
IEEE P802.11
Wireless LANs

Sponsor Ballot D7.0 comments**Date:** 2008-01-30**Author(s):**

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Abstract

Initial Sponsor Ballot comments on P802.11y_D7.0

Sponsor Ballot opened 20 December, 2007 at 23:59 ET and closed 30 January, 2008 at 23:59 ET

Cl 00 SC 0 P L # 6
 Stephens, Adrian P Individual
 Comment Type ER Comment Status X
 "may" is misused 3 times in 5.2.8.2. I suspect this might be systematic.
 SuggestedRemedy
 Review all use of "may" and replace with "can" (is able to) or "might" as appropriate (i.e. where the text is not granting permission)
 Proposed Response Response Status O

Cl 00 SC 0 P L # 93
 Chaplin, Clint Individual
 Comment Type GR Comment Status X
 Time to update the copyright notices
 SuggestedRemedy
 Update the copyright notices to 2008
 Proposed Response Response Status O

Cl 00 SC 0 P L # 1
 Coordination, Scc14
 Comment Type GR Comment Status X
 SCC14 Coordination OK.
 SuggestedRemedy
 Proposed Response Response Status O

Cl 03 SC 3 P L # 3
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "Hidden STA" is used in 5.1.1.1, but not defined.
 SuggestedRemedy
 Add definition of "Hidden STA" to clause 3.
 Proposed Response Response Status O

Cl 00 SC 0 P L # 83
 Ecclesine, Peter Individual
 Comment Type GR Comment Status X
 The 11y PAR Purpose speaks of extending TPC to this band, but no band-specific extensions are proposed. The 3650 MHz power regulations are in mW/MHz, but existing TPC tools are in Transmit Power and EIRP, and cannot be sent by the Enabling STA to any STA that is not associated with it.
 SuggestedRemedy
 It would be useful to have a Public Action Power Constraint command with units of dB relative to 1 mW/MHz, with Requester STA and Responder STA address fields, so the power constraint can be sent by the Enabling STA to any of its dependent STAs. Commenter will submit draft text revisions to add a DSE Power Constraint frame.
 Proposed Response Response Status O

Cl 03 SC 3 P1 L 46 # 112
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Definition is ambiguous or incomplete.
 SuggestedRemedy
 Change "permitted to transmit" to "permitted to transmit on a restricted channel".
 Proposed Response Response Status O

Cl 03 SC 3 P1 L 50 # 113
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Definition is ambiguous or incomplete.
 SuggestedRemedy
 Change "permission" to "temporary permission (enablement) from an enabling STA".
 Proposed Response Response Status O

CI 03 SC 3 P1 L 53 # 114
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Definition is ambiguous or incomplete.
 SuggestedRemedy
 Change "that broadcasts" to "authorized to operate and operating on a restricted channel to provide DSE and to broadcast".
 Proposed Response Response Status O

CI 03 SC 3 P1 L 65 # 117
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Definition is ambiguous or incomplete.
 SuggestedRemedy
 Change "before it is allowed to transmit" to "to obtain authorization to operate on a restricted channel".
 Proposed Response Response Status O

CI 03 SC 3 P1 L 57 # 115
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Definition is ambiguous or incomplete.
 SuggestedRemedy
 Change "To simultaneously change" to "Procedure initiated by an AP or DFS owner to coordinate a change of"; Change "Class" to "Class for all STAs in a BSS or IBSS"
 Proposed Response Response Status O

CI 03 SC 3.52a P1 L # 138
 Myles, Andrew Individual
 Comment Type E Comment Status X
 The text defines "extended channel switching" as "To simultaneously change either or both operating channel and Regulatory Class"
 However, this is an unsatisfactory definition because it is not a complete sentence.
 SuggestedRemedy
 Rewrite as a complete sentence
 Proposed Response Response Status O

CI 03 SC 3 P1 L 61 # 116
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Definition is ambiguous or incomplete.
 SuggestedRemedy
 Change "only authorized to operate" to "is operating on a restricted channel as a registered STA with authorization to transmit limited to transmissions from its specific registered location".
 Proposed Response Response Status O

CI 03 SC 3.52a P1 L # 139
 Myles, Andrew Individual
 Comment Type E Comment Status X
 The text defines "extended channel switching" as "To simultaneously change either or both operating channel and Regulatory Class"
 However, one cannot "simultaneously" change "either"
 SuggestedRemedy
 Rewrite to avoid an impossibility
 Proposed Response Response Status O

Cl 05 SC 5.1.1.1 P 14 L 40 # 111
 Palm, Stephen Individual
 Comment Type TR Comment Status X
 Mobile STA term not defined nor is is the term used
 SuggestedRemedy
 Clarify and use
 Proposed Response Response Status O

Cl 05 SC 5.1.1.1 P 14 L 40 # 110
 Palm, Stephen Individual
 Comment Type TR Comment Status X
 Portable STA term not defined nor is is the term used.
 SuggestedRemedy
 clarify
 Proposed Response Response Status O

Cl 05 SC 5.1.1.1 P 14 L 46 # 109
 Palm, Stephen Individual
 Comment Type TR Comment Status X
 Hidden STA not defined
 SuggestedRemedy
 Clarify the term and why it is needed
 Proposed Response Response Status O

Cl 05 SC 5.1.1.1 P 2 L # 136
 Myles, Andrew Individual
 Comment Type T Comment Status X
 The draft makes various changes to the text that seem to say that the function of aSTA can be modified.
 It is not clear why this is useful
 SuggestedRemedy
 Explain why changes to 5.1.1.1 are useful
 Proposed Response Response Status O

Cl 05 SC 5.1.1.1 P 2 L 35 # 48
 Petranovich, James Individual
 Comment Type G Comment Status X
 "In the design of wired LANs it is implicitly assumed that an address is equivalent to a physical location." is not strictly correct. A mobile device like a laptop may be unplugged form one place and plugged in another and may keep the same address.
 SuggestedRemedy
 delete this and the next sentence and instead say "In wireless LANs there is no implication that an address corresponds to a fixed physical locaiton".
 Proposed Response Response Status O

Cl 05 SC 5.1.1.1 P 2 L 44 # 88
 Stanley, Dorothy Individual
 Comment Type E Comment Status X
 Change from "It is important to realize that a station.." to "A station.."
 SuggestedRemedy
 As in comment
 Proposed Response Response Status O

CI 05 SC 5.2.8 P L # 4
 Stephens, Adrian P Individual
 Comment Type E Comment Status X
 "Countries may impose specific requirements for radio equipment in addition to those specified in this standard."
 "may" is a normative verb equivalent to "are permitted to by this standard". But I don't think they need our permission.
 SuggestedRemedy
 Replace "may" with "can"
 Proposed Response Response Status O

CI 05 SC 5.2.8 P2 L # 137
 Myles, Andrew Individual
 Comment Type T Comment Status X
 The text mentions amendments to the standard.
 However, the standard should not mention the amendments because the amendments are technicaly part of the standard
 SuggestedRemedy
 Rewrite clause to remove reference to amendments
 Proposed Response Response Status O

CI 05 SC 5.2.8 P2 L 54 # 2
 Nikolich, Paul Individual
 Comment Type E Comment Status X
 The process by which 802.11 has been updated (amending the base std) to allow use of licensed freqs is not material. The text should be made independent of the amendment process.
 Improve wording of
 "IEEE 802.11 has been amended to make use of a number of frequencies that are licensed by the national regulators
 for a given country. While effort is made to generalize these amendments so that they can be reused
 in the same bands in other countries, it must be noted that the projects that drafted said changes were focused
 on the rules of a single country. Countries may impose specific requirements for radio equipment in addition
 to those specified in this standard."
 There may be other portions of the text to which similar logic applies that I have not had a chance to read--please try to fix those too if they exist.

