH PHYs, and it is not clear whether legacy FH operation could be affected by deleting normative requirements. The FH PHY clause is not modified for RCPI by this amendment.

SuggestedRemedy

Choose between making Radio Measurements work with FH PHYs and removing any 802.11k normative text changes about FH Parameters and Patterns. Modify draft accordingly.

Response Response Status C

ACCEPT IN PRINCIPLE. Commenter is correct that Radio Measurements are not specified for operation with FH PHYs. The TGk draft exercises care to not modify the specification for FH operation. In this clause 4 sentences are deleted. The first sentence is a redundant requirement which is also provided in Table 8 which follows. The second and fourth sentences are informational notes only and are not appropriate for clause 7 format description. The third sentence is a FH requirement which has been relocated to Clause 9.8.2.1 on P60L25. In this way TGk has editorially cleaned up this clause following suggestions from previous comments without modifying the requirements for FH and other legacy STAs. No text change is needed here.

CI 07 SC 7.2.3.1 P8 L44 # 173
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

CI 07 SC 7.2.3.1 P9 L9 # 86
Hart, Brian D

Comment Type TR Comment Status R Hart

802.11k adds elements to the beacon (and probe response) and thus exacerbates beacon bloat. These elements exist even when they are repeated across virtual APs. This is clearly an inefficiency which can be avoided if STAs understand "Non Non Transmitted BSSIDs"

SuggestedRemedy

Commenter withdraws the comment

Response Response Status C

REJECT.

This comment was WITHDRAWN by the commenter.

This comment was WITHDRAWN by the commenter.

CI 07 SC 7.2.3.1 P9 L9 # 85
Hart, Brian D

Comment Type TR Comment Status A Hart

802.11k adds elements to the beacon (and probe response) and thus exacerbates beacon bloat. These elements exist even when they do not contain additional or unexpected information. This is clearly an inefficiency without benefit

SuggestedRemedy

Remove these inefficiencies. Commenter will provide text.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect1

CI 07 SC 7.2.3.4 P9 L31 # 174
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 174

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 07 SC 7.2.3.5 P10 L7 # 175

O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

CI 07 SC 7.2.3.5 P10 L8 # 1

PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB96#02-Engwer: Clauses 7.2.3.5 and 7.2.3.7 show the addition of the RCPI and RSNI to the information included in the association response and reassociation response frames respectively. Presumably these are the RCPI and RSNI measured on the corresponding association request and reassociation request frames received by the AP, but this is only described in clause 10 (10.3.6.4.2 and 10.3.7.4.2) whereas I would expect a description in clause 11 of how these values are actually used, but I can't find where this is described in clause 11. Further, clauses 10.3.6.4.2 and 10.3.7.4.2 expose the RCPI and RSNI values from the AP STA's MLME to the AP STA's SME, presumably so that the AP SME can include those factors in it's decision to grant association/ reassociation or not. It makes sense that the values are exposed as part of the associate/ reassociate .indication primitives, but the values are also returned to the MLME as part of the .response primitive. This in turn allows inclusion of the RCPI and RSNI values in the association response and reassociation response frames respectively. But again the purpose in doing so is never revealed. Is the information intended for the associating STA's MLME or SME? If the answer is the MLME then a description of how this MLME utilizes this information is needed in clause 11. If the intended recipient of the RCPI and RSNI values is the associating STA's SME then the RCPI and RSNI values should also be included in the associate and reassociate .confirm primitives.

SuggestedRemedy

Clarify the purpose of including the RCPI and RSNI values in the association and reassociation response frames and align that with the appropriate changes to the associate and reassociate .response and .confirm primitives as needed.

Suggestion: add text to clause 11 to define and describe the purpose and specific instances under which this information is used, and leave clause 10 unchanged in this regard.

Or, remove the RCPI and RSNI values from the association response frames since no description is provided for how it is to be used.

Or, add the RCPI and RSNI values to the association/ reassociation .confirm primitives which will push the corresponding responsibility for interpreting and acting upon these values to the SME (on both ends of the link).

Response Response Status C

ACCEPT. Add RSNI and RCPI values to the association/reassociation .confirm primitives on both ends of the link. This will push the corresponding responsibility for interpreting and acting on these values into the SME. At the STA, the .confirm primitive should contain RCPI and RSNI values for received frames at both ends of the association link. Assigned to Joe Kwak for text for approval. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.2.3.6 P10 L 20 # 176

O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

CI 07 SC 7.2.3.7 P10 L 32 # 2

PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB96#03-Engwer: Clauses 7.2.3.5 and 7.2.3.7 show the addition of the RCPI and RSNI to the information included in the association response and reassociation response frames respectively. Presumably these are the RCPI and RSNI measured on the corresponding association request and reassociation request frames received by the AP, but this is only described in clause 10 (10.3.6.4.2 and 10.3.7.4.2) whereas I would expect a description in clause 11 of how these values are actually used, but I can't find where this is described in clause 11. Further, clauses 10.3.6.4.2 and 10.3.7.4.2 expose the RCPI and RSNI values from the AP STA's MLME to the AP STA's SME, presumably so that the AP SME can include those factors in its decision to grant association/ reassociation or not. It makes sense that the values are exposed as part of the associate/ reassociate .indication primitives, but the values are also returned to the MLME as part of the .response primitive. This in turn allows inclusion of the RCPI and RSNI values in the association response and reassociation response frames respectively. But again the purpose in doing so is never revealed. Is the information intended for the associating STA's MLME or SME? If the answer is the MLME then a description of how this MLME utilizes this information is needed in clause 11. If the intended recipient of the RCPI and RSNI values is the associating STA's SME then the RCPI and RSNI values should also be included in the associate and reassociate .confirm primitives.

SuggestedRemedy

Clarify the purpose of including the RCPI and RSNI values in the association and reassociation response frames and align that with the appropriate changes to the associate and reassociate .response and .confirm primitives as needed.

Suggestion: add text to clause 11 to define and describe the purpose and specific instances under which this information is used, and leave clause 10 unchanged in this regard.

Or, remove the RCPI and RSNI values from the association response frames since no description is provided for how it is to be used.

Or, add the RCPI and RSNI values to the association/ reassociation .confirm primitives which will push the corresponding responsibility for interpreting and acting upon these values to the SME (on both ends of the link).

Response Response Status C

ACCEPT. Add RSNI and RCPI values to the association/reassociation .confirm primitives on both ends of the link. This will push the corresponding responsibility for interpreting and acting on these values into the SME. At the STA, the .confirm primitive should contain RCPI and RSNI values for received frames at both ends of the association link. Assigned to Joe Kwak for text for approval. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.2.3.7 P10 L 32 # 177
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

CI 07 SC 7.2.3.8 P11 L 8 # 178
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

CI 07 SC 7.2.3.9 P11 L 21 # 225
Ecclesine, Peter

Comment Type TR Comment Status A Kwak

I do not think FH stations will ever add Radio Measurement, as their non-operating channel operation is not specified in the amendment.

SuggestedRemedy

Remove all changes to FH normative text, e.g. 7.2.3.1, 7.2.3.9, 9.8.2.1, and review the text for all other FH PHY changes.

Response Response Status C

ACCEPT IN PRINCIPLE. Commenter is correct that Radio Measurements are not specified for operation with FH PHYs. The TGk draft exercises care to not modify the specification for FH operation. In this clause 2 sentences are deleted. The first sentence is a redundant requirement which is also provided in Table 15 which follows. The second sentence is an informational note only and is not appropriate for clause 7 format description. In this way TGk has editorially cleaned up this clause following suggestions from previous comments without modifying the requirements for FH and other legacy STAs. No text change is needed here.

CI 07 SC 7.2.3.9 P11 L 24 # 179
O'Hara, Robert

Comment Type TR Comment Status A Ganesh

The change to the use of the Request IE in the probe response is incorrect. The change allows the response to include "any" IEs in two locations in the response. This is a significant change to the material added by 802.11d and duplicates a number of IEs that were not previously duplicated. This change can lead to two APs, one of which implements 802.11k, to respond to the same Request IE in very different ways. This has the potential to break previously compliant implementations of 802.11d.

SuggestedRemedy

Remove the change that allows duplication of IEs other than those specified in the original text that is marked to be deleted.

Response Response Status C

ACCEPT. Doc 07/2314r0.

CI 07 SC 7.2.3.9 P11 L 31 # 171
Geipel, Michael D

Comment Type T Comment Status A Ganesh

"A STA shall return only the information elements that it supports."
Suppose that the STA does not support any of the IEs in the request.
Should it generate an empty response? Or ignore the entire request?
I believe that the empty response is the correct behavior.
[The statement that was removed from this paragraph assumed that a response would still be required. By removing the last line of the paragraph (lines 33-34), the paragraph seems to be more about ignoring IEs.]

SuggestedRemedy

Add a statement to clarify the response behavior when none of the requested IEs are supported by the STA.

Response Response Status C

ACCEPT IN PRINCIPLE. Doc 07/2314r0.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 171

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 07 SC 7.2.3.9 P11 L31 # 170
Geipel, Michael D

Comment Type E Comment Status A Editor

"A STA shall return only the information elements that it supports."
The statement that follows this one talks about ignoring improperly formatted messages.
The use of the word "only" in this statement weakens the intended message.

SuggestedRemedy

Remove the word "only" from this statement. Replace:
"A STA shall return only the information elements that it supports."
with
"A STA shall return the information elements that it supports."

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 07 SC 7.2.3.9 P11 L33 # 180
O'Hara, Robert

Comment Type TR Comment Status A Ganesh

The deletion of this text leads to potential interoperability problems with previously compliant implementations of 802.11d.

SuggestedRemedy

Reinstate the deleted text.

Response Response Status C

ACCEPT IN PRINCIPLE. Reinstate the deleted text and moved the text to clause 11.1.3.2.1. See Document 07/2314r0.

CI 07 SC 7.2.3.9 P11 L33 # 118
Ecclesine, Peter

Comment Type TR Comment Status A Ganesh

Text removes constraint from base standard for ordering IE in Probe Response, by duplicating requested IE appearance to be both numerical and requested order.

SuggestedRemedy

Change text so that legacy STAs can Probe Serving APs and receive all requested information elements.

Response Response Status C

ACCEPT IN PRINCIPLE. Doc 07/2314r0.

CI 07 SC 7.2.3.9 P11 L45 # 181
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace all "shall" and "may" usage with "is" and "can", or other appropriate descriptive verbs throughout clause 7.

Response Response Status C

ACCEPT.

CI 07 SC 7.2.3.9 P12 L7 # 152
Ecclesine, Peter

Comment Type E Comment Status A Editor

Probe response Notes field should include 'as specified in 7.x.x.x' text to give reader context for field.

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 07 SC 7.2.3.9a P12 L27 # 182
O'Hara, Robert

Comment Type TR Comment Status R Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy

remove the clause.

Response Response Status C

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 182

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 07 SC 7.2.3.9a P12 L35 # 108

Hart, Brian D

Comment Type TR Comment Status A Hart

Timestamp, beacon interval, most of capability, max regulatory power, TX power used, transceiver NF, DS parameter set are either redundant or of little use in supporting the MP benefits.

SuggestedRemedy

Remove or condense

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 07 SC 7.2.3.9a P12 L43 # 104

Hart, Brian D

Comment Type TR Comment Status A Hart

MP is missing regulatory class

SuggestedRemedy

Add

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 07 SC 7.3.1.11 P13 L44 # 44

PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#32-Marshall: Changes to table 24 don't match the base standard. Reserved row currently says "4-126" and not "5-126". Also, "5" should not be both underlined and strikethrough.

SuggestedRemedy

Insert a row "4 Reserved -" and change the "5<underlined><strikethrough>6<underlined>" to "4<strikethrough>6<underlined>"

Response Response Status C

ACCEPT. Insert a row "4 Reserved -" and change the "5<underlined><strikethrough>6<underlined>" to "4<strikethrough>6<underlined>"

CI 07 SC 7.3.1.11 P13 L48 # 111

Kays, Ruediger

Comment Type E Comment Status A Editor

When referencing to 802.11-2007, table 24 becomes table 7-24.

In this table, Code 4 is not defined.

Assuming that there is no code 4, numbering scheme has to be changed.

