

CI 00 SC P L # 59  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 more reason to keep it, as there may be  
 SuggestedRemedy  
 To  
 Proposed Response Response Status O

CI 00 SC P L # 3  
 COORDINATION, EDITORIAL  
 Comment Type ER Comment Status D  
 Good to go, Section 1 comments have been addressed.  
 -Mike Fisher, IEEE Staff Editor  
 SuggestedRemedy  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 00 SC P L # 19  
 WORSTELL, HARRY R Individual  
 Comment Type TR Comment Status D  
 This ballot does not contain the 802.11e ammendment and should include it. I vote NO.  
 SuggestedRemedy  
 Include 802.11e in the rollup  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 00 SC P L # 20  
 COORDINATION, SCC14  
 Comment Type GR Comment Status D  
 In the early pages (!) of this document there is a large section devoted to definitions. However, it does not include definitions of "byte" and "octet". In some standards the two terms are synonymous, but in this standard the terms are used and are not synonyms. Please add the two definitions.  
 SuggestedRemedy

Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE. All uses of "byte" the the text are synonymous with "octet". Replace all occurrences of "byte" with "octet", except in the C code in Annex H.  
 In H.5.1:  
 1. replace "preferable" with "preferably",  
 2. replace "lowest byte of time" with "least significant octet of the timestamp" in three locations,  
 3. replace "packet is seen" with "packet is received",  
 4. replace "concatenate the seen time" with "concatenate this octet",  
 5. replace "take the lowest byte of RSSI" with "take the least significant octet of RSSI",  
 6. replace "concatenate the sent time, received time, RSSI, and Snonce" with concatenate the sent time, received time, RSSI, and SNonce octets"

CI 00 SC P L # 63  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 1 or State 3 are unprotected  
 SuggestedRemedy  
 Proposed Response Response Status O

CI 00 SC P L # 62  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 all Action frames, whether sent in State  
 SuggestedRemedy  
 Proposed Response Response Status O

CI 00 SC P L # 60  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 applications which use this capability.  
 SuggestedRemedy  
 vi) Spectrum Management Action  
 Proposed Response Response Status O

CI 00 SC P L # 58  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 Yes, this is a unique capability, all the  
 SuggestedRemedy  
 Within an IBSS, action frames are class 1.  
 Proposed Response Response Status O

CI 00 SC P L # 57  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 TGh, and should remain in the standard.  
 SuggestedRemedy  
 Proposed Response Response Status O

CI 00 SC P L # 56  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 State 1. This capability was added by  
 SuggestedRemedy  
 vi) Action  
 Proposed Response Response Status O

CI 00 SC P L # 55  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 802.11 to support Action frames in  
 SuggestedRemedy  
 Proposed Response Response Status O

Cl 00 SC P L # 61  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type G Comment Status X  
 Now, and prior to the introduction of TGw  
 SuggestedRemedy  
 Proposed Response Response Status O

Cl 00 SC Generally P L # 9  
 STEPHENS, ADRIAN P Individual  
 Comment Type E Comment Status D  
 There are no line numbers  
 SuggestedRemedy  
 Add them  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 00 SC M P L # 71  
 MYLES, ANDREW F Individual  
 Comment Type TR Comment Status X  
 This annex allegedly provides an AP functional description  
 However, in reality it has very limited value given that it is mostly content free and almost  
 totally disconnected from implementation reality. The use of a large number of new terms  
 and the semi-formal specification language only increases its obscurity.  
 SuggestedRemedy  
 Remove entire annex  
 Proposed Response Response Status O

Cl 00 SC N P L # 72  
 MYLES, ANDREW F Individual  
 Comment Type TR Comment Status X  
 There is little obvious value in this annex  
 SuggestedRemedy  
 Remove entire annex  
 Proposed Response Response Status O

Cl 00 SC N & M P L # 7  
 STEPHENS, ADRIAN P Individual  
 Comment Type ER Comment Status X  
 There is confusion between these two annexes as to exactly what an AP is. Annex N  
 provides no means for an AP to discover about mapping changes from the DS. Annex M  
 says that this is possible.  
 SuggestedRemedy  
 There probably needs to be a new DS-STA-NOTIFY.request (from DS to AP) to provide  
 this communication. Alternatively the use of terms like AP needs to be clarified (i.e. in M it  
 includes the DS, in N they are called out separately).  
 Proposed Response Response Status W  
 Darwin to provide draft response.