SuggestedRemedy
 IEEE 802.11 may make use of a number of frequencies that are licensed by the national regulators for a given country. While effort is made to generalize the licensed frequency portions of the standard so it can be reused in the same bands in other countries, it must be noted that those portions are focused on the rules of a single country. Countries may impose specific requirements for radio equipment in addition to those specified in this standard.
 Proposed Response Response Status O

CI 05 SC 5.2.8 P2 L 54 # 87
 Stanley, Dorothy Individual
 Comment Type G Comment Status X
 The text describes amendments, which will not be distinct after the amendments will be rolled up into the next revision of the standard
 SuggestedRemedy
 Change lines 54-59 from "IEEE 802.11 has been amended..... to those specified in this standard." to
 "IEEE Std 802.11 can be used with a number of frequencies that are licensed by the national regulators for a given country. While effort is made to generalize use of the same bands in other countries, the specification is focused on the rules of a single country. Countries may impose specific requirements for radio equipment in addition to those specified in this standard."
 Proposed Response Response Status O

Cl 05 SC 5.2.8.1 P2 L 63 # 49
 Petranovich, James Individual
 Comment Type G Comment Status X
 It is nto clear what the purpose of the "types of licenses" section serves
 SuggestedRemedy
 delete this section
 Proposed Response Response Status O

Cl 07 SC 7.2.3.1 P4 L 43 # 89
 Stanley, Dorothy Individual
 Comment Type T Comment Status X
 "may be present only if"
 What is the difference between this and "may be present if"
 SuggestedRemedy
 Change to "may be present if"
 Proposed Response Response Status O

Cl 05 SC 5.2.8.2 P L # 5
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 "a wireless device or its license holder may have to change how the device is operated"
 "may" has a special normative interpretation that is not relevant here.
 SuggestedRemedy
 Replace "may" with "might"
 Proposed Response Response Status O

Cl 07 SC 7.2.3.4 P4 L 62 # 50
 Petranovich, James Individual
 Comment Type E Comment Status X
 in the same table (7-10) one entry uses the contract "shall be present" while another entry
 uses the contract "is present". One of these is incorrect usage. I preser "is", as this enter
 does not describe behavior but rather what is in a table, and anyway this is in the notes.
 SuggestedRemedy
 change "shall be" to "is" in table 7-10, order 7, under notes.
 Proposed Response Response Status O

Cl 05 SC 5.2.8.2 P3 L # 140
 Myles, Andrew Individual
 Comment Type T Comment Status X
 The text states "The base level privilege of a registered STA is the ability to operate
 autonomously on a restricted channel (the STA does not need to participate in the DSE
 process)."
 This may be true for 3.65GHz band but is not necessarily true for other bands, ie in general
 terms registration does not always mean autonomous operation is allowed.
 I suspect what to you are really saying is that you are going to define a "registered STA" as
 one that is allowed to operate autonomously.
 SuggestedRemedy
 Rewrite so that a registered STA is defined as one that is allowed to operate autonomously
 Proposed Response Response Status O

Cl 07 SC 7.2.3.6 P5 L 37 # 51
 Petranovich, James Individual
 Comment Type E Comment Status X
 in the same table (7-12) one entry uses the contract "shall be present" while another entry
 uses the contract "is present". One of these is incorrect usage. I preser "is", as this enter
 does not describe behavior but rather what is in a table, and anyway this is in the notes.
 SuggestedRemedy
 change "shall be" to "is" in table 7-12, order 8, under notes.
 Proposed Response Response Status O

CI 07 SC 7.2.3.9 P 6 L 22 # 55
 Hart, Brian D Individual
 Comment Type E Comment Status X
 Consistency - no subject with verb
 SuggestedRemedy
 Add "The DSE reg loc &"
 Proposed Response Response Status O

CI 07 SC 7.3.2.52 P 8 L 45 # 57
 Hart, Brian D Individual
 Comment Type E Comment Status X
 "AT code 3 & is formatted in 2's C &". Rather the altitude is formatted as 2's C
 SuggestedRemedy
 Change the subject of "is"
 Proposed Response Response Status O

CI 07 SC 7.3.2 P 6 L 44 # 94
 Chaplin, Clint Individual
 Comment Type TR Comment Status X
 IEEE 802.11k has added a fourth column to this table (7-26)
 SuggestedRemedy
 Add and populate a fourth column to table 7-26.
 Proposed Response Response Status O

CI 07 SC 7.3.2.52 P 8 L 53 # 58
 Hart, Brian D Individual
 Comment Type E Comment Status X
 Significance of nat policy area is not clear.
 SuggestedRemedy
 Add reference to 11.11.2
 Proposed Response Response Status O

CI 07 SC 7.3.2 P 6 L 47 # 56
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Element ID table is missing "Extensibility column" introduced by 11k
 SuggestedRemedy
 Identify DSE reg and ECSA as extensible
 Proposed Response Response Status O

CI 07 SC 7.3.2.52 P 9 L 1 # 59
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Reg Class/channel number need a country string.
 SuggestedRemedy
 Identify which country string to use; here and wherever a reg class is mentioned. Especially consider 7.3.2.54 when sent in a broadcast probe request, which does not indicate country.
 Proposed Response Response Status O

CI 07 SC 7.3.2 P 6 L 51 # 62
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Upper limit is 257 since length includes id & len
 SuggestedRemedy
 Change 255 to 257
 Proposed Response Response Status O

CI 07 SC 7.3.2.53 P 9 L 62 # 60
 Hart, Brian D Individual
 Comment Type E Comment Status X
 Sentence is odd: it mixes two distinct quantities in an Ored list: "meaningOfValues or Value"
 SuggestedRemedy
 Change to "meaningOfValue or meaningOfValue"
 Proposed Response Response Status O

CI 07 SC 7.3.2.54 P L # 7
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "The length of the Supported Regulatory Classes element is between 1 and 253 octets."
 Wrong - the value of the length field is between these limits. The length of the element is 2
 bytes more.
 SuggestedRemedy
 Replace cited text with: "The value of the Length field of the Supported Regulatory Classes
 element is between 1 and 253."
 Proposed Response Response Status O

