Cl **00** *SC* *P* *L* # 103
ENGWER, DARWIN A Individual

Comment Type **GR** *Comment Status* **A**

the introduction of hte 802.11e material introduced several inconsistencies in the draft standard

SuggestedRemedy

resolve the inconsistencies

Response *Response Status* **U**

ACCEPT.

The editor is instructed to comb the document for the term "amendment" and correct it wherever it is found. The editor is also instructed to replace the word "roam" with "transition" wherever it is found.

The Balloter is warned that the suggested remedy is required to provide sufficient detail to allow the ballot resolution committee to determine what is necessary to cause the balloter to change their vote from "no" to "yes". Failure to do so may cause the comment to be considered invalid.

Editor included in draft 7.0 by searching for amendment. Replaced with either revision or standard, as appropirate.

Cl **00** *SC* *P* *L* # 135
STEPHENS, ADRIAN P Individual

Comment Type **E** *Comment Status* **R**

There's a lot of variability in how particular diagramming techniques are used. For example the MSCs are draw with varying fonts, symbol sizes, arrow sizes, line weights and varying degrees of informal syntax about what sits at the top of a lineline.

SuggestedRemedy

Ask the editor to review these diagrams and adopt a consistant appearance.

Response *Response Status* **C**

REJECT.

Cl **00** *SC* **0** *P* *L* # 73
CHAPLIN, CLINT F Individual

Comment Type **ER** *Comment Status* **R**

11e made a big mistake by defining the notion of a QSTA being somehow different than a STA. A STA is a STA. Some STAs are capable of additional functions, and advertises those additional capabilities. This change unfortunately set a precedent for later amendments - 11r D1.0 defined a TSTA and TAP, and 11n D1.0 defined a HT-STA and HT-AP. Don't set the precedent for future amendments to do this again.

SuggestedRemedy

Change QSTA to STA throughout. Change QAP to AP throughout. Change QBSS to BSS throughout. Change QIBSS to IBSS throughout. Delete definitions 3.118, 3.119, 3.121, and 3.122. Delete acronyms QAP, QBSS, QIBSS, and QSTA.

Response *Response Status* **U**

REJECT.

The change suggested by the commenter is not a simple editorial substitution. Such a substitution would result in substantial ambiguity in the functional description of the requirements for compliant operation of an implementation.

Cl **00** *SC* **0** *P* *L* # 1
COORDINATION, EDITORIAL

Comment Type **ER** *Comment Status* **A**

Meets editorial requirements. -M. Fisher

SuggestedRemedy

Response *Response Status* **U**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **00**
SC **0**

Page 1 of 40
6/19/2006 1:39:04

Submission **Bob O'Hara, Cisco Systems**

Cl **00**   *SC* **0**   *P* **1**   *L* **14**   # 72

CHAPLIN, CLINT F   Individual

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

Title of document doesn't match PAR

SuggestedRemedy

Change to "Local and Metropolitan networks"

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 in front matter and in title before clause 1.0.

Cl **02**   *SC* **2**   *P*   *L*   # 35

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status* **A**

IETF RFC 2202 referenced by 1N7903 is not an IETF formal standard but only an
informative document, so it should not be cited in Clause 2.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. RFC 2202 is an informative
reference, so should be moved to Annex E.

Response   *Response Status* **C**

ACCEPT.

Remedy already implemented in D6.0. No further editorial action required.

Cl **02**   *SC* **2**   *P*   *L*   # 36

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status* **A**

IETF RFC 3748 referenced by 1N7903 is not an IETF formal standard but only an
informative document, so it can't provide a guarantee for the security technology

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. RFC 3748 is an informative
reference, so should be moved to Annex E.

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 by moving from normative references to Annex E.

Cl **02**   *SC* **2**   *P*   *L*   # 34

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status* **A**

IETF RFC 1750, which is referenced by 1N7903, is not an IETF formal standard and only
an informative document, so it can not provide a guarantee for the security technology.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. RFC 1750 is an informative
reference, so should be moved to Annex E. The reference should be updated to RFC 4086
in the process, as RFC 4086 has superceded RFC 1750 since 802.11i was issued

Response   *Response Status* **C**

ACCEPT.

Already implemented in D6.0. No further editorial action required.

Cl **02**   *SC* **2**   *P*   *L*   # 40

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status* **A**

There is a mistake when 1N7903 makes reference of IEEE 802.1X. The reference should
be the latest formal edition IEEE Std 802.1X"-2004, not the draft IEEE P802.1X"-REV

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. The reference should be to IEEE
802.1X-2004. Make the same change throughout the document

Response   *Response Status* **C**

ACCEPT.

Already implemnted in D6.0. No further editorial action required.

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

Cl **02**
SC **2**

Page 2 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **02**   *SC* **2**   *P* **5**   *L* **22**   # 28

FISCHER, MICHAEL A   Individual

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

Sponsor ballot comment 136 was accepted, moving the bibliographic reference to the MSC standard from Annex E to Clause 2. However, the sited document, Z.120 (1999) has been superseded by a newer (2004) MSC specification at ITU-T.

SuggestedRemedy

Update the Z.120 entry in clause 2 to refer to "Z.120 (04/04)"

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in Clause 2.

Cl **03**   *SC* **3.135**   *P*   *L*   # 107

STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **A**

"For a non-access point (non-AP) QSTA, there can be at most one SP active at any time." I believe this statement to be both wrong and unnecessary. It is wrong because there is nothing to stop the AP assigning overlapping SP to different TS.

SuggestedRemedy

Remove the quoted sentence.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 3.133 (service period).

Cl **03**   *SC* **3.149**   *P*   *L*   # 108

STEPHENS, ADRIAN P   Individual

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

"However, such classification is beyond the scope of this amendment." - This is not an amendment.

SuggestedRemedy

There are 19 instances of this word in the document. Replace them with "standard".

Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Duplicate. See editorial resolution in comment #103.

Cl **03**   *SC* **3.15**   *P* **7**   *L* **13**   # 101

ENGWER, DARWIN A   Individual

Comment Type   **TR**   *Comment Status*   **R**

The basic service set basic rate set text should not be deleted!! it is referenced again as soon as later in clause 3 and at other places in the standard as well.

SuggestedRemedy

Restore the deleted text and fix the definition at the same time.

Response   *Response Status*   **U**

REJECT.

Continue the replacement of "BSS basic rate set" with "contained in the BSSBasicRateSet parameter" for all remaing occurrences of BSS basic rate set.

Delete the definition of "extended rate set" and modfy 11.1.4 by changing "Rate Set and Extended Rate Set" at the end of the last sentence to be "Supported Rates information element and Extended Supported Rates information element".

Delete the definition of "station basic rate" as those words occur only in the definitions.

The editor search draft 6.0 for BSS Basic Rate Set and basic service set basic rate set and base service set (BSS) basic rate set. None occur except in 3.53 (extended rate set) and 3.138 (station basic rate) which are to be deleted by this same action. No action on this part.

A less precise phrase, "basic rate set," was found in the document in 9.6 (twice), A.4.4, and Annex C. The editor included changes in draft 7.0 in 9.6 (twice) and A.4.4 to use the more precise wording "contained in the BSSBasicRateSet parameter".

The editor included in draft 7.0 in 11.1.4 to avoid extended rate set.

The editor deleted definitions in draft 7.0 from 3.53 (extended rate set) and 3.138 (station basic rate).

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

Cl **03**
SC **3.15**

Page 3 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **03**   *SC* **3.161**   *P*   *L*   # 109
STEPHENS, ADRIAN P   Individual

Comment Type   **E**   *Comment Status*   **A**
    "recipien address"

SuggestedRemedy
    replace with "recipient address". Recommend doing a spell check of the whole document.

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

    Editor included in draft 7.0 in 3.159 (unicast).

Cl **03**   *SC* **3.162**   *P*   *L*   # 110
STEPHENS, ADRIAN P   Individual

Comment Type   **E**   *Comment Status*   **A**
    "Syn:" is not defined anywhere

SuggestedRemedy
    Replace with "Synonym:"

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

    Editor included in draft 7.0 in 3.160 (unicast address).

Cl **03**   *SC* **3.36**   *P*   *L*   # 105
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **A**
    I'm not sure the definition of delivery-enabled access category is correct. It implies that the AP must use EDCA, while I believe the AP is not constrained as to which channel access method to use to send the data.

SuggestedRemedy
    Replace with: "delivery-enabled access category (AC): A quality of service (QoS) access point (QAP) AC where the QAP delivers traffic from the AC to a non-access point (non-AP) QoS station (QSTA) in an unscheduled service period (SP) triggered by the station (STA)."

Response   *Response Status*   **C**
    ACCEPT IN PRINCIPLE.

    The comment pointed out a problem with the definintion. The reasoning of the commenter is not accepted. But, the definition does need to be corrected to remove a description of the funcitonal behavior from the definition.

    Replace with: "delivery-enabled access category (AC): A quality of service (QoS) access point (QAP) AC used for the delivery of traffic to a non-access point (non-AP) QoS station (QSTA) in an unscheduled service period (SP) triggered by the station (STA)."

    Editor included in draft 7.0 in 3.34.

Cl **03**   *SC* **3.38**   *P*   *L*   # 106
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **R**
    The definition of direct link implies that frames may be exchanged through the AP. Actually it is only MSDUs that are exchanged through the AP.

SuggestedRemedy
    Replace with: "direct link: A unidirectional link from one non-access point (non-AP) quality of service (QoS) station (QSTA) to another non-AP QSTA operating in the same infrastructure QoS basic service set (QBSS) that does not pass through a QoS access point (QAP). Once a direct link has been set up, all Data MPDUs sent from the first STA to the second STA are transmitted directly."

Response   *Response Status*   **C**
    REJECT.

    The normative text provided is inconsistent with the DLS handshake protocol in clause 11.7.

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

Cl **03**
SC **3.38**

Page 4 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **03**	*SC* **3.59**	*P* **10**	*L* **10**	*#* 102

ENGWER, DARWIN A   Individual

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

Fragmentation is defined within 802.11, but here in clause the 3 the term should be related back to the appropriate guiding term in the normative reference document ISO 7498-1.

SuggestedRemedy

Change "partitioning" to "segmenting" (and potentially cite the reference to ISO 7498-1 clause 5.8.1.9).

Response   *Response Status*   **U**

ACCEPT.

Editor to change "partitioning" to "segmenting" and add an appropriate reference to ISO 7498-1.

Editor included in draft 7.0 in 3.57.

Cl **03**	*SC* **3.94**	*P*	*L*	*#* 41

O'HARA, ROBERT   Individual

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

The article of "a RSNA" is inconsistent with the later description "an RSNA"

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. This should be "an RSNA". Make the same change in the first bullet in 8.1

Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Editor included in draft 7.0 in 3.125 (robust security network association). The bullet points in 8.1 are correct in draft 6.0.

Cl **03**	*SC* **3.98**	*P* **12**	*L* **52**	*#* 75

CHAPLIN, CLINT F   Individual

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

(IEEE 802.11 TGr LB82 Comment 77) PMK is not derived from an EAP method. MSK is derived from an EAP method. Suggest change. (see next column).

SuggestedRemedy

"The PMK may be derived from a key generated by an Extensible Authentication Protocol (EAP) method."

Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

Insert "a key generated by" between "from" and "an Extensible".

Editor included in draft 7.0 in 3.96.

Cl **04**	*SC* **4**	*P* **19**	*L* **26**	*#* 70

CHAPLIN, CLINT F   Individual

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

"APSD QSTA" is a combination of two acronyms, both defined here

SuggestedRemedy

Drop this extraneous acronym definition

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in Clause 4.

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

Cl **04**
SC **4**

Page 5 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **05**   *SC* **5.4.3.3**   *P* **51**   *L* **52**   # 111
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **R**

Footnote 16 is unnecesary and unwise. It highlights that ARC4 is licensed, and who is the license holder. However I do not believe that the IEEE should indicate whether it believes any part of the Standard infringes on the IP of any specific entity. As such it is offering a legal opinion. There are many other places where this could also apply, thereby making its treatment of RSA privileged.

SuggestedRemedy

Remove the footnote.

Response   *Response Status*   **C**

REJECT.

The comment is beyond the scope of the current ballot. The comment will be forwarded to the working group for consideration in a future revision of the standard.

Cl **05**   *SC* **5.6**   *P* **44**   *L* **50**   # 76
CHAPLIN, CLINT F   Individual

Comment Type   **TR**   *Comment Status*   **R**

(IEEE 802.11 TGr LB82 Comment 376) This is a remnant. There should be no shalls in this section since there is no PICs for it.

SuggestedRemedy

change "shall" to must.

Response   *Response Status*   **U**

REJECT.

