Cl **00**   *SC* **0**   *P* **0**   *L* **0**   *MyBallot #* 433
Raissinia, Ali

Comment Type   **ER**   *Comment Status* **D**
0

SuggestedRemedy
0

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. The comment is blank and there is nothing for the editor to do.

Cl **00**   *SC* **17, 18, 19**   *P* **0**   *L* **0**   *MyBallot #* 628
Godfrey, Tim

Comment Type   **E**   *Comment Status* **D**
To assist readers who are new to the standard, it might be helpful to include the original Task Groups in the main title line for clauses 17, 18, and 19. That would clearly associate the "common names" for these PHYs with the appropriate clause when viewing the table on contents or PDF bookmarks.

SuggestedRemedy
For example:
"17. 802.11a: Orthogonal frequency division multiplexing (OFDM) PHY specification for the 5 GHz band"
"18. 802.11b: High Rate direct sequence spread spectrum (HR/DSSS) PHY specification"
"19. 802.11g: ERP specification"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. This might apply nicely to a few claues, but will not work at all for the work of some other task groups like 802.11h. It would introduce a false concept that task groups work only on sub-clauses of the document.

Cl **00**   *SC* **Bookmarks**   *P* **0**   *L* **0**   *MyBallot #* 543
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
Revision misspelled "Revisin"

SuggestedRemedy
Use word processor that spellchecks Bookmarks.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor searched for Revisin in Frame source and not found. The error must have been a one-off typo error in creating PDF.

Cl **00**   *SC* **Bookmarks 19**   *P* **0**   *L* **0**   *MyBallot #* 544
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
Why defining all the other acronyms and not "ERP"?

SuggestedRemedy
Spell out "Extended Rate PHY (ERP)" in title.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The editor believes the draft consistently uses acronyms in titles of clauses and sub-clauses. The bookmarks come directly from the clause and sub-clause titles

---

Cl **00**   *SC* **Compelte Doc**   *P* **0**   *L* **0**   *MyBallot #* 599
Kumar, Rajneesh

Comment Type   **E**   *Comment Status* **D**
Top Left of every pageTop left of most of the pages read "Revision with IEEE Corrections, Clarifications & Enhancments". Spelling of Enhancements is wrong

SuggestedRemedy
Enhancements

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment id #120. See #120 for editorial resolution.

Cl **00**   *SC* **General**   *P* **0**   *L* **0**   *MyBallot #* 570
Liu, Changwen

Comment Type   **E**   *Comment Status* **D**
Why the ODFM PHY specification for 2.4GHz is not included?

SuggestedRemedy
0

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Clause 19 (ERP Phy) is included. There is no other OFDM PHY specification for 2.4GHz currently approved as ammendment of 802.11 or adopted within 802.11ma. No action was requested and question is answered. No editorial action needed.

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* **General**   *P* **0**   *L* **0**   *MyBallot #* 396
LEMBERGER, URIEL

Comment Type   **ER**   *Comment Status*   **D**

Regulatory related requirements are spreaded in the document in noncosistant way, and sometimes duplicated in two different locations.

SuggestedRemedy

Use consistant way to define regulatory related information like transmit power for example having all in annex I and reference to this point from other parts of the document

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Most references to regulatory bodies and information will be made general, rather than specific, referring the implementer to check the regulations for himself.

In clause 14.6.2: remove the following: Table 56, and revise the text above it to say "There are specific radio regulations in various countries to which equipment built to this standard must comply. Theses regulations are not identified in this standard." Editor included in draft 2.0 in 14.6.2.

in 14.8.1: Table 70

in 14.8.2.2: Table 71

in 14.8.2.19:

in 15: Delete second and third sentences. Editor included in draft 2.0 in second paragraph of 15.1.

in 15.4.6.2: delete all but first sentence and add "See the applicable regulations for the countries in which the implementation will operate." Editor included in draft 2.0 in 15.4.6.2.

in 15.4.6.5: Editor included similar chagnes in draft 2.0 in 15.4.6.5.

in 15.4.7.1: delete Table 89 and second sentence. Editor included in draft 2.0 in 15.4.7.1.

in 18.4.6.2: see 15.4.6.2. Editor included in draft 2.0 in 18.4.6.2.

in 18.4.6.8:

in 18.4.7.1: Delete Tables 136 and 137, and text that references them. Editor included in draft 2.0 in 18.4.7.1.

in 19.4.1: delete all but the first sentence. Editor included in draft 2.0 in 19.4.1.

Cl **00**   *SC* **General**   *P* **0**   *L* **0**   *MyBallot #* 244
Palm, Stephen

Comment Type   **TR**   *Comment Status*   **D**

If an implementor wished to implement an 802.11g or 802.11a only product, this document provides no guidance as to which clauses and phrases are relevant.

SuggestedRemedy

Clearly indicate which clauses and phrsases are applicable to the individual amendments of 802.11a through 802.11j

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. Once 802.11REV-2005 is published, IEEE rules require that the individual amendments (802.11a-j) disappear. These distinctions are not indicated in the revision of the standard.

Cl **00**   *SC* **General**   *P* **0**   *L* **0**   *MyBallot #* 395
Kandala, Srinivas

Comment Type   **TR**   *Comment Status*   **D**

Since Tge draft has been stable and the "ma" draft is incomplete (see comment on clause 5) and the chances of another amendment approved in the next 2 years is very close to 0, I respectfully request the TG/WG to ensure that the amendment in Tge gets rolled in this cycle itself.

SuggestedRemedy

As the editor of Tge I can not change my vote in good conscience on this unless the Tge amendment is also added to the draft.

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. IEEE rules are that a revision may include only approved amendment to a standard. As 802.11e is not yet approved, it cannot be included. As well, the 802.11ma PAR allowed for the inclusion of amendments approved by the IEEE-SA in a window of six months after the approval of the 802.11ma PAR. 802.11e was not approved by the IEEE-SA within this window, either.

Cl **00**   *SC* **General**   *P* **0**   *L* **0**   *MyBallot #* 615
Williams, Richard

Comment Type   **E**   *Comment Status*   **D**

Bookmark for page iii has incorrect spelling

SuggestedRemedy

Change 'Revisin' to 'Revision'.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Duplicate of comment id# 543. See #543 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   7/6/2005 10:15:57 AM

Page 2 of 118
Cl **00**   *SC* **General**

Submission   Bob O'Hara, Cisco Systems

Cl **00**   *SC* **General**   *P* **0**   *L* **0**   *MyBallot #* 338
Hillman, Garth

Comment Type   **E**   *Comment Status* **D**

Well, congratulations to IEEE 802.11. It is quite impressive (and lengthy) to see this standard finally consolidated.

SuggestedRemedy

Keep up the good work!!

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Nothing for editor to do to draft.

Cl **00**   *SC* **Generally**   *P* **0**   *L* **0**   *MyBallot #* 532
Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

The aPHY-RX-START-Delay parameter has been introduced without adequate definition. From its use in section 9.2.5.4, it is clearly the delay between the start of the packet on-air, an receiving the PHY-RXSTART.ind.   For all PHYs, there is a preamble and a PLCP header to be received before the PHY can emit this indication. However, the change appears to believe only the OFDM PHYs have this behaviour.

SuggestedRemedy

Add a definition for this parameter somewhere. I have made separate comments in each plac where it is wrongly defined to be zero.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Definitions will be added to the appropriate clauses. Editor has nothing to do on this item, but will examine other separate comment responses.

Cl **00**   *SC* **Generally**   *P* **0**   *L* **0**   *MyBallot #* 71
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**

There are 105 instances of "per".   Most of these are the meaining "for each".   About 6 of the have different meanings: "as defined in", "through".

Recommend that only the more common meaning be acceptable, and uses such as "per 8.2.3.4" should be reworded.

SuggestedRemedy

Check and re-word to avoid overloading the word.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in clause 3.118, 7.3.1.8, 7.3.1.9, 10.3.6.2.2 10.3.7.2.2, 11.2.1.4, 11.2.1.5, N.2.1.1.2, N.2.1.2.2.

Cl **00**   *SC* **Generally**   *P* **0**   *L* **0**   *MyBallot #* 34
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**

Please do a spell check. There are multiple typos that will be detected in this way.

SuggestedRemedy

Spellcheck

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Spell check is useless on the document at large with so many acronyms, revision marks, variable names, and source code. Editor has run spell check on the new annexes K, L, M, and N.

Cl **00**   *SC* **Generally**   *P* **0**   *L* **0**   *MyBallot #* 40
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

The aPHY-RX-START-Delay parameter has been introduced without adequate definition. From its use in section 9.2.5.4, it is clearly the delay between the start of the packet on-air, an receiving the PHY-RXSTART.ind.   For all PHYs, there is a preamble and a PLCP header to be received before the PHY can emit this indication. However, the change appears to believe only the OFDM PHYs have this behaviour.

SuggestedRemedy

Add a definition for this parameter somewhere. I have made separate comments in each plac where it is wrongly defined to be zero.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Definitions will be added to the appropriate clauses. Duplicate of comment id #532. See #532 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

7/6/2005 10:15:57 AM

Page 3 of 118
Cl **00**   *SC* **Generally**

Submission   Bob O'Hara, Cisco Systems

Cl **00**   *SC* **Generally**   *P* **0**   *L* **0**   *MyBallot #* 48
Stephens, Adrian

Comment Type **E**   *Comment Status* **D**

I know that it's kind of hard to achieve, but I have always felt that the reference model in secti 5.8 should map onto the clause description better than it does.

Part of the problem is the way we use language "a STA associates à" instead of "the SME of the STA initiates an association.request". The use of loose language and failure to identify which logical entity is responsible for normative behaviour causes loss of clarity.

SuggestedRemedy

I think we need an "SME procedures" clause. Logically, what needs to be done is each the th word "the STA" or "the AP", check to see if this is a rule for the SME, and if so, move it to th SME section.

Then we need a cross-check, the MLME_SAP and PLME_SAP should export interfaces that support the behaviour in this section.

A non-trivial undertaking, I know, but I hope it would be worth it.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The text has served the purpose of introducing the concepts used in 802.11 to implementers. If clarification is required, the commenter is solicited to provide specific text.

Cl **00**   *SC* **Introduction**   *P* **0**   *L* **0**   *MyBallot #* 590
Richard, Paine

Comment Type **E**   *Comment Status* **D**

PiiiL8 bad sentence

SuggestedRemedy

change "membershipit has the following membership:" to "membership"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in the introduction.

Cl **00**   *SC* **none**   *P* **0**   *L* **0**   *MyBallot #* 306
Kruys, Jan

Comment Type **E**   *Comment Status* **D**

misspelling

SuggestedRemedy

In the header - spell "enhancements" correctly

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment id #120. See #120 for editorial resolution.

Cl **00**   *SC* **Page 1**   *P* **0**   *L* **0**   *MyBallot #* 545
Hunter, David

Comment Type **ER**   *Comment Status* **D**

Title: Technolgoy

SuggestedRemedy

Use word processor that spellchecks anything.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor corrected misspelling on first page and title page in draft 1.1.

Cl **00**   *SC* **page 1 & Cover page**   *P* **1**   *L* **0**   *MyBallot #* 4
Aboba, Bernard

Comment Type **ER**   *Comment Status* **D**

Misspelling.

SuggestedRemedy

Change "Technolgoy" to "Technology"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment #545. See #545 for editorial resolution.

Cl **00**   *SC* **page iii**   *P* **0**   *L* **0**   *MyBallot #* 573
McCann, Stephen

Comment Type **E**   *Comment Status* **D**

Editor's note does not specify year of change, only month

SuggestedRemedy

Add 2005 as year to months, e.g. March 2005 work item

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This material was revision notes only for draft 1.0 and has been removed entirely from draft 1.1.

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

7/6/2005 10:15:57 AM   *Cl* **00**   *SC* **page iii**

Cl **01** *SC* **1.2**   *P* **0** *L* **0** *MyBallot #* 307

Kruys, Jan

Comment Type **T** *Comment Status* **D**

 Last bullit item is not correct: DFS etc is required in the 5GHz band everywhere

SuggestedRemedy

 Remove " in Europe"

Proposed Response *Response Status* **W**

 PROPOSED ACCEPT. Editor included in draft 1.1 in 1.2.

Cl **02** *SC* **2, pp. 3** *P* **3** *L* **0** *MyBallot #* 5

Aboba, Bernard

Comment Type **ER** *Comment Status* **D**

 Out of date reference.

SuggestedRemedy

 Change "802.1X-REV" to "802.1X-2004" throughout the document.

Proposed Response *Response Status* **W**

 PROPOSED ACCEPT. Included by editor in draft 1.1, in clauses 2, 3, 4, 5, 8.

Cl **02** *SC* **2, pp. 3** *P* **3** *L* **0** *MyBallot #* 6

Aboba, Bernard

Comment Type **TR** *Comment Status* **D**

 Add reference.

SuggestedRemedy

 Add reference to RFC 4017, "EAP Method Requirements for Wireless LANs"

Proposed Response *Response Status* **W**

 PROPOSED ACCEPT. Add the reference requested. Editor included in draft 2.0 in clause 2.

Cl **02** *SC* **2.**   *P* **0** *L* **0** *MyBallot #* 495

Engwer, Darwin

Comment Type **TR** *Comment Status* **D**

 After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

 Resolve the inconsistencies.

Proposed Response *Response Status* **W**

 PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the task group.

Cl **03** *SC* **3.**   *P* **0** *L* **0** *MyBallot #* 366

Watanabe, Fujio

Comment Type **TR** *Comment Status* **D**

 No definition of SSID. Is ESSID equal to SSID? If so, why does not say ESSID instead of SSI

SuggestedRemedy

 Add the definition of SSID, BSSID, and ESSID (if necessary) and add differentiation between ESSID and SSID if necessary.

Proposed Response *Response Status* **W**

 PROPOSED REJECT. SSID and BSSID are defined as field names in clause 7. BSSID is defined in 7.1.3.3.3. SSID is defined in 7.3.2.1. They are not "terms" that require definition in clause 3.

 Any occurrence of "ESSID" is an error and will be corrected. Editor searched the FRAME source for ESSID and did not find it.

Cl **03** *SC* **3.**   *P* **0** *L* **0** *MyBallot #* 546

Hunter, David

Comment Type **ER** *Comment Status* **D**

 Header: "Enhancments"

SuggestedRemedy

 Spellcheck

Proposed Response *Response Status* **W**

 PROPOSED ACCEPT. Editor included in draft 1.1 in abstract, introduction.

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

7/6/2005 10:15:57 AM

Page 5 of 118
Cl **03** *SC* **3.**

Submission   Bob O'Hara, Cisco Systems

Cl **03**   *SC* **3.**   *P* **0**   *L* **0**   *MyBallot #* 496

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the task group. Nothing for the editor to resolve.