SuggestedRemedy

4 Radio Measurement 7.4.6

5-126 Reserved

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 07 SC 7.3.1.11 P13 L50 # 94

Trainin, Solomon

Comment Type TR Comment Status A Kwak

The code 7 is already allocated by TGn so it cannot be referred as reserved

SuggestedRemedy

Fix the reserved codes per last know ANA allocation

Response Response Status C

ACCEPT IN PRINCIPLE. The TGk draft baseline does not include 11n. 11n baseline includes TGk. For TGk draft purposes, odes 6-126 are reserved. In the 11n draft, the 11n Category values will be listed. This is standard practice. No text change is needed for this comment. See CID#44 for a related correction to this Table.

CI 07 SC 7.3.1.18 P14 L5 # 184

O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "shall set" with "sets"

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 184

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 07 SC 7.3.1.19 P14 L 16 # 185
O'Hara, Robert

Comment Type TR Comment Status R Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy
remove the clause.

Response Response Status C

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI 07 SC 7.3.1.20 P14 L 34 # 186
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy
replace "shall be" with "is"

Response Response Status C
ACCEPT.

CI 07 SC 7.3.1.21 P14 L 50 # 164
Ecclesine, Peter

Comment Type TR Comment Status A Ganesh

Max Transmit Power definition is incorrect, as it does not include multiple power limits on the same frequency, e.g. 4.9425 GHz.

SuggestedRemedy
Add normative text in 11.13 about use of multiple emissions masks on the same frequency, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C
ACCEPT IN PRINCIPLE. Text inserted in 7.4.6.3. See Doc 07/2314r0.

CI 07 SC 7.3.1.21 P15 L 1 # 105
Hart, Brian D

Comment Type TR Comment Status A Ganesh

Max TX power is the min of device capability, regulatory and policy ; and is superseded by reg class anyway

SuggestedRemedy
Define correctly

Response Response Status C

ACCEPT IN PRINCIPLE. Since changes in the draft as a result of modifications to Measurement Pilot includes removal of Max Tx Power from Measurement Pilot, the definition is now moved to Clause 7.4.6.3. Document 07/2314r0 has a more accurate definition of Max Tx Power.

CI 07 SC 7.3.1.21-23 P14 L 50 # 112
Kays, Ruediger

Comment Type T Comment Status R CRgroup

In order to efficiently organize WLANs, channel information should be delivered with smaller tolerances than +/- 5dB.

SuggestedRemedy
Reduce tolerances for measurements.

Response Response Status C
REJECT. Numerous inputs from various manufacturers have indicated that a tolerance of +/-5dB is challenging and cannot be reduced. The specified tolerance applies across all environmental extremes (temperature), for the entire product lifetime, and for all possible input power conditions. These items drive the tolerance limits for power measurements.

CI 07 SC 7.3.1.4 P13 L35 # 141
Ecclesine, Peter

Comment Type TR Comment Status A Ganesh

The various Radio Measurement procedures of 11.10, 11.11, 11.12 and 11.13 should all be subheads under a single 11.10 Radio Measurement clause, and all procedures cause B12 in the Capability Information field to be set to 1. Annex A.4.3 CF13 should point to 11.10, not 7.3.1.4

SuggestedRemedy

Create 11.10 Radio Measurement, add text requiring dot11RadioMeasurementEnabled to be true, and when dot11RadioMeasurementEnabled is true, then dot11RegulatoryClassesRequired is true, dot11SpectrumManagementImplemented is true, dot11MultiDomainCapabilityEnabled is true. Renumber existing 11.10, 11.11, 11.12 and 11.13 as 11.10.1, 11.10.2, 11.10.3, 11.10.4 and change Annex A.4.3 CF13 References to add 11.10.

Response Response Status C
ACCEPT IN PRINCIPLE. Doc 07/2314r0

CI 07 SC 7.3.1.4 P13 L36 # 43
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#31-Marshall: Normative statements don't belong in clause 7.

SuggestedRemedy

Change "shall set" to "sets" and "shall be set" to "sets"

Response Response Status C
ACCEPT IN PRINCIPLE. P13L36 Change "shall set" to "sets". P13L37 Change ", otherwise it shall be set to 0" to "and sets it to 0 otherwise."

CI 07 SC 7.3.1.4 P13 L36 # 183
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "shall set" with "sets"

Response Response Status C
ACCEPT.

CI 07 SC 7.3.2.18 P17 L5 # 119
Ecclesine, Peter

Comment Type TR Comment Status A Ecclesine

There are Regulatory Classes where the maximum frame size is ~700 octets (in a 5 MHz channel bandwidth), so the TPC report element text should be changed for use with those classes.

SuggestedRemedy

Change text in parentheses to "when transmitting the smaller of 1500 octet frames or the maximum MPDU sized-frames allowed for the Regulatory Class"

Response Response Status C
ACCEPT IN PRINCIPLE. "when transmitting 1500 octet frames or maximum MPDU sized-frames, whichever is smaller."

CI 07 SC 7.3.2.21 P18 L26 # 45
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#33-Marshall: "is described in Table 28" was added, but not underlined.

SuggestedRemedy

Underline the new text

Response Response Status C
ACCEPT.

CI 07 SC 7.3.2.21 P19 L20 # 188
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "may" with "can"

Response Response Status C
ACCEPT.

CI 07 SC 7.3.2.21 P19 L 29 # 189
O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "may" with "can"

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.21 P19 L 40 # 46
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#34-Marshall: Column with "Measurement Use" has been added.

SuggestedRemedy

Underline "Measurement Use", and add an Editor's Note below Table 29 stating that the addition of a column can't be shown with underline/strikethrough.

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to editor. EDITOR--Accept Suggested Remedy. Also make same change at top of P20.

CI 07 SC 7.3.2.21.10 P26 L 38 # 18
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#06-Stephens: "Transmit stream Measurement" is a poor name. A transmit stream specifically refers to Data sent with TIDs in the range 8-15 - i.e. for which a TSID exists. Also note that the T in TID stands for traffic, not transmit.

FYI: "3.154 traffic stream (TS): A set of medium access control (MAC) service data units (MSDUs) to be delivered subject to the quality of service (QoS) parameter values provided to the MAC in a particular traffic specification (TSPEC). TSs are meaningful only to MAC entities that support QoS within the MAC data service.

These MAC entities determine the TSPEC applicable for delivery of MSDUs belonging to a particular TS using the TS identifier (TSID) value provided with those MSDUs at the MAC service access point (MAC_SAP)."

SuggestedRemedy

Replace with a name that does not exclude TIDs 0-7.

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to editor. EDITOR--Commenter notes that TID applies to Traffic Streams associated with TSPECs and also to Traffic Categories for QOS traffic without TSPECs. This measurement applies to both kinds of TIDs. The term Traffic Stream in the measurement name does not address both TS and TC traffic. Suggest new name (1) Transmit QOS Measurement (2) Transmit Flow Quality Measurement (3) Transmit Stream/Category Measurement (4) Traffic Stream/Category Transmit Measurement. OR DECLINE comment and note that this seems to be the best name we can provide. GO WITH #3 AS NAME. CLARIFY NAME IN FIRST SENTENCE OF EACH SUBCLAUSE TITLED WITH THIS NEW NAME.

CI 07 SC 7.3.2.21.4 P20 L 41 # 100
Trainin, Solomon

Comment Type TR Comment Status R CRgroup

The defined format of Channel Load Request does not contain channel width identification. No way to distinguish between 20MHz or 40MHz channels

SuggestedRemedy

Add channel width identification to the Channel Load Request

Response Response Status C

REJECT. The TGk draft baseline does not include 11n. 11n baseline includes TGk. We would expect all of these 11n specific changes to 11k to be included in the 11n amendment. The commenter is encouraged to provide these comments to the next draft of 11n.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 100

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 07 SC 7.3.2.21.4 P20 L 48 # 95
Trainin, Solomon

Comment Type TR Comment Status A Ecclesine

"Regulatory Class and Channel Number together specify the channel frequency ..." The Regulatory Class depends on Country. So the Country should be known to specify the channel frequency and spacing.

SuggestedRemedy

Change the sentence adding the word Country: "Country, Regulatory Class and &"

Response Response Status C

ACCEPT. Change 7.3.2.21.4-7 and 7.3.2.22.4-7 per suggested resolution.

CI 07 SC 7.3.2.21.6 P21 L 36 # 87
Hart, Brian D

Comment Type TR Comment Status A Hart

Due to multiple overlapping APs, multiple BSSIDs/SSIDs and beacon bloat itself, a STA accepting a beacon request may have to retransmit many octets of beacons from many APs. This incurs a high burden on the STA and is wasteful of medium time, when perhaps a more efficient scheme is for the AP to request the STA to report all APs with a low level of detail, and then to request the STA to report certain APs with a high level of detail.

SuggestedRemedy

Split the reporting condition into two fields, with 2 MSBs for a new field, reporting detail: 0 = no body, 1 = fixed fields + requested elements only, 2 = full. If request element is present, request element specifies which IEs if present in the beacon are to be reported. Commenter will provide text.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect3

CI 07 SC 7.3.2.21.6 P21 L 46 # 93
Hart, Brian D

Comment Type TR Comment Status A Hart

There is no efficient method of requesting a specific STA to perform a beacon measurement on specific channels. The beacon request allows for 0 (all channels in the regulatory class) or 255 (AP channel report) but not some specific set of channels. The beacon request can also list multiple beacon requests in a Measurement Request action frame. This does the job but is an unnecessarily verbose scheme.

SuggestedRemedy

Add optional AP channel report element(s) at the end of the beacon request. When present, the optional elements cause the request to be iterated over the concatenation of the existing regulatory class/channel pair at the start of the request, plus the regulatory class/channel list pair in each AP channel report element. Commenter will provide text.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect7

CI 07 SC 7.3.2.21.7 P23 L 39 # 90
Hart, Brian D

Comment Type TR Comment Status A Hart

For future-proofing 11k, we should explicitly allow for extension of 11k's frames by unspecified appended sub- elements, including VS sub-elements. This applies to the Channel Load, Noise Histogram, Beacon, Frame, STA stats, LCI, Traffic Stream Metrics, Measurement Pause, and Link Measurement Req/Rep. However, many of these measurement fields cannot be extended due to the presence of optional fields because the receiver cannot know how to parse the measurement field.

SuggestedRemedy

Change these fields to allow subelements to be parsable. Commenter will provide text.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect6

CI 07 SC 7.3.2.22 P31 L 11 # 47
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#35-Marshall: Column with "Measurement Use" has been added.

SuggestedRemedy

Underline "Measurement Use", and add an Editor's Note below Table 30 stating that the addition of a column can't be shown with underline/strikethrough.

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.10 P43 L 33 # 54
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#42-Marshall: Figure 85n should be shown as a single row, not split across lines.

SuggestedRemedy

Make the change agreed by the TG & Change Figure 85n to separate items on one row. Suggest C1 C2 C3 C4 C5 C6 C7, and add text below the figure with "C1 is the value of (or change in value of) dot11STAStatisticsAPAverageAccessDelay." and

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.4 P31 L 46 # 101
Trainin, Solomon

Comment Type TR Comment Status R CRgroup

The defined format of Channel Load Report does not contain channel width identification. No way to distinguish between 20MHz or 40MHz channels

SuggestedRemedy

Add channel width identification to the Channel Load Report

Response Response Status C

REJECT. The TGk draft baseline does not include 11n. 11n baseline includes TGk. We would expect all of these 11n specific changes to 11k to be included in the 11n amendment. The commenter is encouraged to provide these comments to the next draft of 11n.

CI 07 SC 7.3.2.22.7 P35 L 35 # 96
Trainin, Solomon

Comment Type TR Comment Status R CRgroup

The Frame Report Entry format does not contain fields to report 802.11n specific things like 40MHz channel width and Greenfield mode. The existent format does not contain any reserved field and does not allow extension. So no way to add the important information later.

SuggestedRemedy

Change format of the Frame Report entry by adding reserved field or to define the Frame report entry like Information Element with ID and length to allow extension

Response Response Status C

REJECT. The TGk draft baseline does not include 11n. 11n baseline includes TGk. We would expect all of these 11n specific changes to 11k to be included in the 11n amendment. The commenter is encouraged to provide these comments to the next draft of 11n.

CI 07 SC 7.3.2.22.8 P36 L 18 # 98
Trainin, Solomon

Comment Type TR Comment Status R Kwak

Figure 85g does not reflect repetitiveness of the Group Identity and Statistics Group Data

SuggestedRemedy

Fix the Figure 85g

Response Response Status C

REJECT. Figure 85g is correct. Each STA Statistics request element may request statistics on only one statistics group, specified by Group Identity in the request. Each STA Statistics report element provides statistics for only one statistics group, specified by the Group Identity in the report. The statistics listed in the variable length Statistics Group Data field are specified in Table 31b for each defined Group Identity value. There is no repetition in the STA Statistics Report element. However, any Measurement Request frame may contain multiple STA Statistics Request elements and thereby obtain multiple STA Statistics Reports which may be sequentially included in a Measurement Report frame.