The normative statements are needed to complete the definition of the MAC. They are inappropriate in clause 5 and are moved to clause 11.

Move clause 5.6 to become clause 11.3. Move the current 11.3 in a level under the text moved from 5.6, becoming a new 11.3.1. Also move 11.8 (Association . . .) in a level and also under the new 11.3, as 11.3.2.

Editor included in draft 7.0 by moving 5.6, renumbering 11.3, and moving 11.8. References to 5.6, 11.3, and 11.8 were searched and updated.

Cl **06**   *SC* **6.1.1.2**   *P*   *L*   # 112
STEPHENS, ADRIAN P   Individual

Comment Type   **ER**   *Comment Status*   **R**

It is not clear what is new or changed in this subclause. The gutter marking indicates that it is all changed. However there are strikeouts and underlines within the section, which do not correspond to the gutter marking.

SuggestedRemedy

Please show changes from previous version with underlining or strikeout consistently, or define an unambiguous convention through editorial notes.

Response   *Response Status*   **U**

REJECT.

This was explained in an editor note in draft 6.0.

Cl **06**   *SC* **6.1.2**   *P*   *L*   # 43
O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

The security services provided by WEP, TKIP, and CCMP in IEEE 802.11 are as follows: a) Confidentiality; b) Authentication; and c) Access control in conjunction with layer management. This description is not correct. Shared Key Authentication based on WEP could not provide secure access control for network, and WEP privacy mechanism could not protect data either. This kind of description is incorrect and misleading.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for its comments. We propose resolving this by deleting "Authentication, and c)" We will make this change in IEEE 802.11REV-ma

Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Se the resolution to comment #42.

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

Cl **06**
SC **6.1.2**

Page 6 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **06**	*SC* **6.1.2**	*P*	*L*	# 42

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

Security services in IEEE 802.11 are provided by the authentication service and the WEP, TKIP, and CCMP mechanisms. It is not correct. Shared Key Authentication could not supply secure access control for network, and WEP privacy mechanism could not protect data either. This kind of description is incorrect and misleading.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for its comments. We propose resolving this by deleting the words "the authentication service and"

Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Delete the word "WEP" in all occurrences in clause 6.1.2 and correct puntcuation after deletions.

Add the following as a separate paragraph after the last sentence in 6.1.2:
"The use of WEP for confidentiality, authentication, or access control is deprecated. The WEP algorithm is unsuitable for the purposes of this standard."

Also, in 3.167 (WEP definition), replace "optional" with "deprecated".

Editor included in draft 7.0 in 3.165 and 6.1.2.

Cl **06**	*SC* **6.2.1.3**	*P* **62**	*L* **5**	# 98

ENGWER, DARWIN A   Individual

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

Further to comment #141 on the previous ballot, it is not clear why this primitive exists in its current form. If generation of MA-UNITDATA-STATUS.indication relates to a MA-UNITDATA.request then it should be a .confirm primitive.

Note that the mapping between corresponding .request and .confirm primitives can be asynchronous. That is there is a one-to-one mapping between .request and .confirm primitives, but they are not necessarily synchronous (e.g. an API implemented to be comformant with the SAP specification may employ delayed call back functions).

SuggestedRemedy

Change MA-UNITDATA-STATUS.indication primitive to MA-UNITDATA.confirm.

Response   *Response Status*   **U**

ACCEPT.

Editor to change all occurrences in the draft.

Editor included in draft 7.0 in 6.2.1, 6.2.1.1.4, 6.2.1.3, 6.2.1.3.2, 6.2.1.3.3, 8.2.1.3, 8.7.1, 8.7.2, 8.7.2.1.

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

Cl **06**
SC **6.2.1.3**

Page 7 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

_Cl_ **06**	_SC_ **6.2.1.3.2**	_P_ **62**	_L_ **29**	# 19

FISCHER, MICHAEL A   Individual

Comment Type   **GR**   _Comment Status_   **A**

There are several transmission status values that are useless within the scope of the cases that an MA-UNITDATA-STATUS.indication is stated to be generated. In 6.2.1.1.4 it states "On receipt of this primitive, the MAC sublayer entity determines whether the request can be fulfilled according to the requested parameters. A request that cannot be fulfilled according to the requested parameters is discarded, and this action is indicated to the LLC sublayer entity using an MA-UNITDATASTATUS.indication primitive primitive that describes why the MAC was unable to fulfill the request...." This pertains to transmission status values (c), (d), (e), (f), (g), (h), (j), and (k) -- each of which indicates a failure of a request that cannot be fulfilled according to the requested parameters. In 6.2.1.1.4, the text continues "...If the request can be fulfilled according to the requested parameters, the MAC sublayer entity appends all MAC specified fields (including DA, SA, FCS, and all fields that are unique to IEEE 802.11) passes the properly formatted frame to the lower layers for transfer to a peer MAC sublayer entity or entities (see 6.1.4), and indicates this action to the LLC sublayer entity using an MA-UNITDATA-STATUS.indication primitive with transmission status set to Successful." This pertains to transmission status value (a). There are no defined cases where transmission status values (b), (i), (l), or (m) are appropriate. Because 6.2.1.1.4 provides for generation of MA-UNITDATA-STATUS with transmission status other than "Successful" (a) prior to the appending of "all MAC specified fields..." it is clear that this reporting of non-successful transmission status values occurs prior to any attempt to transmit the requested MSDU, whereas transmission status values (b), (i), (l), and (m) can only be determined after said transmission has been attempted (or at least the attempt initiated in the case of the timeouts). However, 6.2.1.1.4 also requires that all MA-UNITDATA.request primitives making a request that can be met using the requested parameters generate an MA-UNITDATA-STATUS.indication with transmission status set to "Successful" (a). There are NO references to MA-UNITDATA-STATUS.indication in other clauses of this draft that provide for reporting of any of transmission status values (b), (i), (l), or (m); and NO references that indicate that more than one MA-UNITDATA-STATUS.indication may be generated pursuant to a single MA-UNITDATA.request.

SuggestedRemedy

Remove transmission status values (b), (i), (l), and (m), re-designating the list elements to reuse the omitted, intervening letters.   Acceptable alternative, at least for the (b) and (i), which were present in 8802-11 (1999) and 802.11-1999 (R2003) -- include a statement to the effect that "Reporting of transmission status values (b), (i), (l), and (m) is deprecated, because these status values are not meaningful in the cases that MA-UNITDATA-STATUS.indication primitives are generated."

Response   _Response Status_   **U**

ACCEPT.

Editor included in draft 7.0 by removing the cited list elements in 6.2.1.3.2.

_Cl_ **07**	_SC_ **7.1.3.1.2**	_P_ **67**	_L_	# 2

ADACHI, DR TOMOKO   Individual

Comment Type   **E**   _Comment Status_   **A**

B7 is defined as the QoS subfield. But the same name is used in Capability Information and it is confusing.

SuggestedRemedy

For example, change the name of B7 to QoS subtype. This is because it is also used in clause 6.1.1.1.1.

Response   _Response Status_   **C**

ACCEPT IN PRINCIPLE.

There are three occurrences of an unqualified usage of "QoS subfield". These will be modified to add "of the Subtype field" to remove any ambiguity. They occur in 7.1.3.4.1, 7.1.3.5, and 9.2.9.

Editor included in draft 7.0 in 7.1.3.4.1, 7.1.3.5, and 9.2.9.

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

_Cl_ **07**
_SC_ **7.1.3.1.2**

Page 8 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.1.3.1.3**   *P* **69**   *L* **6**   # 152
ENGWER, DARWIN A   Individual

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

After the 802.11e merge the text for the To DS and From DS clauses is more confusing than ever. The text in Table 2 is now also incorrect.

SuggestedRemedy

Replace the To DS and From DS bit designations and definitions with a two bit field, the meaning of which is defined by Table 2.

Delete all the existing text in clauses 7.1.3.1.3 and 7.1.3.1.4 except the sentence that reads "The permitted bit combinations and their meanings are given in Table 2."

Correct the descriptions in Table 2 as follows:

To/From:

00: Data frame direct from one STA to another STA within the same IBSS, or a data frame direct from one non-AP QSTA to another non-AP QSTA within the same QBSS, as well as all management and control frames.

10: Data frame destined for the DS or being sent by a STA associated with an AP to the Port Access Entity in that AP.

01: Data frame exiting the DS or being sent by the Port Access Entity in an AP.

11: Data frame using the four-address wireless distribution system (WDS) format. This standard does not define procedures for using this combination of field values.

Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

Delete clause 7.1.3.1.4 and all the text in 7.1.3.1.3. Retitle 7.1.3.1.3 as "ToDS and FromDS fields".

As the only sentence in this subclause, insert "The meaning of the combinations of values for the ToDS and FromDS fields are shown in Table 2."

Insert the table as described in the suggested remedy.

Editor included in draft 7.0 in 7.1.3.1.4, including modifying Table 2 entires for To/From 10 and 01.

Cl **07**   *SC* **7.1.3.3.3**   *P*   *L*   # 113
STEPHENS, ADRIAN P   Individual

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

There's an example of "may only" here and 5 others in the document. The normative power of this phrase is ambiguous as it is intended to be a strict prohibition, but it is achieved using "may" language. What is intended is that rather than x may only y, x shall not (not y). The style guide doesn't help us here.

SuggestedRemedy

In this case repplace with "A wildcard BSSID shall not be used in the BSSID field of a frame except for management frames of subtype probe request", with similar rewording for the other cases.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 7.1.3.3.3. The commenter did not provide any other locations.

The editor also changed 8.4.4, 9.13, and Annex D (dot11AssociateinNQBSS and dot11DiversitySelectionRx).

Cl **07**   *SC* **7.1.3.4**   *P*   *L*   # 114
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **R**

"Sequence control field is not present in control frames." This statement, while true, is not necessary. The other fields don't have a description of which packet types they are present in.

SuggestedRemedy

Remove the quoted sentence here and the matching statement in 7.1.3.4.1.

Response   *Response Status*   **C**

REJECT.

It is believed that the statements add clarity to the specification.

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

Cl **07**
SC **7.1.3.4**

Page 9 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.1.3.5.1**   *P*   *L*   # 115
STEPHENS, ADRIAN P   Individual

Comment Type   **E**   *Comment Status*   **A**
Footnote 18 is a statement of the obvious.

SuggestedRemedy
Remove it.

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

Editor included in draft 7.0 in 7.1.3.5.1.

Cl **07**   *SC* **7.1.3.5.7**   *P* **76**   *L*   # 3
ADACHI, DR TOMOKO   Individual

Comment Type   **E**   *Comment Status*   **A**
There is misspelling in B10-11 of Figure 22.

SuggestedRemedy
Correct "Buferred" to "Buffered".

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

Editor included in draft 7.0 in 7.1.3.5.7, Figure 22.

Cl **07**   *SC* **7.2.2**   *P* **84**   *L* **84**   # 153
ENGWER, DARWIN A   Individual

Comment Type   **TR**   *Comment Status*   **A**
The information in the description column is wrong.

SuggestedRemedy
Remove the description column. This incorrect info was added by the 802.11e merge and is an incorrect restatement of the material in Table 2 (clause 7.1.3.1.3).

Response   *Response Status*   **U**
ACCEPT.

Editor included in draft 7.0 in 7.2.2, Table 7.

Cl **07**   *SC* **7.2.3.4**   *P* **89**   *L* **36**   # 78
CHAPLIN, CLINT F   Individual

Comment Type   **TR**   *Comment Status*   **R**
(IEEE 802.11 TGr LB82 Comment 449) Definition of QOS Capablity IE in setcion 7.3.2.20 limits its use here.

SuggestedRemedy
Update the defination of QOS Capablity IE in section 7.3.2.20 to allow its use here.

Response   *Response Status*   **U**
REJECT.

7.3.2.20 does not describe the use of the QoS Capability IE.

Cl **07**   *SC* **7.2.3.4**   *P* **89**   *L* **36**   # 77
CHAPLIN, CLINT F   Individual

Comment Type   **TR**   *Comment Status*   **A**
(IEEE 802.11 TGr LB82 Comment 447, 448, 450)   The third column in the table corresponding to "QoS Capability" lacks any text   Seems that there is no descriptive text now   There is no description for the QoS Capability information element

SuggestedRemedy
Add description text

Response   *Response Status*   **U**
ACCEPT.

Add "The QoS Capability element
is present when dot11Qos-OptionImplemented is true" in the Notes column for the QoS Capability information element.

Editor included in draft 7.0 in 7.2.3.4, Table 10.