Cl **03**   *SC* **3.**   *P* **0**   *L* **0**   *MyBallot #* 591

Richard, Paine

Comment Type   **E**   *Comment Status* **D**

P9L30 eliminated a definition, but didn't change numbering

SuggestedRemedy

change numbering

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in clasue 3.

Cl **03**   *SC* **3.114**   *P* **0**   *L* **0**   *MyBallot #* 279

Kruys, Jan

Comment Type   **T**   *Comment Status* **D**

The definition is wrong and in any case EIRP is already defined elsewhere

SuggestedRemedy

Delete.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.114. Numbering will be fixed in next version of draft when struck out definition is actually removed.

Cl **03**   *SC* **3.119**   *P* **0**   *L* **0**   *MyBallot #* 280

Kruys, Jan

Comment Type   **T**   *Comment Status* **D**

This is not correct, it applies in the US, Japan etc too.

SuggestedRemedy

Replace with: A regulatory requirement to avoid that some of the available RF channels are more used than others.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Delete "per ERC/DEC/(99)23". Editor included in draf 1.1 in 3.119.

Cl **03**   *SC* **3.121**   *P* **0**   *L* **0**   *MyBallot #* 473

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

excess verbiage

SuggestedRemedy

change to: This standard describes such a frame format, but does not describe how such a mechanism or frame format would be used.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.120.

Cl **03**   *SC* **3.122**   *P* **0**   *L* **0**   *MyBallot #* 190

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

The definition of WLAN system only allows a single AP.

SuggestedRemedy

Replaces "Access Point" with "Access Points" and "AP's station" with "Access Points' stations

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Replace only "Access Point" with "Access Points". Also, insert "(WLAN)" after "Wireless Local Area Network" in the term being defined. Editor included in draft 1.1 in 3.121.

Cl **03**   *SC* **3.122**   *P* **0**   *L* **0**   *MyBallot #* 189
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
"the AP's station (STA) and portal entities." is difficult to parse. Is it the AP's (STA and portal) or the (AP's STA) and portal?

SuggestedRemedy
replace with "portal entities and the AP's station(STA)

Proposed Response   *Response Status* **W**
PROPOSED REJECT. See comment #191 for alternate resolution.

Cl **03**   *SC* **3.122**   *P* **0**   *L* **0**   *MyBallot #* 191
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
An AP is defined to include a STA, so there is no need to explicitly include it.

SuggestedRemedy
Remove "the AP's station(STA)".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 3.121.

Cl **03**   *SC* **3.13**   *P* **0**   *L* **0**   *MyBallot #* 581
McCann, Stephen

Comment Type   **E**   *Comment Status* **D**
Definition needs a grammar tweak

SuggestedRemedy
remove "may communicate" from end of definition

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Grammar fixed. See comment id #471 for editorial resolution.

Cl **03**   *SC* **3.13**   *P* **0**   *L* **0**   *MyBallot #* 619
Godfrey, Tim

Comment Type   **E**   *Comment Status* **D**
The revised text reads: "The area containing the members of a basic service set (BSS) may communicate."

SuggestedRemedy
I suggest either "The area containing the members of a basic service set (BSS)" or "The area containing the members of a basic service set (BSS) that are able to communicate"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Grammar fixed. See comment id #471 for editorial resolution.

Cl **03**   *SC* **3.13**   *P* **0**   *L* **0**   *MyBallot #* 471
Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**
sentence is not gramatically correct

SuggestedRemedy
fix

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Change was traced back to the contribution 05/105r44 and corrected using this as basis. Included by editor in draft 1.1 in 3.13.

Cl **03**   *SC* **3.13**   *P* **0**   *L* **0**   *MyBallot #* 187
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
"may communicate" needs to be removed from the end of the definition of BSA.

SuggestedRemedy
See comment

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Grammar fixed. See comment id #471 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   7/6/2005 10:15:57 AM

Page 7 of 118
Cl **03**   *SC* **3.13**

Submission   Bob O'Hara, Cisco Systems

Cl **03**   *SC* **3.13**   *P* **0**   *L* **0**   *MyBallot #* 629
Olson, Tim

Comment Type   **E**   *Comment Status* **D**
    This definition of BSA does not make grammatical sense.

SuggestedRemedy
    Suggest striking the words "may communicate".

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. Grammar fixed. See comment id #471 for editorial
    resolution.

Cl **03**   *SC* **3.13; page 5**   *P* **0**   *L* **0**   *MyBallot #* 340
Hillman, Garth

Comment Type   **E**   *Comment Status* **D**
    Incorrect sentence structure

SuggestedRemedy
    delete "may communicate"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. Grammar fixed. See comment id #471 for editorial
    resolution.

Cl **03**   *SC* **3.14**   *P* **0**   *L* **0**   *MyBallot #* 188
Mike, Moreton

Comment Type   **E**   *Comment Status* **D**
    "membership in a BSS" is grammatically wrong (at least in my part of the world).

SuggestedRemedy
    "membership of a BSS"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in 3.14.

Cl **03**   *SC* **3.14**   *P* **0**   *L* **0**   *MyBallot #* 472
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **A**
    but STAs that have synchronized doesn't quite cover it, bcus a BSS is more than (say) just
    adopting a channel or hop sequence. It is being part of a *particular* BSS. And that means
    syncing, or joining that BSS and NOT joining all other BSSs. BSS uniqueness is tied to a
    specific BSSID.

SuggestedRemedy
    fix

Proposed Response   *Response Status* **C**
    ACCEPT. Replace "STA Synchornization procedure" with "Join service primitive". Editor
    included in draft 1.1 in 3.14. The footnote also required updating to point to this primitive in te:

Cl **03**   *SC* **3.14**   *P* **0**   *L* **0**   *MyBallot #* 540
Perahia, Eldad

Comment Type   **E**   *Comment Status* **D**
    spelling error: "synchornization"

SuggestedRemedy
    synchronization

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. The mispelled text was deleted entirely. See comment id #472 for
    editorial resolution.

Cl **03**   *SC* **3.14**   *P* **0**   *L* **0**   *MyBallot #* 630
Olson, Tim

Comment Type   **T**   *Comment Status* **D**
    This new definition for BSS seems like it causes some interesting issues with other BSS
    definitions. For example the BSS basic rate set seems to indicate that all members of the BS
    must support the basic rate set. But if all that is required is to synchronize with the AP to
    become a member, this basic rate set definition seems awkward.

SuggestedRemedy
    0

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. The footnote does not refer to the correct procedure
    for synchronization. The footnote should refer to clause 10.3.3, not 11.1. Replace "11.1" in th
    footnote with "10.3.3". Editor included in draft 1.1 in footnote to 3.14.

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

7/6/2005 10:15:57 AM

Page 8 of 118
Cl **03**   *SC* **3.14**

Submission   Bob O'Hara, Cisco Systems

Cl **03**   *SC* **3.14**   *P* **0**   *L* **0**   *MyBallot #* 270
Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**
   "synchronization' is mispelled in "the STA synchornization procedure"

SuggestedRemedy
   edit

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The mispelled text was deleted entirely. See comment id #472 for
   editorial resolution.

Cl **03**   *SC* **3.14**   *P* **0**   *L* **0**   *MyBallot #* 582
McCann, Stephen

Comment Type   **E**   *Comment Status* **D**
   typo

SuggestedRemedy
   change "synchornization" to "synchronization"

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The mispelled text was deleted entirely. See comment id #472 for
   editorial resolution.

Cl **03**   *SC* **3.18**   *P* **0**   *L* **0**   *MyBallot #* 309
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
   The definition of channel is a description, not a definition. Most of the descriptive material is
   wrong.

SuggestedRemedy
   Replace with: channel: an instance of communications medium use for the purpose of passing
   protocol data units (PDUs) between two or more stations.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 3.18. The associated table was also
   deleted.

Cl **03**   *SC* **3.19**   *P* **0**   *L* **0**   *MyBallot #* 569
Liu, Changwen

Comment Type   **E**   *Comment Status* **D**
   I would like to see a better writing for the sentence. I cannot understand it.

SuggestedRemedy
   0

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 3.19.

Cl **03**   *SC* **3.22**   *P* **0**   *L* **0**   *MyBallot #* 310
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**
   The definition of confidentiality is not correct English

SuggestedRemedy
   Replace with: data confidentiality a property of information that prevents disclosure to
   unauthorized individuals, entities, or processes.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 3.25. Text was searched for term
   "confidentiality" and chagned to "data confidentiality" in 5.3, 5.3.1, 5.4, 5.4.3, 5.4.3.3, 5.7.5,
   6.1.2, 8.2.3.3.5, 8.3.1, 8.3.3., 8.3.3.1, 8.3.3.3, 8.3.3.4, 8.5.1.2.

Cl **03**   *SC* **3.23**   *P* **0**   *L* **0**   *MyBallot #* 311
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**
   A station may be able to receive at any time.

SuggestedRemedy
   After "transmit": remove "and may be able to receive"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 2.0 in 3.22.

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* **3.24**   *P* **0**   *L* **0**   *MyBallot #* 364

Watanabe, Fujio

Comment Type   **T**   *Comment Status* **D**

There is no definitions of "Point coordinator" in the specification

SuggestedRemedy

Add the definition of Point Coordinator.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Add: "Point Coordinator: The point coordinator is the entity within the STA in an AP that performs the point coordination function." Editor included in draft 2.0 in 3.8

Cl **03**   *SC* **3.26**   *P* **0**   *L* **0**   *MyBallot #* 312

Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

0

SuggestedRemedy

After "deauthentication" add "service"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.26.

Cl **03**   *SC* **3.30**   *P* **0**   *L* **0**   *MyBallot #* 313

Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

0

SuggestedRemedy

After "dissociation" add "service"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.30.

Cl **03**   *SC* **3.32**   *P* **0**   *L* **0**   *MyBallot #* 314

Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

Superfluous -see 3.35

SuggestedRemedy

Delete

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Change 3.32 "distribution" to "distribution service" definition. Editor included in draft 2.0 in 3.33.

Cl **03**   *SC* **3.35**   *P* **0**   *L* **0**   *MyBallot #* 315

Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

Too much text for a definition and it is not correct either: APs that use the wireless medium to perform DSS functions would fall outside the original definition.

SuggestedRemedy

Replace with: distribution system service (DSS): The set of services provided by the distribution system (DS) to transport MAC service data units (MSDUs) between stations comprising the DS.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is no inherent limit on the length of a definition. The list of services is helpful to some readers.

Cl **03**   *SC* **3.4**   *P* **0**   *L* **0**   *MyBallot #* 308

Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

The definition of ad-hoc network is superfluous.

SuggestedRemedy

Delete and add a sentence to the IBSS definition that ad--hoc network is some times used as vernacular for IBSS

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.4.

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 **03**   *SC* **3.4, 3.21, 3.23**   *P* **0**   *L* **0**   *MyBallot #* 548

Hunter, David

Comment Type **ER**   *Comment Status* **D**

WM is defined in 3.2 and later in its formal entry.

SuggestedRemedy

Use only "WM" or "wireless medium"

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The style used is believed to be easy to read and comprehend. It is consistent with all the other subclauses of section 3.

Cl **03**   *SC* **3.40**   *P* **0**   *L* **0**   *MyBallot #* 316

Kruys, Jan

Comment Type **E**   *Comment Status* **D**

EIRP is always determined by tx out and antenna gainà:-)

SuggestedRemedy

Replace with: effective isotropically radiated power (EIRP): The equivalent power of a transmitted signal in terms of
an isotropic (omnidirectional) radiator. The EIRP equals the product of the transmitter power and the antenna gain (reduced by any coupling losses between the transmitter and antenna).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.40.

Cl **03**   *SC* **3.41**   *P* **0**   *L* **0**   *MyBallot #* 317

Kruys, Jan

Comment Type **E**   *Comment Status* **D**

Superfluous, see below

SuggestedRemedy

Delete

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The term encapsulate and the term encapsulation describe totally different processes in the 802.11 text.

Cl **03**   *SC* **3.42**   *P* **0**   *L* **0**   *MyBallot #* 318

Kruys, Jan

Comment Type **T**   *Comment Status* **D**

encapsulation is a term with a well defined meaning - whereas the def. only covers the crypto variant.

SuggestedRemedy

Replace with: Cryptographic encapsulation: The process ofà.etc

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Also fix up the use of "encapsulation" to be "cryptographic encapsulation" throughout the document, as required. Editor included in draft 1.1 in 3.25, 8.2.1.1, 8.2.1.1.4, 8.2.2.3.3, 8.3.2.1.1, 8.3.2.2., 8.3.3.3, 8.7.1, A.4.4.1, H.6.2.

Cl **03**   *SC* **3.46**   *P* **0**   *L* **0**   *MyBallot #* 319

Kruys, Jan

Comment Type **E**   *Comment Status* **D**

This is correct but incomplete - the 5GHz band is available world-wide on the same conditions except for the US. However, that will change shortly too. Therefore making this distinction here is useless.

SuggestedRemedy

Remove "in Europe" here and in all other appearances.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Delete the definition in 3.46. Other occurrences dealt with in other comments. Editor included in draft 2.0 by deleting 3.46. It will be renumbered when revision marks are removed.

Cl **03**   *SC* **3.49**   *P* **0**   *L* **0**   *MyBallot #* 320

Kruys, Jan

Comment Type **E**   *Comment Status* **D**

0

SuggestedRemedy

Capitalize "group" and add "-as used in this standard"

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

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   7/6/2005 10:15:57 AM   Page 11 of 118   *Cl* **03**   *SC* **3.49**

Submission   Bob O'Hara, Cisco Systems

Cl **03**   *SC* **3.5**   *P* **0**   *L* **0**   *MyBallot #* 363

Watanabe, Fujio

Comment Type   **E**   *Comment Status*   **D**

It seems to me that the definition of "association" states only an infrastructure mode. How abc
IBSS case? Is it possible to say "association" if two STAs communicates?

SuggestedRemedy

Add the definition of association in IBSS.

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. Assication is defined only for a BSS.

Cl **03**   *SC* **3.51**   *P* **0**   *L* **0**   *MyBallot #* 274

Kruys, Jan

Comment Type   **E**   *Comment Status*   **D**

the logic off the (non) capitalization is hard to follow -here and in may other places

SuggestedRemedy

Add a note to the beginning of the Definitions that explains the capitalization.

Proposed Response   *Response Status*   **W**

PROPOSED REJECT.

Cl **03**   *SC* **3.57**   *P* **0**   *L* **0**   *MyBallot #* 99

Oakes, Ivan

Comment Type   **E**   *Comment Status*   **D**

"intergation" should say "integration services"

SuggestedRemedy

as comment

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.57.