CI 07 SC 7.3.2.22.8 P37 L4 # 97
Trainin, Solomon

Comment Type TR Comment Status A CRgroup

There is no way to add counters in each of the defined Groups that may be very important for new defined MAC/PHY like TGn and TGy.

SuggestedRemedy

Change format of the Statistics group data to include length field thus allowing extension

Response Response Status C

ACCEPT IN PRINCIPLE. A submission (07/2302r4) addresses the extensibility of existing groups.

CI 07 SC 7.3.2.22.8 P40 L13 # 99
Trainin, Solomon

Comment Type TR Comment Status A Kwak

Last row in the Table 31b is defined such a way that does not allow extension of the table

SuggestedRemedy

Replace the word "none" with "reserved"

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.8 P40 L22 # 48
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#36-Marshall: Figure 85h should be shown as a single row, not split across lines.

SuggestedRemedy

Make the change agreed by the TG & Change Figure 85h to 7 items on one row. Suggest C1 C2 C3 C4 C5 C6 C7, and add text below the figure with "C1 is the value of (or change invalue of) dot11TransmittedFragmentCount." and remainder in

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.8 P41 L1 # 49
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#37-Marshall: Figure 85i should be shown as a single row, not split across lines.

SuggestedRemedy

Make the change agreed by the TG & Change Figure 85i to 6 items on one row. Suggest C1 C2 C3 C4 C5 C6, and add text below the figure with "C1 is the value of (or change invalue of) dot11RetryCount." and remainder in similar way.

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.8 P41 L17 # 216
Chaplin, Clint F

Comment Type TR Comment Status A Kwak

"indexed by x."

SuggestedRemedy

"indexed by x+1."

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.8 P41 L19 # 50
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#38-Marshall: font wrong on this line

SuggestedRemedy

fix

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

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Submission

Comment ID # 50

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9/19/2007 6:39:14

Richard Paine, Boeing

CI 07 SC 7.3.2.22.8 P41 L 20 # 19
PAINE, RICHARD H

Comment Type E Comment Status A Editor

LB103#07-Stephens: "dot11QosCountersIndex is set to 3." is in a different font.

SuggestedRemedy

Set to default para font.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 07 SC 7.3.2.22.8 P41 L 23 # 51
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#39-Marshall: Figure 85j should be shown as a single row, not split across lines.

SuggestedRemedy

Make the change agreed by the TG ...Change Figure 85j to 13 items on one row. Suggest C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13, and add text below the figure with "C1 is the value of (or change invalue of)

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.8 P41 L 45 # 52
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#40-Marshall: Normative statements don't belong in clause 7.

SuggestedRemedy

change "shall set" to "sets"

Response Response Status C

ACCEPT. change "shall set" to "sets"

CI 07 SC 7.3.2.22.8 P42 L 2 # 53
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#41-Marshall: Figure 85k should be shown as a single row, not split across lines.

SuggestedRemedy

Make the change agreed by the TG &Change Figure 85k to 7 items on one row. Suggest C1 C2 C3 C4 C5 C6 C7, and add text below the figure with "C1 is the value of (or change invalue of) dot11STAStatisticsAPAverageAccessDelay." and

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.9 P42 L 26 # 120
Ecclesine, Peter

Comment Type TR Comment Status A Ecclesine

P802.11y Draft 4.0 Figure 112z shows a LCI Report element format, which this section lacks.

SuggestedRemedy

Redraw to show entire Report element format, including Element ID and Length. Commenter will supply diagram in Frame format.

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.22.9 P42 L 48 # 13
PAINE, RICHARD H

Comment Type TR Comment Status A Ecclesine

LB96#34-Stevens: I suspect no two manufacturers would interpret the structure of figure 85l in the same way. For example it shows three latitude fields. The text clearly states that fields are little endian, but it does not state if the first of these t

SuggestedRemedy

Redraw 85l using the conventions elsewhere in this document - i.e. show each field in a single box and number the bits at its left and right edges. (you can use figure 85m as an example). Do not split fields across multiple boxes.

Response Response Status C

ACCEPT IN PRINCIPLE. Similar Tgy comment from same commenter was resolved to the commenter's satisfaction with a bitfield drawing. A TGk version of that bitfield drawing in TGy D4.0 Figure 112z will be used, with the accompanying NOTE on how to represent an RFC-3825 example longitude.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 13

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Richard Paine, Boeing

CI 07 SC 7.3.2.28 P46 L18 # 217
Chaplin, Clint F

Comment Type ER Comment Status A Editor & CRgroup

Editor's instruction: "Change the third paragraph of 7.3.2.28 and format as formula as follows:"

SuggestedRemedy

"Change the third paragraph of 7.3.2.28 and format the formula as follows:"

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.36 P46 L37 # 172
Hart, Brian D

Comment Type TR Comment Status R Hart

11v has many channel lists which essentially comprise regulatory class and a channel list. They define their own elements with their own (sub)element ids

SuggestedRemedy

Commenter withdraws the comment

Response Response Status C

REJECT.

This comment was WITHDRAWN by the commenter.

CI 07 SC 7.3.2.36 P46 L44 # 102
Trainin, Solomon

Comment Type TR Comment Status R CRgroup

The defined format of AP Channel Report element does not contain channel width identification. No way to distinguish between 20MHz or 40MHz channels

SuggestedRemedy

Add channel width identification to the AP Channel Report element

Response Response Status C

REJECT. The TGk draft baseline does not include 11n. 11n baseline includes TGk. We would expect all of these 11n specific changes to 11k to be included in the 11n amendment. The commenter is encouraged to provide these comments to the next draft of 11n.

CI 07 SC 7.3.2.37 P47 L25 # 103
Trainin, Solomon

Comment Type T Comment Status R CRgroup

The defined format of Neighbor Report element does not contain channel width identification. No way to distinguish between 20MHz or 40MHz channels

SuggestedRemedy

Add channel width identification to the Neighbor Report element

Response Response Status C

REJECT. The TGk draft baseline does not include 11n. 11n baseline includes TGk. We would expect all of these 11n specific changes to 11k to be included in the 11n amendment. The commenter is encouraged to provide these comments to the next draft of 11n.

CI 07 SC 7.3.2.37 P48 L30 # 55
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#43-Marshall: Normative statements don't belong in clause 7.

SuggestedRemedy

Change "shall have" to "have", and "shall be" to "are"

Response Response Status C

ACCEPT. Change "shall have" to "have", and "shall be" to "are"

CI 07 SC 7.3.2.37 P48 L44 # 56
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#44-Marshall: Normative statements don't belong in clause 7.

SuggestedRemedy

Change "shall be" to "are"

Response Response Status C

ACCEPT IN PRINCIPLE. P48L44: Delete "and shall be set to 0 on transmission and are ignored on reception". Reserve bits are fully defined in the base standard in 7.1.1.

CI 07 SC 7.3.2.37 P48 L 49 # 92
Hart, Brian D

Comment Type TR Comment Status A Kwak

The TSF Offset is difficult to measure since it drifts in time and so an accuracy of +/-100 us is perfectly acceptable.

SuggestedRemedy

Specify an accuracy, or add a tolerance field, or allow the rate of change to be estimated: i.e. mention the TSF at which the TSF offset was first measured, and the ppm offset between devices. Then the RX can infer the current TSF offset.

Response Response Status U

ACCEPT IN PRINCIPLE. Requested TSF accuracy is provided in clause 11.11.2 on P98L22. No text change is needed.

CI 07 SC 7.3.2.37 P49 L 31 # 140
Ecclesine, Peter

Comment Type ER Comment Status R Editor & CRgroup

Why is 'Vendor Specific' coded 221 and not 254? Why is the entry not 'VendorSpecificInfo' like 7.3.2.26?

SuggestedRemedy

Rename to VendorSpecificInfo in Table 43b and subsequent text pg 50 line 20. Renumber Sub-element ID to 254 per comment.

Response Response Status C

REJECT. As noted on P50L20: the vendor specific sub-element uses the same format as Vendor Specific element described in 7.3.2.26. The defined Element ID for this format is 221 as shown in Table 7-26 of the baseline.

CI 07 SC 7.3.2.38 P50 L 35 # 145
Ecclesine, Peter

Comment Type TR Comment Status A Kwak

The term RCPI is not defined, and should have a pointer to e.g. 17.3.10.6

SuggestedRemedy

Add text referring to where RCPI is defined

Response Response Status C

ACCEPT. P50L36 add new paragraph: "The RCPI field contains an RCPI value as specified for certain PHYs in clauses 15, 17, and 18."

CI 07 SC 7.3.2.39 P51 L 15 # 58
PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB103#46-Marshall: Rows for "n" don't show the units of measurement

SuggestedRemedy

Add "us" for upper and lower bound on each

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to Joe Kwak. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.3.2.39 P51 L 15 # 57
PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB103#45-Marshall: Multiple lines here for entry "n" need to show the valid range for each.

SuggestedRemedy

Delete the lines "and so on where" and delete the line "where n is the integer value (step) used to incitate the measured Access Delay". Change "n:" at start of line 15 to "2<=n<=14". Similar change on line 24 and 32.

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to Joe Kwak. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.3.2.39 P52 L 4 # 146
Ecclesine, Peter

Comment Type TR Comment Status A Kwak

The 'shall' statements should be moved to clause 11 and referred to here. Same for 7.3.2.44 BSS AC Access Delay

SuggestedRemedy

Move measurement and accuracy 'shall' statements to clause 11, and refer to them in clause 7.

Response Response Status C

ACCEPT. Move this requirement to a new subclause in clause 11. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting. Also see related comment in CID#64.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 146

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Richard Paine, Boeing

CI 07 SC 7.3.2.41 P52 L 50 # 231
Hansen, C J

Comment Type TR Comment Status A Kwak

Text is confusing. RSNi as defined by the equation appears that it should be an unsigned integer that takes on values of 0 to 254. Line 50 states RSNi has range -10 to 117 dB. This needs to be clarified.

SuggestedRemedy

Define RSNi unambiguously.

Response Response Status C

ACCEPT IN PRINCIPLE. P52L50: change paragraph from "for RSNi in the range -10dB to -117dB, and where RCPIpower and ANPIpower indicate power domain values for RCPI and ANPI and not dB domain values." to "where RCPIpower and ANPIpower indicate power domain values for RCPI and ANPI and not dB domain values. RSNi in dB is scaled in units of 0.5dB to obtain 8 bit RSNi values which cover the range from -10 dB to +117 dB."

CI 07 SC 7.3.2.43 P53 L # 246
Kwak, Joseph A

Comment Type TR Comment Status A Kwak

Description of 16 bit value for Available Admission Capacity is not detailed enough to indicate how the value is to be set by an AP. This seems to be based on the Available Admission Capacity defined in 7.3.2.28 but would seem to provide more detail concerning explicit admission control for prioritized UPs and ACs. Is there a relationship between the Available Admission Capacity defined in these two sections? It is not clear and unless this is fixed, an AP may set these fields to any arbitrary values and still be compliant with the standard. Without a clear definition, the admission capacity values are meaningless. In 7.3.2.28 the base standard says "The field is helpful for roaming non-AP STAs to select an AP that is likely to accept future admission control requests, but it does not represent a guarantee that the HC will admit these requests. This comparison of reported admission capacities will not be valid unless all AP implementation understand how to set these values and set them in a consistent way. This must be fixed.

SuggestedRemedy

Fix this in 7.3.2.43 and in 7.3.2.28. It would be best to add a new clause to 11 to describe in detail the purpose of this IE and the way an AP is to set these fields. I suspect that the intent of this was to report on admission control "allocations" for future admission requests. In this case, the wording "remaining amount of medium time" is misleading. Such an admission control "allocation" need not be restricted to the remaining time (unused medium time) in any period. Such "allocations" may be independent of current medium load and may be arbitrarily set by policy in an AP. In any case this would imply a requirement that a STA shall never request admission for more medium time than is indicated to be "available", and an AP shall never grant admission requests for more medium time than is "available". These requirements should be stated in a new clause 11.10.x. Note that K.2.2 provides an informative definition for medium time that can be used for these requirements.

Response Response Status C

ACCEPT IN PRINCIPLE. See text changes in 07/2327r2.

CI 07 SC 7.3.2.44 P54 L 37 # 59
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#47-Marshall: bad cross reference

SuggestedRemedy

Should be "Figure 112n"

Response Response Status C

ACCEPT.