Cl 02 SC 2 P 3 L # 39  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 IEEE Std 802-1990 should be -2001.  
 SuggestedRemedy  
 Change to IEEE Std 802-2001.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 02 SC 2 P 3 L # 38  
O'HARA, ROBERT Individual

Comment Type T Comment Status D

Citation for RFC 4017 has inaccurate title.

*SuggestedRemedy*

Change title of RFC 4017 to "Extensible Authentication Protocol (EAP) Method Requirements for Wireless LANs".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 02 SC 2 P 3 L # 37  
O'HARA, ROBERT Individual

Comment Type T Comment Status D

RFC 4086 obsoleted RFC 1750 (it still has the same title).

*SuggestedRemedy*

Change RFC 1750 to RFC 4086.

Proposed Response Response Status W

PROPOSED ACCEPT. Include correct date in citation.

Cl 02 SC 2 P 3 L # 36  
O'HARA, ROBERT Individual

Comment Type G Comment Status D

Old citation for IEEE 802.1X dating from when it was a draft.

*SuggestedRemedy*

IEEE P802.1X-2004 citation should remove the "P" and change the name to the official name (no draft!): "IEEE Standard for Local and Metropolitan Area Networks: Port-Based Network Access Control".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 02 SC 2 P 3 L # 35  
O'HARA, ROBERT Individual

Comment Type G Comment Status D

Many of the RFCs cited here are in fact not IETF standards (nor are they even standards-track documents), but are informational documents, yet they are cited here as "normative" references.

*SuggestedRemedy*

Use the citation format from the RFC index, which has the standardization status as part of the citation.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 03 SC 3.10 P 5 L # 41  
O'HARA, ROBERT Individual

Comment Type E Comment Status D

Incorrect citation of IEEE 802.1X.

*SuggestedRemedy*

Replace with "IEEE 802.1X-2004."

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 03 SC 3.106 P 11 L # 42  
O'HARA, ROBERT Individual

Comment Type E Comment Status D

Incorrect citation of IEEE 802.1X.

*SuggestedRemedy*

Replace with "See IEEE 802.1X-2004."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 03 SC 3.107 P 11 L # 43  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Lack of parallel structure with 3.11.  
 SuggestedRemedy  
 Should have similar structure, such as: "The medium access control (MAC) address of the IEEE 802.1X Supplicant."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 03 SC 3.11 P 5 L # 44  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Awkward sentence structure.  
 SuggestedRemedy  
 Would be clearer as: "The medium access control (MAC) address of the IEEE 802.1X Authenticator."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 03 SC 3.116 P 12 L # 45  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Inconsistent definition. The synonym for "unicast frame" should be "directed frame" not "directed address".  
 SuggestedRemedy  
 Change "directed address" to "directed frame".  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.  
 Change 3.30 and 3.116 to "directed frame"  
 In 9.8, change "either directed or group-addressed" to "either individual or group-addressed".

CI 03 SC 3.19 P 6 L # 46  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 The name of the defined term is not in boldface.  
 SuggestedRemedy  
 Change formatting of "channel spacing" to boldface.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 03 SC 3.24 P 6 L # 47  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Remove the second "with" from the name of the defined term.  
 SuggestedRemedy  
 Change all instances that spell out the definition of CCMP to remove the second "with".  
 Proposed Response Response Status W  
 PROPOSED ACCEPT. Make the deletion in the following clauses:  
 3.24 in two places  
 3.79  
 3.95  
 4  
 5.2.3.2  
 A.4.4.1 PC34.1.2.1

CI 03 SC 3.26 P 6 L # 40  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Missing punctuation.  
 SuggestedRemedy  
 Add a space after "disclosure" and add a period at end of sentence.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 03 SC 3.69 P 9 L # 48  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status X  
 Too much detail.  
 SuggestedRemedy  
 No need to mention frame types when defining multicast. Remove all text after the first sentence of the definition.  
 Proposed Response Response Status W  
 Ivan Oakes to propose resolution.