Cl **03**   *SC* **3.67**   *P* **0**   *L* **0**   *MyBallot #* 275

Kruys, Jan

Comment Type   **T**   *Comment Status*   **D**

The MIC may use any sort of crypto and therefore the "symmetric" is not appropriate. The
explanatory sentences do not belong in the definition section

SuggestedRemedy

message integrity code (MIC): A value generated by a cryptographic function. If the
input data are changed, a new value cannot be correctly computed without knowledge of the
cryptographic key(s) used by the cryptographic function.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Replace the first 3 sentences with the suggested remedy. Editor
included in draft 2.0 in 3.67.

Cl **03**   *SC* **3.70**   *P* **0**   *L* **0**   *MyBallot #* 365

Watanabe, Fujio

Comment Type   **E**   *Comment Status*   **D**

The definition of "mobile station" seems to be only defined at an infrastructure mode. How
about STA in IBSS? Don't we call Mobile Station? Or is STA in IBSS categorized as a Portabl
Station?

SuggestedRemedy

Add the definition of mobile station in IBSS

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. The definition applies equally well to STA being part of a BSS or IBSS

Cl **03**   *SC* **3.73**   *P* **0**   *L* **0**   *MyBallot #* 44

Stephens, Adrian

Comment Type   **ER**   *Comment Status*   **D**

Definitions are not allowed to introduce normative behaviour (2005 style guide). "shall" is
reserved for normative behaviour.

SuggestedRemedy

Replace "shall" with "is"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 3.72.

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   7/6/2005 10:15:57 AM

Page 12 of 118
Cl **03**   *SC* **3.73**

Submission   Bob O'Hara, Cisco Systems

Cl **03**		*SC* **3.76**			*P* **0**		*L* **0**		*MyBallot #* 276
Kruys, Jan

Comment Type	**E**		*Comment Status*	**D**
	The definition is not a complete

SuggestedRemedy
	3.73 nonce: A numerical value used in cryptographic operations associated with a given
	cryptographic key, that shall not be reused with that key, including over all reinitializations of t
	system, through all time.

Proposed Response		*Response Status*	**W**
	PROPOSED ACCEPT. Editor included in draft 1.1 in 3.72.

Cl **03**		*SC* **3.85**			*P* **0**		*L* **0**		*MyBallot #* 277
Kruys, Jan

Comment Type	**E**		*Comment Status*	**D**
	The conditional does not make sense

SuggestedRemedy
	3.85 pre-robust security network association (pre-RSNA): Any type of association used by a
	pair of stations
	(STAs) that does not use a 4-Way handshake for establishing authentication or association
	between them.

Proposed Response		*Response Status*	**W**
	PROPOSED REJECT. Definition makes sense in light of all the other RSNA definitions
	provided in this same section.

Cl **03**		*SC* **3.86**			*P* **0**		*L* **0**		*MyBallot #* 278
Kruys, Jan

Comment Type	**E**		*Comment Status*	**D**
	Superfluous

SuggestedRemedy
	Delete

Proposed Response		*Response Status*	**W**
	PROPOSED REJECT. This term is used in the text and other definitions.

Cl **03**		*SC* **3.90**			*P* **0**		*L* **0**		*MyBallot #* 620
Godfrey, Tim

Comment Type	**E**		*Comment Status*	**D**
	The use of the word "liveness" in this definition is inconsistent with the definition of liveness
	provided in 3.63

SuggestedRemedy
	Use a better word than "liveness" in the 3.90 definition, or modify the definition in 3.63, or both

Proposed Response		*Response Status*	**W**
	PROPOSED ACCEPT. Replace the last sentence with "In order to ensure liveness of a
	communication in which a pseudorandom value is used, a nonce should be one of the inputs
	the function." Editor included in draft 2.0 in 3.90.

Cl **04**		*SC* **4.**			*P* **0**		*L* **0**		*MyBallot #* 497
Engwer, Darwin

Comment Type	**TR**		*Comment Status*	**D**
	After the combination of the base standard, the subsequent ammendments and more focused
	individual changes, there remain unresolved inconsistencies between the text in this clause a
	other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
	Resolve the inconsistencies.

Proposed Response		*Response Status*	**W**
	PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the tas
	group.

Cl **04**		*SC* **4.**			*P* **0**		*L* **0**		*MyBallot #* 622
Godfrey, Tim

Comment Type	**E**		*Comment Status*	**D**
	Definition of "LED"

SuggestedRemedy
	The common use (found in the majority of definitions) is that a LED is a "Light Emitting Diode'
	However, the only reference to LED in the standard in 11.1.2 does use the phrase "Light
	Emitting Display". Maybe both should be updated to "diode"?

Proposed Response		*Response Status*	**W**
	PROPOSED ACCEPT. Editor included in draft 1.1 in clause 4 and 11.1.2.

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						7/6/2005 10:15:57 AM

Page 13 of 118
Cl **04**		*SC* **4.**

Submission											Bob O'Hara, Cisco Systems

Cl **04**   *SC* **4.**   *P* **0**   *L* **0**   *MyBallot #* 621
Godfrey, Tim

Comment Type **E**   *Comment Status* **D**
    Definition of HiperLAN uses the word "ratio", not "radio"

SuggestedRemedy
    The common definitions are "High Performance Radio Local Access Network" or "High Performance Radio Local Area Network"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in 4.

Cl **05**   *SC* **5.**   *P* **0**   *L* **0**   *MyBallot #* 498
Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**
    After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
    Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the tas group.

Cl **05**   *SC* **5.**   *P* **0**   *L* **0**   *MyBallot #* 393
Kandala, Srinivas

Comment Type **TR**   *Comment Status* **D**
    Text on the architecture is not included that were suggested as part of changes.

SuggestedRemedy
    Add them.

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. IT is not clear to the task group exactly what is the subject of this comment. The commenter is urged to clarify this in a future ballot.

Cl **05**   *SC* **5.**   *P* **0**   *L* **0**   *MyBallot #* 45
Stephens, Adrian

Comment Type **TR**   *Comment Status* **D**
    This section, and particularly section 5.2 creates a number of fictions that have created problems in understanding the system for implementers since the first approved version. These fictions will hopefully be addressed by future activities seeking to clarify architecture.

    Specifically, an architecture consists of entities for which behaviour is defined connected by interfaces. If the interfaces are exposed to the outside world, they need to be concrete rathe than abstract.

    But we have a distribution service that provides an abstract description of communication between APs and portals. Unless the only implementations of the entire DS reside within a single physical realization or system from a single manufacturer, the interfaces between the A and portals are exposed and need to be standardised.

SuggestedRemedy
    Recommend that this section (and particularly 5.2) carry a disclaimer such as: "don't believe this, it will confuse the heck out of you", or alternatively: "the architectural description is unde review by study group xxx".

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. This standard describes the MAC and PHY and the air interface. It also describes the place of the MAC and PHY in a larger architecture. Describing the entire architecture in a normative fashion is beyond the scope of this standard. Clause 5 has the purpose of describing this architecture in a general fashion and not in a restrictive fashion, to allow future activities to extend this architecture.

Cl **05**   *SC* **5.1.1.2**   *P* **0**   *L* **0**   *MyBallot #* 549
Hunter, David

Comment Type **ER**   *Comment Status* **D**
    Incorrect punctuation for a list.

SuggestedRemedy
    The format for a list of clauses or words (as opposed to complete sentences) is to put a colon after the intro (here "PHYs:") and remove all of the periods, except for the last.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in 5.1.1.2.

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   7/6/2005 10:15:57 AM   Page 14 of 118   *Cl* **05**   *SC* **5.1.1.2**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.2**   *P* **0**   *L* **0**   *MyBallot #* 102

Oakes, Ivan

Comment Type **TR**   *Comment Status* **D**

The sentence "The portal provides the integration service between the DS and other LANs." muddies the concept of the portal as a unit or a SAP.

SuggestedRemedy

Replace the sentence by the definition of Portal as given in 3.84 "[The portal is] the logical poi at which the integration service is provided."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.

Cl **05**   *SC* **5.2**   *P* **0**   *L* **0**   *MyBallot #* 103

Bagby, David

Comment Type **TR**   *Comment Status* **D**

the language is changed to BSA (area) but the pic still indicates sets. Was this intentional or was the intent to label the ovals as areas?

SuggestedRemedy

Please make consistent.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The text references Figure 1 as part of the description of a BSS. Afterward, the text moves to the concept of basic service area, which is independent of the figure.

Cl **05**   *SC* **5.2**   *P* **0**   *L* **0**   *MyBallot #* 574

McCann, Stephen

Comment Type **E**   *Comment Status* **D**

Figure 1 does not show the new BSA

SuggestedRemedy

Add BSA to Figure 1

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Duplicate with comment id #103. See #103 for rational for reject.

Cl **05**   *SC* **5.2**   *P* **0**   *L* **0**   *MyBallot #* 550

Hunter, David

Comment Type **TR**   *Comment Status* **D**

Last sentence before figure is false: STA might still be able to communicate with some other members of the BSS.

SuggestedRemedy

Replace "it can no longer directly communicate with other members of the BSS" with "it may r longer be capable of directly communicating with some of the other members of the BSS".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Reverse the change in the last sentence of paragraph 3: Delete "BSA" and undelete "BSS". Editor included in draft 1.1 in 5.2.

Cl **05**   *SC* **5.2.1**   *P* **0**   *L* **0**   *MyBallot #* 575

McCann, Stephen

Comment Type **E**   *Comment Status* **D**

Text "Figure 1 does not show two IBSSs" is not true, as Figure 1 shows BSSs

SuggestedRemedy

Figure 1 should be changed to show IBSSs

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Since an IBSS is a type of BSS, then the statement is true. However, this can be made more apparent in 5.2.1 without introducing an identical drawi simply with a new label. Editor included in draft 1.1 in 5.2.1.

Cl **05**   *SC* **5.2.2**   *P* **0**   *L* **0**   *MyBallot #* 271

Karcz, Kevin

Comment Type **E**   *Comment Status* **D**

"synchronisation" is

SuggestedRemedy

0

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Comment is unclear. However, see comment #474 for change in a possibly related area.

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

7/6/2005 10:15:58 AM

Page 15 of 118
Cl **05**   *SC* **5.2.2**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.2.2**   *P* **0**   *L* **0**   *MyBallot #* 475
Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**
If we intend the term "membership in a BSS" to have some meaning, then we need to define that.

SuggestedRemedy
Clearly define the term "membership".

Proposed Response   *Response Status* **W**
PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **05**   *SC* **5.2.2**   *P* **0**   *L* **0**   *MyBallot #* 541
Perahia, Eldad

Comment Type **E**   *Comment Status* **D**
spelling error: "synchronisation"

SuggestedRemedy
synchronization

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment #474. See #474 for editorial resolution.

Cl **05**   *SC* **5.2.2**   *P* **0**   *L* **0**   *MyBallot #* 551
Hunter, David

Comment Type **ER**   *Comment Status* **D**
A STA has membership *in*, not *of*, a BSS

SuggestedRemedy
Replace "of" with "in".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.2.

Cl **05**   *SC* **5.2.2**   *P* **0**   *L* **0**   *MyBallot #* 474
Engwer, Darwin

Comment Type **ER**   *Comment Status* **D**
The word "synchronisation" is not US grammar.

SuggestedRemedy
Change spelling of "synchronisation" to "synchronization".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.2.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 583
McCann, Stephen

Comment Type **E**   *Comment Status* **D**
typo last paragraph before 5.2.3.1

SuggestedRemedy
change "unctonrolled" to "uncontrolled"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 424
Chaplin, Clint

Comment Type **E**   *Comment Status* **D**
The sentence "IEEE 802.11 logically separates the WM from the distribution system medium (DSM)." is the first time the term WM is used in the standard; please define here.

SuggestedRemedy
0

Proposed Response   *Response Status* **W**
PROPOSED REJECT. WM is used in 1.2 and spelled out. The term is defined in 3.122.

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

7/6/2005 10:15:58 AM

Page 16 of 118
Cl **05**   *SC* **5.2.3**

Submission   Bob O'Hara, Cisco Systems

Cl **05**　　　*SC* **5.2.3**　　　　　*P* **0**　　　*L* **0**　　*MyBallot #* 552
Hunter, David

Comment Type **ER**　　*Comment Status* **D**
Using term "provide" in different ways in same sentence

SuggestedRemedy
Replace "provides" with "enables".

Proposed Response　　　*Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.

Cl **05**　　　*SC* **5.2.3**　　　　　*P* **0**　　　*L* **0**　　*MyBallot #* 443
Myles, Andrew

Comment Type **TR**　　*Comment Status* **D**
Text explains how uncontrolled port frames do not transit the DS unlike other frames.

This may be true but it is not obvious why this fact is called out here

SuggestedRemedy
Justify the statement that uncontrolled port frames do not transit the DS (at least in a respons to this comment if not the actual text)

Proposed Response　　　*Response Status* **W**
PROPOSED ACCEPT. Uncontrolled port frames were introduced in 802.11i. For example, 802.1X frames are terminated within the AP, even though they are addressed as if they shoul be forwarded to the DS. (no change to the text of the draft.) No editorial resolution needed. S also comment #245.

Cl **05**　　　*SC* **5.2.3**　　　　　*P* **0**　　　*L* **0**　　*MyBallot #* 420
Chaplin, Clint

Comment Type **E**　　*Comment Status* **D**
Spelling error: "unctonrolled"

SuggestedRemedy
Correct to "uncontrolled"

Proposed Response　　　*Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**　　　*SC* **5.2.3**　　　　　*P* **0**　　　*L* **0**　　*MyBallot #* 592
Richard, Paine

Comment Type **E**　　*Comment Status* **D**
P22L11 misspelled word "unctonrolled"

SuggestedRemedy
Change "unctonrolled" to "uncontrolled"

Proposed Response　　　*Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**　　　*SC* **5.2.3**　　　　　*P* **0**　　　*L* **0**　　*MyBallot #* 442
Myles, Andrew

Comment Type **E**　　*Comment Status* **D**
"unctonrolled" is misspelt

SuggestedRemedy
Correct

Proposed Response　　　*Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**　　　*SC* **5.2.3**　　　　　*P* **0**　　　*L* **0**　　*MyBallot #* 594
Newton, Paul

Comment Type **E**　　*Comment Status* **D**
Change "An unctonrolled port frame in an RSNA is formatted as if it is to be sent to the DS bu does not, in fact, transmit the DS"

SuggestedRemedy
"An uncontrolled port frame in an RSNA is formatted as if it is to be sent to the DS but does not, in fact, transmit the DS"

Proposed Response　　　*Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

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

Submission　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 245
Edney, Jon

Comment Type   **T**   *Comment Status* **D**
New paragraph about "controlled port frame" very confusing and using undefined terms

SuggestedRemedy
Data sent to the AP's STA address by an associated STA always transits the DS, except whe
the data's destination is the uncontrolled port of the 802.1X authenticator in which case the da
is delivered directly to the authenticator. Note that the transit of the DS may be conceptual
rather than actual.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Change the last paragraph in 5.2.3 to: "Data sent to
the AP's STA address by one of the STAs associated with it conceptually transits the DS
unless it utilizes the 802.1X Ethertype. 802.1X frames must have the "To DS" bit set, even
though they do not in fact transit the DS." Editor included in draft 1.1 in 5.2.3.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 553
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
"unctronrolled"

SuggestedRemedy
Spellcheck

Proposed Response   *Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 542
Perahia, Eldad

Comment Type   **E**   *Comment Status* **D**
spelling error: "unctonrolled"

SuggestedRemedy
uncontrolled

Proposed Response   *Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 124
Myles, Andrew

Comment Type   **E**   *Comment Status* **D**
"unctonrolled" is misspelt

SuggestedRemedy
Correct

Proposed Response   *Response Status* **W**
PROPOSED REJECT. Text was deleted by resolution to comment #245.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 93
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
The last sentence on page 21 has been corrected. It would be more consistent it it just re-
iterate the AP definition.