CI 07 SC 7.3.2.44 P54 L 48 # 60
 PAINE, RICHARD H
 Comment Type TR Comment Status A CRgroup
 LB103#48-Marshall: bad cross reference
 SuggestedRemedy
 Should be "Figure 112o"
 Response Response Status C
 ACCEPT.

CI 07 SC 7.3.2.44 P55 L 11 # 62
 PAINE, RICHARD H
 Comment Type TR Comment Status A Kwak
 LB103#50-Marshall: Rows for "n" don't show the units of measurement
 SuggestedRemedy
 Add "us" for upper and lower bound on each
 Response Response Status C
 ACCEPT IN PRINCIPLE. Assigned to Joe Kwak. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.3.2.44 P55 L 11 # 61
 PAINE, RICHARD H
 Comment Type TR Comment Status A Kwak
 LB103#49-Marshall: Multiple lines here for entry "n" need to show the valid range for each.
 SuggestedRemedy
 Delete the lines "and so on where" and delete the line "where n is the integer value (step) used to incidate the measured Access Delay". Change "n:" at start of line 15 to "2<=n<=14". Similar change on line 20 and 28.
 Response Response Status C
 ACCEPT IN PRINCIPLE. Assigned to Joe Kwak. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.3.2.44 P55 L 50 # 63
 PAINE, RICHARD H
 Comment Type TR Comment Status A CRgroup
 LB103#51-Marshall: Normative statements don't belong in clause 7.
 SuggestedRemedy
 change "shall measure" to "measures"
 Response Response Status C
 ACCEPT IN PRINCIPLE. P55L50 replace "shall measure and average" with "measures and averages".

CI 07 SC 7.3.2.44 P56 L 2 # 64
 PAINE, RICHARD H
 Comment Type TR Comment Status A Kwak
 LB103#52-Marshall: Normative statements don't belong in clause 7.
 SuggestedRemedy
 change "shall be" to "is"
 Response Response Status C
 ACCEPT IN PRINCIPLE. Assigned to Joe Kwak to move this requirement to a new subclause in clause 11. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 07 SC 7.3.2.44 P56 L 6 # 20
 PAINE, RICHARD H
 Comment Type T Comment Status A CRgroup
 LB103#08-Stephens: I suppose the mapping from AC_VO to "voice" is obvious. However, it wouldn't harm to state the mapping from the labels that define an AC to the fields of this report with a smidgeon more formality.
 SuggestedRemedy
 Reference the AC_* lables in figure 112o.
 Response Response Status C
 ACCEPT. Figure 112o: add to field names the common abbreviations, e.g. "... Best Effort" to "... Best Effort (AC_BE)".

CI 07 SC 7.3.22.10 P45 L 15 # 208

Myles, Andrew F

Comment Type TR Comment Status A Kwak

The text mentions the "point at which the first or only fragment is ready for transmission"
However, it is not clear what "ready for transmission" means

SuggestedRemedy

Clarify meaning of "ready for transmission"

Response Response Status C

ACCEPT IN PRINCIPLE. P45L15: replace "transmission," with "transmission (i.e., begins CSMA/CA access),".

CI 07 SC 7.3.22.10 P45 L 28 # 209

Myles, Andrew F

Comment Type ER Comment Status A Editor & CRgroup

The subscripts on line 28 and line 31 are not subscripted

SuggestedRemedy

Fix it

Response Response Status C

ACCEPT IN PRINCIPLE. There are many small items to be fixed in this clause. P45L23: change "Range" to "Range field value". P45L28 change "B0 duration" to "Bin 0 range". P45L28 change "B(subscript0)" to "B(subscript0) = Bin 0 Range field value". P45L28 delete "for i = 0;". P45L31 change "Bi duration" to "Bin i range". P45L38 change "bin range" to "Bin 0 range".

CI 07 SC 7.4.6 P56 L 20 # 122

Ecclesine, Peter

Comment Type ER Comment Status R Editor & CRgroup

7.4.1 Action Value fields are in the base standard, and the same term should be used for radio measurement.

SuggestedRemedy

Change Action field values to Action Value field values throughout 7.4.6, and change figures to show Action Value after Category

Response Response Status C

REJECT. The commenter points out an inconsistency in the baseline spec. 5 action IEs in SpectrumManagement use term "Action Value field". 10 action IEs in QOS use term "Action field". Changing "Action field" to "Action Value field" does not add any value to spec nor does it change the meaning. TGk will continue to use the shorter term consistent with QOS action IEs in the baseline.

CI 07 SC 7.4.6.3 P57 L # 211

Myles, Andrew F

Comment Type E Comment Status A Editor

The ToC page numbering is incorrect

SuggestedRemedy

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 07 SC 7.4.6.5 P59 L 35 # 190

O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "may optionally be" with "can be"

Response Response Status C

ACCEPT.

CI 07 SC 7.4.6.5 P59 L 35 # 191

O'Hara, Robert

Comment Type TR Comment Status R Hart

This field does not need to include the entire SSID element. Only the value of the SSID is necessary.

SuggestedRemedy

Change the description to include only the value of the SSID, eliminating the SSID element ID and length.

Response Response Status C

REJECT. By inserting the entire element as a sub-element, other future TGs are able to add extra subelements to extend the semantics of the element. See 07/2302r4 Sect6.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 191

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9/19/2007 6:39:14

Richard Paine, Boeing

CI 07 SC 7.4.6.6 P60 L 10 # 192

O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "shall be" with "is"

Response Response Status C

ACCEPT IN PRINCIPLE. PROPOSED ACCEPTED IN PRINCIPLE. Change "shall be" to "are".

CI 07 SC 7.4.6.6 P60 L 7 # 193

O'Hara, Robert

Comment Type TR Comment Status A Kwak

Clause 7 is not the place for normative language in the description of the frame content

SuggestedRemedy

replace "shall be" with "is"

Response Response Status C

ACCEPT.

CI 09 SC 9 P12 L 50 # 227

Hansen, C J

Comment Type TR Comment Status A Hart

Transceiver noise floor provides no useful information

SuggestedRemedy

Remove

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5

CI 09 SC 9.8.2.1 P60 L 25 # 147

Ecclesine, Peter

Comment Type TR Comment Status R Kwak

Why is P802.11k changing this clause if the FH PHY is not otherwise modified in Radio Measurement?

SuggestedRemedy

Delete change to 9.8.2 and submit a change request to REV-mb.

Response Response Status U

REJECT. TGk is not changing the specification for FH PHY. 9.8.2.1, as modified here, shows an existing requirement for FH PHYs which was incorrectly placed in 7.2.3.1 and is now moved here. See related comment CID#121.

CI 10 SC 10 P68 L 1 # 194

O'Hara, Robert

Comment Type ER Comment Status A Editor & CRgroup

the figure numbers do not reference any valid figure in 802.11-2007.

SuggestedRemedy

correct the figure numbers.

Response Response Status C

ACCEPT. The baseline for this D8.0 document is 802.11maD9.0. The next D9.0 will be based on 802.11-2007 and will have figure numbers corrected to match this new baseline.

CI 10 SC 10 P85 L 35 # 232

Hansen, C J

Comment Type TR Comment Status R Crgroup

There are no guidelines or limits defined in this section for how often measurements can be made. This is unacceptable. All measurements will have an effect on the network capacity and the throughput available to stations incorporating these measurements. Implementations need guidance from the IEEE as to how often to make these measurements.

SuggestedRemedy

Add new text describing typical scenarios for how measurements are to be used.

Response Response Status C

REJECT. Rate, range, transmit power, regulatory classes, location, are all delimiters on the ability to provide services. The requirements and issues document produced by 11k provide those scenarios and the justification for a measurement service (02/508rX).

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 232

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9/19/2007 6:39:14

Richard Paine, Boeing

CI 10 SC 10.3.12 P69 L 28 # 67
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup
LB103#55-Marshall: Editor instructions are too general.

SuggestedRemedy

Make the change agreed by the TG & add "Change text of 10.3.12.1.2 as follows" at page 68 line 35, add "Change table in 10.3.12.1.2 as follows" at page 69 line 1, and similar changes to 10.3.12.3.2, 10.3.14.1.2, and 10.3.14.3.2.

Response Response Status C
ACCEPT.

CI 10 SC 10.3.12.1.2 P69 L 36 # 68
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup
LB103#56-Marshall: Formatting is inconsistent with original document. Also, "Number of Repetitions" and "Measurement Category" is new text and should be underlined.

SuggestedRemedy
as in comment

Response Response Status C
ACCEPT.

CI 10 SC 10.3.12.1.2 P69 L 44 # 124
Ecclesine, Peter

Comment Type E Comment Status A Editor
Three inserted parameters are not underlined here and 10.3.12.3.2.

SuggestedRemedy

Underline MeasurementRequestSet, etc.

Response Response Status C
ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 10 SC 10.3.12.1.2 P70 L 18 # 125
Ecclesine, Peter

Comment Type E Comment Status A Editor
Why is Radio Measurement Description ALL CAPS here and 10.3.12.3.2?

SuggestedRemedy

Follow IEEE Style Guide.

Response Response Status C
ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 10 SC 10.3.12.3.2 P70 L 32 # 69
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup
LB103#57-Marshall: Formatting is inconsistent with original document. Also, "Number of Repetitions" and "Measurement Category" is new text and should be underlined.

SuggestedRemedy
as in comment

Response Response Status C
ACCEPT.

CI 10 SC 10.3.2.2.2 P61 L 16 # 123
Ecclesine, Peter

Comment Type E Comment Status A Editor
Clause 10 tables have Valid range fields, not Valid Range.

SuggestedRemedy

Change title to Valid range in all tables in Clause 10.

Response Response Status C
ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 10 SC 10.3.2.2.2 P61 L 22 # 148
Ecclesine, Peter

Comment Type T Comment Status A Ganesh

Is the amendment text complete if dot11MultiDomainCapabilityEnabled is false and dot11RadioMeasurementEnabled is true? I don't think so - see my comments on 7.3.1.4 and 11.10. If setting dot11RadioMeasurementEnabled true also sets dot11MultiDomainCapabilityEnabled true, then this change is not necessary.

SuggestedRemedy

Determine whether dot11MultiDomainCapabilityEnabled is false and dot11RadioMeasurementEnabled is true is a normal operating condition, and if not, then remove this change.

Response Response Status C
ACCEPT IN PRINCIPLE. Doc 07/2314r0

CI 10 SC 10.3.2.2.2 P61 L 30 # 5
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB90#06-Engwer: In the scan.confirm primitive parameters the RCPIMeasurement description states that the RCPI information is derived from fields in the "RCPI element present in the received Probe Response", but there is no RCPI field defined in the Probe Response frame format. I suspect the intent was to provide the RCPIMeasurement value for the received ProbeResponse frame itself rather than a field within the frame.

SuggestedRemedy

As appropriate either add the RCPI field to the ProbeResponse frame format, or change "This parameter shall be present within a BSSDescription returned in an MLME-SCAN.confirm primitive when an RCPI element was present in the received Probe Response. Present only when the MIB attribute dot11RadioMeasurementEnabled is true." to "This parameter shall be present within a BSSDescription returned in an MLME-SCAN.confirm primitive when the MIB attribute dot11RadioMeasurementEnabled is true.".

Response Response Status C

ACCEPT. Delete all rows from the BSSDescription table and add a new row for request information elements. Also modify MLME-SCAN.request primitive to add a new row for request information elements. Modify section 11.1.3 to indicate use of new request information elements in the SCAN.request/.confirm primitives.

CI 10 SC 10.3.32.2.2 P79 L # 247
Kwak, Joseph A

Comment Type TR Comment Status A Kwak

The Link Measurement confirm primitive reports the result of a Link Measurement and is incomplete. The link measurement is based on the exchange of link measurement request/report frames. The resulting confirm primitive should contain the measured RCPI and RSNi for both the request frame and the report frame. The primitive currently only reports on the measured values of the request frame.

SuggestedRemedy

Add the RCPI and RSNi measured values for the Link Measurement Report frame to the primitive.

Response Response Status C
ACCEPT IN PRINCIPLE. Modify text and table to include RCPI.request, RCPI.report, RSNi.request, and RSNi.report.

CI 10 SC 10.3.32.2.2 P79 L 39 # 70
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#58-Marshall: Editor instruction is "insert", so no underlining needed

SuggestedRemedy

Remove underlining under the comma

Response Response Status C
ACCEPT.

CI 10 SC 10.3.6 P62 L 29 # 65
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#53-Marshall: Editor instructions are too general.