CI 07 SC 7.3.2.54 P L # 141
 Myles, Andrew Individual
 Comment Type T Comment Status X
 The "Supported Regulatory Classes" element defines the regulatory classes that are
 supported
 What does it mean to "support" a regulatory class
 SuggestedRemedy
 Clarify
 Proposed Response Response Status O

CI 07 SC 7.3.2.54 P10 L15 # 61
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Length of elements is ambiguous.
 SuggestedRemedy
 Change to "The Length field". Change upper limit to 255
 Proposed Response Response Status O

CI 07 SC 7.3.2.54 P10 L19 # 63
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Reg Class/channel number need a country string.
 SuggestedRemedy
 Identify which country string to use; here and wherever a reg class is mentioned. Especially
 consider 7.3.2.54 when sent in a broadcast probe request, which does not indicate country.
 Proposed Response Response Status O

CI 07 SC 7.4.7.3 P L # 142
 Myles, Andrew Individual
 Comment Type T Comment Status X
 The text mentions a "DSE STA"
 Where is this defined?
 SuggestedRemedy
 Clarify
 Proposed Response Response Status O

CI 07 SC 7.4.7.3 P L # 8
 Stephens, Adrian P Individual
 Comment Type ER Comment Status X
 "The Category field is set to 4 (representing Public Action)."
 This is not where to define this value - it should be in table 7-24.
 SuggestedRemedy
 Replace with "The Category field is set to the value for Public Action defined in Table 7-
 24". Make similar edits where the cited text is used throughout 7.4.7.
 Add editing instructions to insert in table 7-24 the values "4; Public Action".
 Proposed Response Response Status O

CI 07 SC 7.4.7.3 P11 L4 # 64
 Hart, Brian D Individual
 Comment Type E Comment Status X
 Definition of DSE in clause 3 emphasises the process of DSE, not an aspect of an individual STA. Therefore DSE makes little sense as an adjective modifying "STA"
 SuggestedRemedy
 Change the definition of DSE so it can be dropped in here, or add a new definition for "DSE STA"
 Proposed Response Response Status O

CI 07 SC 7.4.7.3 P11 L7 # 47
 Hart, Brian D Individual
 Comment Type T Comment Status X
 If a "offspring of 11y" were formed needing to extend 11y's action frames, no standards method is defined so new frames must be used in place of 11y's frames.
 SuggestedRemedy
 Define an extensibility mechanism for 11y frames. Make the mechanism extensible to other amendments also.
 Proposed Response Response Status O

CI 07 SC 7.4.7.3 P12 L10 # 90
 Stanley, Dorothy Individual
 Comment Type T Comment Status X
 The meaning of the "X" markings and all of the blank rows seem incomplete, or not needed.
 SuggestedRemedy
 Suggest deleting the last two columns of tables 7-57d1 and 7-57d2, and add a text description of the allowed use of the Reason Result Code values.
 Proposed Response Response Status O

CI 07 SC 7.4.7.3 P12 L31 # 118
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Use of "Peer STA" is not clear here.
 SuggestedRemedy
 Elaborate meaning in table or add complete reason code definitions to new referenced clause in procedures, clause 11.
 Proposed Response Response Status O

CI 07 SC 7.4.7.4 P13 L18 # 65
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Amendment does not provide for gratuitous deenablement from the enabler: e.g. for when emergency services come & need to shut everybody up immediately. In clause 11.11.1.3 deenablement begins for the enabled STA. Gratuitous deenablement presumably comes from a time-out instead.
 SuggestedRemedy
 Determine if a timeout is sufficient. If not, provide a gratuitous method.
 Proposed Response Response Status O

CI 07 SC 7.4.7.4 P13 L33 # 119
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Use of "Peer STA" is not clear here.
 SuggestedRemedy
 Elaborate meaning in table or add complete reason code definitions to new referenced clause in procedures, clause 11.
 Proposed Response Response Status O

CI 07 SC 7.4.7.8 P15 L33 # 95
 Chaplin, Clint Individual
 Comment Type TR Comment Status X
 "The Length field indicates the length of the remaining frame fields in octets, and is variable." What is variable? The length of the length field? Or the value of the length field?
 SuggestedRemedy
 "The Length field indicates the length of the remaining frame fields in octets, and the value is variable."
 Proposed Response Response Status O

CI 07 SC 7.4.7.8 P15 L47 # 67
 Hart, Brian D Individual
 Comment Type E Comment Status X
 "Reported DSE LCI field" yet "LCIs" in figure. Does figure indicate a list of LCIs? If so, align text with figure or change "variable" in figure to nx20 octets. (replacing 20 w/ correct value)
 SuggestedRemedy
 As in comment
 Proposed Response Response Status O

CI 07 SC 7.4.7.8 P15 L7 # 68
 Hart, Brian D Individual
 Comment Type T Comment Status X
 "Length" field helps extensibility only yet no language defining parsing rules is provided.
 SuggestedRemedy
 Define parsing rules for extending frames
 Proposed Response Response Status O

CI 07 SC 7.4.7.8 P16 L1 # 69
 Hart, Brian D Individual
 Comment Type E Comment Status X
 , 3 times
 SuggestedRemedy
 Change elements to fields
 Proposed Response Response Status O

CI 09 SC 9.8.1 P17 L1 # 70
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Extend MP to add DSE enabling bit. Update language to allow for MPs
 SuggestedRemedy
 As in comment
 Proposed Response Response Status O

CI 09 SC 9.8.1 P28 L60 # 145
 Palm, Stephen Individual
 Comment Type TR Comment Status X
 "accross" seems to have specialized but undefined regulatory meaning
 SuggestedRemedy
 Clarify
 Proposed Response Response Status O

CI 09 SC 9.8.3 P17 L37 # 71
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Clarify whether the STA is allowed to attempt association when the reg class etc are unknown
 SuggestedRemedy
 As in comment
 Proposed Response Response Status O

CI 09 SC 9.8.4 P L # 9
Stephens, Adrian P Individual

Comment Type TR Comment Status X

"When dot11RegulatoryClassesRequired and dot11ExtendedChannelSwitchEnabled are true, the Coverage Class field of the Country Information element shall be processed when received by the associated STA or dependent STA, replacing the current aAirPropagationTime with one indicated by the Coverage Class field."

"shall be processed" is an incomplete normative specification. The PHY characteristics interface returns SIFS and slot time. So where is this processing done (MAC, in which case we need to describe how to adjust the values from the PHY; or PHY, in which case this specification needs to go into the PHY, and the characteristics interface needs to communicate the aAirPropagationTime value to the PHY)?

SuggestedRemedy

Either refer to the subclause defining that processing (in which case why is this shall required?) or define that processing.

Proposed Response Response Status O

CI 09 SC 9.8.4 P 29 L 46 # 146
Palm, Stephen Individual

Comment Type ER Comment Status X

use a non-breaking hyphen in aSlot-Time

SuggestedRemedy

use a non-breaking hyphen in aSlot-Time

Proposed Response Response Status O

CI 10 SC 10.3.6.3.2 P 20 L 8 # 97
Chaplin, Clint Individual

Comment Type E Comment Status X

"DSEregisteredlocation" doesn't seem to follow the normal capitalization scheme of the other parameters.