SuggestedRemedy
Replace the sentence starting "An access pointà" with the definition from 3.2 "[An Access Poi
is] any entity that has station functionality and provides access to the distribution services, via
the wireless medium (WM), for associated stations."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.

Cl **05**   *SC* **5.2.3**   *P* **0**   *L* **0**   *MyBallot #* 125
Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**
Text explains how uncontrolled port frames do not transit the DS unlike other frames.

This may be true but it is not obvious why this fact is called out here

SuggestedRemedy
Justify the statement that uncontrolled port frames do not transit the DS (at least in a respons
to this comment if not the actual text)

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Uncontrolled port frames were introduced in 802.11i. For example,
802.1X frames are terminated within the AP, even though they are addressed as if they shoul
be forwarded to the DS. (no change to the text of the draft.) This is a duplicate of comment
443. No editorial resoution needed. See also comment #245.

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   7/6/2005 10:15:58 AM

Page 18 of 118
Cl **05**   *SC* **5.2.3**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.2.3, pp. 22**   *P* **22**   *L* **0**   *MyBallot #* 8

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

The 2nd paragraph is confusing. Since according to 802.1X all frames go to both the controlle and uncontrolled port, there is no such thing as an "uncontrolled port frame".

SuggestedRemedy

Change paragraph to: "Data sent to the AP's STA address by one of the STAs associated with it conceptually transits the DS unless it utilizes the 802.1X Ethertype. Therefore such frames must have the "To DS" bit set, even though they do not in fact transit the DS."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Resolved with resolution of comment 245. See #245 for editorial resolution.

Cl **05**   *SC* **5.2.3, pp. 22**   *P* **22**   *L* **0**   *MyBallot #* 7

Aboba, Bernard

Comment Type   **ER**   *Comment Status* **D**

Misspelling.

SuggestedRemedy

Change "unctronrolled" to "uncontrolled" throughout the document.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate. See id #553 for editorial resolution.

Cl **05**   *SC* **5.2.3.1**   *P* **0**   *L* **0**   *MyBallot #* 554

Hunter, David

Comment Type   **ER**   *Comment Status* **D**

"physically disjointed" is not correct English

SuggestedRemedy

Replace "disjointed" with "disjoint"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.1.

Cl **05**   *SC* **5.2.3.1**   *P* **0**   *L* **0**   *MyBallot #* 466

Yang, Lily

Comment Type   **TR**   *Comment Status* **D**

Is ESS only the union of all BSS with the same SSID? Figure 3 and 6 seem to suggest that, b the text is very vague. Does ESS include DS as part of it or is ESS only the part of the L2 network that is built on 802.11?

SuggestedRemedy

Say explicitly what ESS means, in relation to BSS and DS. IS ESS the union of all BSS and D or just the union of BSS?

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Add to the end of the first paragraph in 5.2.3.1: "An ESS is the union of the BSSs connected by a DS. The ESS does not include the DS." Editor included in draft 2.0 in 5.2.3.1.

In 3.45: delete "and integrated local area networks (LANs)". Editor included in draft 2.0 in 3.45

Cl **05**   *SC* **5.2.3.1**   *P* **0**   *L* **0**   *MyBallot #* 421

Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**

The following: "Two of the most common are when an ad hoc network is operating in a locatic that also has an ESS network, and when physically overlapping IEEE 802.11 networks have been set up by different organizations." I would suggest to add the case where two different access and security policies are needed in the same location.

SuggestedRemedy

Change to: "Three of the most common are when an ad hoc network is operating in a location that also has an ESS network, when physically overlapping IEEE 802.11 networks have been set up by different organizations, and when two or more different access and security policies are needed in the same location."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Replace the third sentence with "Some examples are when an ad hoc network is operating in a location that also has an ESS network, when physically overlapping IEEE 802.11 networks have been set up by different organizations, and when two or more different access and security policies are needed in the same location." Editor included in draft 2.0 in 5.2.3.1.

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

7/6/2005 10:15:58 AM

Page 19 of 118
Cl **05**   *SC* **5.2.3.1**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 367
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
An access point (AP) always implements

SuggestedRemedy
An AP always implements

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment #422. See comment #422 for editorial resolutio

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 556
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
"EAP" is used before it is defined

SuggestedRemedy
Switch the usages of "EAP" and "Extensible Authentication Protocol (EAP)".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.2.

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 555
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
Need period at the end of the list.

SuggestedRemedy
Add period after "(TKIP)"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.2.

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 404
Edwards, Bruce

Comment Type   **ER**   *Comment Status* **D**
The expansion of the doubly-nested acronym "CCMP" is too confusing. Also use of the MAC acronym for something other than Medium Access Controller is a bad idea.

SuggestedRemedy
Explain only the first level of acryonym or all levels with a single phrase. "called Counter mode with Cipherblock
chaining with Message authentication code Protocol (CCMP)"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 3.25, 3.80, 3.96, 5.2.3.2, PC34.1.2.1 (Annex A),

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 369
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
, and a STA always implements a Supplicant PAE and implements the Extensible Authentication Protocol (EAP) peer role.

SuggestedRemedy
, and a STA always implements a Supplicant PAE and implements the EAP peer role.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment #556. See comment #556 for editorial resolution.

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 368
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
implements the EAP Authenticator roles, and..

SuggestedRemedy
implements the Extensible Authentication Protocol (EAP) Authenticator role..

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment #556. See comment #556 for editorial resolutio

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   7/6/2005 10:15:58 AM

Page 20 of 118
Cl **05**   *SC* **5.2.3.2**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 422
Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**
I was going to complain that many times acronyms are used without definition, and then I run across this section, which goes too far in the opposite direction. Pulling in amendments into t base standard will point out areas like this, where it is no longer necessary to define acronyms at this particular point. For instance, this is not the first use of the term AP, and yet it's expanded here.

SuggestedRemedy
0

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.2 and searched document for any other duplicate introductions of AP. None were found except this one.

Cl **05**   *SC* **5.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 423
Chaplin, Clint

Comment Type   **TR**   *Comment Status* **D**
"a STA always implements a Supplicant PAE and implements the Extensible Authentication Protocol (EAP) peer role." Repeat after me: an AP is a STA, but not all STAs are APs. AP STAs do not implement a supplicant PAEà.

SuggestedRemedy
Change to: "a non-AP STA always implements a Supplicant PAE and implements the Extensible Authentication Protocol (EAP) peer role."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.2.3.2.

Cl **05**   *SC* **5.2.3.2, pp. 24**   *P* **24**   *L* **0**   *MyBallot #* 9
Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**
EAP method requirements are defined in RFC 4017, which was approved by IEEE 802.11.

SuggestedRemedy
In the 2nd paragraph, change "use of an EAP method that supports mutual authentiation of th AS and the STA." to "use of an EAP method that supports the requirements of RFC 4017, including mutual authentication of the AS and the STA."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Change the referenced txt to "use of an EAP method that supports mutual authentication of the AS and the STA, such as those that meet the requirements in RF 4017." Editor included in draft 2.0 in 4th paragraph of 5.2.3.2.

Cl **05**   *SC* **5.2.4**   *P* **0**   *L* **0**   *MyBallot #* 72
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
This section is iirelevant to the specification, remove it

SuggestedRemedy
Delete section 5.2.4 "Area Concepts" including the diagram

Proposed Response   *Response Status* **W**
PROPOSED REJECT. This section is informative in nature and helps the implementer to understand the vague and time varying aspects of wireless communication. It also helps to explain why the standard uses set, rather than area, for its specification.

Cl **05**   *SC* **5.3**   *P* **0**   *L* **0**   *MyBallot #* 476
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
the first sentence is confusing; drop it

SuggestedRemedy
retain the last three sentences of the first paragraph

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Restore the deleted paragraph (the first paragraph of 5.3), except for the first sentence. Editor included in draft 1.1 in 5.3.

Cl **05**   *SC* **5.3**   *P* **0**   *L* **0**   *MyBallot #* 557
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
Need period at the end of the list.

SuggestedRemedy
Add period after "TPC"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.3.

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 **05**   *SC* **5.3**   *P* **0**   *L* **0**   *MyBallot #* 563
Odman, Knut

Comment Type   **E**   *Comment Status* **D**
    Page 27, Last sentence in 5.3: "DS" should be omitted

SuggestedRemedy
    Delete the old "DS" before new "the DSS"

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. The text was rewritten to be more direct. See comment #558.

Cl **05**   *SC* **5.3**   *P* **0**   *L* **0**   *MyBallot #* 104
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
    why was the first paragraph removed? Was it there an error in the paragraph or did someone just feel it was unnecessary?

SuggestedRemedy
    I would like to see the paragraph remain.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. Duplicate of 476. See #476 for editorial resolution.

Cl **05**   *SC* **5.3**   *P* **0**   *L* **0**   *MyBallot #* 105
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
    why was the first paragraph removed? Was it there an error in the paragraph or did someone just feel it was unnecessary?

SuggestedRemedy
    Retain the paragraph

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. Duplicate of 476. See #476 for editorial resolution.

Cl **05**   *SC* **5.3**   *P* **0**   *L* **0**   *MyBallot #* 558
Hunter, David

Comment Type   **E**   *Comment Status* **D**
    Misused m-dashes make it appear as if the word between the m-dashes are a single clause

SuggestedRemedy
    Replace m-dashes with parens.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. The text has been rewritten to be more direct. Editor included in draft 1.1 in 5.3.

Cl **05**   *SC* **5.3.1**   *P* **0**   *L* **0**   *MyBallot #* 559
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
    Need period at the end of the list.

SuggestedRemedy
    Add period after "TPC"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in 5.3.1.

Cl **05**   *SC* **5.3.2**   *P* **0**   *L* **0**   *MyBallot #* 560
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
    Need period at the end of the list.

SuggestedRemedy
    Add period after "Reassociation"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in 5.3.2.

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

7/6/2005 10:15:58 AM

Page 22 of 118
Cl **05**   *SC* **5.3.2**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.3.2**   *P* **0**   *L* **0**   *MyBallot #* 616
Turner, Sandra

Comment Type   **E**   *Comment Status* **D**
   05/105r4 wording is slightly different for the first sentence in the 2nd paragraph.

SuggestedRemedy
   Follow 05/105r4 wording: "This service is represented in the IEEE 802.11 architecture by arrows within the APs, indicating that the service is used to cross media and possibly address space boundaries.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. The work possibly was added. Editor included in draft 1.1 in 5.3.2.

Cl **05**   *SC* **5.3.3**   *P* **0**   *L* **0**   *MyBallot #* 467
Yang, Lily

Comment Type   **E**   *Comment Status* **D**
   This clause makes more sense if it is after 5.4 with more explaination of what DSS means.

SuggestedRemedy
   Combine 5.3 and 5.4 into one clause, and reorder such that the content of 5.3.3 is after the overview of the servcices are presented.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. The sectoin 5.3.3 was moved to a new sub-clause the follows 5.4. Editor included in draft 1.1 in new sub-clause 5.5.

Cl **05**   *SC* **5.3.3**   *P* **0**   *L* **0**   *MyBallot #* 106
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
   I think these changes are incorrect. The effect of the language change is to couple the address space to be an attribute of the DSM. However, this is coupling is too strict. Consider a DS operating at the IP layer: IP runs ôoverö enet û the DSM address space is that of enet, but the address space of the DS is IP. I think the section really did want to say DS and not DSM as changed.

SuggestedRemedy
   put back to "DS"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Reverse the changes from DS to DSM in paragraphs 4 and 5. Editor included in draft 1.1 in 5.5.

Cl **05**   *SC* **5.4**   *P* **0**   *L* **0**   *MyBallot #* 477
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
   paragraph 5: Inconsistent terminology

SuggestedRemedy
   change "MAC management service data path" to "MAC management service path".

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 5.4.

Cl **05**   *SC* **5.4.1.1**   *P* **0**   *L* **0**   *MyBallot #* 561
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
   Since "DSS" is defined as a singular "group service" then the reference to "a DSS" is incorrec

SuggestedRemedy
   Replace "a DSS" with "the DSS"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 5.4.1.1.

Cl **05**   *SC* **5.4.1.2**   *P* **0**   *L* **0**   *MyBallot #* 562
Hunter, David

Comment Type   **ER**   *Comment Status* **D**
   Since "DSS" is defined as a singular "group service" then the reference to "a DSS" is incorrec

SuggestedRemedy
   Replace "a DSS" with "one of the services in the DSS"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 5.4.1.2, 5.4.2.2, 5.4.2.3, 5.4.2.4.

Cl **05**   *SC* **5.4.3.2**   *P* **0**   *L* **0**   *MyBallot #* 46
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**
   "à BSS and IBSS RSNAs à" mistakenly implies that BSS is specific to the infrastructure BSS.

SuggestedRemedy
   Replace with "infrastructure and independent BSS RSNAs"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. Sentence was rewritten to clarify. Editor included in draft 1.1 in 5.4.3.1.

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

7/6/2005 10:15:58 AM

Cl **05**   *SC* **5.4.3.2**   *P* **0**   *L* **0**   *MyBallot #* 534
Jalfon, Marc

Comment Type   **E**   *Comment Status* **D**
"à BSS and IBSS RSNAs à" mistakenly implies that BSS is specific to the infrastructure BSS.