CI 03 SC 3.72 P 9 L # 49  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Circular definition.  
 SuggestedRemedy  
 Don't use "pair" or "pairwise" when defining "pairwise". This definition avoids this issue: "Referring to, or an attribute of, two entities that are associated with each other, e.g., an access point (AP) and an associated station (STA), or two STAs in an independent basic service set (IBSS) network. This term is used to refer to a type of encryption key hierarchy pertaining to keys shared by only two entities."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 03 SC 3.8 P 5 L # 50  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Circular definition.  
 SuggestedRemedy  
 Remove the word "suite" from the definition, or define it.  
 Proposed Response Response Status W  
 Mike Moreton to propose resolution.

CI 03 SC 3.9 P 5 L # 51  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 Incorrect citation of IEEE 802.1X.  
 SuggestedRemedy  
 Replace with "IEEE 802.1X-2004."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 05 SC 5.6, a), 2), vi) P 36 L # 64  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type TR Comment Status X  
 TGM has removed the capability of 802.11 to support Action frames in State 1. This capability was added by TGh, and should remain in the standard. Yes, this is a unique capability, all the more reason to keep it, as there may be applications which use this capability. Now, and prior to the introduction of TGw all Action frames, whether sent in State 1 or State 3 are unprotected.  
 SuggestedRemedy  
 Change from vi) Action within an IBSS, action frames are Class 1. To vi) Spectrum Management Action  
 Proposed Response Response Status O

CI 05 SC 5.6, a), 2), vi) P 36 L # 54  
 PONNUSWAMY, SUBBURAJAN Individual  
 Comment Type TR Comment Status X  
 TGM has removed the capability of  
 SuggestedRemedy  
 Change from  
 Proposed Response Response Status O

CI 05 SC 5.7 P 38 L # 53  
O'HARA, ROBERT Individual

Comment Type E Comment Status X

It seems that the section heading for "Reference Model" was deleted between D3.0 and D4.0 -- it used to be at 5.9, but now the text and diagram are concatenated with section 5.7 entitled "Differences between ESS and IBSS LANs". I think the section heading should be restored (now it would be 5.8).

*SuggestedRemedy*

Insert the correct heading and section number, renumber subsequent sections.

Proposed Response Response Status O

CI 06 SC 6.2.1.1.1 P 49 L 1 # 2  
JAMES, DAVID V Individual

Comment Type TR Comment Status D

(These apply throughout; the page, sub-clause, and line numbers were put in to bypass the format checker and are only relevant for a small portion of this comment)

This document does not conform to the IEEE Style Manual.

A couple of examples:

- 1) List of Figures ==> List of figures
- 2) Figure 118 in TOF breaks across line
- 3) Redundant/confusing names:  
destination address, DA
- 4) Mbit/s ==> Mb/s
- 5) State machine on #811 not consistent with state machine notation in other 802 specifications

*SuggestedRemedy*

Conform to the IEEE Style Manual.

If necessary, please request assistance from the IEEE Editors.

Proposed Response Response Status W

PROPOSED ACCEPT. The Working Group editor is working with the IEEE-assigned project editor to ensure conformance with the IEEE Style Manual.

Change abbreviation for "megabits per second" to the correct spelling throughout (either Mbit/s or Mb/s).

There is no requirement for state machine format consistency between 802 documents.

CI 07 SC 7.1.3.1.9 P L # 17  
STEPHENS, ADRIAN P Individual

Comment Type E Comment Status D

"Only WEP is allowed as the cryptographic encapsulation algorithm for management frames of subtype Authentication." This statement doesn't relate to the interpretation of the Protected Frame Field.

*SuggestedRemedy*

Move to an appropriate section under the format of the authentication frame.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Delete the last sentence of the clause. Change "When the Protected Frame field is set to 1 in a data frame" to "When the Protected Frame field is set to 1".

CI 07 SC 7.3.2 P 80 L # 28  
O'HARA, ROBERT Individual

Comment Type T Comment Status D

As all bits in the Capability Information Field are now consumed, a new place to identify the use of new capabilities must be defined. An information element is the perfect place for this.

*SuggestedRemedy*

Add a new "Extended Capability Information Field" IE that is a bit field capable of extension to the full length of an IE.