SuggestedRemedy

Make the change agreed by the TG & add "Change text of 10.3.6.3.2 as follows" at page 61 line 23, add "Change table in 10.3.6.3.2 as follows" at page 61 line 38, and similar changes to 10.3.6.4.2, 10.3.7.3.2, and 10.3.7.4.2.

Response Response Status C
ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 65

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Richard Paine, Boeing

CI 10 SC 10.3.6.3.2 P62 L38 # 66
PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB103#54-Marshall: Vendor Specific was deleted from the table

SuggestedRemedy

Would be acceptable to delete most of the table in 10.3.6.3.2, keeping only the new rows, and change the editing instruction to "Insert". But if the editing instruction is kept as "Change", then include the Vendor Specific line in the table as you did all the other existing lines. Similar change needed to 10.3.6.4.2, 10.3.7.3.2, 10.3.7.4.2, 10.3.12.1.2, 10.3.12.3.2, 10.3.14.1.2, 10.3.14.3.2.

Response Response Status C

ACCEPT. Assigned to Joe Kwak. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 10 SC 10.3.6.4.2 P64 L1 # 3
PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB96#04-Engwer: Clauses 7.2.3.5 and 7.2.3.7 show the addition of the RCPI and RSNI to the information included in the association response and reassociation response frames respectively. Presumably these are the RCPI and RSNI measured on the corresponding association request and reassociation request frames received by the AP, but this is only described in clause 10 (10.3.6.4.2 and 10.3.7.4.2) whereas I would expect a description in clause 11 of how these values are actually used, but I can't find where this is described in clause 11. Further, clauses 10.3.6.4.2 and 10.3.7.4.2 expose the RCPI and RSNI values from the AP STA's MLME to the AP STA's SME, presumably so that the AP SME can include those factors in its decision to grant association/ reassociation or not. It makes sense that the values are exposed as part of the associate/ reassociate .indication primitives, but the values are also returned to the MLME as part of the .response primitive. This in turn allows inclusion of the RCPI and RSNI values in the association response and reassociation response frames respectively. But again the purpose in doing so is never revealed. Is the information intended for the associating STA's MLME or SME? If the answer is the MLME then a description of how this MLME utilizes this information is needed in clause 11. If the intended recipient of the RCPI and RSNI values is the associating STA's SME then the RCPI and RSNI values should also be included in the associate and reassociate .confirm primitives.

SuggestedRemedy

Clarify the purpose of including the RCPI and RSNI values in the association and reassociation response frames and align that with the appropriate changes to the associate and reassociate .response and .confirm primitives as needed.

Suggestion: add text to clause 11 to define and describe the purpose and specific instances under which this information is used, and leave clause 10 unchanged in this regard.

Or, remove the RCPI and RSNI values from the association response frames since no description is provided for how it is to be used.

Or, add the RCPI and RSNI values to the association/ reassociation .confirm primitives which will push the corresponding responsibility for interpreting and acting upon these values to the SME (on both ends of the link).

Response Response Status C

ACCEPT. Add RSNI and RCPI values to the association/reassociation .confirm primitives on both ends of the link. This will push the corresponding responsibility for interpreting and acting on these values into the SME. At the STA, the .confirm primitive should contain RCPI and RSNI values for received frames at both ends of the association link. Assigned to Joe Kwak for text for approval. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 10 SC 10.3.7.4.2 P66 L 25 # 4
PAINE, RICHARD H

Comment Type TR Comment Status A Kwak

LB96#05-Engwer: Clauses 7.2.3.5 and 7.2.3.7 show the addition of the RCPI and RSNI to the information included in the association response and reassociation response frames respectively. Presumably these are the RCPI and RSNI measured on the corresponding association request and reassociation request frames received by the AP, but this is only described in clause 10 (10.3.6.4.2 and 10.3.7.4.2) whereas I would expect a description in clause 11 of how these values are actually used, but I can't find where this is described in clause 11. Further, clauses 10.3.6.4.2 and 10.3.7.4.2 expose the RCPI and RSNI values from the AP STA's MLME to the AP STA's SME, presumably so that the AP SME can include those factors in it's decision to grant association/ reassociation or not. It makes sense that the values are exposed as part of the associate/ reassociate .indication primitives, but the values are also returned to the MLME as part of the .response primitive. This in turn allows inclusion of the RCPI and RSNI values in the association response and reassociation response frames respectively. But again the purpose in doing so is never revealed. Is the information intended for the associating STA's MLME or SME? If the answer is the MLME then a description of how this MLME utilizes this information is needed in clause 11. If the intended recipient of the RCPI and RSNI values is the associating STA's SME then the RCPI and RSNI values should also be included in the associate and reassociate .confirm primitives.

SuggestedRemedy

Clarify the purpose of including the RCPI and RSNI values in the association and reassociation response frames and align that with the appropriate changes to the associate and reassociate .response and .confirm primitives as needed.

Suggestion: add text to clause 11 to define and describe the purpose and specific instances under which this information is used, and leave clause 10 unchanged in this regard.

Or, remove the RCPI and RSNI values from the association response frames since no description is provided for how it is to be used.

Or, add the RCPI and RSNI values to the association/ reassociation .confirm primitives which will push the corresponding responsibility for interpreting and acting upon these values to the SME (on both ends of the link).

Response Response Status C

ACCEPT. Add RSNI and RCPI values to the association/reassociation .confirm primitives on both ends of the link. This will push the corresponding responsibility for interpreting and acting on these values into the SME. At the STA, the .confirm primitive should contain RCPI and RSNI values for received frames at both ends of the association link. Assigned to Joe Kwak for text for approval. Text changes in 07/2165r0 approved in JUL07 by vote at San Francisco meeting.

CI 11 SC 11.1 P99 L # 241
Palm, Stephen R

Comment Type TR Comment Status A Ganesh

There are too many varied procedures here. It is unlikely that implementations will implement all of the procedures. Each of the supported procedures/reports should be separately indicated and negotiated

SuggestedRemedy

Add a capabilities field so that each procedure/report may be separately indicated and/or negotiated. For negotiation, I envisioning an AP with limited resources (e.g. memory) where the client could pick which few values to have monitored.

Response Response Status C
ACCEPT IN PRINCIPLE. See resolution in CID#12.

CI 11 SC 11.1.3 P82 L 41 # 195
O'Hara, Robert

Comment Type TR Comment Status R Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy

delete the change inserting measurement pilots

Response Response Status C
REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI 11 SC 11.1.3.2.1 P83 L 15 # 197
O'Hara, Robert

Comment Type TR Comment Status A Ganesh

The duplication of information elements is not necessary, as they can already be found in the probe response.

SuggestedRemedy

Delete the paragraph specifying the duplication of information elements in the probe response

Response Response Status C
ACCEPT IN PRINCIPLE. Move all normative paragraphs from 7.2.3.9 to 11.1.3 (Move P11, Lines 19-34 to 11.1.3). Add text to indicate that if the Requested Elements IE in the corresponding Probe Request includes elements that are part of the Probe Response (listed in Table-15), the Probe Response will not duplicate them. See Doc 07/2314r0.

CI 11 SC 11.1.3.2.1 P83 L17 # 126
Ecclesine, Peter

Comment Type TR Comment Status A Ganesh

First inserted paragraph should be restricted to STAs with dot11RadioMeasurementEnabled set to true, as legacy STAs have different behavior.

SuggestedRemedy

Qualify the paragraph like the next paragraph is qualified "when dot11RadioMeasurementEnabled is true,".

Response Response Status C

ACCEPT IN PRINCIPLE. Doc 07/2314r0

CI 11 SC 11.1.3.2.1 P83 L18 # 196
O'Hara, Robert

Comment Type E Comment Status A Editor

grammar

SuggestedRemedy

"which" -> "that"

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 11 SC 11.10 P85 L35 # 12
PAINE, RICHARD H

Comment Type TR Comment Status A Ganesh

LB96#25-Palm:There are too many varied procedures here. It is unlikely that implementations will implement all of the procedures. Each of the supported procedures/reports should be seperately indicated and negotiated

SuggestedRemedy

Add a capabilities field so that each procedure/report may be seperately indicated and negotiated

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to Ganesh. Added RRM Capability Enabled Bitmask IE. See Document 07/2285r0.

CI 11 SC 11.10.7 P89 L43 # 128
Ecclesine, Peter

Comment Type E Comment Status A Editor

There is no 11.6.6 in the base standard nor this amendment.

SuggestedRemedy

Correct the reference to DFS.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 11 SC 11.10.8.1 P91 L39 # 91
Hart, Brian D

Comment Type TR Comment Status A Hart

Here and elsewhere in 11k, behaviour when the report exceeds the max element length or packet length is undefined.

SuggestedRemedy

Specify whether to truncate to split over multiple elements or packets. (Here it would be packets; elsewhere it can be elements - e.g. frame report)

Response Response Status C

ACCEPT IN PRINCIPLE. Add new sentence at P88L30 "A single Measurement Request Element may generate a large quantity of measurement report data. The measurement report data may be reported using multiple measurement report elements in multiple measurement report frames."

CI 11 SC 11.10.8.1 P92 L2 # 129
Ecclesine, Peter

Comment Type T Comment Status A Hart

Because the AP Channel Report can contain > eight channels in a band, there should be way to specify a subset of the channels, by band or by channel bandwidth.

SuggestedRemedy

Add a way to restrict Beacon measurements to a subset of the channels in a Channel Report - e.g. RC, Length, list of channels. Should be able to have upper 5 GHz and lower 5 GHz, outdoor 5 GHz and indoor 5 GHz as seperate lists.

Response Response Status U

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect7

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 129

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9/19/2007 6:39:14

Richard Paine, Boeing

CI 11 SC 11.10.8.1 P92 L7 # 88

Hart, Brian D

Comment Type TR Comment Status A Hart

The 11k text is overly narrow when it disallows a wildcard BSSID in a Beacon measurement request. As a data point, note that wildcard BSSIDs are allowed with the channel field equal to 0 (all channels)

SuggestedRemedy

Delete "A Beacon measurement request & not allowed)

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect4

CI 11 SC 11.10.8.1 P92 L8 # 89

Hart, Brian D

Comment Type TR Comment Status A Hart

The 11k text is confusing wrt BSSID in Beacon Reports. There are two: the associated BSSID sending the AP Channel Report, and the BSSID to report on. The current text implies the latter yet must mean the former.

SuggestedRemedy

Delete "for the specific BSSID"

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect5

CI 11 SC 11.10.8.1 P92 L8 # 213

Chaplin, Clint F

Comment Type TR Comment Status A Hart

DS: The following text "A Beacon measurement request with Channel Number set to 255 shall only specify a specific BSSID (wildcard BSSID not allowed)." places a restriction on use of the wildcard BSSID when the Beacon Report specifies the channels in the AP Channel Report. This prevents the simple request of an AP asking the STA to scan on all channels specified in the AP channel report and report to the AP all BSSIDs heard//found on those channels.

SuggestedRemedy

Delete the parenthetical comment.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/2302r4 Sect4

CI 11 SC 11.10.8.2 P93 L32 # 218

Chaplin, Clint F

Comment Type TR Comment Status A Kwak

"Average RCPI = (Last Average RCPI * (N-1) / N) + (Current frame RCPI / N), where N = 32." why in the world deoes this formula define a variable, when the variable has a fixed value? Seems like overkill to me.

SuggestedRemedy

"Average RCPI = (Last Average RCPI * (31) / 32) + (Current frame RCPI / 32)."

Response Response Status C

ACCEPT.

CI 11 SC 11.10.8.6 P95 L7 # 219

Chaplin, Clint F

Comment Type ER Comment Status A Editor & CRgroup

"which together represent Latitude, Longitude or Altitude to 34-, 34-, or 30-bits" When I first read this, I assumed that the "34-, 34-, or 30" could be applied to Latitude, and also to Longitude, and also to Altitude. It took subsequent readings to figure out what was being said.

SuggestedRemedy

"which together represent Latitude, Longitude and Altitude to a maximum resolution of 34-, 34-, and 30-bits respectively"

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 219

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9/19/2007 6:39:14

Richard Paine, Boeing

CI 11 SC 11.10-11.13 P85 L # 144

Ecclesine, Peter

Comment Type TR Comment Status A Ganesh

The various Radio Measurement procedures of 11.10, 11.11, 11.12 and 11.13 all depend on MultiDomain Capability, Spectrum Management Capability and Regulatory Classes, yet no statements about related MIB entities are made. Such statements should be made at a higher level than each procedure or within each procedure.