SuggestedRemedy
Replace with "infrastructure and independent BSS RSNAs"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Sentence rewritte to avoid the misinterpretation. Editor included in draft 1.1 in 5.4.3.2

Cl **05**   *SC* **5.4.3.3**   *P* **0**   *L* **0**   *MyBallot #* 539
Ciotti, Frank

Comment Type   **T**   *Comment Status* **D**
The last paragraph of clause 5.4.3.3 indicates that data frames which are discarded due to confidentiality service failures are still acknowledged on the WM if they pass the FCS check. did not find this behavior defined elsewhere in the spec. Since I thought that Clause 5 did not contain normative text, I felt this behavior should be defined in either Clause 8 or perhaps in Clause 9.2.8 (ACK procedure)

SuggestedRemedy
Add normative text describing ACK procedure for frames discarded for failure of confidentiality service.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The ACK procedure in 9.2.8 is clear in that all frames with correct FCS are acknowledged. No additional text is required.

Cl **05**   *SC* **5.4.4.1**   *P* **0**   *L* **0**   *MyBallot #* 73
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
The first paragraph of adds nothing and may be incomplete given recent FCC rulings.

SuggestedRemedy
Remove 1st paragraph of 5.4.4.1 starting "ERC/DEC/(99)23à"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Replace the reference to ERC/DEC/(99)23 with "Radio regulations may require". Editor included in draft 1.1 in 5.4.4.1

Cl **05**   *SC* **5.4.4.2**   *P* **0**   *L* **0**   *MyBallot #* 74
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
The first paragraph of adds nothing and may be incomplete given recent FCC rulings.

SuggestedRemedy
Remove 1st paragraph of 5.4.4.2 starting "ERC/DEC/(99)23à"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Replace the reference to ERC/DEC/(99)23 with "Radio regulations may require". Editor included in draft 1.1 in 5.4.4.2.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 193
Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**
Second sub-bullet of bullet a) is labelled "6".

SuggestedRemedy
Change to 2.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 5.5. Not shown with change bars because it is automatic Frame text.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 405
Edwards, Bruce

Comment Type   **E**   *Comment Status* **D**
Section c describing Class 3 frames should renumber clause 3 since clause 2 seems to be completely deleted. It probably is just a text processor artifact that it didn't

SuggestedRemedy
Make the change.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Numbering is not updated until the items delete is a numbered list are actually removed. If they remain with revision marks, the list numbering is not updated. Editor included in draft 1.1 with updated numbering.

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   7/6/2005 10:15:58 AM
Page 24 of 118
Cl **05**   *SC* **5.5**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 142

Visscher, Bert

Comment Type   **TR**   *Comment Status* **D**

In many implementations WDS frames are accepted between STA's (i.e. AP's) without having gone through the association procedure.

SuggestedRemedy

Add an explicit note indicating that WDS frames must result in a deauthenticate notification unless both peers have established a state 3 relationship with each other.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The standard is clear on when data frames may be accepted by a ST and when a STA must deauthenticate another STA upon receipt of a data frame.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 246

Edney, Jon

Comment Type   **TR**   *Comment Status* **D**

The sending of data frames as class 1 frames has been restricted to IBSS. I see no reason fo this change and, furthermore, it removes a potentially useful method by which stations might i future communicate to the SME of an AP without transiting the DS (there is already a precede for this)

SuggestedRemedy

Remove the words "in an IBSS"

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The cited sentence refers only to operation of an independent BSS (see both ToDS and FromDS equal to zero). Adding the words "in an IBSS" helps to clarify this. If the commenter disagrees, please provide more complete description of the precedent not cited in your comment.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 107

Bagby, David

Comment Type   **TR**   *Comment Status* **D**

page 36 û should the class 1 list in a) 6) really be numbered a) 2) to make the outline format correct? Also in c) shouldnÆt the removal of 2) cause the next 3) -> 2)?

SuggestedRemedy

correct as required

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment #193. Also, numbering is not updated until the items delete is a numbered list are actually removed. If they remain with revision marks, the li numbering is not updated. Numbering is updated in draft 1.1. See #193 for editorial resolution

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 565

Odman, Knut

Comment Type   **T**   *Comment Status* **D**

Page 37, item c) 2) Management frames. Isn't it still true that a deauthentication when associated will imply disassociation? Compare 5.4.3.2, 5.5 and 11.3.3

SuggestedRemedy

Reinstate text.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The text has not been deleted, but moved to class 1. The effect is the same. State 3 allows sending class 1, 2 and 3 frames.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 192

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

The additions to bullet a) 6) iv) make it a bit tautological.

SuggestedRemedy

Remove all the new text after (but NOT including) "Deauthentication notification when in State implies disassociation as well,"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.6.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 75

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

a) 6) vi) Actions frames can be sent as class 1 frames, i.e. before association. As the Ap doe not know of the existance of the STA before authentication, then the frame must be from STA to AP, but what procedures does this cover?

SuggestedRemedy

Move action frames to Class 3 for infratsructure and however leave as class 1 for IBSS.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.6.

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   7/6/2005 10:15:58 AM

Page 25 of 118
Cl **05**   *SC* **5.5**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 370
Watanabe, Fujio

Comment Type **E**   *Comment Status* **D**
   a) Class 1 framesà. 6) Management frames -> 6) is a wrong number

SuggestedRemedy
   Change to 2) Management frames

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate of comment #193. See #193 for editorial resolution.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 564
Odman, Knut

Comment Type **T**   *Comment Status* **D**
   Page 37, item b) 1) iii) Disassociation. Belongs to c) class 3.

SuggestedRemedy
   Move item to c) class 3.

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. It appears that the commenter is confused between "class 2" and
   "state 2". If a class 3 frame (a data frame) is received from a STA while in State 2
   (authenticated but not associated), the receiving STA is to send a disassociation frame, to
   synchronize the sending STA to state 2. Moving this to class 3 would allow the only response
   to this situation to be deauthentication, which is not desirable.

Cl **05**   *SC* **5.5**   *P* **0**   *L* **0**   *MyBallot #* 148
Ecclesine, Peter

Comment Type **E**   *Comment Status* **D**
   a) Management Frames numbered '6' instead of '2'

SuggestedRemedy
   change to '2'

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate of comment #193. See #193 for editorial resolution.

Cl **05**   *SC* **5.7**   *P* **0**   *L* **0**   *MyBallot #* 47
Stephens, Adrian

Comment Type **E**   *Comment Status* **D**
   I've always wondered about the value of this section. The descriptions of messages are an
   incomplete and abstract representation of frame formats.   Much information that is present in
   the frame formats is left out. The rules for what is in and what is out are not clear, which will
   lead to confusion.

SuggestedRemedy
   Remove section 5.7

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 2.0 by deleting 5.8. Sub-clauses will be
   renumbered when revision marks are removed.

Cl **05**   *SC* **5.7.8**   *P* **0**   *L* **0**   *MyBallot #* 149
Ecclesine, Peter

Comment Type **E**   *Comment Status* **D**
   Direction of Message is given as a separate thing, but was an 'Information item' in Amendment
   802.11h, and only appears as Measurement Request Mode bits

SuggestedRemedy
   Demote 'Direction of message' to be fourth 'Information item'

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The editor believes the consisten format across sub-clause 5.8 is
   useful. The editor does not see the format as reflecting the format of the frames specifically.

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   7/6/2005 10:15:58 AM

Page 26 of 118
Cl **05**   *SC* **5.7.8**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.8**   *P* **0**   *L* **0**   *MyBallot #* 468
Yang, Lily

Comment Type   **TR**   *Comment Status* **D**

Figure 11 graphic ambiguity: the vertical line between MAC sublayer and MAC Sublayer Management Entity goes above the horizontal line of "MAC_SAP", why? On the right hand side The Station Management Entitiy is not a fully enclosed box: Is 802.1X Authenticator/Supplicant part of SME or not? If it is, then why is it not fully enclosed, and why is it drawn above the invisible horizontal line extended from "MAC_SAP"? If it is not part of SME, then we should clearly depict it that way, with interface between SME and it clearly marked.

SuggestedRemedy

Fix the graphic to match the actual meaning. The text can use some more clarification too if it not obvious from the graph.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Delete the vertical line extending above the MAC sublayer and MAC Sublayer Management Entity. Draw a single block above the MAC Data SAP, extending above bothe the MAC Susblayer and MAC Sublayer Management Entitiy and label it "802.1X". Delete the box labled "802.1X Authenticator/Supplicant".

Editor included in draft 1.1 in 5.9 Figure 11.

Cl **05**   *SC* **5.9**   *P* **0**   *L* **0**   *MyBallot #* 78
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

It is unclear how the Controlled Port gets blocked after being Unblocked.

SuggestedRemedy

Add a new section after 5.9.2.2 "Disassociation" with the contents "Disassociation instigated by either end of the link causes the installed PTK and, on a non-AP STA, the GTK keys to be removed from IEEE 802.11 and the Controlled Port to become Blocked. All subsequant MSDUs transmitted and received between the peers are not encrypted or decrypted."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.   Add the section as described in the suggested remedy, replacing "all subsequent" with the words "Until the controlled port again becomes unblocked," Editor included in draft 1.1 in 5.10.2.2.

Cl **05**   *SC* **5.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 126
Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

"Anonce" in Figure 14 is incorrect font size

SuggestedRemedy

Correct

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment #444. See #444 for editorial resolution.

Cl **05**   *SC* **5.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 444
Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

"Anonce" in Figure 14 is incorrect font size

SuggestedRemedy

Correct

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in Figure 14 of 5.10.2.1.

Cl **05**   *SC* **5.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 478
Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**

Figure 12 represents the first use of a Message Sequence Chart (MSC) within the revised draft. Needs an explanation of the diagram syntax.

SuggestedRemedy

Add description of MSC syntax, i.e. entities at the top, messages/ events between the entities with time increasing from top to bottom. Even better would be to (also) cite a definitive reference document/ standard for this type of diagram (i.e. some ISO standard document) and then also add that to Annex E.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Editor does not have text, and editor has no way of knowing if each drawing conforms to "some ISO standard document" for drawing MSC.

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

7/6/2005 10:15:58 AM

Page 27 of 118
Cl **05**   *SC* **5.9.2.1**

Submission   Bob O'Hara, Cisco Systems

Cl **05**   *SC* **5.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 77

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

It is unclear if the uncontrolled port MSDUs (i.e. EAPOL frames) are themselves encrypted once the PTK and GTK keys are installed.

SuggestedRemedy

Add a sentence "Installing the PTK, and where applicable the GTK keys, causes the MAC to encrypt and decrypt all subsequant MSDUs irrespective of their path through the controlled or uncontrolled ports."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.10.2.1.

Cl **05**   *SC* **5.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 76

Oakes, Ivan

Comment Type   **E**   *Comment Status* **D**

Figure 12 and 13 used the term "blocked", this can be read to mean the action "block the port now". I suggest making this clearer by adding the word "remains"

SuggestedRemedy

Changed "Blocked" to "Remains Blocked" in Figure 12 and 13.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Remove the two boxes from the bottom of the lines in Figure 12 and put one of them back, centered below the figure. Editor included in draft 2.0 in 5.9.2.1. This is not shown by change bars.

Cl **05**   *SC* **5.9.2.1, pp. 44**   *P* **44**   *L* **0**   *MyBallot #* 10

Aboba, Bernard

Comment Type   **ER**   *Comment Status* **D**

Awkward separation of 4-way handshake functionality list.

SuggestedRemedy

Move "Confirm the cipher suite selection" to before Figure 13 (ideally on page 43).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.9.2.1. Paragraphs in questioned marked to keep together. Not shown with change bars because change in internal to Frame paragraph format.

Cl **05**   *SC* **5.9.3**   *P* **0**   *L* **0**   *MyBallot #* 79

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**   *security*

5.9.3.1 suggests a STA must authenticate in an IBSS before EAPOL key exchange, thus allowing de-auth later. If not, then 5.9.3.1 implies de-auth with out auth? Further in an IBSS, can be assumed the link will make and break often. It is unclear how this is handled, i.e. whether the keys persist and how recovery may be achieved if one end is reset but not the other, i.e. one end is encrypted but not the other.

SuggestedRemedy

Add a sentence or two to 5.9.3.1 "In an IBSS, the 4-way handshake may follow 802.11 authentication of one STA to another. Such authentication may be used by the peer to uninst the PTK key and Block the Controlled Port thus reseting any previous handshake."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.10.3.1.

Cl **05**   *SC* **5.9.4**   *P* **0**   *L* **0**   *MyBallot #* 535

Jalfon, Marc

Comment Type   **E**   *Comment Status* **D**

"protocol must support". Use of "must" is deprecated.

SuggestedRemedy

Replace with an alternative, e.g. should

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate comment to #49. See #40 for editorial resolution.

Cl **05**   *SC* **5.9.4**   *P* **0**   *L* **0**   *MyBallot #* 49

Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**

"protocol must support". Use of "must" is deprecated.

SuggestedRemedy

Replace with an alternative, e.g. should

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 5.10.4.

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

7/6/2005 10:15:58 AM

Page 28 of 118
Cl **05**   *SC* **5.9.4**

Submission   Bob O'Hara, Cisco Systems

Cl **06**   *SC* **6.**   *P* **0**   *L* **0**   *MyBallot #* 499
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **06**   *SC* **6.1.2**   *P* **0**   *L* **0**   *MyBallot #* 431
Raissinia, Ali

Comment Type   **E**   *Comment Status* **D**
802.11 WEP, TKIP and CCMP provide "privacy" protection

SuggestedRemedy
Add the word Privacy prior to protection

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The words confidentiality appear just priot to this sentence. The editor believes the meaning in this context is clear without introducing further terms. The editor researched the words privacy and protection within the 802.11 in coming to this response.

Cl **06**   *SC* **6.1.5**   *P* **0**   *L* **0**   *MyBallot #* 80
Oakes, Ivan

Comment Type   **E**   *Comment Status* **D**
logical "or" should be "and" in "The IEEE 802.1X Controlled/Uncontrolled Ports discard the MSDU if the Controlled Port is not enabled or if the MSDU does not represent an IEEE 802.1X frame."

SuggestedRemedy
change "or" to "and"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 6.1.5.

Cl **06**   *SC* **6.1.5**   *P* **0**   *L* **0**   *MyBallot #* 143
Visscher, Bert

Comment Type   **TR**   *Comment Status* **D**
An MSDU representing a 802.1X frame must also be discarded if the destination address is unequal to the authenticator address, otherwise 802.1X encapsulated frames bypass the privacy function.

SuggestedRemedy
Add that 802.1X frames will also be discarded if the destination address is unequal to the authenticator address.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. All 802.1X frames will be processed by the privacy function. There is no bypassing it. The handling of misaddressed 802.1X frames is an issue for 802.1X.

Cl **06**   *SC* **6.2.1.1.2**   *P* **0**   *L* **0**   *MyBallot #* 479
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
incorrect direction indicated in text

SuggestedRemedy
Change "The source address (SA) parameter specifies an individual MAC sublayer address o the sublayer entity to which the MSDU is being transferred." to "The source address (SA) parameter specifies an individual MAC sublayer address of the sublayer entity from which the MSDU is being transferred."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 6.2.1.1.2.