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

Cl **07**
SC **7.2.3.4**

Page 10 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.2.3.6**   *P* **90**   *L* **41**   # 79
CHAPLIN, CLINT F   Individual

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

(IEEE 802.11 TGr LB82 Comment 496, 497, 498) The third column in the table corresponding to "QoS Capability" lacks any text Seems that there is no descriptive text now There is no description for the QoS Capability information element

SuggestedRemedy

Add description text

Response   *Response Status*   **U**

ACCEPT.

Add "The QoS Capability element
is present when dot11Qos-OptionImplemented is true" in the Notes column for the QoS Capability information element.

Editor included in draft 7.0 in 7.2.3.6, Table 12.

Cl **07**   *SC* **7.3.1.11**   *P* **103**   *L*   # 147
STEPHENS, ADRIAN P   Individual

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

(Comment on behalf of Emily Qi)

Table 24 does not define a vendor-specific action catory. It is reasonable for vendors to define vendor-specific signalling, but at the moment, this is only present appended to existing management action frames - each of which has a normative effect. What is necessary is a vendor-specific frame that has no defined normative effect. This can be achieved by defining a vendor-specific management action category, with some standardised syntax relating to OUI within the frame.

SuggestedRemedy

Add "Vendor Specific" in Table 24 and assign it a code, or ask the ANA to assign a code as appropriate. It is suggested that the OUI follow immediately after the category field within the action field, the remainder of the field being vendor-defined. Add new subclause to 7.4 defining vendor-specific management action details. (Emily Qi volunteers to provide normative text consistent with this recommended change if so approved).

Response   *Response Status*   **U**

ACCEPT.

Apply the changes cited in document 6/773r0.

Editor included in draft 7.0 in 7.4 and new section 7.4.5.

Cl **07**   *SC* **7.3.1.13**   *P* **104**   *L*   # 4
ADACHI, DR TOMOKO   Individual

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

The wording in Figure 49 is inconsistent with the text.

SuggestedRemedy

Fix "DLP Timeout Value" to "DLS Timeout Value".

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 7.3.1.13, Figure 48.

Cl **07**   *SC* **7.3.1.17**   *P* **106**   *L*   # 5
ADACHI, DR TOMOKO   Individual

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

Unify the expression for "ACK". "Ack" is used in the last paragraph.

SuggestedRemedy

Change "Ack frames" to "ACK frames".

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 7.3.17.

Cl **07**   *SC* **7.3.1.4**   *P* **98**   *L* **35**   # 48
ECCLESINE, PETER   Individual

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

In the Capability Information Field, Delayed BlockAck is B14 and Immediate Block is B15, and the indications are discussed in numerical order, except on p98, where Immediate Block Ack is discussed three paragraphs ahead of Delayed Block Ack, perhaps reflecting that it previously was not B15.

SuggestedRemedy

Move text of Immediate Block Ack to after line 52 discussion of Delayed Block Ack

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 7.3.1.4.

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

Cl **07**
SC **7.3.1.4**

Page 11 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.3.2**   *P*   *L*   # 116
STEPHENS, ADRIAN P   Individual

Comment Type **TR**   *Comment Status* **A**
Table 26 contains a TBD

SuggestedRemedy
Get a number from the ANA and insert it here.

Response   *Response Status* **U**
ACCEPT.

Editor to replace "TBD" with "127" for the element ID of the Extended Capabilities IE and place it in the correct order in the table.

Editor included in draft 7.0 in 7.3.2 (Table 26) and 7.3.2.27.

Cl **07**   *SC* **7.3.2**   *P* **102**   *L* **37**   # 49
ECCLESINE, PETER   Individual

Comment Type **E**   *Comment Status* **A**
Element ID says TBD, but could say Number To Be Supplied, and Editor's note could refer to ANA giving supplying a number at final draft approval

SuggestedRemedy
Change TBD to NTBS, with explaination in subsequent Editor's Note

Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

See resolution to comment #116

Cl **07**   *SC* **7.3.2**   *P* **108**   *L* **37**   # 47
O'HARA, ROBERT   Individual

Comment Type **T**   *Comment Status* **A**
Replace TBD value

SuggestedRemedy
Correct value for the Extended Capabilities IE needs to be assigned.

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

See resolution to comment #116.

Cl **07**   *SC* **7.3.2.2**   *P*   *L*   # 136
STEPHENS, ADRIAN P   Individual

Comment Type **E**   *Comment Status* **A**
The rules for encoding of basic and supported rates are too distributed. The implementer of a Japanese quarter-clocked system is supposed to discover the note in the PLME-DSSSTEST SAP interface to discover how to round the 2.25Mbps rate.

SuggestedRemedy
Replace the following: "and bits 6 through 0 are set to the appropriate value from the valid range column of the DATA_RATE row of the table in 10.4.4.2" with: "and bits 6 through 0 are set to the data rate, in units of 500Kbps, if necessary rounded up".

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

Editor included in draft 7.0 in 7.3.2.2.

Cl **07**   *SC* **7.3.2.20**   *P* **122**   *L* **35**   # 146
STEPHENS, ADRIAN P   Individual

Comment Type **T**   *Comment Status* **R**
(Submitted on behalf of Shlomo Ovadia) The New Channel Number field in Channel Switch Announcement IE include only valid operating channels in 5 GHz band (Annex J)

SuggestedRemedy
It is proposed to bring a submission that provides details of the changes required to the normative text. Note the number of changes is expected to be relatively small.

Response   *Response Status* **C**
REJECT.

See the resolution to comment #85.

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

Cl **07**
SC **7.3.2.20**

Page 12 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.3.2.27**   *P* **127**   *L* **16**   # 50

ECCLESINE, PETER   Individual

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

Element Identifier says TBD, but could say Number To Be Supplied, and Editor's note could refer to ANA giving supplying a number at final draft approval

SuggestedRemedy

Change TBD to NTBS, with explaination in subsequent Editor's Note

Response   *Response Status* **C**

ACCEPT.

See resolution to comment #116.

Cl **07**   *SC* **7.3.2.28**   *P* **137**   *L* **53**   # 80

CHAPLIN, CLINT F   Individual

Comment Type **TR**   *Comment Status* **R**

(IEEE 802.11 TGr LB82 Comment 571) "specifies the remaining amount of medium time available via explicit admission control in units of 32 us/s." As specified, this implies that the value must be up to date. It is my understanding that some APs fail to update the medium time each time the QBSS Load information element is advertised, and so this definition would make these implementations non-compliant?

SuggestedRemedy

Reword to make it backward compatible with existing AP implementations that do not transmit an up-to-date value in this field.

Response   *Response Status* **U**

REJECT.

Poor implementations do not necessitate changes to the standard.

Cl **07**   *SC* **7.3.2.29**   *P* **138**   *L*   # 6

ADACHI, DR TOMOKO   Individual

Comment Type **T**   *Comment Status* **R**

Relating to Table 37, EDCA TXOP Limit is announced by EDCA Parameter Set element but you cannot distinguish the EDCA TXOP Limit values set in the Beacon are those for clause 15 and 18 PHY or for clause 17 and 19 PHY.

SuggestedRemedy

Take either of the followings.

- There is a reserved field of 1 octet in the EDCA Parameter Set element. Name it as EDCA Classification Field (or whatever appropriate) and use the last 2 bits to indicate the PHY, which can be named as PHY Type subfield. PHY types are distinguished by those bits as

00: Extended Rate/OFDM

01: DSSS/CCK

10: Other PHYs

11: Reserved.

Unused 6 bits are reserved.

- If the Beacon is sent in OFDM, EDCA TXOP values will be used for OFDM. If the Beacon is sent in DSSS/CCK, then those will be used for DSSS/CCK.

Response   *Response Status* **C**

REJECT.

The standard does not distinguish between the PHY types, for the purpose of establishing TXOP Limits. The limit is set for the STAs that are QoS enabled and members of the BSS.

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

Cl **07**
SC **7.3.2.29**

Page 13 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.3.2.30**   *P* **139**   *L*   # 97
SOOMRO, AMJAD A   Individual

Comment Type   **TR**   *Comment Status*   **R**

Applications such as video or voice are quite tolerant to frame loss conditions and while medical wireless applications are very loss sensitive, though their TSPEC would appear to be similar to voice TSPEC. In order to serve these diverse streams QAP needs to know drop sensitivity of the stream to adjust its scheduling. In order to ensure interoperability and better expression of traffic stream requirements, acceptable frame loss rate for the traffic stream needs to be communicated between HC and a QSTA.

SuggestedRemedy

Add the acceptable error frame loss parameter in TSPEC field

Response   *Response Status*   **U**

REJECT.

Addition of this field to the information element would make any existing implementations instantly noncompliant. This is not a desirable outcome. It is also not clear how a scheduling algorithm would operate differently, given the requested additional frame error loss tolerance information.

Cl **07**   *SC* **7.3.2.30**   *P* **140**   *L*   # 7
ADACHI, DR TOMOKO   Individual

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

In Figure 101, 15 should be B15.

SuggestedRemedy

Fix "15" to "B15" in Figure 101.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 7.3.2.30, Figure 100.

Cl **07**   *SC* **7.3.2.30**   *P* **140**   *L*   # 94
MYLES, ANDREW F   Individual

Comment Type   **GR**   *Comment Status*   **A**

TSID is identified in Figure 101, but references clause 7.1.3.5.1 which defines the TID, not the TSID

SuggestedRemedy

Rename one of the fields to eliminate the confusion

Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

Replace the sentence "The TSID subfield is 4 bits in length and contains the TSID values in the format defined in 7.1.3.5.1." below figure 101 with:
"The TSID subfield is 4 bits in length and contains a value that is a TSID."

Editor included in draft 7.0 in 7.3.2.30.

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

Cl **07**
SC **7.3.2.30**

Page 14 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **07**   *SC* **7.3.2.30**   *P* **141**   *L*   # 16
ADACHI, DR TOMOKO   Individual

Comment Type   **T**   *Comment Status* **A**

The descriptions of setting ASPD and Scheduled subfields in clauses 7.3.2.30 and 11.2.1.4 are not consistent.

In clause 11.2.1.4, it says "In order to use a scheduled SP for a TS when the access policy is controlled channel access or for a AC when the access policy is contention-based channel access, a non-AP QSTA shall send an ADDTS Request frame to the QAP with the APSD and Schedule subfields of the TS Info field in the TSPEC element both set to 1."

On the other hand in clause 7.3.2.20, it is said as "When the Access Policy subfield is set to any value other than EDCA, the Schedule subfield is reserved." in p.141.

SuggestedRemedy

Change the description of setting the Schedule subfield in clause 7.3.2.20 to be consistent with that in clause 11.2.1.4.

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change 11.2.1.4 to replace the sentence cited by the commenter with the following:

"In order to use a scheduled SP for a TS when the access policy is controlled channel access, a non-AP QSTA shall send an ADDTS Request frame to the QAP with the APSD subfield of the TS Info field in the TSPEC element set to 1. To use a scheduled SP for a TS for a AC when the access policy is contention-based channel access, a non-AP QSTA shall send an ADDTS Request frame to the QAP with the APSD and Schedule subfields of the TS Info field in the TSPEC element both set to 1."

Editor included in draft 7.0 in 7.3.2.30.

Cl **07**   *SC* **7.3.2.30**   *P* **143**   *L* **4**   # 8
ADACHI, DR TOMOKO   Individual

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

The SP in the sentence "The Service Start Time field in 4 octets and &" should be more clarified.

SuggestedRemedy

Change the sentence to "& when the *first scheduled* SP starts."

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 in 7.3.2.30.

Cl **07**   *SC* **7.3.2.34**   *P* **147**   *L*   # 9
ADACHI, DR TOMOKO   Individual

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

The value of the Length field of the Schedule element in Figure 111 is not 14 but 12.

SuggestedRemedy

It should be corrected to 12.

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 in 7.3.2.34, Figure 110.

Cl **07**   *SC* **7.3.2.9**   *P*   *L*   # 117
STEPHENS, ADRIAN P   Individual

Comment Type   **E**   *Comment Status* **R**

The layout of figure 64 is not consistent with other element diagrams

SuggestedRemedy

Redraw using the same conventions.

Response   *Response Status* **C**

REJECT.

The diagram is drawn as it is to emphasize the triplets that are part of the information element and to emphasize the padding required.

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

Cl **07**
SC **7.3.2.9**

Submission   **Bob O'Hara, Cisco Systems**

Cl **08**	*SC* **8.1.1.4**	*P*	*L*	# 33

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

The immaturity of STAKey protocol in 1N7903 makes it difficult to be implemented because of no rules which should be obeyed, then induces the problems of interoperability.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. This omission can be rectified through normal processes. At least one proposal is being submitted via another commenter. Adiption of any such comment will resolve this comment

Response   *Response Status*   **C**

ACCEPT.