Proposed Response Response Status W

PROPOSED ACCEPT. Incorporate text from 11/05-xxx from Kapil Sood.

CI 08 SC 8.1.3 P 113 L 1 # 74  
DHARANIPRAGADA, KALYAN R Individual

Comment Type G Comment Status X  
Usage of "a RSNA" and "an RSNA" is inconsistent

*SuggestedRemedy*

Use "a RSNA"

Proposed Response Response Status O

CI 08 SC 8.1.3 P 113 L 6 # 75  
 DHARANIPRAGADA, KALYAN R Individual  
 Comment Type G Comment Status X  
 words "to protect" are redundant  
 SuggestedRemedy  
 It programs the agreed-upon temporal keys and cipher suites into the MAC and invokes protection.  
 Proposed Response Response Status O

CI 08 SC 8.2.1.2 P L # 18  
 STEPHENS, ADRIAN P Individual  
 Comment Type E Comment Status D  
 Footnote to Figure 86 seems out of place.  
 SuggestedRemedy  
 If it's necessary to say this, put it in a section on document conventions.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.  
 This is not a necessary statement.  
 Delete the footnote.

CI 08 SC 8.3.2.4 P 129 L 1 # 77  
 DHARANIPRAGADA, KALYAN R Individual  
 Comment Type T Comment Status X  
 TKIP countermeasures optional/configurable?  
 SuggestedRemedy  
 Introduce dot11RSNATKIPCounterMeasures = TRUE (default) in dot11PrivacyTable  
 Proposed Response Response Status O

CI 08 SC 8.3.2.4 P 129 L 1 # 76  
 DHARANIPRAGADA, KALYAN R Individual  
 Comment Type T Comment Status X  
 The standard requires the rate of MIC failures < 2 per 60 seconds! i.e. STA/Aps detecting 2 MIC failures in 60s must disable all receptions using TKIP for 60s. In addition the PTK and GTK should be changed ( renegotiated) using a 4-way handshake. Can we have a MIB variable to configure the rate and set the default to 2/60  
 SuggestedRemedy  
 Introduce dot11RSNATKIPCounterMeasureRate = 2 (default) in dot11PrivacyTable  
 Proposed Response Response Status O

CI 08 SC 8.3.3.3 P 140 L # 73  
 SHVODIAN, WILLIAM M Individual  
 Comment Type E Comment Status X  
 Some of the figures are very clear visually like Figures 100 and 101. Others are quite blocky and poor quality, like figure 89, 94, 95, 98, 99, 102, 103, and 104. This draft would be easier to read and look more professional if all of the figures had the same level of high quality.  
 SuggestedRemedy  
 Improve the visual quality of the figures.  
 Proposed Response Response Status O

CI 08 SC 8.4.1.2.1 P 145 L # 30  
 O'HARA, ROBERT Individual  
 Comment Type E Comment Status D  
 The reference to section 5.5 is incorrect, after 5.5 was changed to 5.6.  
 SuggestedRemedy  
 change "5.5" to "5.6".  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 08 SC 8.5.1.2 P 156 L 2 # 29  
O'HARA, ROBERT Individual

Comment Type T Comment Status D

the formula  $PMK=L(PTK,0,256)$  is incorrect. The text is clearly stating that PMK is the first 256 bits of the AAA key.

SuggestedRemedy

Replace "PTK" with "AAA key".

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 08 SC 8.5.1.2 P 156 L 2 # 16  
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status D

(Submitted on behalf of Jesse Walker, TGi editor)  
Line 2 says: "PMK <-- L(PTK, 0, 256)"  
This was an editorial error with normative consequences.

SuggestedRemedy

Replace the quoted text with:  
PMK <-- L(AAA Key, 0, 256)

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 08 SC 8.5.7.2 P 188 L 37 # 1  
KARCZ, KEVIN J Individual

Comment Type E Comment Status D

EAPOL misspelled in definition of GTimeoutCtr as EAPIOL.