Cl **06**   *SC* **6.3.1**   *P* **0**   *L* **0**   *MyBallot #* 281
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**
Add data integrity as a service - it is a major component on the RNSA and authentication doe not cover it.

SuggestedRemedy
Replace the first bullit with "a) data confidentiality and data integrity"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. There is no such sectoin 6.3.1 and the editor could not find a similar section in 6 to which the comment applies.

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   7/6/2005   10:15:58 AM

Page 29 of 118
Cl **06**   *SC* **6.3.1**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.**   *P* **0**   *L* **0**   *MyBallot #* 51
Stephens, Adrian

Comment Type   **ER**   *Comment Status* **D**

The frame format section should describe structures and formats, not behaviour.
I gave up counting when I reached 120 "shall"s in section 7 (got as far as 7.3.2.21.1).
Example in 7.2.1.4: "All STAs update their NAV setting as appropriate..." which has nothing to
do with definition of the PS-Poll frame format.
Section 7 needs to be slimmed down to describe structure, with normative behaviour describe
in the clause appropriate to the architectural entitiy responsible for the behaviour.

SuggestedRemedy

Scan section 7 for use of the word "shall". Move any text describing behaviour into the
appropriate section.

Where shall is used to introduce a constraint in the use of the format, this can be done with
"is".

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is no known prohibition against the normative descritpion on this
section.

Cl **07**   *SC* **7.**   *P* **0**   *L* **0**   *MyBallot #* 500
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused
individual changes, there remain unresolved inconsistencies between the text in this clause a
other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **07**   *SC* **7.1.3.1**   *P* **0**   *L* **0**   *MyBallot #* 536
Jalfon, Marc

Comment Type   **E**   *Comment Status* **D**

The frame control fields are not valid in certain types of MPDU. This information is distributed
throughout the subsections of section 7.1.3.1 (and sometimes it's missing).

SuggestedRemedy

I think you need a table of field versus type (I don't think subtypes are necessary, but they cou
easily be introduced) and indicate which uses are reserved.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The commenter is solicited to provide the table for review by the task
group. The task group does not find any combinations of fields that meet the criteria provided
by the commenter.

Cl **07**   *SC* **7.1.3.1**   *P* **0**   *L* **0**   *MyBallot #* 50
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**

The frame control fields are not valid in certain types of MPDU. This information is distributed
throughout the subsections of section 7.1.3.1 (and sometimes it's missing).

SuggestedRemedy

I think you need a table of field versus type (I don't think subtypes are necessary, but they cou
easily be introduced) and indicate which uses are reserved.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The commenter is solicited to provide the table for review by the task
group. The task group does not find any combinations of fields that meet the criteria provided
by the commenter.

Cl **07**   *SC* **7.1.3.1.9**   *P* **0**   *L* **0**   *MyBallot #* 282
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**

The "protected bit" is restricted to certain message types; removing that restriction here does
not change the standard but makes adding in the management protection easier.

SuggestedRemedy

Remove the sentence "The Protected
Frame field is set to 1 only within data frames and within management frames of subtype
Authentication.
The Protected Frame field is set to 0 in all other frames."

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This is being handled by Task Group W and is out of scope for this
revision.

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   7/6/2005 10:15:58 AM

Cl **07**   *SC* **7.1.3.3.2**   *P* **0**   *L* **0**   *MyBallot #* 108
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
    better to say ôAll ones shall be interpretedàö

SuggestedRemedy
    Change as suggested

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. This is a descriptive paragraph. It is not specifying a normative
    behavior. The use of "shall" is not appropriate here.

Cl **07**   *SC* **7.1.3.7**   *P* **0**   *L* **0**   *MyBallot #* 432
Raissinia, Ali

Comment Type   **E**   *Comment Status* **D**
    The Figure 37 and table-19 should be moved under this section and not under 7.1.3.8

SuggestedRemedy
    Move the diagram

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. The section specified does not exist in the draft. The pagination is
    automatic in FRAME, including placement of tables and figures. The editor has coded the
    paragraphs of 7.3.1.8 to stay together in future (which should prevent the split that the
    commentor describes, when feasible). Editor included in draft 1.1 in 7.3.1.7 & 7.3.1.8, but there
    is no guarantee that future drafts will continue to do this as pagination moves from draft to dra

Cl **07**   *SC* **7.2.1.1**   *P* **0**   *L* **0**   *MyBallot #* 84
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
    In the text for management, data and PS-Poll frames, there is specific text for setting NAV.
    This text is not present for RTS/CTS or ACK. This is misleading as it would suggest NAV
    should be processed for data, mgt and PS-Poll but not for these other frames types. I believe
    this to be wrong. I believe NAV should be processed for all frames types irrespective of type,
    and using a uniform rule. 9.2.5.4 gives almost the complete rule, but neglects the 32768 valu
    7.1.3.2 mentions 32768 but neglects to mention the address rule. The PS-Poll text indicates
    even the receiving STA sets its NAV which is inconsistent. It also requires to knowledge of th
    duration of the ACK and SIFS which will depend on the basic rate set and operating mode an
    may not be known by all STAs. The SDL gives a good summary (page 721):"Update NAV
    using Duration/ID value from frames to all other stations. Else case is for DurId=32768 in the
    CF period". It would make the text very much clearer if there were only one statement, my
    suggestion is to remove the incomplete and inaccurate text from various sections in 7 and
    ammend section 9 to have the complete rule, dropping any special case for PS-Poll.

SuggestedRemedy
    In 9.2.5.4 Add the text add to the end first sentance "but shall be left unchanged if the
    Duration/ID is equal to 32768 or codes an AID". In 7.1.3.2 Remove the words "When the
    contents of the duration/ID field are less than 32768, ". In 7.2.1.4 remove the text "All STAs,
    upon receipt of a PS-Poll frame, update their NAV settings as appropriate under the
    coordination function rules using a duration value equal to the time, in microseconds, required
    to transmit one ACK frame plus one SIFS interval". Remove the last sentance from 7.2.2 "All
    Stations..." and similarly from 7.2.3 in the 3rd last paragraph.

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. The text in 9.2.5.4 does not adeqautely cover all that the commenter
    proposed to remove from clause 7.

Cl **07**   *SC* **7.2.1.2**   *P* **0**   *L* **0**   *MyBallot #* 623
Godfrey, Tim

Comment Type   **T**   *Comment Status* **D**
    This section does not specify how the RA field is to be set when the CTS is the first frame in
    the exchange.

SuggestedRemedy
    Specify that the RA field is the address of the STA transmitting the frame in the last paragrap

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Add the following sentence to the paragraph after the figure: "When
    the CTS is the first frame in a frame exchange, the RA field is set to the MAC address of the
    transmitter." Change the first sentence from "The RA field.. ." to "When the CTS frame follow
    an RTS frame, the RA field.. ." Editor included in draft 2.0 in 7.2.1.2.

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
7/6/2005 10:15:58 AM
Page 31 of 118
Cl **07**   *SC* **7.2.1.2**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.2**   *P* **0**   *L* **0**   *MyBallot #* 247

Edney, Jon

Comment Type   **T**   *Comment Status* **D**

"to ensure that the broadcast
or multicast originated in the same BSS to which the station is associated." This text is wrong
since the rule also applies for IBSS

SuggestedRemedy

originated from a STA in the BSS for which the receiving STA is a member

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 7.2.2.

Cl **07**   *SC* **7.2.2**   *P* **0**   *L* **0**   *MyBallot #* 81

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

Paragraph below table 4: "Association" has a specific meaning in 802.11. Using the term her
may cause confusion as there is no association in an IBSS.

SuggestedRemedy

Replace the words "to which the station is associated" with "to which the STA is joined"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Resolved by the resolution of comment 247. See "#24
for editorial resolution.

Cl **07**   *SC* **7.2.2**   *P* **0**   *L* **0**   *MyBallot #* 195

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

"to ensure that the broadcast or multicast originated in the same BSS to which the station is
associated" - a STA isn't associated with an IBSS, and broadcast frames may originate in
another BSS across the DS.

SuggestedRemedy

"to ensure that it was transmitted by another member of the same BSS".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.   Resolved by the resolution of comment 247. See
comment #247 for editorial resolution.

Cl **07**   *SC* **7.2.2**   *P* **0**   *L* **0**   *MyBallot #* 194

Mike, Moreton

Comment Type   **T**   *Comment Status* **D**

I'd just like to express my immense appreciation to the group for the additions to table 4. This
was a huge logical hole that made other descriptions much more complex than they needed t
be.

SuggestedRemedy

None.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Nothing for the editor to resolve.

Cl **07**   *SC* **7.2.3**   *P* **0**   *L* **0**   *MyBallot #* 85

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

I welcome the addition explicitly of the vendor specific elements, but would like a limit on the
length of the resulting MMPDU in order that implementations may have some bounds to desig
to.

SuggestedRemedy

Add at the end of section 7.2.3: "Where Vendor Specific elements are added to Management
frames, the total MMPDU frame body shall not exceed 1500 bytes."

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The length of the MMPDU is limited by the maximum MSDU size
(which limits the length of the frame body of all frames). See 7.1.3.5.

Cl **07**   *SC* **7.2.3**   *P* **0**   *L* **0**   *MyBallot #* 371

Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**

the BSSID also is validated to ensure that the brocastàThis sententce has grammatical error.

SuggestedRemedy

the BSSID is also validated to ensure

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Text was mofified in other ways. See #248.

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   7/6/2005 10:15:58 AM

Page 32 of 118
Cl **07**   *SC* **7.2.3**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.3**   *P* **0**   *L* **0**   *MyBallot #* 248
Edney, Jon

Comment Type   **T**   *Comment Status* **D**

"to ensure that the broadcast
or multicast originated in the same BSS to which the station is associated." This text is wrong
since the rule also applies for IBSS

SuggestedRemedy

originated from a STA in the BSS for which the receiving STA is a member

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 7.2.3.

Cl **07**   *SC* **7.2.3**   *P* **0**   *L* **0**   *MyBallot #* 82
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

Paragraph below figure 30: "Association" has a specifici meaning in 802.11. Using the term
here may cause confusion as there is no association in an IBSS. In addition action frames ma
be sent without association according to 5.5.

SuggestedRemedy

Replace the words "to which the station is associated" with "to which the STA is joined"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Resolved with the resolution of comment 248. See
#248 for editorial resolution.

Cl **07**   *SC* **7.2.3**   *P* **0**   *L* **0**   *MyBallot #* 196
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

"to ensure that the broadcast or multicast originated in the same BSS to which the station is
associated." doesn't cover the IBSS case.

SuggestedRemedy

replace with "to ensure that the frame was transmitted by another member of the same BSS"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Resolved with the resolution of comment 248. See
#248 for editorial resolution.

Cl **07**   *SC* **7.2.3.* & 7.3.2.26 & pos**   *P* **0**   *L* **0**   *MyBallot #* 109
Bagby, David

Comment Type   **TR**   *Comment Status* **D**

I oppose the introduction of vender specific elements. If a specific function is sufficiently usefu
to the industry as to be needed, it should be standardized and included. This is an attempt to
have a standard encourage non-standard operation û a very bad idea in the opinion of this
reviewer. This reviewer will not vote to approve the draft until all the added vendor specific
related changes are removed.

SuggestedRemedy

Remove all vendor specific element additions

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The definition of a standard vendor-specific information element is
preferable to vendors independently choosing random values to carry their proprietary
information. This, at least, allows standard implementations to operate correctly along side of
implementations with vendor-specific extensions.

Cl **07**   *SC* **7.2.3.1**   *P* **0**   *L* **0**   *MyBallot #* 537
Jalfon, Marc

Comment Type   **E**   *Comment Status* **D**

These tables of things in order create potential future problems.   If the current specification fo
order of elements coincidentally agrees with the numeric order of the elements, I propose tha
the management frame format sections only list which elements are present and there be a
global rule that elements shall be transmitted in order of element ID for all frames.

SuggestedRemedy

If this suggestion is accepted, it is possible to go futher, in each element, list the manageme
frames that include it.   The management frame formats then indicate the format of their fixed
fields and indicate whether any elements are present or not.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Not all items listed in the frame bodies are information elements.
Therefore not all have element IDs.

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   7/6/2005 10:15:58 AM

Page 33 of 118
Cl **07**   *SC* **7.2.3.1**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.3.1**   *P* **0**   *L* **0**   *MyBallot #* 52
Stephens, Adrian

Comment Type   **E**   *Comment Status*   **D**

These tables of things in order create potential future problems. If the current specification for order of elements coincidentally agrees with the numeric order of the elements, I propose that the management frame format sections only list which elements are present and there be a global rule that elements shall be transmitted in order of element ID for all frames.

SuggestedRemedy

If this suggestion is accepted, it is possible to go futher, in each element, list the management frames that include it. The management frame formats then indicate the format of their fixed fields and indicate whether any elements are present or not.

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. Duplicate of #537.

Cl **07**   *SC* **7.2.3.1**   *P* **0**   *L* **0**   *MyBallot #* 150
Ecclesine, Peter

Comment Type   **TR**   *Comment Status*   **D**

Order 22 indicates 'Vendor specific' information, yet it was not present in 802.11i or previous amendments. On what basis is Order 22 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Order 22 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution needed.

Cl **07**   *SC* **7.2.3.10**   *P* **0**   *L* **0**   *MyBallot #* 576
McCann, Stephen

Comment Type   **E**   *Comment Status*   **D**

Change bar indication on Table 14

SuggestedRemedy

Not sure what has been changed here ?

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. It appears to have been a FRAME format typo only. No editorial resolution required.

Cl **07**   *SC* **7.2.3.10**   *P* **0**   *L* **0**   *MyBallot #* 158
Ecclesine, Peter

Comment Type   **TR**   *Comment Status*   **D**

Order 10 indicates 'Vendor specific' information. On what basis is Order 10 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Order 10 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.10, pp. 75**   *P* **75**   *L* **0**   *MyBallot #* 16
Aboba, Bernard

Comment Type   **TR**   *Comment Status*   **D**

IEEE 802.11i already added authentication extensibility; therefore vendor-specific authentication mechanisms are not needed.

SuggestedRemedy

Delete Vendor-specific IE type 5 within Table 13.

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. 802.11i added extensibility in a specific direction. This did not limit the use of the Authentication frame.