SuggestedRemedy

Create 11.10 Radio Measurement, add text requiring dot11RadioMeasurementEnabled to be true, and when dot11RadioMeasurementEnabled is true, then dot11RegulatoryClassesRequired is true, dot11SpectrumManagementImplemented is true, dot11MultiDomainCapabilityEnabled is true. Determine when dot11SpectrumManagementRequired should be true. Renumber existing 11.10, 11.11, 11.12 and 11.13 as 11.10.1, 11.10.2, 11.10.3, 11.10.4

Response Response Status C

ACCEPT IN PRINCIPLE. Doc 07/2314r0

CI 11 SC 11.11.1 P98 L3 # 210

Myles, Andrew F

Comment Type TR Comment Status A Ganesh

The text explains how an "associated STA" requests a neighbour report. However, it does not address the case of an unassociated STA, although I suspect the intent is that an unassociated STA should not be able to make a request. This assumption is consistent with the text in 11.3

SuggestedRemedy

The text should be changed to remove "associated" from 11.11.1, and rely on 11.3 to limit use to associated STAs

Response Response Status C

ACCEPT IN PRINCIPLE. Doc 07/2314r0. Clause 11.3 does not permit the measurement request to be transmitted to the AP that the STA is not associated with.

CI 11 SC 11.11.2 P98 L17 # 220

Chaplin, Clint F

Comment Type TR Comment Status A CRgroup

"A STA receiving a neighbor report element with an unknown sub-element identifier shall ignore the unknown sub-element and continue to process remaining sub-elements. A STA receiving a neighbor report element containing a Vendor Specific sub-element with an unknown OUI shall ignore this Vendor Specific sub-element and continue to process any remaining Vendor Specific sub-elements." "Shall?" Isn't that a bit strong? Who knows what in the STA will be processing this report?

SuggestedRemedy

Replace "shall" with "should": "A STA receiving a neighbor report element with an unknown sub-element identifier should ignore the unknown sub-element and continue to process remaining sub-elements. A STA receiving a neighbor report element containing a Vendor Specific sub-element with an unknown OUI should ignore this Vendor Specific sub-element and continue to process any remaining Vendor Specific sub-elements."

Response Response Status C

ACCEPT IN PRINCIPLE. P98, L19-20: change "shall ignore this vendor specific sub-element and continue" to "should ignore this vendor specific sub-element and shall continue".

CI 11 SC 11.12 P98 L31 # 127

Ecclesine, Peter

Comment Type TR Comment Status A Kwak

The Regulatory Class implies a maximum transmit power or EIRP for the STA, and additional text is required. "The value of the Max Transmit Power field of the Link Measurement Request shall be less than or equal to the Transmit Power Limit for the operating channel."

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT IN PRINCIPLE. The issue raised by this comment is corrected in the clause 7 definitions for Max Transmit Power. No text change is needed in this clause. See response for CID#105

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 127

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9/19/2007 6:39:14

Richard Paine, Boeing

CI 11 SC 11.13 P98 L # 205

Myles, Andrew F

Comment Type TR Comment Status R Hart

The text proposes the use of MPs to:

- * Rapidly discover BSS via passive scanning
- * Provide neighbour measurements via passive scanning
- * Provide link SNR information

However, 07/0535r2 examines various use cases for MPs and concludes they have limited benefit.

SuggestedRemedy

Remove MPs.

Response Response Status C

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI 11 SC 11.13 P98 L # 162

Ecclesine, Peter

Comment Type TR Comment Status R Hart

STAs can active scan in the 2.45 GHz band and the lower 5 GHz band, and receive Neighbor Reports from 11k APs, to quickly learn the BSS situation in many neighborhood bands.

SuggestedRemedy

Remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status U

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI 11 SC 11.13 P98 L 33 # 200

O'Hara, Robert

Comment Type GR Comment Status R Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy

delete all of 11.13

Response Response Status C

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI 11 SC 11.13 P98 L 35 # 224

Ecclesine, Peter

Comment Type TR Comment Status A Hart

The text is wholly misleading, in that it does not describe the expected STA operation in radar/shared bands or the 2.4 GHz bands with virtual APs. It also neglects to say that MPs take more transmit time in the BSS than Beacon frames do in most circumstances.

SuggestedRemedy

Add text cautioning that use of MPs may affect BSS operation in radar/shared bands or with Virtual APs, and revise 5.2.7.2 accordingly, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5

CI 11 SC 11.13 P98 L 36 # 158

Ecclesine, Peter

Comment Type TR Comment Status A Hart

Transmission time of a Measurement Pilot is not significantly different than a Beacon Frame (.11k MP is 52+ octets, Beacon frame in 5 GHz band is 72+ octets), so both will cause about the same amount of interference to other nearby STAs.

SuggestedRemedy

Restrict MPs such that they cause less than three times (including preambles) the interference of Beacon frames to other nearby STAs, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5. Note that this only describes an informative note in section 11.13.1, containing a similar but not identical restriction to that proposed in the Suggested Remedy

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 158

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 11 SC 11.13 P98 L 37 # 222
Ecclesine, Peter

Comment Type TR Comment Status R Hart

Description generalizes the differences between Beacon frames and MP frames, which are substantial at lowest basic rates. For ten Beacon frames per second and nine MP frames per beacon frame, I calculate in 2.4 GHz band MPs take > 54 msec per second (vs 7 msec for Beacons alone) , and in any band with 5 MHz channel bandwidth, MPs take > 31 msec per second (vs 4 msec for Beacons alone), regardless of traffic. It would be useful to include a table in MP generation describing time per second used by Beacon frames and MPs for a channel bandwidth and preamble.

SuggestedRemedy

Add table with Beacon frame and MP frame time per second per PHY/preamble/channel bandwidth combination, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

REJECT. Editor shall implement 07/0535r5 which contains many cautionary notes.

CI 11 SC 11.13 P98 L 37 # 223
Ecclesine, Peter

Comment Type TR Comment Status R Hart

Description generalizes the differences between Beacon frames and MP frames, which are substantial at lowest basic rates. For ten Beacon frames per second and nine MP frames per beacon frame, I calculate in 2.4 GHz band MPs take > 54 msec per second, and in any band with 5 MHz channel bandwidth, MPs take > 31 msec per second, regardless of traffic. It would be useful to include a table in MP generation describing time per second used by MPs for a channel bandwidth and preamble.

SuggestedRemedy

Add table with MP time per second per PHY/preamble/channel bandwidth combination, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

REJECT. Editor shall implement 07/0535r5 which contains many cautionary notes.

CI 11 SC 11.13 P98 L 40 # 157
Ecclesine, Peter

Comment Type TR Comment Status R Hart

To my understanding, Measurement Pilots permit a STA to make rapid discovery of a BSS, yet it is incompletely specified for any band except the 2.45 GHz band, and it is not specified for the FH PHY.

SuggestedRemedy

Specify MP frame formats for all bands and the FH PHY, or remove measurement pilots (as specified in e.g. 07/2158r1)

Response Response Status U

REJECT. The MAC frame formats are available to all PHYs in all bands.

CI 11 SC 11.13 P98 L 41 # 156
Ecclesine, Peter

Comment Type TR Comment Status R Hart

To my understanding, Measurement Pilots permit a STA to make faster collection of neighbor measurements than by passive scanning for Beacon frames. What request can an AP make to receive a report of such neighbor measurements, as all other measurements are request/response?

SuggestedRemedy

Provide a mechanism to request reports of existing neighbor measurements, not new measurements, or remove measurement pilots (as specified in e.g. 07/2158r1)

Response Response Status C

REJECT. Mechanisms to request reports of existing neighbor measurements are available via a Beacon Request of Measurement Mode = Beacon Table. See section 7.3.2.21.6 and 7.3.2.22.6.

CI 11 SC 11.13 P99 L 1 # 206
Myles, Andrew F

Comment Type TR Comment Status A Hart

The text states on line 1 that the MP shall be scheduled as the next frame for transmission. It also states on line 4 that it should use a particular AC. However, these two requirements are contradictory because putting a frame at the head of an AC's queue does not mean that frame is next to be transmitted

SuggestedRemedy

Decide on what is really required and document it (or remove MP's from draft altogether)

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 206

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 11 SC 11.13.1 P98 L41 # 107

Hart, Brian D

Comment Type T Comment Status A Hart

Caution needs to be advised in seeking these benefits - i.e. MPs may not be universally available

SuggestedRemedy

Add an informative note that under some circumstances MPs may not be available.

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 11 SC 11.13.1 P98 L47 # 160

Ecclesine, Peter

Comment Type TR Comment Status A Hart

Transmission time of a Measurement Pilot using 5 MHz channel bandwidth in a shared band at the lowest basic rate (1.5 Mbps) causes a significant reduction in time available to monitor for primary users (4msec per sec).

SuggestedRemedy

The rules should be changed to allow MPs to be sent at the same data rates as Beacon frames, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status U

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 11 SC 11.13.1 P98 L47 # 159

Ecclesine, Peter

Comment Type TR Comment Status A Hart

Transmission time of a Measurement Pilot using 5 MHz channel bandwidth in a shared band at the lowest basic rate (1.5 Mbps) causes a significant reduction in time available to monitor for primary users (4msec per sec). This section should discuss setting MeasurementPilotPeriod in a shared band.

SuggestedRemedy

Mention impairing effects of using MPs in a radar band, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status U

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 11 SC 11.13.1 P98 L47 # 207

Myles, Andrew F

Comment Type TR Comment Status A Hart

The text specified that the MP should be sent at the lowest basic rate.

However, in some circumstances it may be better to send the MP at a higher rate

SuggestedRemedy

Allow MPs to be sent at a higher basic rate (or remove MPs altogether)

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 11 SC 11.13.1 P98 L47 # 106

Hart, Brian D

Comment Type TR Comment Status A Hart

Lowest basic rate consumes too much medium time

SuggestedRemedy

Allow other rates

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 11 SC 11.13.1 P98 L50 # 166

Ecclesine, Peter

Comment Type TR Comment Status R Hart

"local TSF timer (in us) modulo the Measurement Pilot Interval equals zero" is inexact.

SuggestedRemedy

Change to "local TSF timer (in us), modulo the Measurement Pilot Interval has a remainder of zero", or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

REJECT. Commenter describes a non-standard understanding of the modulo operator, which returns the "remainder" by definition

CI 11 SC 11.13.1 P99 L7 # 161
Ecclesine, Peter

Comment Type TR Comment Status R Hart

The MP generation rules ignore other AP admitted traffic, especially periodic traffic.

SuggestedRemedy

The rules should be changed to allow other frame transmissions to take place at TMPTT, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

REJECT. A lot of the MPs benefits would disappear if they were not transmitted as close as possible to scheduled times.

CI 11 SC 11.13.2 P99 L22 # 163
Ecclesine, Peter

Comment Type TR Comment Status A Hart

Measurement Pilot Link SNR ceiling calculation is incorrect for the 5 GHz band, as it does not include multiple power limits on the same frequency, e.g. 4.9425 GHz.

SuggestedRemedy

Correct the equations to match regulatory and operational requirements, or remove measurement pilots (as specified in e.g. 07/2158r1).

Response Response Status C

ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5.

CI 11 SC 11.13.2 P99 L22 # 116
Lubar, Daniel M

Comment Type E Comment Status A Editor

The 2nd paragraph here is awkward and should be fixed:
ie the current..

"Let RCPIMaxPwr representing the RCPI that would have been received by a STA in a downlink frame if the frame were sent with the Max Transmit Power. Furthermore assume that a STA knows its own STA Noise Floor (in dBm) and STA Max Transmit Power. Then:"
Might read..

"Let RCPIMaxPwr be the RCPI that was received by a STA in a downlink frame if the frame was sent at Max Transmit Power. Then, assuming that this same STA knows its STA Noise Floor (in dBm) and its STA Max Transmit Power, the following equations apply:"

SuggestedRemedy

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 11 SC 11.3 P83 L30 # 198
O'Hara, Robert

Comment Type TR Comment Status R Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy

delete the change beginning on line 30 and concluding on line 50.

Response Response Status C

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI 11 SC 11.8 P84 L15 # 71
PAINE, RICHARD H

Comment Type TR Comment Status A CRgroup

LB103#59-Marshall: With the change in lines 16-19, the text on line 15 is no longer introducing a list.

SuggestedRemedy

Delete the text on line 15.

Response Response Status W

ACCEPT. Delete the text on line 15. Underline lines 21-24 and change the editing instruction to indicate that this is only reformatting existing text.