SuggestedRemedy

edit

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 10 SC 10.3.20.1.3 P 289 L # 52  
O'HARA, ROBERT Individual

Comment Type T Comment Status D

This section is about sending EAPOL frames, not Michael MIC failures. This comment was first entered in LB75, but I goofed in the section number (entered it as 10.3.20.1.1 instead of 10.3.20.1.3) but had the line number on the page correct. There were two places on the page that needed correction; only the first was done in D3.0. In LB76 I voted yes, but submitted this comment again with the corrected section number. I don't find it in the resolution spreadsheet, and believe it never was registered as a comment in LB76.

SuggestedRemedy

Change sentence to: This primitive is generated by the SME when the SME has an 802.1X EAPOL-Key frame to send

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 11 SC 11.1.3 P 308 L # 8  
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status D

"A STA may start its own BSS without first scanning for a BSS to join".  
One of the issues I have with the structure of the document is that it claims that the SME is outside the scope of the specification, and therefore doesn't have a section for the SME. However it also makes normative statements that only make sense as specification for an SME.  
This statement is an example of that, hopefully I'll notice and report a few more. Because control of sequencing of scanning/joining/starting is under control of the SME, this statement should read: "The SME of a STA may start its own BSS..."

SuggestedRemedy

Add a section containing statements for the SME and move the amended statement there.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Delete the sentence.

Cl 11 SC 11.1.3.2.1 P L # 10  
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status D

"In each BSS there shall be at least one STA&"

This is an example of another class of generic error that is, unfortunately, far too common in this document - wrong use of "shall".

"Shall" introduces a normative requirement on the implementer. In this example, shall cannot introduce a normative requirement on the implementer because the BSS consists of multiple STA from multiple implementers.

It should be possible to trace most "shall" statements to PICS entries.

SuggestedRemedy

I recommend that the document be scanned and each occurrence of "shall" (there are 2258 of them) be validated.

In this example, what it meant to say: "The procedures defined in this subclause ensure that in each BSS there is at least one STA&"

Proposed Response Response Status W

PROPOSED ACCEPT. The editor is to identify those uses of "shall" that are not normative and replace with descriptive language.

Cl 11 SC 11.2.1.1 P L # 11  
STEPHENS, ADRIAN P Individual

Comment Type T Comment Status D

How big is "ProbeDelay"? Answer: it's not specified.

This creates a problem because later amendments (e.g. 802.11n) may result in long sequences of frames that are not PHY compatible. The legacy system waits for a "ProbeDelay" for a valid legacy header. A protection solution for the new system is to ensure the transmission of a valid legacy frame every ProbeDelay - but without knowing what this value is, there is no way this can be achieved.

SuggestedRemedy

Recommend that ProbeDelay is given a value in this document. Recommend suitable value is largest 802.11e TXOP duration.

Proposed Response Response Status W

PROPOSED REJECT.

ProbeDelay is a parameter passed to the MLME by the SME. The value for this parameter is outside the scope of the standard.

Cl 11 SC 11.2.1.4 P L # 12  
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status D

"An AP shall have an aging function to delete pending traffic when it is buffered for an excessive time period."

I'm not sure this normative requirement is necessary. It is certainly not testable without defining what "excessive" means.

SuggestedRemedy

Recommend turning this into an informative note.

Alternatively define the ageing algorithm so that compliance can be tested.

Proposed Response Response Status W

PROPOSED ACCEPT.

"An AP can delete buffered frames for implementation dependent reasons, including the use of an aging function and availability of buffers."

Cl 11 SC 11.2.1.4 P L # 13  
STEPHENS, ADRIAN P Individual

Comment Type T Comment Status D

I wonder if it's worth adding a comment here on preserving ordering when moving frames resulting from an indication that a STA has changes power-saving state.

SuggestedRemedy

Add note something like: "An AP that moves frames to and from its buffer as learns that a STA has changed power-saving state should preserve the relative order of those frames."

Proposed Response Response Status W

PROPOSED REJECT.

Commenter to bring this comment again, if incorporation of text from 802.11e does not address this topic.

CI 11 SC 11.2.1.9 P L # 14  
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status D

"The AP shall have an aging function to delete buffered traffic when it has been buffered for an excessive period of time. That function shall be based on the ListenInterval parameter of the MLMEASSOCIATE request primitive of the STA for which the traffic is buffered."  
"... shall have a function..." "... shall be based on ...".  
Oh dear, oh dear, oh dear.