Cl **07**   *SC* **7.2.3.11**   *P* **0**   *L* **0**   *MyBallot #* 159
Ecclesine, Peter

Comment Type   **TR**   *Comment Status*   **D**

Order 2 indicates 'Vendor specific' information. On what basis is Order 2 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Order 2 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution 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

7/6/2005 10:15:58 AM

Page 34 of 118
Cl **07**   *SC* **7.2.3.11**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.3.11, pp. 76**   *P* **76**   *L* **0**   *MyBallot #* 17

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying the behavior of a STA or AP receiving a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.11: "A STA receiving a Deauthentication frame containing a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.11, pp. 76**   *P* **76**   *L* **0**   *MyBallot #* 177

Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying the behavior of a STA or AP receiving a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.11: "A STA receiving a Deauthentication frame containing a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.12**   *P* **0**   *L* **0**   *MyBallot #* 53

Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

This section indicates an action field followed by vendor specific elements. However the action field has a varible length, and does not encode its length (it is determined from the MPDU length).   So it is not possible to follow it with anything.

SuggestedRemedy

Remove vendor-specific from Table 16.
I Recommend checking all occurrances of vendor specific for this bug.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.   The "action details" field is variable length, as described by the commenter. The content of the action details is defined for the individual Action frames, as determined by the Category value. It is possible to determine the length of the action details entirely from the content of that field and the value of the Category.

Cl **07**   *SC* **7.2.3.12**   *P* **0**   *L* **0**   *MyBallot #* 160

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 2 indicates 'Vendor specific' information. On what basis is Order 2 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Order 2 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution needed.

Cl **07**   *SC* **7.2.3.12**   *P* **0**   *L* **0**   *MyBallot #* 538

Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

This section indicates an action field followed by vendor specific elements. However the action field has a varible length, and does not encode its length (it is determined from the MPDU length).   So it is not possible to follow it with anything.

SuggestedRemedy

Specify the length of vendor specific field

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The "action details" field is variable length, as described by the commenter. The content of the action details is defined for the individual Action frames, as determined by the Category value. It is possible to determine the length of the action details entirely from the content of that field and the value of the Category.

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* **7.2.3.12**   *P* **0**   *L* **0**   *MyBallot #* 250
Tolpin, Alexander

Comment Type   **TR**   *Comment Status* **D**

This section indicates an action field followed by vendor specific elements. However the action field has a variable length, and does not encode its length (it is determined from the MPDU length).   So it is not possible to follow it with anything.

SuggestedRemedy

Remove vendor-specific from Table 16.
I recommend checking all occurrences of vendor specific for this bug.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.   The "action details" field is variable length, as described by the commenter. The content of the action details is defined for the individual Action frames, as determined by the Category value. It is possible to determine the length of the action details entirely from the content of that field and the value of the Category.

Cl **07**   *SC* **7.2.3.12, pp. 76**   *P* **76**   *L* **0**   *MyBallot #* 176
Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying the behavior of a STA or AP receiving a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.12: "A STA receiving an Action frame containing a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.12, pp. 76**   *P* **76**   *L* **0**   *MyBallot #* 18
Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying the behavior of a STA or AP receiving a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.12: "A STA receiving an Action frame containing a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.3**   *P* **0**   *L* **0**   *MyBallot #* 151
Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 2 indicates 'Vendor specific' information. On what basis is Order 2 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Order 2 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution requried.

Cl **07**   *SC* **7.2.3.3, pp. 71**   *P* **0**   *L* **0**   *MyBallot #* 1
Hassan, Amer

Comment Type   **TR**   *Comment Status* **D**

No text specifying what a STA should do if it encounters a Dissassociation frame including a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.3: "A STA receiving a vendor-specific IE that it does not support shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.3, pp. 71**   *P* **71**   *L* **0**   *MyBallot #* 11
Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying what a STA should do if it encounters a Dissassociation frame including a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.3: "A STA receiving a vendor-specific IE that it does not support shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 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   7/6/2005 10:15:58 AM

Page 36 of 118
Cl **07**   *SC* **7.2.3.3, pp.**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.3.3, pp. 71**   *P* **71**   *L* **0**   *MyBallot #* 178

Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying what a STA should do if it encounters a Dissassociation frame including a vendor-specific IE it does not understand.

SuggestedRemedy

Add sentence to 7.2.3.3: "A STA receiving a vendor-specific IE that it does not support shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Add the proposed sentence to the penultimate paragraph of 7.2.3. This makes the statement applicable to all management frames, not just the disassociation frame. Editor included in draft 1.1 in 7.2.3.

Cl **07**   *SC* **7.2.3.4**   *P* **0**   *L* **0**   *MyBallot #* 152

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 9 indicates 'Vendor specific' information. On what basis is Order 9 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Order 9 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.4, pp.71**   *P* **71**   *L* **0**   *MyBallot #* 12

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying how an AP should behave if it encounters an Association-Request frame including a vendor-specific IE it does not understand, or that does not include a vendor specif IE.

SuggestedRemedy

Add sentence to 7.2.3.4: "An AP receiving an Association Request frame including a vendor-specific IE it does not understand shall ignore the vendor-specific IE. An AP shall fail to process an Association Request frame that does not include a vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.4, pp.71**   *P* **71**   *L* **0**   *MyBallot #* 179

Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying how an AP should behave if it encounters an Association-Request frame including a vendor-specific IE it does not understand, or that does not include a vendor specif IE.

SuggestedRemedy

Add sentence to 7.2.3.4: "An AP receiving an Association Request frame including a vendor-specific IE it does not understand shall ignore the vendor-specific IE. An AP shall not fail to process an Association Request frame due to lack of a vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.5**   *P* **0**   *L* **0**   *MyBallot #* 153

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 6 indicates 'Vendor specific' information. On what basis is Order 6 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Order 6 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.5**   *P* **0**   *L* **0**   *MyBallot #* 197

Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**

The line above the last row is too bold. (If it was deliberate, there are some sections where it isn't bold that need making bold)

SuggestedRemedy

Reduce it. Also 7.2.3.7, 7.2.3.8, 7.2.3.10, 7.2.3.11, 7.2.3.12

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in Table 8 (7.2.3.5), Table 10 (7.2.3.7), Table 11, (7.2.3.8), Table 16 (7.2.3.12). Nothing found to do in 7.2.3.10 & 7.2.3.11. Not shown with change bars because internal Frame formatting change.

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   7/6/2005 10:15:58 AM

Page 37 of 118

Cl **07**   *SC* **7.2.3.5**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.3.5, pp. 72**   *P* **72**   *L* **0**   *MyBallot #* 180

Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying when a vendor-specific IE can be sent within an Association Response.

SuggestedRemedy

Add sentence to 7.2.3.5: "A STA receiving an Association Response frame including a vendor specific IE it does not understand shall ignore the vendor-specific IE. An AP shall not send a vendor-specific IE within an Association Response unless a corresponding vendor-specific IE is included within the Association Request."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.5, pp. 72**   *P* **72**   *L* **0**   *MyBallot #* 13

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying when a vendor-specific IE can be sent within an Association Response.

SuggestedRemedy

Add sentence to 7.2.3.5: "A STA receiving an Association Response frame including a vendor specific IE it does not understand shall ignore the vendor-specific IE. An AP shall not send a vendor-specific IE within an Association Response unless a corresponding vendor-specific IE is included within the Association Request."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.6**   *P* **0**   *L* **0**   *MyBallot #* 154

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 10 indicates 'Vendor specific' information. On what basis is Order 10 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.   Order 10 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.7**   *P* **0**   *L* **0**   *MyBallot #* 155

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 6 indicates 'Vendor specific' information. On what basis is Order 6 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.   Order 6 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.8**   *P* **0**   *L* **0**   *MyBallot #* 156

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 5 indicates 'Vendor specific' information. On what basis is Order 5 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.   Order 5 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.8, pp. 73**   *P* **73**   *L* **0**   *MyBallot #* 182

Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying the behavior of an AP receiving a vendor-specific IE it does not understand

SuggestedRemedy

Add sentence to 7.2.3.8: "An AP receiving a Probe Request frame including a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 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 **07**   *SC* **7.2.3.8, pp. 73**   *P* **73**   *L* **0**   *MyBallot #* 15

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying the behavior of an AP receiving a vendor-specific IE it does not understand

SuggestedRemedy

Add sentence to 7.2.3.8: "An AP receiving a Probe Request frame including a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.2.3.9**   *P* **0**   *L* **0**   *MyBallot #* 157

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Order 22 indicates 'Vendor specific' information, yet it was not present in 802.11i or previous amendments. On what basis is Order 22 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.   Order 22 is the next sequential value available. The definition of a standard vendor-specific information element is preferable to vendors independently choosing random values to carry their proprietary information. This, at least, allows standard implementations to operate correctly along side of implementations with vendor-specific extensions. No editorial resolution required.

Cl **07**   *SC* **7.2.3.9**   *P* **0**   *L* **0**   *MyBallot #* 321

Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**

Table 12 indicated that the 18th (order 18) is reserved. It is not clear what that means. Does that mean that there is a reserved element there? How can you have a reserved slot

SuggestedRemedy

Remove the 18th entry and shift all the remaining entries up one.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 7.2.3.9.

Cl **07**   *SC* **7.2.3.9**   *P* **0**   *L* **0**   *MyBallot #* 390

Jokela, Jari

Comment Type   **TR**   *Comment Status* **D**

Order 18 is reserved but no explanation is given why it is reserved

SuggestedRemedy

Explain or remove 18 as reserved

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. The table will be changed to decrease by 1 the value for the orders greater than 18. See comment #321 for editorial resolution.

Cl **07**   *SC* **7.2.3.9**   *P* **0**   *L* **0**   *MyBallot #* 406

Edwards, Bruce

Comment Type   **ER**   *Comment Status* **D**

Why is there a reserved order element (18)? Since these don't correspond to element IDs, there seems to be no purpose to this.

SuggestedRemedy

Remove it

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment id #321. See #321 for editorial resolution.

Cl **07**   *SC* **7.2.3.9, pp. 75**   *P* **75**   *L* **0**   *MyBallot #* 14

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

No text specifying when a vendor-specific IE can be sent within a Probe Response or how it is interpretted by the STA.

SuggestedRemedy

Add sentence to 7.2.3.9: "A STA receiving a Probe Response frame including a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 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

7/6/2005 10:15:58 AM

Page 39 of 118
Cl **07**   *SC* **7.2.3.9, pp.**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.2.3.9, pp. 75**   *P* **75**   *L* **0**   *MyBallot #* 181

Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**

No text specifying when a vendor-specific IE can be sent within a Probe Response or how it is interpretted by the STA.

SuggestedRemedy

Add sentence to 7.2.3.9: "A STA receiving a Probe Response frame including a vendor-specific IE it does not understand shall ignore the vendor-specific IE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 178. See comment #178 for editorial resolution.

Cl **07**   *SC* **7.3.1.11**   *P* **0**   *L* **0**   *MyBallot #* 375

Watanabe, Fujio

Comment Type   **TR**   *Comment Status* **D**

According to 7.3 (within management frames, fixed-length mandatory frame body components are defined as fixed fields; variable length mandatory and all optional frame body components are defined as information elements.), 7.3.1.11 Action field belongs to the 7.3.1 Fixed field. However, actual action frame has variable length.

SuggestedRemedy

Either 7.3 sentence will be changed to adequately include the action frame or make a new category for Action frame.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. In 7.3, delete the paragraph. Retitle 7.3.1 to "Fields that are not information elements". Editor included in draft 2.0 in 7.3 and 7.3.1.

Cl **07**   *SC* **7.3.1.4**   *P* **0**   *L* **0**   *MyBallot #* 547

Hunter, David

Comment Type   **ER**   *Comment Status* **D**

This seems to be the first place "ERP" is used outside of a table -- so the acronym should be defined here -- or at least a pointer included to the place where it is defined.

SuggestedRemedy

Replace "ERP" with "Extended Rate PHY (ERP)" in text.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.1.4.

Cl **07**   *SC* **7.3.1.9**   *P* **0**   *L* **0**   *MyBallot #* 572

Bilstad, Mark

Comment Type   **T**   *Comment Status* **D**

In Table 20, a "vendor specific" status code is defined. This does not seem to be very useful. At a minimum, the OUI of the AP vendor must be derived somehow in this context, but there is no text describing how this is done. Otherwise, this code has no other meaning than code 1 (unspecified failure). In fact, there does not seem to be any text about this status code that I can find. Even with the OUI derived somehow, this would still only allow 1 status code per vendor; again, not very useful.

SuggestedRemedy

Remove this status code from the table; or, add frame fields and text describing how a vendor can implement multiple vendor-specific status codes.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment id #86. See #86 for editorial resolution.

Cl **07**   *SC* **7.3.1.9**   *P* **0**   *L* **0**   *MyBallot #* 161

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

Status code 221 indicates 'Vendor specific' information. On what basis is code 221 included?

SuggestedRemedy

Justify or remove

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment id #86. See #86 for editorial resolution.

Cl **07**   *SC* **7.3.1.9**   *P* **0**   *L* **0**   *MyBallot #* 394

Kandala, Srinivas

Comment Type   **TR**   *Comment Status* **D**

Status code is assigned by another draft amendment with permission from ANA.

SuggestedRemedy

Assign another number.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is insufficient information in the comment to determine the status code value to which the commenter refers.

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   7/6/2005 10:15:58 AM

Page 40 of 118
Cl **07**   *SC* **7.3.1.9**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.1.9**   *P* **0**   *L* **0**   *MyBallot #* 86
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
I think "Vendor Specific" (221/0xDD) should appear in the IE table not in the Status codes. Further I donÆt think a vendor specific status code is required, an implementation should instead use "Unspecified failure" or just "Successful" as appropriate.

SuggestedRemedy
Remove row for code 221 from Table 20 and insert the same into Table 22.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in Table 20 (7.3.1.9) & Table 22 (7.3.2).

Cl **07**   *SC* **7.3.1.9**   *P* **0**   *L* **0**   *MyBallot #* 322
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**
In table 20 what does a vendor specific status code mean? One is probably not enough for ar particular vendor. Should this really be here or should this be in Table 22.

SuggestedRemedy
Remove vendor specific status code.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment id #86. See #86 for editorial resolution.

Cl **07**   *SC* **7.3.1.9, pp. 83**   *P* **83**   *L* **0**   *MyBallot #* 19
Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**
No text specifying when a vendor-specific Status code can be sent, or how it is interpretted.

SuggestedRemedy
Add sentence to 7.3.1.9: "A vendor-specific status code shall only be sent if a corresponding vendor-specific IE was included in the requested operation. A STA receiving a vendor-specfii IE it does not understand shall interpret it as though it had received a Status Code of 1 (Unspecified failure)."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. This status code has been deleted as a result of resolving other comments. See comment #86 for editorial resolution.

Cl **07**   *SC* **7.3.1.9, pp. 83**   *P* **83**   *L* **0**   *MyBallot #* 175
Kuehnel, Thomas

Comment Type   **TR**   *Comment Status* **D**
No text specifying when a vendor-specific Status code can be sent, or how it is interpretted.