CI 11 SC 11.8 P84 L21 # 203

Myles, Andrew F

Comment Type ER Comment Status A Editor & CRgroup

The paragraph starting, "A STA &" should be a dash point

SuggestedRemedy

Fix it

Response Response Status C

ACCEPT IN PRINCIPLE. This clause has been reformatted to correct the inconsistency noted here. See proposed text changes in CID#71 and #72.

CI 11 SC 11.8 P84 L21 # 72

PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#60-Marshall: New text should be underlined

SuggestedRemedy

Underline this paragraph of new text

Response Response Status C

ACCEPT IN PRINCIPLE. Assigned to editor. EDITOR--P84L13: Replace editing instruction with "Reformat fourth paragraph of 11.8 and make other changes as follows:" Delete P84L15. Underling paragraph at P84L21.

CI 11 SC 11.8 P84 L25 # 204

Myles, Andrew F

Comment Type TR Comment Status A Kwak

The text changes "operate" to "join"
However, it is not clear why this change has been made. Indeed it suggests a STA may merrily transmit packets as long as it does not "join". I also note the text does not say what the STA is joining.

SuggestedRemedy

Change back to "operate" or justify in a reply to this comment why join is better. In the latter case explain what is being joined

Response Response Status C

ACCEPT.

CI 11 SC 11.8.2 P85 L15 # 142

Ecclesine, Peter

Comment Type TR Comment Status A Hart

Additional text is informative, and neglects Regulatory Classes, which also affect operation below known regulatory limits.

SuggestedRemedy

Delete change to fourth paragraph of 11.8.2

Response Response Status C

ACCEPT.

CI 11 SC 11.8.2 P85 L20 # 153

Ecclesine, Peter

Comment Type TR Comment Status A CRgroup

Text is changed from 'the current channel' to 'their operating channels' without any reference to how that is done across all the PHYs and all the bands.

SuggestedRemedy

Either delete the text changes, or specify what Beacon frame and Probe Response frame elements and fields are set to indicate operation across all the supported bands - e.g. 5 GHz bands.

Response Response Status C

ACCEPT IN PRINCIPLE. Change "their operating channels" to "that STA's operating channel" in two places.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 153

Page 39 of 50

9/19/2007 6:39:11

Richard Paine, Boeing

CI 11 SC 11.8.2 P85 L 25 # 143
Ecclesine, Peter

Comment Type E Comment Status A Editor

11.8.2 text is changed without underscore markings

SuggestedRemedy

Properly show text changes

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 12 SC 12.3.5.10 P101 L 24 # 149
Ecclesine, Peter

Comment Type E Comment Status A Editor

Editing instruction not in bold italic

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 12 SC 12.3.5.8.2 P100 L 29 # 150
Ecclesine, Peter

Comment Type E Comment Status A Editor

Text is changed without underscore markings here and 12.3.5.9.2 and 12.3.5.10.2

SuggestedRemedy

Properly show text changes

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 15 SC 15.2.7 P103 L 11 # 113
Kays, Ruediger

Comment Type E Comment Status A Editor

Figure does not include any change compared to Fig. 15-8 of IEEE 802.11-2007

SuggestedRemedy

Remove Line 6-26

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 15 SC 15.2.7 P103 L 22 # 242
Kwak, Joseph A

Comment Type E Comment Status A Editor

Figure 235 does not show figure change which had been in prior WORD versions. Error probably happened on conversion to FRAME format.

SuggestedRemedy

Retrieve figure showing change from prior versions and add editorial note pointing out the change in the figure.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 15 SC 15.2.7 P103 L 6 # 130
Ecclesine, Peter

Comment Type E Comment Status A Editor

There appears to be no change from the base standard figure 15-8 Receive PLCP, which is correct?

SuggestedRemedy

Do not replace a correct figure without describing what is changed in an Editorial Note or editing instruction.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 130

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9/19/2007 6:39:11

Richard Paine, Boeing

CI 17 SC 17.2.3 P105 L 33 # 73
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup
LB103#61-Marshall: TableTable

SuggestedRemedy
Table

Response Response Status C
ACCEPT.

CI 17 SC 17.2.3 P105 L 36 # 151
Ecclesine, Peter

Comment Type TR Comment Status A Kwak
Text lacks ANT_STATE that is added to 18.3.5. Clause 17 radios have antenna diversity, and text should be added to report Antenna Information (7.3.2.40)

SuggestedRemedy
Add Antenna information to Clause 17.

Response Response Status C
ACCEPT. Modify Table 134 to add new row "ANT_STATE / PHY-RXSTART.indicate(RXVECTOR), PHY-RXEND.indicate(RXVECTOR) / 0 to 255"

CI 17 SC 17.3.12 P107 L 1 # 131
Ecclesine, Peter

Comment Type E Comment Status A Editor
There appears to be no change from the base standard figure 17-16 Receive PLCP, which is correct?

SuggestedRemedy
Do not replace a correct figure without describing what is changed in an Editorial Note or editing instruction.

Response Response Status C
ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 17 SC 17.3.12 P107 L 33 # 243
Kwak, Joseph A

Comment Type E Comment Status A Editor
Figure 264 does not show figure change which had been in prior WORD versions. Error probably happened on conversion to FRAME format.

SuggestedRemedy
Retrieve figure showing change from prior versions and add editorial note pointing out the change in the figure.

Response Response Status C
ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 17 SC 17.3.12 P107 L 5 # 114
Kays, Ruediger

Comment Type E Comment Status A Editor
Figure contains typo: first row (RXVECTER)

SuggestedRemedy
Replace "(RXVECTER)" by "(RXVECTOR)"

Response Response Status C
ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 17 SC 17.5.4.2 P107 L 46 # 74
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup
LB103#62-Marshall: TableTable

SuggestedRemedy
Table

Response Response Status C
ACCEPT.

CI 18 SC 18.2.6 P110 L1 # 132
Ecclesine, Peter

Comment Type E Comment Status A Editor

There appears to be no change from the base standard figure 18-9, Receive PLCP.

SuggestedRemedy

Do not replace a correct figure without describing what is changed in an Editorial Note or editing instruction.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 18 SC 18.2.6 P110 L33 # 244
Kwak, Joseph A

Comment Type E Comment Status A Editor

Figure 275 does not show figure change which had been in prior WORD versions. Error probably happened on conversion to FRAME format.

SuggestedRemedy

Retrieve figure showing change from prior versions and add editorial note pointing out the change in the figure.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI 18 SC 18.3.5 P110 L45 # 75
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#63-Marshall: TableTable

SuggestedRemedy

Table

Response Response Status C

ACCEPT.

CI 18 SC 18.4.4.2 P111 L17 # 76
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#64-Marshall: TableTable

SuggestedRemedy

Table

Response Response Status C

ACCEPT.

CI 19 SC 19.2 P112 L45 # 77
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#65-Marshall: TableTable

SuggestedRemedy

Table

Response Response Status C

ACCEPT.

CI 19 SC 19.9.4.2 P113 L8 # 78
PAINE, RICHARD H

Comment Type ER Comment Status A Editor & CRgroup

LB103#66-Marshall: TableTable

SuggestedRemedy

Table

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 78

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Richard Paine, Boeing

CI 19 SC 19.9.4.3 P113 L 18 # 79
 PAINE, RICHARD H
 Comment Type ER Comment Status A Editor & CRgroup
 LB103#67-Marshall: TableTable
 SuggestedRemedy
 Table
 Response Response Status C
 ACCEPT.

CI 21 SC 21 P17 L # 230
 Hansen, C J
 Comment Type TR Comment Status R CRgroup
 there's no restriction on how often a measurement request can be made. what is the expected behavior if this happens?
 SuggestedRemedy
 set maximum frequency allowable for measurement requests to once per 30 secs
 Response Response Status C
 REJECT. A STA has the option to reject a measurement (11.10.4). P88L7 indicates that only one measurement request frame may be active in any STA at any time. A new measurement request frame may be sent at any time (no time or frequency limitation) to supercede the prior measurement request frame.

CI 23 SC 23 P15 L 27 # 228
 Hansen, C J
 Comment Type TR Comment Status A Hart
 what counts as "transceiver noise"? if it includes platform and/or board (NIC), how is the device expected to distinguish between this type of noise and environmental noise?
 SuggestedRemedy
 Remove
 Response Response Status C
 ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5

CI 23 SC 23 P15 L 30 # 229
 Hansen, C J
 Comment Type TR Comment Status A Hart
 contradiction between noise floor referring to antenna used to transmit Noise Floor field and noise floor referring to minimum noise floor across all receive antennas. if antenna used for Noise Floor field transmit does not have minimum noise floor, how should the field be populated?
 SuggestedRemedy
 Remove
 Response Response Status C
 ACCEPT IN PRINCIPLE. Editor to implement 07/0535r5

CI 24 SC 24 P86 L 2 # 233
 Hansen, C J
 Comment Type TR Comment Status R CRgroup
 accuracy of +/- 1 TU is with respect to what point in time? one measurement may require multiple accesses to the radio, and those radio requests may not be serviced immediately
 SuggestedRemedy
 remove accuracy mandate
 Response Response Status C
 REJECT. PROPOSED REJECT TGk does not specify a measurement start time. The accuracy requirement referenced here is the accuracy of the reported actual measurement start time. Processing delays to initiate a measurement are permitted and do not affect the reported actual start time accuracy. Refer to Clause 11.1 for BSS synchronization accuracy requirements.

CI A SC A.4 P114 L 4 # 115
 Kays, Ruediger
 Comment Type E Comment Status A Editor
 Reference should be made to IEEE 802.11-2007
 SuggestedRemedy
 Change to:
 "A.4 PICS proforma-IEEE 802.11, 2007 Edition"
 Response Response Status C
 ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

Cl **Boilerpl** *SC* **Boilerplate** *P* *L* **10** # **24**
PAINE, RICHARD H

Comment Type **ER** *Comment Status* **A** *Editor & CRgroup*
LB103#12-Marshall: Amendment number is missing.

SuggestedRemedy
Change to "Amendment 1"

Response *Response Status* **C**
ACCEPT.

Cl **Boilerpl** *SC* **Boilerplate** *P* *L* **15** # **25**
PAINE, RICHARD H

Comment Type **ER** *Comment Status* **A** *Editor & CRgroup*
LB103#13-Marshall: Copyright statement needs to be updated for 2007

SuggestedRemedy
Change year to "2007"

Response *Response Status* **C**
ACCEPT.

Cl **Boilerpl** *SC* **Boilerplate** *P* *L* **2** # **26**
PAINE, RICHARD H

Comment Type **ER** *Comment Status* **A** *Editor & CRgroup*
LB103#14-Marshall: Copyright statement needs to be updated for 2007

SuggestedRemedy
Change year to "2007"

Response *Response Status* **C**
ACCEPT.

Cl **Boilerpl** *SC* **Boilerplate** *P* *L* **28** # **28**
PAINE, RICHARD H

Comment Type **ER** *Comment Status* **A** *Editor & CRgroup*
LB103#16-Marshall: missing text for "Errata"

SuggestedRemedy
Add it, use 802.11ma D9.0 as model

Response *Response Status* **C**
ACCEPT.

Cl **Boilerpl** *SC* **Boilerplate** *P* *L* **31** # **29**
PAINE, RICHARD H

Comment Type **ER** *Comment Status* **A** *Editor & CRgroup*
LB103#17-Marshall: missing text for "Interpretations"

SuggestedRemedy
Add it, use 802.11ma D9.0 as model

Response *Response Status* **C**
ACCEPT.

Cl **Boilerpl** *SC* **Boilerplate** *P* *L* **34** # **32**
PAINE, RICHARD H

Comment Type **ER** *Comment Status* **A** *Editor & CRgroup*
LB103#20-Marshall: TableTable

SuggestedRemedy
Table

Response *Response Status* **C**
ACCEPT.

CI **Boilerpl** SC **Boilerplate** P L 4 # 31
PAINE, RICHARD H

Comment Type **ER** Comment Status **A** Editor & CRgroup

LB103#19-Marshall: Table numbers in the List of tables don't match the table numbers in the draft. In particular, they are shown here with upper case letters, but appear in the draft correctly with lower case letters (15A should be 15a, etc).

SuggestedRemedy

Make consistent

Response Response Status **C**

ACCEPT.

CI **Boilerpl** SC **Boilerplate** P L 4 # 30
PAINE, RICHARD H

Comment Type **ER** Comment Status **A** Editor & CRgroup

LB103#18-Marshall: Figure numbers in the List of Figures don't match the figure numbers in the draft. In particular, they are shown here with upper case letters, but appear in the draft correctly with lower case letters (53A should be 53a, etc).