*SuggestedRemedy*

Either turn this into a recommendation, or provide enough specification that a compliant implementation can be constructed.

Proposed Response Response Status W

PROPOSED ACCEPT.

Delete the first two sentences of 11.2.1.9. Also, replace "The AP aging function" with "Any AP aging function" in the third sentence.

CI 11 SC 11.3 P 319 L # 31  
O'HARA, ROBERT Individual

Comment Type E Comment Status D

The reference to section 5.5 is incorrect, after 5.5 was changed to 5.6.

*SuggestedRemedy*

change "5.5" to "5.6".

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 11 SC 11.3 P 320 L # 25  
O'HARA, ROBERT Individual

Comment Type G Comment Status X

The current standard defines a number of values for result codes. Very few of these values have definitions for their use. Define how a STA is to respond upon receipt of particular values of the result code in a disassociation frame and when an AP is to use them.

*SuggestedRemedy*

Append the following subclauses after 11.3.4:

11.3.5 STA disassociation procedure

Upon receipt of a Disassociation frame, a STA shall operate as follows:

- a) The MLME shall issue an MLME-DISASSOCIATE.indication with the ReasonCode parameter set to the value of the Reason Code received in the Disassociation frame.
- b) If the Reason Code indicates a configuration or parameter mismatch as the cause of the disassociation, the STA shall not attempt to associate or reassociate with the AP sending the Disassociation frame, until the configuration or parameter mismatch has been corrected.
- c) If the Reason Code indicates the STA was disassociated for a reason other than configuration or parameter mismatch, the STA shall not attempt to associate or reassociate with the AP sending the Disassociation frame until it has attempted to association or reassociate with at least one other AP or a period of 2 seconds has elapsed.

11.3.6 AP disassociation procedure

Upon receipt of an MLME-DISASSOCIATE.request, an AP shall use the following procedure when disassociating an STA:

- a) The AP shall send a Disassociation frame to STA being disassociated.
- b) The AP shall indicate a specific reason for the disassociation in the Reason Code field of the Disassociation frame. If any Reason Code value other than the unspecified reason Reason Code from Table 19 of clause 7.4.1.7 is appropriate for indicating the reason for the disassociation, the AP shall use that Reason Code value. The use of the unspecified reason value shall be used to indicate the STA was disassociated for a reason unrelated to all defined Reason Code values.

Proposed Response Response Status O

Cl 11 SC 11.3.1 P 319 L # 21  
O'HARA, ROBERT Individual

Comment Type T Comment Status X

The current standard defines a number of values for status codes . Very few of these values have definitions for their use. Define how a STA is to respond upon receipt of particular values of status codes

*SuggestedRemedy*

Append the following text to clause 11.3.1 c):

The Status Code returned in the Association Response frame indicates the cause of the failed association attempt. Any misconfiguration or parameter mismatch, e.g., data rates required as Basic Rates that the STA does indicate as supported in the Supported Rates information element, shall be corrected before the STA attempts a subsequent association with the AP. If the Status Code indicates the association failed because of a reason that is not related to configuration, e.g., the AP is unable to support additional associations, the STA shall not attempt to associate with the same AP if other APs are available, until the STA has attempted to associate with at least one other AP or a period of 2 seconds has elapsed.

Proposed Response Response Status O

Cl 11 SC 11.3.2 P L # 15  
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status X

"The STA's SME shall delete any PTKSA&"

See also my earlier comment. We need to put this in a section containing normative requirements on the SME.

*SuggestedRemedy*

Add a section containing statements for the SME and move the statement there.  
Recommend scanning for SME and doing likewith with any other similar statements.

Proposed Response Response Status W

Need to discuss with Jesse Walker.

Cl 11 SC 11.3.2 P 319 L # 22  
O'HARA, ROBERT Individual

Comment Type T Comment Status X

The current standard defines a number of values for status codes . Very few of these values have definitions for their use. Define how a STA is to respond upon receipt of particular values of status codes.