Delete 3.136, 3.137, and 3.138, instead of 3.100, 101, and 102 as described in 05/1258r1.

Modify 3.130 as described in 05/1258r1, instead of 3.97.

Adopt 05/1258r1 for the remainder of the changes described there.

See comment #32 for editorial resolution.

Cl **08**	*SC* **8.1.1.4**	*P*	*L*	# 32

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

The STAKey protocol in 1N7903 is not mature. The text describes the process only when STAKey is successful, but not tell what to do if protocol is not finished successfully because of high packet loss ratio; for example, if the state machines of the initiator and the peer fail to be synchronized, how to notify the peer delete the STAKey just installed isn't specified."

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. This omission can be rectified through normal processes. At least one proposal is being submitted via another commenter. Adiption of any such comment will resolve this comment

Response   *Response Status*   **C**

ACCEPT.

Delete 3.136, 3.137, and 3.138, instead of 3.100, 101, and 102 as described in 05/1258r1.

Editor included in draft 7.0 in 3.134 (STAKey), 3.135 (STAKey Handshake), and 3.136 (STAKey security association).

Modify 3.130 as described in 05/1258r1, instead of 3.97.

Editor included in draft 7.0 in 3.128 (robust security network association (RSNA) key management).

Adopt 05/1258r1 for the remainder of the changes described there.

Editor included in draft 7.0 in clauses 3, 5, 7, 8, 10, 11, Annex A, and Annex D.

Cl **08**	*SC* **8.2.1.2**	*P*	*L*	# 118

STEPHENS, ADRIAN P   Individual

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

Footnote 25 is no longer relevant

SuggestedRemedy

Remove it.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 8.2.1.2.

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

Cl **08**
SC **8.2.1.2**

Page 16 of 40
6/19/2006 1:39:04

Submission   **Bob O'Hara, Cisco Systems**

Cl **08**   *SC* **8.3.2.3.1**   *P*   *L*   # 119

STEPHENS, ADRIAN P   Individual

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

"figure 125 depicts informatively different". I don't know what an informatively different thing is. And the word "depicts" is unnecessarily obscure. Awkward.

SuggestedRemedy

Replace with "Informative Figure 125 shows different&"

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 8.3.2.3.1.

Cl **08**   *SC* **8.3.2.3.1**   *P*   *L*   # 120

STEPHENS, ADRIAN P   Individual

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

The deletion of "The priority ... Use." leaves the priority field undefined.

SuggestedRemedy

Specify the field.

Response   *Response Status*   **U**

ACCEPT.

The field is defined as the "MSDU priority" in 8.3.2.1 a). Editor to add the following in place of the deleted sentence:
"The Priority field refers to the priority parameter of the MA-UNITDATA.request service primitive."

Editor included in draft 7.0 in 8.3.2.3.1.

Cl **08**   *SC* **8.3.2.6**   *P*   *L*   # 121

STEPHENS, ADRIAN P   Individual

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

"Block Ack reordering & detection". This is slightly misleading as it is not block acks that are being reordered, but MSDUs. Same comment in 8.3.3.4.3

SuggestedRemedy

Replace with: For MSDUs sent using the Block Ack feature, reordering of received MSDUs according to the Block Ack receiver operation (described in 9.10.4) is performed prior to replay detection.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 8.3.2.6 and 8.3.3.4.3.

Cl **08**   *SC* **8.4.1.1.4**   *P*   *L*   # 31

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

The STAKey protocol in the amendment is incomplete because it does not define the failure case. When STAKey is established between two STAs in BSS, if AP doesn't successfully notify STAKey to the initiator STA, how to notify the peer STA to delete the STAKey just installed is not defined.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. This omission can be rectified through normal processes. At least one proposal is being submitted via another commenter. Adiption of any such comment will resolve this comment

Response   *Response Status*   **C**

ACCEPT.

Delete 3.136, 3.137, and 3.138, instead of 3.100, 101, and 102 as described in 05/1258r1.

Modify 3.130 as described in 05/1258r1, instead of 3.97.

Adopt 05/1258r1 for the remainder of the changes described there.

See comment #32 for editorial resolution.

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

Cl **08**
SC **8.4.1.1.4**

Page 17 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **08**   *SC* **8.4.10**   *P* **201**   *L* **51**   # 81
CHAPLIN, CLINT F   Individual

Comment Type **E**   *Comment Status* **A**
(IEEE 802.11 TGr LB82 Comment 835) "association or reassociation" These are proper names in the standard

SuggestedRemedy
"Association or Reassociation"

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

Editor included in draft 7.0 in 8.4.10.

Cl **08**   *SC* **8.4.10**   *P* **201**   *L* **52**   # 82
CHAPLIN, CLINT F   Individual

Comment Type **E**   *Comment Status* **A**
(IEEE 802.11 TGr LB82 Comment 836) "disassociation or deauthentication" These are proper names.

SuggestedRemedy
"Disassociate or Deauthenticate"

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

Editor included in draft 7.0 in 8.4.10.

Cl **08**   *SC* **8.4.10**   *P* **201**   *L* **52**   # 83
CHAPLIN, CLINT F   Individual

Comment Type **TR**   *Comment Status* **A**
(IEEE 802.11 TGr LB82 Comment 837) "&it will delete some security association." What does some mean?

SuggestedRemedy
Clarify which security associations it will delete.

Response   *Response Status* **U**
ACCEPT IN PRINCIPLE.

The subject of the comment is outside the scope of this ballot. The comment will be forwarded to the working group for consideration in a future revision of the standard.

Cl **08**   *SC* **8.4.10**   *P* **201**   *L* **54**   # 84
CHAPLIN, CLINT F   Individual

Comment Type **TR**   *Comment Status* **R**
(IEEE 802.11 TGr LB82 Comment 838) "&it will delete some security association." What does some mean?

SuggestedRemedy
Clarify which security associations it will delete.

Response   *Response Status* **U**
REJECT.

The subject of the comment is outside the scope of this ballot. The comment will be forwarded to the working group for consideration in a future revision of the standard.

Cl **08**   *SC* **8.5.2**   *P* **207**   *L*   # 122
STEPHENS, ADRIAN P   Individual

Comment Type **E**   *Comment Status* **R**
"When priority processing&" The term "priority processing" is not defined, and the term "highest priority" is informal.

SuggestedRemedy
Replace with "A QSTA should send EAPOL-Key frames using AC_VO."

Response   *Response Status* **C**
REJECT.

It is unclear what change the commenter would be satifisfied with.

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

Cl **08**
SC **8.5.2**

Page 18 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **08**	*SC* **8.5.5**	*P*	*L*	# 37

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

During the notification procedure of STAKey in Figure 43ab, when AP notifies successfully to the peer STA, the peer STA will install the STAKey key; if AP notifies unsuccessfully to the initiator STA, the peer STA should delete the newly installed key. But 1N7903 does not specify how AP notifies the peer STA to delete keys.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. This omission can be rectified through normal processes. At least one proposal is being submitted via another commenter. Adiption of any such comment will resolve this comment

Response   *Response Status*   **C**

ACCEPT.

Delete 3.136, 3.137, and 3.138, instead of 3.100, 101, and 102 as described in 05/1258r1.

Modify 3.130 as described in 05/1258r1, instead of 3.97.

Adopt 05/1258r1 for the remainder of the changes described there.

See comment #32 for editorial resolution.

Cl **08**	*SC* **8.5.5**	*P*	*L*	# 38

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

STAKey handshake protocol is incomplete. When the Peer STA can support the cipher suite selected by the Initiator STA, there is no problem in STAKey handshake. But when the Peer STA can not support the cipher suite selected by the Initiator STA, how to process is not defined in 1N7903.

SuggestedRemedy

ISO/IEC JTC1 thanks China's SAC for this comment. This omission can be rectified through normal processes. At least one proposal is being submitted via another commenter. Adiption of any such comment will resolve this comment

Response   *Response Status*   **C**

ACCEPT.

Delete 3.136, 3.137, and 3.138, instead of 3.100, 101, and 102 as described in 05/1258r1.

Modify 3.130 as described in 05/1258r1, instead of 3.97.

Adopt 05/1258r1 for the remainder of the changes described there.

See comment #32 for editorial resolution.

Cl **08**	*SC* **8.5.5**	*P* **271**	*L* **25**	# 149

STEPHENS, ADRIAN P   Individual

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

For DLS to use peerkey handshake for creating a secure DLS link, it is necessary to create additional operational rules regarding the establishment of unidirectional DLS links in both directions between peers.

SuggestedRemedy

The rules for establishment of these links, and the conditions under which they are necessary need to be studied. It is hoped to bring a proposal containing normative text in due course.

Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

See the resolution to comment #106.

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

Cl **08**
SC **8.5.5**

Page 19 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **08**   *SC* **8.5.5**   *P* **271**   *L* **25**   # 104
STEPHENS, ADRIAN P   Individual

Comment Type   **TR**   *Comment Status* **A**
(From Suman Sharma)   STAKey handshake defined as part of standard is incomplete.
Two flaws a) Security flaw & b) Definition flaw in this handshake has been identified as part
of document 11-05-1058-00-000w-stakey-design-flaws.ppt.   Note, although the referenced
section is not changed in this this revision, the problem arises due to the introduction of the
DLS feature which is new in this revision.

SuggestedRemedy
Document 11-05-1258-01-000m-normative-text-peerkey-handshake-proposal.doc provides
fix to the STAKey flaws. Please use the normative text to fix the STAKey flaws.

Response   *Response Status* **U**
ACCEPT.

Delete 3.136, 3.137, and 3.138, instead of 3.100, 101, and 102 as described in 05/1258r1.

Modify 3.130 as described in 05/1258r1, instead of 3.97.

Adopt 05/1258r1 for the remainder of the changes described there.

See commend #32 for editorial resolution.

Cl **09**   *SC* **9.1.6**   *P*   *L*   # 123
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status* **A**
"The MAC data service for QSTAs shall incorporate a TID with each MA-
UNITDATA.request service.."   This is awkward and has a meaningless "shall".

SuggestedRemedy
Replace with: "In a QSTA, the TID parameter of the MA-UNITDATA.request results in a
TID being specified for each transmitted MSDU."

Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Replace with: "In a QSTA, the TID parameter of the MA-UNITDATA.request results in a
TID being specified for the transmitted MSDU."

Editor included in draft 7.0 in 9.1.6.

Cl **09**   *SC* **9.10.3**   *P* **300**   *L* **31**   # 126
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status* **A**
"Split a Block frame across multiple TXOPs" - this is meaningless

SuggestedRemedy
Replace with: "Split transmission of data MPDUs sent under Block Ack policy across
multiple TXOPs"

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

Editor included in draft 7.0 in 9.10.3.

Cl **09**   *SC* **9.12**   *P*   *L*   # 127
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status* **A**
Frame exchange sequence subclause.   There are two problems with this subclause: 1.
The informal BNF-link notation is proving awkward - witness that much of the semantics of
the sequences are defined by the notes on page 308.   The graphics are impossible for
later amendments to maintain.

SuggestedRemedy
Replace entire contents of subclause with the text in document 11-06-0359r0 in the section
labelled "BASELINE".

Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Replace the text of 9.12 with the "Baseline" section of 06/359r0, leaving the figures in place
in the draft.

Editor included in draft 7.0 in 9.12.

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

Cl **09**
SC **9.12**

Page 20 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **09**   *SC* **9.2.1**   *P* **253**   *L* **49**   # 29
FISCHER, MICHAEL A   Individual

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

In addition to a reference to 9.9.2.2.1, which was added in response to sponsor ballot comment 180, there should also be a few more references to clauses where NAV update is discussed.

SuggestedRemedy

At the end of the 3rd paragraph, add a sentence listing additional clauses pertaining to the NAV, such as: "Additional details regarding NAV usage and/or update appear in 9.2.5.6 (fragmentation), 9.2.11 (NAV distribution), and 9.13 (protection for non-ERP receivers)."

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.2.1.

Cl **09**   *SC* **9.2.4**   *P* **256**   *L* **50**   # 92
MYLES, ANDREW F   Individual

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

"The CW shall be reset to aCWmin after every successful attempt to transmit an MSDU or MMPDU,..." There are number of places where MSDU and MPDU are used interchangably. On page 276, line #1, it clearly states that a MPDU is a fragment of MSDU. Shouldn't the retry counters and CW be associated with individual MPDUs since each MPDU is ACKed individually?

SuggestedRemedy

Replace MSDU with MPDU in appropriate places.

Response   *Response Status*   **U**

ACCEPT.

Change "MSDU" to "MPDU" in line 50.

Editor included in draft 7.0 in 9.2.4.