SuggestedRemedy

Make consistent

Response Response Status **C**

ACCEPT.

CI **Boilerpl** SC **Boilerplate** P L 99 # 27
PAINE, RICHARD H

Comment Type **ER** Comment Status **A** Editor & CRgroup

LB103#15-Marshall: Copyright in page footer needs to be updated for 2007

SuggestedRemedy

Change year to "2007"

Response Response Status **C**

ACCEPT.

CI **D** SC **D** P 121 L 25 # 201
O'Hara, Robert

Comment Type **GR** Comment Status **R** Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy

delete the three attributes associated with measurement pilots.

Response Response Status **C**

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

CI **D** SC **D** P 121 L 26 # 133
Ecclesine, Peter

Comment Type **ER** Comment Status **R** Editor & CRgroup

IETF RFC-4181 gives current practice for INTEGER, Integer32, Unsigned32 and TruthValue in MIBs.

SuggestedRemedy

Examine all Annex D changes and follow guidelines in RFC-4181.

Response Response Status **C**

REJECT. Most uses of 0 in INTEGER indicate special cases, and are documented in the DESCRIPTION field.

CI **D** SC **D** P 123 L 18 # 202
O'Hara, Robert

Comment Type **GR** Comment Status **R** Hart

The utility of the Measurement Pilot has not been proven. It consumes bandwidth that is better used for other purposes.

SuggestedRemedy

delete the three attributes associated with measurement pilots.

Response Response Status **C**

REJECT. Measurement Pilots may be useful in the DFS bands before association, and to quickly harvest RSSIs during roaming.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 202

Page 45 of 50

9/19/2007 6:39:11

Richard Paine, Boeing

CI D SC D P125 L 23 # 80
PAINE, RICHARD H

Comment Type E Comment Status A Gray

LB103#68-Marshall: why the extraneous page break?

SuggestedRemedy

delete the extraneous page break

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI D SC D P125 L 3 # 199
O'Hara, Robert

Comment Type TR Comment Status A CRgroup

There is no need for duplication of the means to obtain the reports generated by radio measurement. If the information is available in the MIB, the action frames conveying the reports to the requester of the measurments can be deleted. However, it is not certain that the STA will implement SNMP to access the MIB. Therefore the action frames are required.

SuggestedRemedy

The measurement information conveyed in action frame measurement report responses is duplicated in the MIB. Delete it from the MIB.

Response Response Status C

ACCEPT IN PRINCIPLE. We agree that the requested STA may not have a MIB and the action frames must be used to obtain information via 11k. However, the 11k PAR requires us to provide an interface to upper layers for management of STAs and the MIB is presently 11k's only such interface. We will move the MIB items for this interface to a new Annex Q as shown in 07/2339r2.

CI D SC D P127 L # 7
PAINE, RICHARD H

Comment Type T Comment Status R Gray

LB96#18-Aboba: The modified IEEE 802.11 MIB, including all the changes, does not appear to have been run through a MIB compiler to test whether it will compile.

SuggestedRemedy

Issue a MIB file including all of the changes, then run the updated MIB through a MIB compiler, correcting the errors.

Response Response Status C

REJECT. This comment will be addressed after D9.0.

CI D SC D P155 L 16 # 138
Ecclesine, Peter

Comment Type E Comment Status A Gray

The listed dot11LCIReport objects are specified in IETF RFC-3825, and should be accessed big-endian, and the DESCRIPTION should have a final sentence "This field is derived from IETF RFC-3825, and is accessed big-endian."

SuggestedRemedy

Change DESCRIPTIONs of dot11LCILatitudeResolution, dot11LCILatitudeInteger, dot11LCILatitudeFraction, dot11LCILongitudeResolution, dot11LCILongitudeInteger, dot11LCILongitudeFraction, dot11LCIAltitudeType, dot11LCIAltitudeResolution, dot11LCIAltitudeInteger and dot11LCIAltitudeFraction per comment.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI D SC D P155 L 19 # 139
Ecclesine, Peter

Comment Type ER Comment Status A Gray

The limits for Latitude/Longitude/Altitude Integer and Fraction are incorrect/missing and should be corrected to Lat/Lon Integer (-359..359), Fraction (-16777215..16777215), Alt Integer (-2097151..2097151), Fraction (-127..127)

SuggestedRemedy

Change per comment

Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 139

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9/19/2007 6:39:11

Richard Paine, Boeing

CI D SC D P161 L49 # 134
Ecclesine, Peter

Comment Type TR Comment Status A Gray

The APChannelReportChannelList may be larger than 16 octets, so each APChannelReportEntry should have a ChannelReportLength field before ChannelReportRegulatoryClass

SuggestedRemedy

Change APChannelReportEntry as described in comment

Response Response Status C

ACCEPT IN PRINCIPLE. P161L50 Change "OCTET STRING (SIZE(16))" to "SEQUENCE OF Dot11APChannelReportChannelListEntry". P162L6: Insert new object dot11APChannelReportChannelListEntry as an INTEGER(1..255) and describe as "This attribute corresponds to a specific channel being reported." P162L3 change "Each octet" to "Each entry".

CI D SC D P162 L49 # 135
Ecclesine, Peter

Comment Type ER Comment Status A Gray

Everywhere else in the Amendment, RegulatoryClass comes before ChannelNumber, so this table is inconsistent.

SuggestedRemedy

Put RegulatoryClass before ChannelNumber in NeighborReportEntry and swap their positions on page 164.

Response Response Status C

ACCEPT.

CI D SC D P169 L38 # 136
Ecclesine, Peter

Comment Type E Comment Status A Gray

dot11Compliance does not show the deprecation of dot11SMTbase6

SuggestedRemedy

Show deprecation of dot11SMTbase6

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI D SC D P169 L38 # 81
PAINE, RICHARD H

Comment Type ER Comment Status A Gray

LB103#69-Marshall: underlining of "dot11SMTbase7" is not correct. This is changing "dot11SMTbase6" to "dot11SMTbase7"

SuggestedRemedy

remove underlining of "dot11SMTbase", show "6" with strikethrough, keep "7" underlined

Response Response Status C

ACCEPT.

CI D SC D P170 L15 # 22
PAINE, RICHARD H

Comment Type E Comment Status A Gray

LB103#10-Stephens: "Deprecate the current SMT base". Please show editing instructions.

SuggestedRemedy

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI D SC D P171 L41 # 137
Ecclesine, Peter

Comment Type E Comment Status A Gray

Should RRMRequest/Report/Config go before dot11SMTbase7 if they are to be in the same order as the base standard?

SuggestedRemedy

Move dot11SMTbase7 to after dot11RRMConfig.

Response Response Status C

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Submission

Comment ID # 137

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9/19/2007 6:39:11

Richard Paine, Boeing

CI **D** SC **D** P **172** L **24** # **82**
PAINE, RICHARD H

Comment Type **TR** Comment Status **A** Gray

LB103#70-Marshall: dot11Groups 35 is already in use, for dot11OFDMComplianceGroup2

SuggestedRemedy

Change this to dot11Groups 36, adjust the other dot11Groups (page 171 line 39, page 174 line 26, and page 174 line 49)

Response Response Status **C**

ACCEPT.

CI **General** SC **General** P L # **21**
PAINE, RICHARD H

Comment Type **E** Comment Status **A** Editor

LB103#09-Stephens: LB103#12-Marshall: When creating redlines, please modify the style of the insert marking so that it is not underlined. That way underlines in inserted text can still be distinguished. (see 9.8.2.1 for an example of where this creates a problem).

SuggestedRemedy

Response Response Status **C**

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI **General** SC **General** P L # **23**
PAINE, RICHARD H

Comment Type **TR** Comment Status **A** CRgroup

LB103#11-Marshall: Numerous comments from D6.0 are marked in the comment resolution spreadsheet as "Accepted", but the changes were not made in D7.0. They are accompanied in the spreadsheet by a comment from the Editor, disagreeing with the accepted resolution. The Technical Editor is only one member of the Task Group, and only has one vote. This is NOT veto power. When 75% of the Task Group approve a resolution to a comment, the Technical Editor is directed to "incorporate all such resolutions therein into the TGk draft" (as stated in 11-07-0109-03-000k-tgk-london-minutes.doc); it doesn't say that the Technical Editor is to "consider incorporating the changes..."

SuggestedRemedy

Editor to incorporate all the approved resolutions to D6.0 comments into the draft.

Response Response Status **C**

ACCEPT. There is no text change needed for this general comment which describes 15 other specific comments for which responses are provided elsewhere.

CI **General** SC **General** P L # **16**
PAINE, RICHARD H

Comment Type **E** Comment Status **A** Editor

LB103#04-Stephens: Bookmarks in the redline .pdf file help your readers navigate

SuggestedRemedy

Please add .pdf bookmarks.

Response Response Status **C**

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI **General** SC **General** P L # 212
Myles, Andrew F

Comment Type **TR** Comment Status **A** CRgroup

Many of the measurements specified in this amendment are long and complex, with many options.

Is there any evidence, eg from the use of similar constructs in pre standard implementations, that these measurements are actually useful? Assertions of usefulness without evidence are insufficient

SuggestedRemedy

Provide evidence that each measurement (and all its options) and measurement mechanism is useful, or consider issuing 802.11k as a trial standard until such evidence is obtained.

The best evidence is that a vendor is using the measurements and the various mechanism (or something similar) today in real systems and that they are useful. Lesser forms of evidence are also acceptable.

One useful form might be a list of measurements, with options broken out separately, and a list of measurement mechanisms. Each item should then be justified with a goal, a summary of how that goal is satisfied by the measurement or mechanism and some level of proof from existing implementations that is actually works.

In some sense my request is totally unreasonable, and the TG would be completely justified in rejecting my comment. However, this TGk has been designing 802.11k for many years and it is worth taking a step back and re-evaluating whether the result satisfies the original goals. The regular TG participants are the best people to undertake this task.

Response Response Status **C**

ACCEPT IN PRINCIPLE. The document 02/508r14 (reissued as 07/2323r0 on the SA server) is the "requirements and issues" document of TGk and describes the background for the RRM architecture and the RRM specification. There are many proprietary implementations of these constructs implemented worldwide by the major wireless LAN equipment providers.

CI **I** SC **I.1** P175 L # 167
Harrington, Timothy E

Comment Type **E** Comment Status **A** Editor

~~~~~

-- editorial --

Request for deprecation of term "ISM bands", eg draft at Table I.2 and elsewhere if applicable, at least in context of FCC Part 15 operations.

In general FCC rules do not use the term "ISM band", rather citation of particular part 15 operating frequency ranges is preferred, eg draft at Table I.4.

OPINIONS ARE AUTHOR'S ONLY, AND MAY NOT BE FCC'S

~~~~~

SuggestedRemedy

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-- editorial --

Request for deprecation of term "ISM bands", eg draft at Table I.2 and elsewhere if applicable, at least in context of FCC Part 15 operations.

In general FCC rules do not use the term "ISM band", rather citation of particular part 15 operating frequency ranges is preferred, eg draft at Table I.4.

OPINIONS ARE AUTHOR'S ONLY, AND MAY NOT BE FCC'S

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Response Response Status **C**

ACCEPT IN PRINCIPLE. This comment is deemed editorial and delegated to the document editor for consideration in developing future drafts. Please note that the IEEE standards are edited professionally prior to publication.

CI I SC I.1 P176 L # 169

Harrington, Timothy E

Comment Type E Comment Status A Editor

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-- editorial --  
at Table I.4  
"FCC 47 CFR 15.247(b)(4)(ii)(iii)"  
- this citation is ambiguous and/or undefined, therefore please confirm or correct  
- perhaps intent is 15.247(b)(4)(i) ...?  
OPINIONS ARE AUTHOR'S ONLY, AND MAY NOT BE FCC'S  
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SuggestedRemedy

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-- editorial --  
at Table I.4  
"FCC 47 CFR 15.247(b)(4)(ii)(iii)"  
- this citation is ambiguous and/or undefined, therefore please confirm or correct  
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Response Response Status C

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CI I SC I.1 P176 L # 168

Harrington, Timothy E

Comment Type E Comment Status A Editor

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-- editorial --  
at Table I.2  
"FCC CFR47 [B8], Section 15.247"  
- preferred citation format is "47 CFR 15.247 [B8]"  
- fyi this reads "title 47, part 15, section 247", where title 47 is "Telecommunication" and chapter I of title 47 is "Federal Communications Commission"  
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SuggestedRemedy

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Response Response Status C

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