*SuggestedRemedy*

Append the following text after 11.3.2 c):

d) When the status value of the association is not successful, the AP shall indicate a specific reason for the failure to associate in the Status Code of the Association Response frame. If any Status Code value from Table 20 in clause 7.3.1.9 is an appropriate reason for the failure to associate, the AP shall use that Status Code value. The use of the unspecified reason value of the Status Code shall be used to indicate the association failed for a reason that is unrelated to every other defined Status Code value.

Proposed Response Response Status O

Cl 11 SC 11.3.3 P 320 L # 23  
O'HARA, ROBERT Individual

Comment Type T Comment Status X

The current standard defines a number of values for status codes. Very few of these values have definitions for their use. Define how a STA is to respond upon receipt of particular values of the status code.

*SuggestedRemedy*

Append the following text to 11.3.3 c):

The Status Code returned in the Reassociation Response frame indicates the cause of the failed reassociation attempt. Any misconfiguration or parameter mismatch, e.g., data rates required as Basic Rates that the STA does indicate as supported in the Supported Rates information element, shall be corrected before the STA attempts a subsequent reassociation with the AP. If the Status Code indicates the reassociation failed because of a reason that is not related to configuration, e.g., the AP is unable to support additional associations, the STA shall not attempt to reassociate with the same AP if other APs are available, until the STA has attempted to reassociate with at least one other AP or a period of 2 seconds has elapsed.

Proposed Response Response Status O

CI 11 SC 11.3.4 P 320 L # 24  
O'HARA, ROBERT Individual

Comment Type T Comment Status X

The current standard defines a number of values for status codes. Very few of these values have definitions for their use. Define how a STA is to respond upon receipt of particular values of the status code.

*SuggestedRemedy*

Append the following text after 11.3.4 c):

d) When the status value of the reassociation is not successful, the AP shall indicate a specific reason for the failure to reassociate in the Status Code of the Reassociation Response frame. If any Status Code value other than the unspecified reason Status Code value from Table 20 in clause 7.3.1.9 is an appropriate reason for the failure to associate, the AP shall use that Status Code value. The use of the unspecified reason value of the Status Code shall be used to indicate the reassociation failed for a reason that is unrelated to every other defined Status Code value.

Proposed Response Response Status O

CI 11 SC 11.4 P 320 L # 32  
O'HARA, ROBERT Individual

Comment Type E Comment Status X

The reference to section 5.5 is incorrect, after 5.5 was changed to 5.6.

*SuggestedRemedy*

change "5.5" to "5.6".

Proposed Response Response Status O

CI 11 SC 11.5.1 P L # 67  
MYLES, ANDREW F Individual

Comment Type TR Comment Status X

The text defines association based on transmit power capability  
However, no use has ever been demonstrated for this feature and few if any implementations provide it for any useful purpose

*SuggestedRemedy*

Delete all text related to association based on transmit power capability

Proposed Response Response Status O

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

CI 11 SC 11.5.3 P L # 68  
MYLES, ANDREW F Individual

Comment Type TR Comment Status X

The text defines adaption of transmit power  
However, no use has ever been demonstrated for this feature in relation to DFS and few, if any, implementations provide it for any useful purpose

*SuggestedRemedy*

Delete all text related to adaption of transmit power, and allow 11k and 11v to define new more appropriate features

Proposed Response Response Status O

CI 11 SC 11.6.1 P L # 69  
MYLES, ANDREW F Individual

Comment Type TR Comment Status X

The text defines association based on supported channels  
However, no use has ever been demonstrated for this feature in relation to DFS and few if any implementations provide it for any useful purpose

*SuggestedRemedy*

Delete all test related to association based on supported channels

Proposed Response Response Status O

CI 11 SC 11.6.3 P L # 66  
MYLES, ANDREW F Individual

Comment Type TR Comment Status X

The text references ETSI EN 301 893.  
This reference is European focused and incorrect

*SuggestedRemedy*

Remove all references to ETSI EN 301 893

Proposed Response Response Status O

CI 11  
SC 11.6.3

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11/16/2005 8:58:02 AM

Bob O'Hara, Cisco Systems

**Cl 11**    **SC 11.6.6**                    **P**                    **L**                    # **70**  
 MYLES, ANDREW F                    Individual