Cl **09**   *SC* **9.2.5.3**   *P* **259**   *L*   # 93
MYLES, ANDREW F   Individual

Comment Type   **TR**   *Comment Status*   **R**

MSDU and MPDU are used interchangably in these two paragraphs

SuggestedRemedy

Replace MSDU with MPDU in appropriate places.

Response   *Response Status*   **U**

REJECT.

This comment is beyond the scope of the present ballot. The comment will be forwarded to the working group for consideration in a future revision of the standard.

Cl **09**   *SC* **9.2.5.4**   *P*   *L*   # 124
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **A**

Typo: "N1AV"

SuggestedRemedy

Replace with "NAV"

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.2.5.4.

Cl **09**   *SC* **9.2.5.4**   *P* **260**   *L* **26**   # 45
O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **A**

The clause "except those where the RA is equal to the receviing STA's MAC address" is ambiguous.

SuggestedRemedy

Change the clause to be "except the NAV shall not be updated where the RA&"

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.2.5.4.

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

Cl **09**
SC **9.2.5.4**

Page 21 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **09**   *SC* **9.2.5.4**   *P* **260**   *L* **26**   # 46

O'HARA, ROBERT   Individual

Comment Type   **T**   *Comment Status*   **R**

Changes made to the use of duration by incoporation of 11e make validation of correct duration values imperative.

SuggestedRemedy

Add after the first sentence: "All STAs shall validate that the received value in the Duration field does not exceed that permitted by the frame construction rules of clauses 7.1.4 and 7.2. Any value for the Duration in excess of that allowed shall be ignored for the purposes of setting the NAV or calculating a Duration value for a response frame and shall be calculated as if the correct value had been transmitted."

Response   *Response Status*   **C**

REJECT.

The suggested remedy requires too uch work on the receiver. The receiver should not recalculate the duration value received, based on its own assumptions. The receiver needs to be liberal in what it receives not to prevent future extensions to the standard.

Cl **09**   *SC* **9.2.5.4**   *P* **260**   *L* **30**   # 44

O'HARA, ROBERT   Individual

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

"NAV" is misspelled

SuggestedRemedy

change "N1AV" to "NAV"

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.2.5.4

Cl **09**   *SC* **9.3.1**   *P* **270**   *L*   # 10

ADACHI, DR TOMOKO   Individual

Comment Type   **E**   *Comment Status*   **R**

"DFC traffic" in Figure 169 should be "DCF traffic".

SuggestedRemedy

Fix it.

Response   *Response Status*   **C**

REJECT.

Editor included in draft 7.0 in 9.3.1, Figure 175.

Cl **09**   *SC* **9.4**   *P* **275**   *L* **46**   # 154

ENGWER, DARWIN A   Individual

Comment Type   **ER**   *Comment Status*   **A**

The term "directed" is deprecated.

SuggestedRemedy

change "directed" to "individually addressed"

Response   *Response Status*   **U**

ACCEPT.

Editor included in draft 7.0 in 9.1.5, 9.2, 9.2.6, 9.2.7, 9.2.8, 9.3.2.1, 9.3.3.1, 9.3.3.2, 9.3.3.4, 9.4, 9.5.

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

Cl **09**
SC **9.4**

Page 22 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **09**   *SC* **9.6**   *P* **277**   *L*   # 11
ADACHI, DR TOMOKO   Individual

Comment Type   **T**   *Comment Status*   **A**

Why isn't BA frame said clearly as to be sent with the same rate and *modulation*?

This comment was declined by the following: For every single PHY, there is a unique modulation associated with every rate in any given channel.

But 802.11a OFDM and 802.11g DSSS-OFDM both use 6-54 Mbps but in different modulation.

SuggestedRemedy

Change the last sentence of the fourth paragraph to "The BlockAck   control frame shall be sent at the same rate and modulation class as the BlockAckReq frame if it is sent in response to a BlockAck-   Req frame."

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.6.

Cl **09**   *SC* **9.7**   *P* **279**   *L* **17**   # 64
ECCLESINE, PETER   Individual

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

text refers to 'aMaxMSDUTransmitLifetime' but proper name is dot11MaxTransmitMSDULifetime

SuggestedRemedy

Correct

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.7.

Cl **09**   *SC* **9.9**   *P*   *L*   # 125
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **A**

"This clause describes the QoS enhancements to the MAC functional description. QSTAs may access the channel in a more controlled manner, compared to a non-QSTA, to transmit MPDUs." 1. This is a subclause, not a clause. 2. It only describes some of the QoS enhancements. 3. "more controlled manner" is imprecise.

SuggestedRemedy

Remove quoted sentences.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.9.

Cl **09**   *SC* **9.9.1.4**   *P* **285**   *L* **52**   # 71
CHAPLIN, CLINT F   Individual

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

singular/plural error

SuggestedRemedy

Change to "&if there is more than one frame pending&"

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.9.1.4.

Cl **09**   *SC* **9.9.2.3**   *P* **293**   *L* **49**   # 12
ADACHI, DR TOMOKO   Individual

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

"dot11QACKOptionImplemented" should be "dot11QAckOptionImplemented".

SuggestedRemedy

Fix it.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 9.9.2.3.

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

Cl **09**
SC **9.9.2.3**

Page 23 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **09**   *SC* **9.9.3.1.2**   *P* **296**   *L* **7**   # 96
SOOMRO, AMJAD A   Individual

Comment Type   **TR**   *Comment Status*   **R**

The surplus bandwidth allowance (SBA) field is loosely defined and it is clearly not needed to generate conforming schedules in any scenario. The mandatory parameters are minimum set of parameters required to generate a conforming schedule which meets TSPEC requirements. Any other parameter beyond this should be optional and be not made mandatory. The SBA is poorly defined and its use in wirless protocols to specify stream requirements is unique for this draft. The parameter is susceptible to loose interpretations at both the ends (QAP and QSTA) and, therefore, there is no basis for its inclusion. This parameter is superfluous in TSPEC.

SuggestedRemedy

Remove the requirement to make Surplus bandwidth allowance mandatory

Response   *Response Status*   **U**

REJECT.

While the use of the SBA may not be required to implement a conformant scheduler, the information may be useful to some implementers.

Cl **10**   *SC* **10.3.24.2.2**   *P*   *L*   # 18
ADACHI, DR TOMOKO   Individual

Comment Type   **E**   *Comment Status*   **R**

There are some places where "TSDelay" (having no space between TS and Delay) is used.

SuggestedRemedy

Change "TSDelay" to "TS Delay".

Response   *Response Status*   **C**

REJECT.

The only places TSDelay occur are judged to be correct in that it is a parameter name in an API (see 10.3.24.2.2 & 10.3.24.4.2). This is not used the same as the TS Delay information element and after review, there doesn't seem to be any sense of confusion casued by this overloading between element name and parameter name.

Cl **10**   *SC* **10.3.28.1.2**   *P* **412**   *L*   # 14
ADACHI, DR TOMOKO   Individual

Comment Type   **E**   *Comment Status*   **R**

The description of Schedule parameter is wrong. It should be "Specifies the Schedule Information, service start time, SI and the specification interval."

SuggestedRemedy

Fix it.

Response   *Response Status*   **C**

REJECT.

The frame format defines this precisely. The wording to which the commenter objects seems to be accurate since it says it "includes" the cited information.

Cl **10**   *SC* **10.3.28.3.2**   *P* **414**   *L*   # 15
ADACHI, DR TOMOKO   Individual

Comment Type   **E**   *Comment Status*   **R**

The description of Schedule parameter is wrong. It should be "Specifies the Schedule Information, service start time, SI and the specification interval."

SuggestedRemedy

Fix it.

Response   *Response Status*   **C**

REJECT.

See comment id #14.

Cl **10**   *SC* **10.3.6.1.2**   *P* **331**   *L* **21**   # 13
ADACHI, DR TOMOKO   Individual

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

Comma is missing.

SuggestedRemedy

Add comma after Supported Channels.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 10.3.6.1.2.

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

Cl **10**
SC **10.3.6.1.2**

Page 24 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **10**   *SC* **10.3.6.4**   *P* **335**   *L* **18**   # 155
ENGWER, DARWIN A   Individual

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

MLME-ASSOCIATE.response is missing the EDCAParameterSet parameter, which somehow(???) shows up in the corresponding .confirm. Is this information relayed from the AP, or just being echoed locally from the START.request primitive?

SuggestedRemedy

add the missing parameter

Response   *Response Status*   **U**

ACCEPT.

Copy the text from 10.3.6.2.2 for the EDCAParameterSet parameter.

Editor included in draft 7.0 in 10.3.6.4.

Cl **10**   *SC* **10.3.7.4**   *P* **342**   *L* **18**   # 156
ENGWER, DARWIN A   Individual

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

MLME-REASSOCIATE.response is missing the EDCAParameterSet parameter, which somehow(???) shows up in the corresponding .confirm. Is this information relayed from the AP, or just being echoed locally from the START.request primitive?

SuggestedRemedy

add the missing parameter

Response   *Response Status*   **U**

ACCEPT.

Copy the text from 10.3.7.2.2 for the EDCAParameterSet parameter.

Editor included in draft 7.0 in 10.3.7.4.

Cl **10**   *SC* **10.4.3.2**   *P* **417**   *L* **14**   # 21
FISCHER, MICHAEL A   Individual

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

The PHY characteristics parameter aPHY-RX-START-Delay is absent from the parameter list of the PLME-CHARACTERISTICS.confirm primitive. This is the ONLY ONE of the 20 PHY characteristics parameters that is not present, and there is no reason stated for its omission. Furthermore, in rejecting sponsor comment 280, which called for a definition of this parameter in clause 9, the reason for rejection was that aPHY-RX-START-Delay was defined for each of the individual PHYs. This is true, but then this parameter value is not included in the PLME primitive that provides such parameter values from PHY to MAC. A significant side-effect of this omission is that there is no description of the meaning of aPHY-RX-START-Delay in any clause that is not specific to a single PHY.

SuggestedRemedy

Add an aPHY-RX-START-Delay parameter to PLME-CHARACTERISTICS.confirm primitive, and define said parameter in the table in clause 10.4.3.2. To keep the ordering the same as the PHY characteristics value tables in the various PHY clauses, the proper place to add this parameter is immediately below aCCATime. An appropriate definition for aPHY-RX-START-Delay is "The delay, in microseconds, from the start of the PHY preamble on the WM to the issuance of the PHY-RX-START.indicate by the PHY."

Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

Change the description of the parameter in the suggested remedy to be:
"The delay, in microseconds, from a point in time specified by the PHY to the issuance of the PHY-RXSTART.indication primitive."

Editor included in draft 7.0 in 10.4.3.2.

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

Cl **10**
SC **10.4.3.2**

Page 25 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **10**	*SC* **10.4.3.2**	*P* **417**	*L* **51**	# 22

FISCHER, MICHAEL A   Individual

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

Sponsor ballot comment 258 was rejected, with a statement that aRxPLCPDelay "is a nominal time, not a maximum or minimum time." However, this rejection was inappropriate because the comment concerned neither maxima nor minima but WHICH BIT is being described by this nominal reporting time. The issue is that some PHYs (e.g. OFDM) do not necessarily provide uniform delay for delivering all bits of an incoming frame from PMD to MAC. Proper operation of the MAC is dependent on the RxPLCPDelay which occurs when delivering the LAST bit of the incoming frame, as illustrated in Figure 166. To achieve interoperability, it is vital that the specified delay be suitable for calculating the time reference for the end-of-reception that the MAC uses for generating IFS periods and initiating responses within frame exchange sequences. Therefore, the issue is not maximum/minimum times rather than nominal time, but nominal time for THE LAST BIT rather than nominal time for "a bit" (which implicitly assumes that the nominal delivery delay for all bits of the received frame is equal -- which may not be the case, for example consider the case of a minimum-length, directed data frame at a data rate <12Mb/s). Failing to provide this clarification of WHICH BIT the aRxPLCPDelay refers to could lead to non-interoperable implementations of any PHY with a symbol time that exceeds the 1us time resolution of MAC intervals.

SuggestedRemedy

In the description of aRXPLCPDelay, change "a bit" to "the last bit of a received frame"

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in 10.4.3.2.

Cl **11**	*SC* **11.1.2**	*P* **426**	*L* **42**	# 23

FISCHER, MICHAEL A   Individual

Comment Type   **TR**   *Comment Status* **R**

Sponsor ballot comment 231 was "accepted in principle" by deleting the final sentence of the sole paragraph in 11.1.2. Far from incorporating the principle of the comment, this resolution totally removes any bounds upon the degree of inter-station synchronization within a BSS. Interoperable operation of the MAC -- AT LEAST the operation of a QBSS -- requires a bound on the magnitude of non-synchronism between the contending stations under EDCA, and/or the pollable QSTAs under HCCA. In the absence of any constraint on TSF synchronization tolerance, there are numerous features of the MAC that are subject to non-interoperable behavior, including, but not limited to, quiet periods, listen intervals, and setting of the NAV by non-AP stations at TBTT.