SuggestedRemedy

"DSERegisteredLocation"

Proposed Response Response Status O

CI 10 SC 10.3.6.4.2 P 20 L 57 # 98
Chaplin, Clint Individual

Comment Type E Comment Status X

"DSEregisteredlocation" doesn't seem to follow the normal capitalization scheme of the other parameters.

SuggestedRemedy

"DSERegisteredLocation"

Proposed Response Response Status O

CI 10 SC 10.3.7.3.2 P 22 L 57 # 99
Chaplin, Clint Individual

Comment Type E Comment Status X

"DSEregisteredlocation" doesn't seem to follow the normal capitalization scheme of the other parameters.

SuggestedRemedy

"DSERegisteredLocation"

Proposed Response Response Status O

CI 10 SC 10.3.7.4.2 P 23 L 42 # 100
Chaplin, Clint Individual

Comment Type E Comment Status X

"DSEregisteredlocation" doesn't seem to follow the normal capitalization scheme of the other parameters.

SuggestedRemedy

"DSERegisteredLocation"

Proposed Response Response Status O

Cl 11 SC 11.11 P L # 22
 Stephens, Adrian P Individual
 Comment Type E Comment Status X
 This is a hanging subclause
 SuggestedRemedy
 Add a new 11.11.1 General
 Proposed Response Response Status O

Cl 11 SC 11.11.1 P L # 23
 Stephens, Adrian P Individual
 Comment Type E Comment Status X
 This is a hanging subclause
 SuggestedRemedy
 Add a new 11.11.1.1 General
 Proposed Response Response Status O

Cl 11 SC 11.11 P L # 24
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 In table 11.11a STA is used to include APs in the first two rows, but then the fourth row implies that the third row doesn't include AP.
 SuggestedRemedy
 Either add "non-AP" in the third non-header row to the unlabelled column, or remove the fourth row.
 And while you're at it, label the blank column, i.e., "Type of STA".
 Proposed Response Response Status O

Cl 11 SC 11.11.1 P39 L23 # 102
 Chaplin, Clint Individual
 Comment Type ER Comment Status X
 Enablement state: The values are unenabled and enabled.
 SuggestedRemedy
 Enablement state: The values are "unenabled" and "enabled".
 Proposed Response Response Status O

Cl 11 SC 11.11 P38 L38 # 74
 Hart, Brian D Individual
 Comment Type E Comment Status X
 "satisfy US"
 SuggestedRemedy
 "satisfy the US"
 Proposed Response Response Status O

Cl 11 SC 11.11.1.1 P L # 26
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 Now I'm even more confused. The title says "enablement requester STA" but the second message type is sent by the enablement responder STA. And the frame under bullet a) of 11.11.1.2 looks very much like the second one in bullet a) of 11.1.1.1
 SuggestedRemedy
 Let's specify what goes in that frame in just one place.
 Proposed Response Response Status O

Cl 11 SC 11.11.1.1 P L # 25
Stephens, Adrian P Individual

Comment Type TR Comment Status X

"Specific items in the enablement confirm indication are as follows:"
I know that it's easy to confuse me, but this did it. Firstly I see the name of a primitive "confirm". Then I see the name of another primitive "indication". But it's actually talking about the contents of a frame!

SuggestedRemedy

Replace cited text with: "Specific items in the enablement message sent by the enablement responder are as follows:"

Proposed Response Response Status O

Cl 11 SC 11.11.1.1 P L # 104
Chaplin, Clint Individual

Comment Type TR Comment Status X

The steps listed here are missing one important item: receiving an enablement response message. This section talks about the items in the enablement confirm indication, but doesn't talk about what triggers that indication.

SuggestedRemedy

Add a step to receive the enablement response message.

Proposed Response Response Status O

Cl 11 SC 11.11.1.1 P40 L30 # 103
Chaplin, Clint Individual

Comment Type ER Comment Status X

If the enablement was successful, the Enablement state variable for the enablement responder STA shall be set to enabled.

SuggestedRemedy

If the enablement was successful, the Enablement state variable for the enablement responder STA shall be set to "enabled".

Proposed Response Response Status O

Cl 11 SC 11.11.1.2 P40 L # 126
Kwak, Joseph Individual

Comment Type TR Comment Status X

Procedure incomplete.

SuggestedRemedy

Need to add procedure details for responder STA to deny enablement and describe conditions to determine success vs failure to enable.

Proposed Response Response Status O

Cl 11 SC 11.11.1.2 P41 L5 # 105
Chaplin, Clint Individual

Comment Type ER Comment Status X

If the enablement is successful, the Enablement state variable for the enablement requester STA shall be set to enabled.

SuggestedRemedy

If the enablement is successful, the Enablement state variable for the enablement requester STA shall be set to "enabled".

Proposed Response Response Status O

Cl 11 SC 11.11.1.3 P L # 27
Stephens, Adrian P Individual

Comment Type TR Comment Status X

"The deenablement message confirm Reason Result Code indicates when the deenablement is successful."
The transmission of the deenablement may fail (missing ack). This doesn't allow for that.

SuggestedRemedy

Replace "when" with "whether".

Proposed Response Response Status O

Cl 11 SC 11.11.1.3 P41 L 14 # 106
 Chaplin, Clint Individual
 Comment Type ER Comment Status X
 If the Enablement state variable for the deenablement responder STA is enabled, the STA shall send a DSE deenablement frame to the deenablement responder STA.
 SuggestedRemedy
 If the Enablement state variable for the deenablement responder STA is "enabled", the STA shall send a DSE deenablement frame to the deenablement responder STA.
 Proposed Response Response Status O

Cl 11 SC 11.11.1.3 P41 L 15 # 75
 Hart, Brian D Individual
 Comment Type T Comment Status X
 If enablement state is disabled, is this a success or failure, & what is sent to MLME?
 SuggestedRemedy
 Add a new reason code.
 Proposed Response Response Status O

Cl 11 SC 11.11.1.3 P41 L 43 # 107
 Chaplin, Clint Individual
 Comment Type ER Comment Status X
 If the deenablement is successful, the Enablement state variable for the deenablement responder STA shall be set to unenabled.
 SuggestedRemedy
 If the deenablement is successful, the Enablement state variable for the deenablement responder STA shall be set to "unenabled".
 Proposed Response Response Status O

Cl 11 SC 11.11.1.4 P41 L # 127
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Procedure incomplete.
 SuggestedRemedy
 Need to add procedure details for responder STA to deny deenablement and describe conditions to determine success vs failure to deenable.
 Proposed Response Response Status O

Cl 11 SC 11.11.1.4 P41 L 56 # 108
 Chaplin, Clint Individual
 Comment Type ER Comment Status X
 The Enablement state variable for the deenablement requester STA shall be set to unenabled
 SuggestedRemedy
 The Enablement state variable for the deenablement requester STA shall be set to "unenabled"
 Proposed Response Response Status O