**Comment Type**    **TR**                    **Comment Status**    **X**

The text defines a complex measurement request and response mechanism. The mechanism is not required for DFS or TPC purposes. It is clearly not sufficient for the measurement purposes given that 11k is currently redefining it

**SuggestedRemedy**  
 Delete all text related to measurement request and response, and allow 11k to define more appropriate features

**Proposed Response**                    **Response Status**    **O**

**Cl 11**    **SC 11.6.7.2**                    **P**                    **L**                    # **65**  
 MYLES, ANDREW F                    Individual

**Comment Type**    **TR**                    **Comment Status**    **X**

The DFS channel changing facilities for IBSS represent a very complex set protocols that have little value in the vast majority of cases and will not work in many circumstances. There is no know implementation of this feature.

**SuggestedRemedy**  
 Delete all text related to selecting a new channel in an IBSS

**Proposed Response**                    **Response Status**    **O**

**Cl 17**    **SC 17.1.2**                    **P 437**                    **L 1**                    # **4**  
 LANDT, JEREMY A                    Individual

**Comment Type**    **G**                    **Comment Status**    **X**

There is no section 5.9 as referenced.

There are two page 437s.

**SuggestedRemedy**  
 Replace '5.9' with '5.7' or remove the reference, correct page numbering

**Proposed Response**                    **Response Status**    **O**

**Cl A**    **SC A.4.4.1**                    **P 569**                    **L**                    # **33**  
 O'HARA, ROBERT                    Individual

**Comment Type**    **E**                    **Comment Status**    **X**

In item PC1.1 The reference to section 5.5 is incorrect, after 5.5 was changed to 5.6.

**SuggestedRemedy**  
 change "5.5" to "5.6".

**Proposed Response**                    **Response Status**    **O**

**Cl A**    **SC A.4.4.1**                    **P 571**                    **L**                    # **34**  
 O'HARA, ROBERT                    Individual

**Comment Type**    **G**                    **Comment Status**    **X**

In item PC14.1, The reference to section 5.5 is incorrect, after 5.5 was changed to 5.6.

**SuggestedRemedy**  
 change "5.5" to "5.6".

**Proposed Response**                    **Response Status**    **O**

**Cl H**    **SC H.6.3**                    **P 950**                    **L**                    # **27**  
 O'HARA, ROBERT                    Individual

**Comment Type**    **T**                    **Comment Status**    **X**

Table H.7 lists some vectors for testing TKIP encryption. It would be nice to also list the source and destination MAC addresses, so that an implementor could walk through the derivation of the the Phase 1 and Phase 2 outputs.

The MAC addresses are recoverable from the plaintext message, if we want to add them to the table.

**SuggestedRemedy**  
 Add the MAC addresses to the table.

**Proposed Response**                    **Response Status**    **O**

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*Cl* **H**      *SC* **H.7.1.1**                      *P* **954**                      *L*                      # **26**  
 O'HARA, ROBERT                                      Individual  
*Comment Type*    **E**                      *Comment Status*    **X**  
     The caption for Table H.14 is incorrect.  
*SuggestedRemedy*  
     change the caption to "Sample derived CCMP temporal key (TK)"  
*Proposed Response*                      *Response Status*    **O**

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*Cl* **N**      *SC* **N.1**                                      *P*                      *L*                      # **5**  
 STEPHENS, ADRIAN P                                      Individual  
*Comment Type*    **E**                      *Comment Status*    **X**  
     The architecture picture is confusing because it has the same SAP at multiple layers. Also the multiplicities of the entities are not clear.  
*SuggestedRemedy*  
     Recommend drawing with a wide portal layer at the top below which are multiple portals and multiple AP stacks. This emphasises the role of the DS in distribution and positions the DS-SAPs at the same level.  
*Proposed Response*                      *Response Status*    **O**

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*Cl* **N**      *SC* **N.1**                                      *P*                      *L*                      # **6**  
 STEPHENS, ADRIAN P                                      Individual  
*Comment Type*    **E**                      *Comment Status*    **X**  
     The DS-STA-NOTIFY primitive is probably best viewed as travelling "up the stack" from the AP to the DS.  
*SuggestedRemedy*  
     Change it from a "request" to an "indication"  
*Proposed Response*                      *Response Status*    **O**