SuggestedRemedy

Retaining the specification from D5.0 of "4 symbols plus the maximum propagation delay of the PHY" is superior to deleting this sentence without replacement. The preferred way to update/correct the "4us" constraint that appeared in 802.11-1999 (R2003) is "2 symbol periods of the PHY plus 2 microseconds plus aAirPropagationTime."

Response   *Response Status* **U**

REJECT.

The sentence that was removed in 11.1.2 is entirely descriptive and its removal changes no normative requirements of the standard. Reinstating that sentence, even with the changes suggested by the commenter, does not change how the algorithms and mechanisms that are normative and that do achieve synchronization operate or change their accuracy.

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

Cl **11**   Page 26 of 40
SC **11.1.2**   6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**   *SC* **11.10.7.2**   *P* **471**   *L* **37**   # 151
STEPHENS, ADRIAN P   Individual

Comment Type **TR**   *Comment Status* **R**

(Submitted on behalf of Marc Jalfon)

This comment relates to comment 65 by Andrew Myles in document IEEE 802.11-06/0095r4 that was rejected by the comment resolution committee. This commenter agrees with Mr Myles comments, and disagrees with their dismissal by the comment resolution committee.

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.

Moreover, given that european regulatory agencies have relaxed their dfs requirements for IBSS, DFS in IBSS is not needed anymore to fulfill the PAR.

SuggestedRemedy

Delete all text related to selecting a new channel in an IBSS (i.e. the referenced subclause and any references to it). The precise set of changes have been documented in the response to comment 65 in the referenced document.

Response   *Response Status* **U**

REJECT. See resolution to comment #85.

Cl **11**   *SC* **11.2**   *P* **432**   *L* **25**   # 100
ENGWER, DARWIN A   Individual

Comment Type **TR**   *Comment Status* **R**

Revisit comment #13 from the previous ballot to ensure that after merging in the 802.11e material there is a requirement to send new MSDUs *after* queued MSDUs.

SuggestedRemedy

Add the appropriate shall statement to the appropriate subclause of 11.2 if it is not already there.

Response   *Response Status* **U**

REJECT.

It is believed that the appropriate direction to the implementer is present in 6.1.3 and that no additional requirements are necessary.

Cl **11**   *SC* **11.2.1.5**   *P*   *L*   # 128
STEPHENS, ADRIAN P   Individual

Comment Type **ER**   *Comment Status* **R**

I challenge anybody to read bullet h) and understand it. My training as a writer says that paragraphs of a 400 words may be a teensy-weensy bit on the long side.

SuggestedRemedy

Restructure using a second level of list indentation to separate out the major topics of bullet h), g) and possibly d).

Response   *Response Status* **U**

REJECT.

Commenter does not provide sufficient information to determine what he would accept.

Cl **11**   *SC* **11.2.2**   *P* **440**   *L* **52**   # 129
STEPHENS, ADRIAN P   Individual

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

I think the prohibition against BA and power-saving in a QIBSS is unnecessary. Power-saving introduces one new problem - that delivery of frames is delayed by a non-deterministic amount of time related to the beacon interval (perhaps several beacon intervals). There is the also the issue of whether our knowledge of the power-saving state of a peer is accurate.

The variable delay only creates an issue for block ack if the block ack timeout is too short. But setting this timeout is a matter of local policy, and we don't prevent an implementation doing something intelligent based on its knowledge of the power-saving state of a peer.

Having an inaccurate knowledge of the peer's power-saving state is no different for BA. A BA sequence will start with an exchange of frames intended to discover if contention has been won (i.e. RTS/CTS), this will also discover if the peer is asleep when we thought it was awake.

SuggestedRemedy

Remove the para starting on line 52: "In a QIBSS&".

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in 11.2.2.

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

Cl **11**
SC **11.2.2**

Page 27 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**	*SC* **11.3.2**	*P* **444**	*L* **40**	# 69

CHAPLIN, CLINT F   Individual

Comment Type   **T**   *Comment Status*   **A**

     Missing statement about a needed transition to State 2.

SuggestedRemedy

     Insert between (a) and (b) the following text to match that in 11.3.1: "If the authentication was successful, the state variable for the indicated STA shall be set to State 2."

Response   *Response Status*   **C**

     ACCEPT.

     Add the indicated sentence as item 11.3.2 b). Move current item b) to c).

     Editor included in draft 7.0 in 11.3.1.2.

Cl **11**	*SC* **11.4**	*P* **445**	*L* **25**	# 67

CHAPLIN, CLINT F   Individual

Comment Type   **ER**   *Comment Status*   **A**

     802.11-1999 had only a subclause 11.3 (Association and Reassociation); 11e and 11i both made simultaneous modifications to that area of the standard, and didn't coordinate their changes. 11i split it into 11.3 (Authentication and Deauthentication) and 11.4 (Association, Reassociation, and Disassociation), that is how it appears in 11ma D5.0. 11e added four new subclauses, numbered them 11.4 through 11.7, and instructed that the existing clauses 11.4 and higher be moved to to follow. As a result, the Association/Reassociation/Disassociation subclause created by 11i is placed far apart from its closely-related subclause on Authentication/Deauthentication.

SuggestedRemedy

     Make the new clauses from 11e follow 11.4 (keeping 11.3 Authentication and 11.4 Association clauses adjacent). Number the 11e clauses 11.5, 11.6, 11.7, and 11.8.

Response   *Response Status*   **U**

     ACCEPT.

     Editor included in draft 7.0 by virtue of other comment resolutions.

Cl **11**	*SC* **11.4.3**	*P* **446**	*L* **43**	# 130

STEPHENS, ADRIAN P   Individual

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

     Figure 195 - typo "suspend" should be "suspended"

SuggestedRemedy

     Change "suspend" to "suspended" in the figure.

Response   *Response Status*   **C**

     ACCEPT.

     The editor included in draft 7.0 in 11.4.3, Figure 202.

Cl **11**	*SC* **11.4.3**	*P* **446**	*L* **43**	# 131

STEPHENS, ADRIAN P   Individual

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

     Figure 195 - the confluence of 3 flows to the bottom right of the "suspend" state makes the diagram hard to interpret.

SuggestedRemedy

     Un-overlap the overlapping flows from the active state and suspend state.

Response   *Response Status*   **C**

     ACCEPT.

     The editor included in draft 7.0 in 11.4.3, Figure 202.

Cl **11**	*SC* **11.4.4**	*P* **448**	*L* **4**	# 68

CHAPLIN, CLINT F   Individual

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

     Incorrect cross reference

SuggestedRemedy

     Change the cross reference from 10.3.11.4.2 to 10.3.24.4.2

Response   *Response Status*   **C**

     ACCEPT.

     Editor included in draft 7.0 in 11.4.4.

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

Cl **11**
SC **11.4.4**

Page 28 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**   *SC* **11.4.5**   *P* **449**   *L*   # 132
STEPHENS, ADRIAN P   Individual

Comment Type   **E**   *Comment Status* **A**
   Figure 197 (and 198) both have very small type.

SuggestedRemedy
   Separate into two figures each occupying the width of the page.

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

   Editor included in draft 7.0 in 11.4.5 (Figure 204) and 11.4.7 (Figure 205).

Cl **11**   *SC* **11.5.1**   *P*   *L*   # 86
MYLES, ANDREW F   Individual

Comment Type   **TR**   *Comment Status* **R**
   The text defines association based on transmit power capability

   However, no use has ever been demonstrated for this feature and few if any
   implmenentations provide it for any useful purpose.

   In the response to a similar comment in the last ballot it was rejected because I had not
   shown it would never be useful. I would turn the response around by asking TGma to show
   that the feature is or will be useful. Showing there is a current implemenation would be
   compelling. I would also like the TG to show the feature was actually within scope for TGh.

SuggestedRemedy
   Delete all text related to association based on transmit power capability

Response   *Response Status* **U**
   REJECT.

   Fails after motion to accept failed (3,3,1).

   Leaving this in the standard does not harm and there may be implementations of which the
   commenter is unaware.

Cl **11**   *SC* **11.5.1.1**   *P*   *L*   # 133
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status* **A**
   Figure 200. The box should only be present in an MSC to group elements for a loop or
   alternate syntactical element. A box without loop or alt in the top left is not syntactically
   valid Z.120 MSC.

SuggestedRemedy
   Remove the enclosing box, or add an appropriate loop designator.

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

   Delete the outermost box from the figure.

   Editor included in draft 7.0 in 11.5.1.1, Figure 207.

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

Cl **11**
SC **11.5.1.1**

Page 29 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**   *SC* **11.5.3**   *P*   *L*   # 87
MYLES, ANDREW F   Individual

Comment Type **TR**   *Comment Status* **R**

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, implmenentations provide it for any useful purpose.

In the response to a similar comment in the last ballot it was rejected because I had not shown it would never be useful. I would turn the response around by asking TGma to show that the feature is or will be useful. Showing there is a current implemenation would be compelling.

It was also suggested that this feature was best deleted by 802.11v and 802.11k. This is certainly a possible course of action. However, these groups are more interested in developing useful new features rather than worrying about useless legacy features. It is TGma's responsibility to look after useless old features

SuggestedRemedy

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

Response   *Response Status* **U**

REJECT.

Actually refers to 11.9.4.

While the commenter is not aware of any implementations of this feature, that is not proof that none exist. Work is under way in TGv to address this area in a regulation neutral fashion. Should that be incorporated into the standard, it is recommended that the regulation-specific text in 11.9 be removed.

Cl **11**   *SC* **11.6.1**   *P*   *L*   # 134
STEPHENS, ADRIAN P   Individual

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

"Other implementations (aside from what is described here) may also be supported." this is pretty meaningless.

SuggestedRemedy

Replace the quoted sentence with: "This is an example implementation using the Higher Layer timer synchronization feature. Other implementations are possible."

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 in 11.6.1.

Cl **11**   *SC* **11.6.1**   *P*   *L*   # 88
MYLES, ANDREW F   Individual

Comment Type **TR**   *Comment Status* **R**

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 implmenentations provide it for any useful purpose

In the response to a similar comment in the last ballot it was rejected because I had not shown it would never be useful. I would turn the response around by asking TGma to show that the feature is or will be useful. Showing there is a current implemenation would be compelling. I would also like the TG to show the feature was actually within scope for TGh.

SuggestedRemedy

Delete all test related to association based on supported channels

Response   *Response Status* **U**

REJECT.

Actually refers to 11.10.1.

While the commenter is not aware of any implementations of this feature, that is not proof that none exist. Maintaining this text in the standard does not hurt, even if there are no implementations of it.

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

Cl **11**
SC **11.6.1**

Page 30 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**   *SC* **11.6.6**   *P*   *L*   # 89

MYLES, ANDREW F   Individual

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

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.

In the response to a similar comment in the last ballot it was rejected because I had not shown it would never be useful. I would turn the response around by asking TGma to show that the feature is or will be useful. Showing there is a current implemenation would be compelling.

It was suggested in the response to a similar comment in the last ballot that this feature was best deleted by 802.11k. This is certainly a possible course of action. However, these groups are more interested in developing useful new features rather than worrying about useless legacy features. It is TGma's responsibility to look after useless old features

SuggestedRemedy

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

Response   *Response Status*   **U**

ACCEPT.

Commenter is to provide specific editing instructions.

Cl **11**   *SC* **11.6.7.2**   *P*   *L*   # 85

MYLES, ANDREW F   Individual

Comment Type   **TR**   *Comment Status*   **R**

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.

In a response to the same comment in the last ballot, TGma asked me to justify my assertions. I believe that they are justified by a quote from 11.10.7.2 that states, "The potential for hidden nodes within an IBSS means that the IBSS channel switch protocol is best effort. All members of an IBSS shall have an individual responsibility to cease transmission on a particular channel in the presence of radar."

This text effectivley says that the IBSS channel switch protocol cannot be relied upon and that individual STAs need to do radar dedection anyway. It is almost certain that regulators will have a similar view.

This removes the primary advantage cited in 06/220. The other advantages cited in 06/220 for the IBSS DFS protocol can be achieved without any special over the air protocol.

SuggestedRemedy

Delete all text related to selecting a new channel in an IBSS, as specified in comment in last Sponsor Ballot

Response   *Response Status*   **U**

REJECT.

The mechanism does not cause any harm, without regard to it usefulness. The mechanism is adequate to cause some STAs in an IBSS to change channels, though it may not be sufficient to cause all STAs to do so.