Cl 11 SC 11.11.2 P L # 28
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "A registered STA that is not an enabling STA may operate as an AP in an infrastructure BSS, and relay Public Action frames from a dependent STA to its enabling STA."
 Exactly where is this "relay" operation defined? Clearly the AP cannot just retransmit these frames, so it must overwrite some fields but not others. Seeing as the addressing must be carried in the management frame body, how can it be generic to all public action frames?
 SuggestedRemedy
 Add a subclause "relaying of DSE frames" and describe how the AP does this. Change "may relay public action frames" to "may relay DSE frames as specified in x.x.x.x".
 Proposed Response Response Status O

Cl 11 SC 11.11.2 P 42 L 13 # 76
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Lines 13-17 are powerfully helpful language.
 SuggestedRemedy
 Move to or duplicate in 5.2.8.2 and/or 11.11
 Proposed Response Response Status O

Cl 11 SC 11.11.2 P 42 L 24 # 82
 Sohrobi, Katayoun Individual
 Comment Type T Comment Status X
 Subclause 11.11.2, line 24, page 42 says:
 "A registered STA that is not an enabling STA may operate as an AP in an infrastructure BSS, and relay Public Action frames from a dependent STA to its enabling STA."
 This means a "registered, fixed" station may relay public action frames, including "DSE" related frames on behalf of a dependent STA to an "enabling" station. As a result a dependent STA may become enabled via "indirect" exchange with an enabling STA.
 At the same time, subclause 11.11.3, page 42, line 35 says:
 "Dependent STA operation is conditional on receiving and decoding a DSE registered location element with RegLoc DSE bit set to 1 directly from an enabling STA."
 This means a dependent STA must received an enabling message DIRECTLY.
 The above two sentences appear to be in conflict, one allowing INDIRECT "enabling", one requiring DIRECT "enablement".

SuggestedRemedy
 Add a clarifying sentence that provides the meaning of "Direct".
 If indeed the two conditions mentioned above are in conflict, then further clarifying text must be included in the document, and a final decision be made as to whether "indirect" enablement is allowed or not.
 Proposed Response Response Status O

Cl 11 SC 11.11.3 P L # 30
 Stephens, Adrian P Individual
 Comment Type E Comment Status X
 "may contain elements received from stations that are not yet associated to a BSS."
 While pedantry is something up with which I will not put, is this the right preposition?
 SuggestedRemedy
 "... associated with a BSS"
 Proposed Response Response Status O

Cl 11 SC 11.11.3 P L # 29
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 "NOTE--An enabling STA may request its dependent STAs perform DSE measurement requests and make DSE reports over the DS. How information is exchanged over a DS is beyond the scope of this standard."
 Great. How does this help create interoperable equipment?
 SuggestedRemedy
 Either indicate how this is done, or reference the external standard that defines this communication, or remove the note.
 Proposed Response Response Status O

Cl 11 SC 11.11.3 P 42 L 41 # 77
 Hart, Brian D Individual
 Comment Type T Comment Status X
 "unique among enabled STAs" - hard to do distributedly across the US, unless the id is 48+16 bits (i.e. enabler MAC address + 16 locally administered bits). Or do u mean "unique among STAs enabled by this enabling STA"? Then 16 bits is plenty. Or unique within interference range + randomly assigned?
 SuggestedRemedy
 Clarify or fix
 Proposed Response Response Status O

Cl 11 SC 11.11.4 P L # 34
 Stephens, Adrian P Individual
 Comment Type **TR** Comment Status **X**
 "An associated dependent STA shall operate under the control of the enabling STA from which it attained enablement;"
 "...shall operate under the control..." more sublime ineffability - i.e., what does this mean?
 SuggestedRemedy
 Refer to those procedures that constitute "operation under control", i.e., by subclause number
 Proposed Response Response Status

Cl 11 SC 11.11.4 P L # 31
 Stephens, Adrian P Individual
 Comment Type **TR** Comment Status **X**
 While figure 11-19 is carrying on the fine tradition of abusing a defined graphical methodology with all the gusto and aplomb of the baseline, please listen to this lone voice crying in the wilderness "make straight your state machines".
 SuggestedRemedy
 The boxes below the state machine title contain actions, not conditional tests. Put conditions on the exit paths.
 Leave just actions there and move the conditions out to the exit paths.
 Proposed Response Response Status

Cl 11 SC 11.11.4 P L # 35
 Stephens, Adrian P Individual
 Comment Type **TR** Comment Status **X**
 "A dependent STA shall create a dependent DSE registered location element"
 Great. Presumably it can also lock this element into a nice safe vault where nobody can see it.
 Just how do I test "shall create"?
 SuggestedRemedy
 Relate to the transmission of this data, which is an observable
 Proposed Response Response Status

Cl 11 SC 11.11.4 P L # 33
 Stephens, Adrian P Individual
 Comment Type **T** Comment Status **X**
 "A STA with dot11DSERequired set to true shall not operate in an infrastructure BSS or IBSS unless it has received a Beacon frame from an enabling STA"
 "shall not operate" is ineffably explicit. Exactly what can it do and not do.
 SuggestedRemedy
 Replace "shall not operate" with a more precise description of what it can't do (i.e. shall not transmit any frames).
 Proposed Response Response Status

Cl 11 SC 11.11.4 P L # 32
 Stephens, Adrian P Individual
 Comment Type **TR** Comment Status **X**
 A state machine is driven by events. So how is the transition "enabling message received? = No" taken?
 SuggestedRemedy
 Review this state machine and ensure that all transitions relate to events, not non-events.
 Proposed Response Response Status

Cl 11 SC 11.11.4 P42 L # 128
 Kwak, Joseph Individual
 Comment Type **TR** Comment Status **X**
 Procedure incomplete.
 SuggestedRemedy
 Need to add states to state machine for deenablement; need to add related text describing deenablement states, including path for denial of deenablement.
 Proposed Response Response Status

Cl 11 SC 11.11.4 P 43 L 47 # 78
 Hart, Brian D Individual
 Comment Type E Comment Status X
 Is "as mandated" correct?
 SuggestedRemedy
 Replace by "mandated to be allowed"
 Proposed Response Response Status O

Cl 11 SC 11.11.4 P 43 L 59 # 79
 Hart, Brian D Individual
 Comment Type T Comment Status X
 "shall only transmit for up to & seconds" is ambiguous. Is this actual on-air time, or time from last packet sent minus time from first packet sent?
 SuggestedRemedy
 Clarify
 Proposed Response Response Status O

Cl 11 SC 11.11.4 P 44 L 15 # 130
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 DSE Registered Location Announcement must never be encrypted.
 SuggestedRemedy
 Change "Action frame" to "unencrypted action frame"
 Proposed Response Response Status O

Cl 11 SC 11.11.4 P 44 L 15 # 80
 Hart, Brian D Individual
 Comment Type T Comment Status X
 "shall send &modulo & FragmentCount. When fragments are sent they are sent at SIFS. Another announcementframe cannot be sent mid-frag-ed frame.
 SuggestedRemedy
 Allow announcement to be sent at end of a frag-ged packet
 Proposed Response Response Status O

Cl 11 SC 11.11.4 P 44 L 18 # 131
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 An enabled STA which is not providing any data services will not transmit DSE Registered Announcement frames. This will not permit coordinated ECS.
 SuggestedRemedy
 Add new sentence: "After any Extended Channel Switch, a dependent STA which is not providing any data services shall select a random time delay less than 300 msec; at the end of this delay the STA shall broadcast a DSE Registered Location Announcement frame."
 Proposed Response Response Status O

Cl 11 SC 11.11.5 P L # 40
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "shall send this Action frame to the broadcast address using normal frame transmission rules"
 This implies that somewhere in our finely crafted standard we have some "abnormal rules". Such a vile slur requires a response.
 Or put another way, what the heck are "normal frame transmission rules"?
 SuggestedRemedy
 Reference the relevant rules or remove "using normal frame transmission rules"
 Proposed Response Response Status O

Cl 11 SC 11.11.5 P L # 39
 Stephens, Adrian P Individual
 Comment Type E Comment Status X
 <DSE measurement request frame shall not contain a value of "1" for the "incapable" subfield>
 This is a virulent attack of quoters disease.
 SuggestedRemedy
 Inoculate.
 Proposed Response Response Status O

Cl 11 SC 11.11.5 P L # 38
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "RegLoc DSE bit set to 1 in the DSE registered location element, and set all fields in bits 16-175 of its DSE registered location element to zero;"
 Structural information such as the bit locations should not be repeated as it creates a maintenance risk.
 SuggestedRemedy
 Replace bit positions with names of field(s).
 Proposed Response Response Status O

Cl 11 SC 11.11.5 P L # 37
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 "A dependent STA shall only attempt enablement with an enabling STA if"
 BEWARE, "shall only" is considered dangerous. The point is that a sentence with "shall only" in it will probably be misread.
 Consider A shall only B if C.
 In my experience in TGn, I have found cases where people interpret this as:
 1. A shall not B if not C
 2. A may B if C
 3. A shall B if C
 The question is whether "shall only" expresses a constraint, or requires or permits action.
 SuggestedRemedy
 Replace with "shall not attempt enablement with an enabling STA unless"
 Proposed Response Response Status O

Cl 11 SC 11.11.5 P L # 36
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 "shall only transmit"
 BEWARE, "shall only" is considered dangerous. The point is that a sentence with "shall only" in it will probably be misread.
 Consider A shall only B if C.
 In my experience in TGn, I have found cases where people interpret this as:
 1. A shall not B if not C
 2. A may B if C
 3. A shall B if C
 The question is whether "shall only" expresses a constraint, or requires or permits action.
 SuggestedRemedy
 Replace with "shall not transmit beyond dot11DSEEnablementTimeLimit seconds"
 Proposed Response Response Status O

Cl 11 SC 11.3 P35 L44 # 92
 Hart, Brian D Individual
 Comment Type T Comment Status X
 Verify changes and changed clause are correct.
 SuggestedRemedy
 Verify changes and changed clause are correct. Make changes to clause as needed
 Proposed Response Response Status O

Cl 11 SC 11.3 P35 L45 # 84
 Ecclesine, Peter Individual
 Comment Type T Comment Status X
 Because 11y's baseline includes 11k, and 11k D12.0 changes clause 11.3 incompletely, 11y must fix whatever errors remain in a2 and c2, as 11y needs them to be correct.
 SuggestedRemedy
 Review 802.11-2007 as amended by 11k and 11r and 11y, and ensure 11y changes result in correct 11.3 specifications for Public Action frames.
 Proposed Response Response Status O

Cl 11 SC 11.9a P 36 L # 124
 Kwak, Joseph Individual
 Comment Type **TR** Comment Status **X**
 Imprecise use of "new channel" throughout this clause.
 SuggestedRemedy
 Change "new channel" to "new channel and/or new regulatory class" in all places in this clause.
 Proposed Response Response Status **O**

Cl 11 SC 11.9a.1 P L # 143
 Myles, Andrew Individual
 Comment Type **T** Comment Status **X**
 The text uses "dependent station" rather than "dependent STA".
 Are they the same?
 SuggestedRemedy
 If they are the same change the text to use one term only
 Proposed Response Response Status **O**

Cl 11 SC 11.9a.1 P L # 144
 Myles, Andrew Individual
 Comment Type **T** Comment Status **X**
 ECS has been described in terms of the regulations in the 3.6GHz band in the US
 However, ECS is a general features that does not need justification in this way
 SuggestedRemedy
 Remove all references to 3.6GHz band in 11.9a.1 (and in 11.9a.3.1/2 and 11.9.3.2). The
 use of ECS to satisfy 3.6GHz band rules can be described in a new section (probably
 11.11.x)
 Proposed Response Response Status **O**

Cl 11 SC 11.9a.1 P L # 10
 Stephens, Adrian P Individual
 Comment Type **E** Comment Status **X**
 "When
 dot11ExtendedChannelSwitchEnabled is false, the Extended Channel Switching field of the
 Extended Capabilities
 information element shall be set to 0."
 I think there's a mismatch here. Capabilities describe what the STA is able (i.e. has
 hardware and software support for) to do. These are static.
 An "enabled" MIB variable implies something more dynamic.
 And just to add confusion we've also got some "capabilityEnabled" variables.
 SuggestedRemedy
 Are any of these truly dynamic - if so, "enabled" might be the right name, but then the
 dependency of a capability field bit on a dynamic field is highly questionable.
 If they are not dynamic, suggest renaming "[capability]enabled" with "supported" for the
 variables mentioned in this subclause.
 Proposed Response Response Status **O**

Cl 11 SC 11.9a.1 P L # 11
 Stephens, Adrian P Individual
 Comment Type **E** Comment Status **X**
 "A STA shall not transmit the Extended Capabilities information element with the Extended
 Channel Switching
 field set to 1 unless dot11ExtendedChannelSwitchEnabled is set to true."
 Theres a lot of redundancy between this and the previous para.
 SuggestedRemedy
 I think you can simplify these two paras by having this statement: "A STA shall set the
 Extended Channel Switching field to 1 in a transmitted Extended Capabilities information
 element if and only if dot11ExtendedChannelSwitchEnabled is set to true."
 And then removing everything else related to the setting of this field.
 Proposed Response Response Status **O**

Cl 11 SC 11.9a.1 P 36 L 30 # 72
 Hart, Brian D Individual
 Comment Type E Comment Status X
 "STAs and APs and DFS owners"
 SuggestedRemedy
 replace first and by comma
 Proposed Response Response Status O

Cl 11 SC 11.9a.1 P 36 L 53 # 129
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 What ECS procdures? Reference is not defined.
 SuggestedRemedy
 Define ECS procedures for non-AP STAs. All procedures here are limited to AP procedures. And even in this regard, there is no requirement for the AP to switch to advertised channel at any specific time.
 Proposed Response Response Status O