Cl **11**   *SC* **11.7**   *P* **456**   *L* **52**   # 142

STEPHENS, ADRIAN P   Individual

Comment Type   **TR**   *Comment Status*   **R**

(Submitted on behalf of Shlomo Ovadia)   The DLS operation does not define if the DLS frames are unidirectional or bi-directional; potential implementation problem

SuggestedRemedy

Revise line 52 "However, STAs with QoS facility (i.e., QSTAs) may transmit unidirectional frames directly to another QSTA.."

Response   *Response Status*   **U**

REJECT.

See the resolution to comment #106.

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

Cl **11**   *SC* **11.7**

Page 31 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**   *SC* **11.7**   *P* **457**   *L* **24**   # 143
STEPHENS, ADRIAN P   Individual

Comment Type   **TR**   *Comment Status*   **R**
    (Submitted on behalf of Shlomo Ovadia)   The DLS operation does not define if data frames transmitted as part of a DLS link is unidirectional or bi-directional

SuggestedRemedy
    Revise line 24 "A STA, QSTA-1, that intends to exchange unidirectional frames directly with another non-AP STA,&"

Response   *Response Status*   **U**
    REJECT.

    See the resolution to comment #106.

Cl **11**   *SC* **11.7**   *P* **459**   *L* **41**   # 148
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **A**
    (Submitted on behalf of Shlomo Ovadia & Jesse Walker)   "Acceptable level of security" is not defined. In addition, this violate STA authorization assumption behind DLS protocol. In particular, if AP1 authorizes the DLS link while AP2 does not know about it.

SuggestedRemedy
    Remove second option

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

    Replace "If one of the QSTAs roams to a different QAP after a DLS is set up, then there are two possibilities:
    - There is an implicit teardown (see 11.7.4).
    - The QSTAs continue to be able to communicate, subject to the acceptable level of security between
    the QSTAs."

    with

    "When a QSTA transitions to a differnent QAP after a DLS is set up, the DLS shall be torn down as described in 11.7.4."

    Editor included in draft 7.0 in 11.7.

Cl **11**   *SC* **11.7.3**   *P* **460**   *L* **460**   # 150
STEPHENS, ADRIAN P   Individual

Comment Type   **TR**   *Comment Status*   **A**
    (For Shlomo Ovadia)   Figure 205 applies only to STA-initiated DLS Teardown procedure

SuggestedRemedy
    Modify figure 205 caption to "QSTA-initiated DLS teardown message flow"

Response   *Response Status*   **U**
    ACCEPT.

    Editor included in draft 7.0 in 11.7.3, Figure 212.

Cl **11**   *SC* **11.7.3.1**   *P* **459**   *L* **42**   # 144
STEPHENS, ADRIAN P   Individual

Comment Type   **TR**   *Comment Status*   **A**
    (Submitted on behalf of Shlomo Ovadia)   The DLS Teardown procedure at QSTA does not define DLS teardown if QSTA is out of the QAP range

SuggestedRemedy
    Presentation IEEE 802.11-06/0242r1 presents a fix to this problem   Submission IEEE 802.11-06/0598r0 contains normative text consistent with this presentation.

Response   *Response Status*   **U**
    ACCEPT IN PRINCIPLE.

    Adopt the changes in 06/598r0 with the following exception:

    Delete: "in some implementation-defined way..." from the text inserted in 11.7.3.3.

    Editor included in draft 7.0 in 11.7.3, 11.7.3.1, and 11.7.3.3.

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

Cl **11**
SC **11.7.3.1**

Page 32 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **11**   *SC* **11.7.3.2**   *P* **460**   *L* **37**   # 145

STEPHENS, ADRIAN P   Individual

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

(Submitted on behalf of Shlomo Ovadia)   QAP-initiated DLS teardown procedure is not defined; this is needed when if QAP loses its DLS session state or QSTA left BSS without disassociation

SuggestedRemedy

Presentation IEEE 802.11-06/0242r1 presents a fix to this problem   Submission IEEE 802.11-06/0598r0 contains normative text consistent with this presentation.

Response   *Response Status* **U**

ACCEPT IN PRINCIPLE.

See resolution to comment #144.

Cl **12**   *SC* **12.3.5.11.3**   *P* **487**   *L* **20**   # 24

FISCHER, MICHAEL A   Individual

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

Sponsor ballot comment 250 was rejected because it attempted to introduce normative wording into the definition of an abstract interface. However, the (abstract) behavior that was the subject of the rejected comment is still relevant, because proper operation of the MAC IS dependent on the PHY maintaining physical WM busy (CCA busy) for the duration indicated in a valid PLCP header. The solution is to describe the expected behavior without introducing normative wording.

SuggestedRemedy

Add a statement at the end of the existing text that states: "After generating a PHYRXSTART.indication the PHY is expected to maintain physical medium busy status (not generating PHY-CCA.indication(IDLE)) during the period required by that PHY to transfer a frame of the indicated LENGTH at the indicated DATARATE. This physical medium busy condition should be maintained even if a PHY-RXEND.indication(CarrierLost) or a PHYRXEND.indication(FormatViolation) is generated by the PHY prior to the end of this period."

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in 12.3.5.11.3.

Cl **12**   *SC* **12.3.5.12.3**   *P* **488**   *L* **28**   # 26

FISCHER, MICHAEL A   Individual

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

Sponsor ballot comment 256 was rejected because it attempted to introduce normative wording into the definition of an abstract interface. However, the (abstract) behavior that was the subject of the rejected comment is still relevant, and should be reflected in the text of this clause using non-normative wording.

SuggestedRemedy

Add a sentence immediately after the initial sentence of this clause that states: "In the case of an RXERROR value of "NoError," the MAC uses the PHY-RXEND.Indication as reference for channel access timing, as shown in Figure 166."

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in 12.3.5.12.3.

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

Cl **12**
SC **12.3.5.12.3**

Page 33 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **12**	*SC* **12.3.5.12.3**	*P* **488**	*L* **29**	# 25

FISCHER, MICHAEL A   Individual

Comment Type **TR**   *Comment Status* **R**

Sponsor ballot comment 251 was rejected because it attempted to introduce normative wording into the definition of an abstract interface. However, the (abstract) behavior that was the subject of the rejected comment is still relevant, because proper operation of the MAC IS dependent on the PHY maintaining physical WM busy (CCA busy) for the duration indicated in a valid PLCP header. The solution is to describe the expected behavior without introducing normative wording.

SuggestedRemedy

Add a statement at the end of the existing text that states: "After generating a PHYRXEND.indication with RXERROR value "UnsupportedRate," the PHY is expected to maintain physical medium busy status (not generating a PHY-CCA.indication(IDLE)) during the period required by that PHY to transfer a frame of the length and data rate encoded in the most recently received PLCP header. If the information in an otherwise-valid PLCP header is inadequate for the local PHY to determine the period required for transfer of the frame, the PHY is expected to report RXERROR of "FormatViolation."

Response   *Response Status* **U**

REJECT.

There are apparently unresolvable conflicts in the suggested remedy, including the need to indicate two different values for RXERROR when an unsupported rate is contained in the PLCP header. In one case the RXERROR is supposed to be "UnsupportedRate". However, because the rate is unknown, the time cannot be calculated, requiring the use of the "FormatViolation" value.

It is not clear what the commenter is trying to accomplish here. It also appears that the commenter is asking that a PLCP header from some other, previous frame reception be used for time calculation when "FormatViolation" is indicated.

Cl **12**	*SC* **12.3.5.4.4**	*P* **480**	*L* **24**	# 27

FISCHER, MICHAEL A   Individual

Comment Type **GR**   *Comment Status* **A**

Sponsor ballot comment 252 was rejected because it attempted to introduce normative wording into the definition of an abstract interface. However, the (abstract) behavior that was the subject of the rejected comment is still relevant, and should be reflected in the text of this clause without the use of normative wording.

SuggestedRemedy

Add a sentence at the end of this clause that states: "The behavior expected by the MAC pursuant to issuance of PHY-TXSTART.Request is shown in Figure 166."

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in 12.3.5.4.4.

Cl **12**	*SC* **12.3.5.7.3**	*P* **483**	*L* **19**	# 30

FISCHER, MICHAEL A   Individual

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

The existing statement was appropriate when written, but has been ambiguous since the introduction of PHYs with symbols that encode large numbers of bits. Sponsor ballot comment 254 was rejected, part of this rejection is acceptable to the commenter, but there is one aspect of that comment which remains important.

SuggestedRemedy

In the existing text, insert "symbol containing the" between "end of the" and "last bit"

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in 12.3.5.7.3.

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

Cl **12**
SC **12.3.5.7.3**

Page 34 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **17**   *SC* **0**   *P* **613**   *L*   # 17
ADACHI, DR TOMOKO   Individual

Comment Type   **E**   *Comment Status*   **A**
   "PHY_TXEND.ind" should be "PHY_RXEND.ind" in Figure 260.

SuggestedRemedy
   Fix it.

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

   Editor included in draft 7.0 in Figure 260 of 17.3.12.

Cl **17**   *SC* **17.3.2.3**   *P*   *L*   # 137
STEPHENS, ADRIAN P   Individual

Comment Type   **T**   *Comment Status*   **A**
   Table 139 rightmost column is wrongly labelled "10MHz"

SuggestedRemedy
   Replace quoted text with "5 MHz".

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

   Editor included in draft 7 in 17.3.2.3.

Cl **17**   *SC* **17.4.4**   *P* **618**   *L* **11**   # 20
FISCHER, MICHAEL A   Individual

Comment Type   **TR**   *Comment Status*   **A**
   Sponsor ballot comment 280 was rejected, stating that the aPHY-RX-START-Delay
   parameter is defined in the individual PHY clauses. This rejection is acceptable to the
   commenter, PROVIDED that the definitions of aPHY-RX-START-Delay are correctly
   specified and/or constrained in each of said PHY clauses. This does not appear to be the
   case for the OFDM PHYs defined in clause 17. The MAC is expecting aPHY-RX-START-
   Delay to be "The delay from the start of the preamble to the issuance of the
   RXSTART.indicate by the PHY." (this statement is quoted from Table 117, which is the
   only accurate statement of the definition of this parameter in the draft, an issue that is
   addressed in a separate recirculation ballot comment by this commenter) The OFDM PHY
   receive timing, shown in Figure 260, places (correctly) the occurrence of PHY-RX-
   START.indication at the end of the receipt of the Service field of the
   "Decoded+descrambled" PLCP header. Because (using numbers for 20MHz channel
   spacing, but the same issue pertains to each of the narrower channel spacings shown in
   Table 150) aPreambleLength is 16us, aPLCPHeaderLength is 4us, hence exactly 4us is
   available after preamble and PLCP header to complete the specified aPHY-RX-START-
   Delay of 24us. However, this 4us is consumed by reception of the first OFDM symbol of the
   "DATA" field (the symbol that contains the PLCP "SERVICE" field) which leaves no time for
   the "Viterbi Decoding Delay" shown in Figure 260, and required in OFDM PHY
   implementations.

SuggestedRemedy
   Increase the duration of aPHY-RX-START-Delay in Table 150 to a set of value that are
   achievable by actual OFDM PHY implementations. If the increase exceeds 2us (for the
   20MHz channel spacing column, or proportionally larger values for the other columns, it
   would be appropriate to include an informative note alerting implementers to the fact that
   this value is additive within the constraints under which "the requirements of aSIFSTime"
   and/or "aCCATime" listed elsewhere in Table 150 apply.

Response   *Response Status*   **U**
   ACCEPT.

   Change the values of aPHY-RX-Start_Delay in Table 150 by increasing the existing values
   by 1us.

   Editor included in draft 7.0 in 17.4.4.

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

Cl **17**   Page 35 of 40
SC **17.4.4**   6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **17**   *SC* **17.5.4.3**   *P* **539**   *L*   *#* 140

STEPHENS, ADRIAN P   Individual

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

Table 153 rightmost column is wrongly labelled "10MHz"

SuggestedRemedy

Replace quoted text with "5 MHz".

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in 17.5.4.3.

Cl **A**   *SC*   *P* **750**   *L*   *#* 138

STEPHENS, ADRIAN P   Individual

Comment Type   **E**   *Comment Status*   **R**

Blank page

SuggestedRemedy

Instruct the editor to let his artistic tendancies loose on the page and produce something the 802.11 community would be proud of.

Response   *Response Status*   **C**

REJECT.

Cl **A**   *SC* **A.4.8**   *P* **730**   *L* **43**   *#* 51

ECCLESINE, PETER   Individual

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

Optional 5 MHz channel spacing not defined

SuggestedRemedy

Append OF1.8 with 5 MHz channel spacing parameters, same as OF1.7 and subelements

Response   *Response Status*   **U**

ACCEPT.

Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **731**   *L* **47**   *#* 53

ECCLESINE, PETER   Individual

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

Optional 5 MHz channel spacingn parameters not defined

SuggestedRemedy

Append OF2.24-26 with Modulation, Timing and RATE for 5 MHz channel spacing, Status referring to OF1.8:M

Response   *Response Status*   **U**

ACCEPT.

Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **732**   *L* **27**   *#* 55

ECCLESINE, PETER   Individual

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

Optional 5 MHz channel spacing Channel Bandwidth not defined

SuggestedRemedy

Insert OF3.11.1 with 5 MHz channel spacing, Status referring to OF1.8:M

Response   *Response Status*   **U**

ACCEPT.

Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **732**   *L* **29**   *#* 56

ECCLESINE, PETER   Individual

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

Optional 5 MHz channel spacing Channelizations not defined

SuggestedRemedy

Insert new 5 MHz channel width after OF3.13.2 and OF3.13.4, Status referring to OF1.8:M, and renumber 3.13.x

Response   *Response Status*   **U**

ACCEPT.

Editor included in draft 7.0 in A.4.8.

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

Cl **A**
SC **A.4.8**

Page 36 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **A**   *SC* **A.4.8**   *P* **733**   *L* **12**   # 57
ECCLESINE, PETER   Individual

Comment Type   **TR**   *Comment Status* **A**
   Optional 5 MHz channel spacing Interference-limited areas not defined

SuggestedRemedy
   Insert new 5 MHz channel width after OF3.16.2 and OF3.16.4, Status referring to OF1.8:O, and renumber 3.13.x

Response   *Response Status* **U**
   ACCEPT.

   Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **733**   *L* **22**   # 58
ECCLESINE, PETER   Individual

Comment Type   **TR**   *Comment Status* **A**
   Optional 5 MHz channel spacing SlotTime not defined

SuggestedRemedy
   Insert OF3.19 with 5 MHz channel spacing, Status referring to OF1.8:M

Response   *Response Status* **U**
   ACCEPT.

   Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **734**   *L* **13**   # 59
ECCLESINE, PETER   Individual

Comment Type   **TR**   *Comment Status* **A**
   Optional 5 MHz channel spacing Power Levels not defined

SuggestedRemedy
   After OF4.13, insert two new with 5 MHz channel spacing, Status referring to OF1.8:M, and renumber rest of OF4

Response   *Response Status* **U**
   ACCEPT.

   Editor included in draft 7.0 in A.4.8. However, editor inserted after OF4.10 and OF4.11.

Cl **A**   *SC* **A.4.8**   *P* **734**   *L* **18**   # 60
ECCLESINE, PETER   Individual

Comment Type   **TR**   *Comment Status* **A**
   Optional 5 MHz channel spacing Transmit constellation errors missing

SuggestedRemedy
   After OF4.14.8, Insert new OF4.15 with 5 MHz channel spacing, Status referring to OF1.8 and its subsections

Response   *Response Status* **U**
   ACCEPT.

   Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **735**   *L* **34**   # 61
ECCLESINE, PETER   Individual

Comment Type   **TR**   *Comment Status* **A**
   Optional 5 MHz channel spacing input level, channel rejection, CCA sensitivity misssoin

SuggestedRemedy
   After OF5.10, Insert new OF5.11-15 with similar parameters, Status referring to OF1.8:M

Response   *Response Status* **U**
   ACCEPT.

   Editor included in draft 7.0 in A.4.8.

Cl **A**   *SC* **A.4.8**   *P* **736**   *L* **36**   # 62
ECCLESINE, PETER   Individual

Comment Type   **TR**   *Comment Status* **A**
   Optional 5 MHz channel spacing RATE parameter missing

SuggestedRemedy
   After OF9.4, Insert new OF9.5 with similar parameters, Status referring to OF1.8:M & O for last entry

Response   *Response Status* **U**
   ACCEPT.

   Editor included in draft 7.0 in A.4.8.

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

Cl **A**
SC **A.4.8**

Page 37 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **A**   *SC* **A.4.8**   *P* **748**   *L* **25**   # 63

ECCLESINE, PETER   Individual

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

Optional 5 MHz channel spacing Regulatory & Coverage classes missing

SuggestedRemedy

After RC3, Insert new RC4 with 5 MHz channel spacing, Status referring to OF1.8:M

Response   *Response Status* **U**

ACCEPT.

Editor included in draft 7.0 in A.4.8.

Cl **C**   *SC* **Annex C**   *P*   *L*   # 139

STEPHENS, ADRIAN P   Individual

Comment Type **T**   *Comment Status* **R**

Although this annex does report that it's valid for only a subset of features, that's not very helpful.

SuggestedRemedy

List which features are and are not supported in the SDL.

Response   *Response Status* **C**

REJECT.

The annex is quite clear as to which features are described therein. The SDL itself provides that description.

Cl **D**   *SC*   *P* **993**   *L* **41**   # 65

ECCLESINE, PETER   Individual

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

text SYNTAX INTEGER 0..2347 should have 3000 limit

SuggestedRemedy

Correct

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 for dot11RTSThreshold.

Cl **D**   *SC* **0**   *P*   *L*   # 141

STEPHENS, ADRIAN P   Individual

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

There is nothing in the MIB to support 5MHz operation, but there is for 10MHz. So we must be missing some changes.

SuggestedRemedy

Add 5MHz support similar to 10MHz support in the MIB.

Response   *Response Status* **U**

ACCEPT.

Editor to incorporate the text from 06/736r0.

Editor included in draft 7.0 in Annex D.

Cl **D**   *SC* **0**   *P* **994**   *L* **29**   # 66

ECCLESINE, PETER   Individual

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

text SYNTAX INTEGER 256..2346 should have 3000 limit

SuggestedRemedy

Correct

Response   *Response Status* **C**

ACCEPT.

Editor included in draft 7.0 in dot11FragmentationThreshold.

Cl **D**   *SC* **0**   *P* **1040**   *L* **44**   # 54

ECCLESINE, PETER   Individual

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

Status deprecated is not underlined

SuggestedRemedy

Replace deprecated with strikethru current and underlined deprecated

Response   *Response Status* **C**

ACCEPT.

Mark this as a change.

Editor included in draft 7.0 for dot11SMTbase4.

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

Cl **D**
SC **0**

Page 38 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **D**   *SC* **D**   *P* **1035**   *L* **3**   # 74
CHAPLIN, CLINT F   Individual

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

dot11SMTbase3 appears in the OPTIONAL-GROUPS. dot11SMTbase3 is deprecated (see page 1039 line 10), and the latest dot11SMTbase appears earlier (page 1034 line 6), and correctly, in the MANDATORY-GROUPS of dot11Compliance. This is being entered as an "Editorial" comment since the OPTIONAL-GROUPS are shown as merely a comment in the MIB.

SuggestedRemedy

dot11SMTbase3 shouldn't appear in the OPTIONAL-GROUPS.

Response   *Response Status*   **C**

ACCEPT.

Editor included in draft 7.0 in Annex D.

Cl **H**   *SC* **H.5**   *P*   *L*   # 39
O'HARA, ROBERT   Individual

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

IETF RFC 1750 explains the notion of cryptographic-quality random numbers and provides advice on ways to harvest suitable randomness." Where IETF RFC 1750 is out of time, the correct description should be "IETF RFC 4086 explains the notion of cryptographic-quality random numbers and provides advice on ways to harvest suitable randomness. "

SuggestedRemedy

Chang "RFC 1750" to "RFC 4086". Make the same change throughout the document

Response   *Response Status*   **C**

ACCEPT.

This was already implemented in draft 6.0.

Cl **M**   *SC* **M**   *P*   *L*   # 90
MYLES, ANDREW F   Individual

Comment Type   **TR**   *Comment Status*   **R**

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.

I disagree with the previous response to this comment in which it was asserted this annex is useful. Given this is new material to the standard, I believe a very strong reasons needs to be provided to include it.

SuggestedRemedy

Remove entire annex

Response   *Response Status*   **U**

REJECT.

The balloter is requested to read the actual draft being balloted. Annex M has nothing to do with AP functional descritpion. It is assumed the balloter means Annex N.

The consensus of the working group is that the material is useful. The burden of proving it not useful is on the commenter. A simple assertion that it is not useful is insufficient justification to remove the annex.

Cl **N**   *SC* **N**   *P*   *L*   # 91
MYLES, ANDREW F   Individual

Comment Type   **TR**   *Comment Status*   **R**

There is little obvious value in this annex

I disagree with the previous response to ths comment in which it was asserted this annex is useful. Given this is new material to the standard, I believe a very strong reasons needs to be provided to include it.

SuggestedRemedy

Remove entire annex

Response   *Response Status*   **U**

REJECT.

The consensus of the working group is that the material is useful. The burden of proving it not useful is on the commenter. A simple assertion that it is not useful is insufficient justification to remove the annex.

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

Cl **N**
SC **N**

Page 39 of 40
6/19/2006 1:39:05

Submission   **Bob O'Hara, Cisco Systems**

Cl **N**　　　*SC* **N.2**　　　　　　*P* **1155**　　　*L* **46**　　　# 52

ECCLESINE, PETER　　　　　　　　Individual

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

UML is used without full name

SuggestedRemedy

Spell out Unified Modeling Language first

Response　　　　　　*Response Status*　**C**

ACCEPT.

Editor included in draft 7.0 in N.2.

Cl **O**　　　*SC* **O.2.2**　　　　　*P* **1165**　　　*L*　　　# 95

ENGWER, DARWIN A　　　　　　　Individual

Comment Type　**GR**　　　*Comment Status*　**A**

With the withdrawal of 802.11F there are now a few aspects of 802.11 that are not described, specified or defined anywhere. While that is in general very unfortunate, there exist today other methods for accomplishing many of the mechanisms described in 802.11F that do not involve using the 802.11F protocol. However, the use of a specially addressed layer 2 frame (e.g. a null XID frame) by an AP to update the DS (e.g. and any infrastructure switches and routers) of the current association status of a mobile STA remains a valid and useful mechanism and method that is now lost.

SuggestedRemedy

Add an informative note in clause N.2.2 (now O.2.2) that cites the use of a null L2 XID packet as one method of accomplishing a DS-STA-NOTIFY update sequence in a real network/ WLAN system. Also include a reference to 802.11F clauses 4.5.1, 4.9.3, 5.1.1, 5.5.1, 5.5.2, 5.8, and 6.3, and (subsequently) add an 802.11F reference to Annex E.　Alternatively we could copy from 802.11F directly into 802.11ma (in the appropriate places) the lines of text that describe the XID frame. Then the 802.11F reference and reference citation would not be needed.

Response　　　　　　*Response Status*　**U**

ACCEPT IN PRINCIPLE.

Add the following sentence to the end of O.2.2.1.4:
"There are many mechanisms to implement this mapping update for the cases of ADD and MOVE. One example mechanism, in the case where the DS is an 802 LAN, is to use an 802.2 XID null frame."

Editor included in draft 7.0 in O.2.2.1.4.

Cl **O**　　　*SC* **O.2.2**　　　　　*P* **1165**　　　*L* **32**　　　# 99

ENGWER, DARWIN A　　　　　　　Individual

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

With the withdrawal of 802.11F there are now a few aspects of 802.11 that are not described, specified or defined anywhere. While that is in general very unfortunate, there exist today other methods for accomplishing many of the mechanisms described in 802.11F that do not involve using the 802.11F protocol. However, the use of a specially addressed layer 2 frame (e.g. a null XID frame) by an AP to update the DS (e.g. and any infrastructure switches and routers) of the current association status of a mobile STA remains a valid and useful mechanism and method that is now lost.

SuggestedRemedy

Add an informative note in clause N.2.2 (now O.2.2) that cites the use of a null L2 XID packet as one method of accomplishing a DS-STA-NOTIFY update sequence in a real network/ WLAN system. Also include a reference to 802.11F clauses 4.5.1, 4.9.3, 5.1.1, 5.5.1, 5.5.2, 5.8, and 6.3, and (subsequently) add an 802.11F reference to Annex E.　Alternatively we could copy from 802.11F directly into 802.11ma (in the appropriate places) the lines of text that describe the XID frame. Then the 802.11F reference and reference citation would not be needed.

Response　　　　　　*Response Status*　**U**

ACCEPT IN PRINCIPLE.

See resolution to comment #95 (duplicate).

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

Cl **O**
SC **O.2.2**

Page 40 of 40
6/19/2006 1:39:05

Submission　　　　　　　　　　　　　　　　　　　　　　　　　　　　　**Bob O'Hara, Cisco Systems**