Cl 11 SC 11.9a.1 P 36 L 55 # 73
 Hart, Brian D Individual
 Comment Type T Comment Status X
 May a STA seek parallel enablement by multiple enablers? I assume not, yet "for the enabling STA" seems to imply this is possible.
 SuggestedRemedy
 Clarify here and in clause 11.11.4
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 17
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 "The AP may force STAs in the BSS to stop transmissions until the channel switch takes place by setting the Extended Channel Switch Mode field to 1 in the Extended Channel Switch Announcement element."
 This is only partly successful. A power-saving STA may wake, determine the medium is idle and start transmitting.
 As such the cited sentence is misleading.
 SuggestedRemedy
 Add note indicating that this is only partly successfull.
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 12
 Stephens, Adrian P Individual
 Comment Type T Comment Status X
 "When an AP, with dot11DSERequired set to true, receives frames containing Extended Channel Switch Announcement elements from the enabling STA, it shall advertise an extended channel switch with the parameters received in the Extended Channel Switch Announcement elements."
 What if it receives such frames from two enabling STAs?
 SuggestedRemedy
 Either this is not possible, or the AP needs to be allowed to choose between enabling STAs, or its enabling STA.
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 13
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "The decision to switch to a new operating channel in an infrastructure BSS is made by the AP."
 This flatly contradicts the previous para.
 SuggestedRemedy
 Indicate this is limited to the case when dot11DSERequired is false.
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 14
 Stephens, Adrian P Individual

Comment Type TR Comment Status X

"In addition, the AP may also send Channel Switch Announcement elements and frames when the requirements signified by the new regulatory class are met by all associated STAs that are intended to act on the Channel Switch Announcement."

This is a normative statement, but it refers to an AP's intentions, which are anthropomorphic, and certainly not testable.

SuggestedRemedy

Replace with a statement that avoids "intended" and is testable.

Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 16
 Stephens, Adrian P Individual

Comment Type T Comment Status X

"When dot11ExtendedChannelSwitchEnabled is true, an AP shall inform associated STAs that the AP is moving to a new channel and maintain the association by advertising the switch using Extended Channel Switch Announcement elements in Beacon frames, Probe Response frames, and Extended Channel Switch Announcement frames until the intended channel switch time."

This statement requires the AP to transmit probe response frames. But if there are no probe requests, this is not possible.

Likewise, we are required to transmit "Extended Channel Switch Announcement frames until the intended channel switch time". How many? Do we transmit them constantly until the appointed time?

SuggestedRemedy

recommend adding "any transmitted" here on the assumption that this shall relates to the contents, not whether they should be transmitted.

Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 18
 Stephens, Adrian P Individual

Comment Type T Comment Status X

"The AP may send the Extended Channel Switch Announcement frame in a BSS" How can it send such a frame "not in a BSS?"

SuggestedRemedy

remove "in a BSS".

Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 19
 Stephens, Adrian P Individual

Comment Type TR Comment Status X

"When a STA with dot11DSERequired false receives an Extended Channel Switch Announcement element, it may choose not to perform the specified switch, but to take alternative action, as described in 11.9.7.1."

This is fine for an AP, but for an infrastructure STA, the reference makes no sense.

SuggestedRemedy

Add reference or other behaviour appropriate to a non-AP STA.

Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P L # 15
 Stephens, Adrian P Individual

Comment Type T Comment Status X

"If dot11ExtendedChannelSwitchEnabled is false, the AP shall send the Channel Switch Announcement element and frame, or both the Extended Channel Switch Announcement and the Channel Switch Announcement elements and frames."

Don't be fooled by the name, dot11ExtendedChannelSwitchEnabled is a capability. If we are incapable of "extended channel switching", what the heck are we doing transmitting an extended channel switch frame?

SuggestedRemedy

Resolve this inconsistency.

Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P 37 L 12 # 125
 Kwak, Joseph Individual
 Comment Type TR Comment Status X
 Incomplete description of requirement.
 SuggestedRemedy
 Needs rewording. "advertise with same parameters" doesn't describe requirement on AP to initiate the ECS procedures itself. New TBTT downcounter must be initialized and updated at each beacon transmission. Furthermore the Channel Switch count parameter received by the AP must NOT be retransmitted as indicated. The channel count value needs to be updated before each transmission.
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.1 P 37 L 53 # 101
 Chaplin, Clint Individual
 Comment Type TR Comment Status X
 "When a STA with dot11DSERequired false receives an Extended Channel Switch Announcement element" "False receives"? What does that phrase mean?
 SuggestedRemedy
 Clarify, please
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.2 P L # 21
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "when the requirements signified by the new regulatory class are met by the DFS owner." What does this mean? Surely if the DFS owner does not meet any of the requirements of a candidate regulatory class, it cannot select it.
 SuggestedRemedy
 Tell me something that makes sense.
 Proposed Response Response Status O

Cl 11 SC 11.9a.3.2 P L # 20
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "A STA in a BSS that is not the AP shall not transmit the Extended Channel Switch Announcement element."
 I suspect the author of this wrongly equates "in a BSS" with "infrastructure BSS". But BSS covers both infrastructure and independent (IBSS) cases and "in a BSS" relates more the adoption of timing parameters and BSSID.
 SuggestedRemedy
 replace "in a BSS" with "in an infrastructure BSS"
 Also a "STA ... that is not the AP" can be shortened to "non-AP STA".
 Proposed Response Response Status O

Cl 17 SC 17.3.10.5 P L # 41
 Stephens, Adrian P Individual
 Comment Type TR Comment Status X
 "NOTE--CCA-ED may be used in bands when not required by Annex J. In these cases, the CCA-ED threshold should equal 20 dB above the minimum modulation and coding rate sensitivity (-62 dBm for 20 MHz channel spacing, -65 dBm for 10 MHz channel spacing, and -68 dBm for 5 MHz channel spacing)."
 Although this claims to be a note, it has one "may" and one "should"
 SuggestedRemedy
 Either use non-normative verbs here, or remove its informative status.
 Proposed Response Response Status O

CI 17 SC 17.3.10.5 P 47 L 56 # 81
Hart, Brian D Individual

Comment Type T Comment Status X

Appendix I/J define a channelization with overlapping 5 and 10 MHz channels; ditto 10 and 20 overlapping. This leads to poor CCA behavior - devices only defer if very loud. To enable mutually satisfactory sharing, BWs could be aligned, or we could define a better CCA: 10 (20) into 5 (10) and 5 (10) into 10 (20).

SuggestedRemedy

Add an improved CCA, so 20 (10) MHz STAs "may" defer for the frame duration when 10 (5) MHz preambles are detected on their upper or lower half-band. Ditto, in reverse, 10 (5) MHz STAs "may" defer when 20 (10) MHz STAs are transmitting, detected via preamble detection, held by detection of a regular pattern of OFDM symbols with cyclic extensions.

Proposed Response Response Status O

CI 17 SC 17.3.10.5 P 47 L 62 # 132
Kwak, Joseph Individual

Comment Type TR Comment Status X

Received signal strength (RSSI) cannot be used for any quantitative and verifiable performance requirement. RSSI is not defined in base standard. CCA-ED performance (which relies on RSSI) is not defined in base standard and cannot be used for any new Tgy performance requirements.

SuggestedRemedy

Suggest that Tgy modify the TGk defined IPI measurements (in 12.3.5) to include new performance spec for accuracy of idle power measurement. Then Tgy should modify CCA-ED to rely on measurement of IPI values (in place of RSSI) for its specified and testable performance. Otherwise strike out all references to CCA-ED in the Tgy draft. Repeating the errors of the past will only further degrade the baseline standard going forward.

Proposed Response Response Status O

CI 17 SC 17.3.10.5 P 48 L 1 # 85
Ecclesine, Peter Individual

Comment Type TR Comment Status X

The clause 17 description of the use of CCA-ED in bands where it is not required by Annex J should be normative, not an informative note.

SuggestedRemedy

Change text to be a normative paragraph, if necessary add PICs OF2.19.3.3 for those uses.

Proposed Response Response Status O

CI 17 SC 17.3.10.5 P 48 L 1 # 54
Petranovich, James Individual

Comment Type T Comment Status X

The note says the CCA-ED threshold should be 20 dB above sensitivity. While this is a tradition in 802.11, it is based on old technology.

SuggestedRemedy

consider recommending a level 15 dB above noise floor.

Proposed Response Response Status O

CI 17 SC 17.3.8.3.1 P 45 L 27 # 52
Petranovich, James Individual

Comment Type TR Comment Status X

The text "The OFDM PHY shall operate in frequency bands, as allocated by a regulatory body in its operational region." is confusing. Is this a requirement for the device to operate in all the bands allocated or only some of them? Is this a subtle hidden requirement?

SuggestedRemedy

change to : "The OFDM PHY shall not operate in frequency bands not allocated by a regulatory body in its operational region."

Proposed Response Response Status O

CI 17 SC 17.3.9.2 P 45 L 42 # 53
Petranovich, James Individual

Comment Type TR Comment Status X

The mask is specified only in a relative measure, dBr. But a low power device might have trouble meeting these dBr requirements and yet would generate less interference than a full power device that meets the dBr requirements.

SuggestedRemedy

Add a clause that indicates any transmission emissions -45 dB from the maximum allowed power level in the band are permitted with any frequency offset for all masks.

Proposed Response Response Status O

Cl A **SC A.4.18** **P 51** **L 52** # **133**
 Kwak, Joseph Individual
Comment Type **TR** **Comment Status** **X**
 Use TGk Frame request/report in place of DSE request/report
SuggestedRemedy
 Replace "DSE" with "Frame" in 3 places in column 2. Replace in column 4 "CF1" with "CF1&CF13&RRM5". Replace in column 4 "CF2" with "CF2&CF13&RRM5".
Proposed Response **Response Status** **O**

Cl A **SC A.4.3** **P 49** **L 5** # **46**
 Perahia, Eldad Individual
Comment Type **T** **Comment Status** **X**
 If my interpretation of the requirements of 11y is correct, it requires 11a. However 11a requires 24 Mbps (OF1.2.5), which requires a 10MHz or 20 MHz channel spacing. This conflicts with J.2 which states "all stations shall be capable of transmitting using 5 MHz channel bandwidths", which I interpret as not requiring transmission with 10MHz or 20MHz channel spacing.
SuggestedRemedy
 correct the PICS to match the requirements in J.2
Proposed Response **Response Status** **O**

Cl Annex **SC ex D** **P** **L** # **45**
 Stephens, Adrian P Individual
Comment Type **TR** **Comment Status** **X**
 The definition of dot11LCIDSETable uses ::= { dot11smt 14 }.
 But in the comments against dot11smt this is shown (correctly, I believe) to be 16.
SuggestedRemedy
 Change definition of dot11LCIDSETable to use ::= { dot11smt 16}
Proposed Response **Response Status** **O**

Cl Annex I **SC ex I** **P 63** **L 4** # **86**
 Ecclesine, Peter Individual
Comment Type **TR** **Comment Status** **X**
 Annex I should be made normative, with an additional sentence at the end of the second paragraph: "The external regulatory references in this annex are informative, and are likely to change."
SuggestedRemedy
 Change Annex I to be normative, and revise PICs OF3.2.7 and elsewhere to refer to Annex I requirements.
Proposed Response **Response Status** **O**

Cl D **SC D** **P** **L** # **42**
 Stephens, Adrian P Individual
Comment Type **TR** **Comment Status** **X**
 Annex D generally. There is a syntax for specifying default values. This annex uses text in the description for some of its MIB entries (e.g., "dot11LCIDSEImplemented")
SuggestedRemedy
 Replace all textual indications of default values with the appropriate syntax.
Proposed Response **Response Status** **O**

Cl I **SC I.1** **P** **L** # **43**
 Stephens, Adrian P Individual
Comment Type **TR** **Comment Status** **X**
 I don't have a clear picture of how the behavior limit sets 11 and 12 are used. How do they map onto the terminology of "fixed", "enabling" and "dependent" STA used in 11.11?
 If a registered fixed AP is allowed to transmit in the higher power, what behaviour set does it put in its beacon? Where is this described?
SuggestedRemedy
 Add to J.2 a description of how the behaviour limit sets map onto the terminology of 11.11.
Proposed Response **Response Status** **O**

Cl I SC I.2.4 P 65 L 27 # 134
Kwak, Joseph Individual

Comment Type TR Comment Status X

Received signal strength (RSSI) cannot be used for any quantitative and verifiable performance requirement. RSSI is not defined in base standard. CCA-ED performance (which relies on RSSI) is not defined in base standard and cannot be used for any new Tgy performance requirements.

SuggestedRemedy

Suggest that Tgy modify the TGk defined IPI measurements (in 12.3.5) to include new performance spec for accuracy of idle power measurement. Then Tgy should modify CCA-ED to rely on measurement of IPI values (in place of RSSI) for its specified and testable performance. Otherwise strike out all references to CCA-ED in the TGy draft. Repeating the errors of the past will only further degrade the baseline standard going forward.

Proposed Response Response Status O

Cl I SC I.2.4 P 65 L 30 # 135
Kwak, Joseph Individual

Comment Type E Comment Status X

Table 145 does not exist.

SuggestedRemedy

Should be Table 17-13 (?).

Proposed Response Response Status O

Cl J SC J.2 P L # 44
Stephens, Adrian P Individual

Comment Type T Comment Status X

"All stations shall use"

Two problems with this:

1. Normative behaviour is for a protocol entity, not all such entities.
2. "shall use" is normatively meaningless.

SuggestedRemedy

Just provide a list of required behaviours and a list of forbidden behaviours, perhaps as a table with a column for name, reference, and required/forbidden?

Proposed Response Response Status O

Cl J SC J.2 P 67 L 22 # 91
Stanley, Dorothy Individual

Comment Type E Comment Status X

"is introduced" will not be accurate with the passage of time.

SuggestedRemedy

Change from "is introduced as a framework" to "provides a framework". Also in line 29, suggest changing from "802.11" to "IEEE Std 802.11"

Proposed Response Response Status O