SuggestedRemedy
Add sentence to 7.3.1.9: "A vendor-specific status code shall only be sent if a corresponding vendor-specific IE was included in the requested operation. A STA receiving a vendor-specfii IE it does not understand shall interpret it as though it had received a Status Code of 1 (Unspecified failure)."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. This status code has been deleted as a result of resolving other comments. Duplicate of comment id #19. See #86 for editorial resolution.

Cl **07**   *SC* **7.3.2**   *P* **0**   *L* **0**   *MyBallot #* 372
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
Table 22 information element were explained at the next sections. However, the sequence of appearing information element (e.g. challenge text 7.3.2.8) are not well organized.

SuggestedRemedy
Revise the information element section in a sequence manner. (e.g., 7.3.2.8: challenge text element should be latter than 7.3.2.9 country information/7.3.2.10 hopping pattern).

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The information elements are presented in the order of the element id

Cl **07**   *SC* **7.3.2**   *P* **0**   *L* **0**   *MyBallot #* 324
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**
In Table 22 the vendor specific element ID is not defined. It needs to be defined so that manufacturers don't start using others. I am assuming it just got left out by accident as there i: a description of it in 7.3.2.26

SuggestedRemedy
Assign a vendor specific element ID.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. See #86 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   7/6/2005 10:15:58 AM   Page 41 of 118
                                                                                                                                                Cl **07**   *SC* **7.3.2**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.2**   *P* **0**   *L* **0**   *MyBallot #* 323
Sanwalka, Anil

Comment Type   **T**   *Comment Status* **D**
In Table 22 the WPA element ID is not specified. Since it is already in wide use. We need to specify it.

SuggestedRemedy
Add 221 as the WPA element ID and specify it.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. The element ID will be "vendor-specific", not WPA. See #86 for editorial resolution.

Cl **07**   *SC* **7.3.2.1**   *P* **0**   *L* **0**   *MyBallot #* 631
Olson, Tim

Comment Type   **T**   *Comment Status* **D**
Some Vendors have a feature where APs do not broadcast the SSID. TGk is adding a beaco measurement where RSSI is measured from a beacon or probe reponse. It would be useful t allow the SSID to remain wild in the probe response so that RSSI can be measured plus the SSID can remain hidden.

SuggestedRemedy
Add in "or Probe Response"à.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. If this is required for work in TGk, that task groups should undertake crafting the text in their draft. This will reduce the likelihood of incompatible changes to the standard.

Cl **07**   *SC* **7.3.2.1**   *P* **0**   *L* **0**   *MyBallot #* 325
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**
The change from broadcast to wildcard does not clarify the description. Might as well specifically say what it does.

SuggestedRemedy
Change "à indicate the wildcard SSID" to "à indicate that the transmitter of the frame is requesting probe response frames from all SSIDs."

Proposed Response   *Response Status* **W**
PROPOSED REJECT. This is a description of the value of the field. Its use is described in 10.3.2.1.2 and 11.1.3.2.1

Cl **07**   *SC* **7.3.2.1**   *P* **0**   *L* **0**   *MyBallot #* 87
Oakes, Ivan

Comment Type   **E**   *Comment Status* **D**
defn: "wildcard noun [C] in computing, a sign that is used to represent any letter or series of letters"

SuggestedRemedy
Replace "the wildcard SSID" with "any SSID will match"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. Wildcard SSID is used in many instances with clear meaning. To remove it from the document would result in more confusion.

Cl **07**   *SC* **7.3.2.14**   *P* **0**   *L* **0**   *MyBallot #* 198
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
Placing basic rates in the extended supported rates element is very dangerous because not a recipients will understand it, and may continually try to associate with APs that will continuous reject them. (I made this comment in 11g, but it was ignored *sigh*).

SuggestedRemedy
in this element only, the "basic rate bit" should be changed to be the "mandatory rate bit" and should be used to indicate rates that must be supported by STAs that support the PHY type in question. There is currently no way of signalling what these rates are, and they are required f correct operation of the 11g changes.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. While it is possible to do what the commenter describes, there are methods fully compliant with the current standard to avoid this problem. It requires only that a least one rate not supported by PHYs requiring support of the Extended Supported Rates element be marked as a Basic Rate in the original Supported Rates element.

Cl **07**   *SC* **7.3.2.25**   *P* **0**   *L* **0**   *MyBallot #* 624
Godfrey, Tim

Comment Type   **E**   *Comment Status* **D**
In figure 77, the 5th field is listed as "Pairwise Cipher Suite"

SuggestedRemedy
It should be "Pairwise Cipher Suite Count"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.2.25 (Figure 77).

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

7/6/2005 10:15:58 AM

Page 42 of 118
Cl **07**   *SC* **7.3.2.25**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.2.25.3**   *P* **0**   *L* **0**   *MyBallot #* 264
Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**
   page 112, "dot11RSNAConfigNumberofPTKSAReplay-Counters." should not have a
   hyphen.
   Page 113, "dot11RSNAConfigNumberofGTKSAReplay-Counters" should not have a hyphen

SuggestedRemedy
   edit

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.2.25.3.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 600
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**
   Spelling error - "ahceived"

SuggestedRemedy
   Change "ahceived" to "achieved".

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.2.26. See 7.3.2.26 for editorial
   resolution.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 376
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
   spell miss : ahceived

SuggestedRemedy
   achieved

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate of comment #600. See comment #600 for editorial
   resolution.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 596
Newton, Paul

Comment Type   **E**   *Comment Status* **D**
   Change "The information element is in the standard format shown in x and requiresà."

SuggestedRemedy
   "The information element is in the standard format shown in figure 80 and requiresà."

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate of comment #407. See comment #407 for editorial response

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 425
Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**
   "ahceived"

SuggestedRemedy
   "achieved"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate of comment #600. See comment #600 for editorial
   resolution.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 144
Visscher, Bert

Comment Type   **E**   *Comment Status* **D**
   typo: ahcieved instead of achieved

SuggestedRemedy
   fix typo

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate of comment #600. See comment #600 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   7/6/2005 10:15:58 AM

Page 43 of 118
Cl **07**   *SC* **7.3.2.26**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 427
Chaplin, Clint

Comment Type   **TR**   *Comment Status*   **D**

"The length of the information field (n) shall be 3 < n < 255."   Shouldn't that be "The length of the information field (n) shall be 3 <= n <= 255."? It's unclear which fields the length field covers.

SuggestedRemedy

See comment.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT IN PRINCIPLE.   Change the text to be "3 < n <= 255". Editor included in draft 1.1 in 7.3.2.26.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 566
Odman, Knut

Comment Type   **E**   *Comment Status*   **D**

Page 113, 3rd line: word "achieved" spelled wrong

SuggestedRemedy

correct typo

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Duplicate of comment #600. See comment #600 for editorial resolution.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 262
Karcz, Kevin

Comment Type   **E**   *Comment Status*   **D**

"ahceived" is mispelled

SuggestedRemedy

edit

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Duplicate of comment #600. See comment #600 for editorial resolutio

---

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 595
Newton, Paul

Comment Type   **E**   *Comment Status*   **D**

Change "à., so that reserved information element IDs are not usurped for non-standard purposes and so that interoperability is more easily ahceived in the presence of non-standard information."

SuggestedRemedy

à., so that reserved information element IDs are not usurped for non-standard purposes and s that interoperability is more easily achieved in the presence of non-standard information.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Duplicate of #600. See #600 for editorial resolution.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 407
Edwards, Bruce

Comment Type   **ER**   *Comment Status*   **D**

The text says "in the standard format shown in x". I think it is referring to the next figure (Figur 80) but I am not sure.

SuggestedRemedy

Replace "x" with the proper reference.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. This should reference Figure 80. Editor included in draft 1.1 in 7.3.2.26.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 263
Karcz, Kevin

Comment Type   **E**   *Comment Status*   **D**

"shown in x" should be "shown in Figure 80"

SuggestedRemedy

edit

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Duplicate of comment #407. See comment #407 for editorial response

---

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

7/6/2005 10:15:58 AM

Page 44 of 118
Cl **07**   *SC* **7.3.2.26**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 199
Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**
ahceived

SuggestedRemedy
change to "achieved"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.2.26.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 625
Godfrey, Tim

Comment Type   **E**   *Comment Status* **D**
"achieved" is misspelled on the 3rd line. "x" is used instead of "Figure 80" on the 4th line.

SuggestedRemedy
Correct

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comments #600 & #407. See comment #600 & #407 for editorial response.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 577
McCann, Stephen

Comment Type   **E**   *Comment Status* **D**
Missing Figure in text "shown in x"

SuggestedRemedy
Change to "shown in Figure 80"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of comment #407. See comment #407 for editorial respons

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 200
Mike, Moreton

Comment Type   **T**   *Comment Status* **D**
It's probably worth making it clear that unlike other elements these can be repeated.

SuggestedRemedy
After "Each vendor specific information
element may have a different OUI value" append "or may repeat an OUI used in one or more
previous vendor specific information elements".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. The text already provides for this situation. Change "Each vendor-specific information element may have a different OUI value." to "Each vendor-specific information element can have a different OUI value." Editor included in draft 1.1 in 7.3.2.26.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 571
Bilstad, Mark

Comment Type   **E**   *Comment Status* **D**
In figure 80, the vendor specific content field is shown with a size of 1 octet, but this is variable length according to the text

SuggestedRemedy
Replace the length with the word "variable"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Duplicate of comment #377. See comment #377 for editorial resolution.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 261
Karcz, Kevin

Comment Type   **TR**   *Comment Status* **D**
The value for the Element ID is not defined in the text. EID also needs to be added to Table 2

SuggestedRemedy
Define the EID as 221 according to ANA.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. The vendor-specific element ID is defined as 221 in table 22. Nothing for the editor to resolve.

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   7/6/2005 10:15:58 AM   Page 45 of 118
                                                                                                                                          Cl **07**   *SC* **7.3.2.26**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 377

Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**

In Figure 80, the length of Vendor specific content must be longer than 1

SuggestedRemedy

revise the length of vendor specific content to "n".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in Figure 80 of 7.3.2.26.

Cl **07**   *SC* **7.3.2.26**   *P* **0**   *L* **0**   *MyBallot #* 426

Chaplin, Clint

Comment Type   **TR**   *Comment Status* **D**

"shown in x"

SuggestedRemedy

"shown in Figure 80"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #407. See #407 for editorial resolution.

Cl **07**   *SC* **7.3.2.26; Figure 80; pg**   *P* **0**   *L* **0**   *MyBallot #* 342

Hillman, Garth

Comment Type   **T**   *Comment Status* **D**

octets count below 'vendor specific content' incorrect

SuggestedRemedy

1 -> 0-(n-3); also, you may want to indicate that 'n' covers the octets in fields OUI and Vendor Specific Content.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Duplicate of comment #377. See comment #377 for editorial resolution.

Cl **07**   *SC* **7.3.2.26; pg 113**   *P* **0**   *L* **0**   *MyBallot #* 341

Hillman, Garth

Comment Type   **E**   *Comment Status* **D**

spelling error; incorrect reference

SuggestedRemedy

ahceived -> achieved; x -> Figure 80

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of comment #600 & #407. See comment #600 & #407 for editorial resolution.

Cl **07**   *SC* **7.3.2.9**   *P* **0**   *L* **0**   *MyBallot #* 373

Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**

p.91 Table 20.1a is not existing

SuggestedRemedy

It should be Table 23.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.2.9.

Cl **07**   *SC* **7.3.2.9**   *P* **0**   *L* **0**   *MyBallot #* 305

Kruys, Jan

Comment Type   **TR**   *Comment Status* **D**

The coverage class definition is too crude to be useful at intermediate ranges. With longer range, increased guard time may be needed but this is dependent on the antenna type. Therefore Coverage class should be split in two components: Guardtime and Propagation tim

SuggestedRemedy

Change Coverage Class to include a guardTime parameter. Use the lower 5 bits for CCA and change the definition of the multiplier to: 0-9 = 1 usec, 10-12 = 2 usec, 21-31 = 3usec. Add Guard class as the upper three bits. Coverage Class: 0-7, multiplier for the basic guardtime (GI) defined in Table 109.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Jan to provide a submission with the specific text changes, before approval of this comment.

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   7/6/2005   10:15:58 AM

Page 46 of 118
Cl **07**   *SC* **7.3.2.9**

Submission   Bob O'Hara, Cisco Systems

Cl **07**   *SC* **7.3.2.9**   *P* **0**   *L* **0**   *MyBallot #* 374
Watanabe, Fujio

Comment Type **E**   *Comment Status* **D**
, allow control of BSS diameter..

SuggestedRemedy
delete .

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 7.3.2.9.

Cl **08**   *SC* **8.**   *P* **0**   *L* **0**   *MyBallot #* 501
Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused
individual changes, there remain unresolved inconsistencies between the text in this clause a
other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the tas
group.

Cl **08**   *SC* **8.**   *P* **0**   *L* **0**   *MyBallot #* 302
Kruys, Jan

Comment Type **TR**   *Comment Status* **D**
Section 8 contains many references to the internal interfaces of the MLME and SME in the
sense of "shall do X". it should be clear that these "shalls" do not define mandatory statement
that require verification testing etc.

SuggestedRemedy
Ideally, the MLME related material should be removed or referenced to an Annex that deals w
the MLME. It may be more efficient to add a note to the beginning of this Clause that states
"where referecence is made to the MLME interfaces and interface primitives, it should be
understood that these refer to the informative models e.g. as presented in Annex"was clause
10". None of the statements "shall......" are to be considered compliance criteria.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. There is insufficient detail in the comment to identify the specific
occurrences to which the commenter objects. The commenter is solicited to supply this detail
in a subsequent ballot. Note: compliance requirements are identified in Annex A.

Cl **08**   *SC* **8.**   *P* **0**   *L* **0**   *MyBallot #* 184
Mike, Moreton

Comment Type **T**   *Comment Status* **D**
WEP is now so thoroughly broken that it should be removed from the standard.

SuggestedRemedy
Remove WEP and direct readers to the 1999 version of the standard for details.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. WEP is used in currently deployed products and continues to appear
in new products. It is beyond the scope of this task group to remove this functionality.

Cl **08**   *SC* **8.1.4**   *P* **0**   *L* **0**   *MyBallot #* 283
Kruys, Jan

Comment Type **E**   *Comment Status* **D**
sub h) - the sentence does not flow

SuggestedRemedy
Add "assumed to be" after "the transmitter is"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The sentence flow is not helped by the addition suggested.

Cl **08**   *SC* **8.2.1.2**   *P* **0**   *L* **0**   *MyBallot #* 626
Godfrey, Tim

Comment Type **E**   *Comment Status* **D**
Footnote 16 appears on the next page

SuggestedRemedy
Correct

Proposed Response   *Response Status* **W**
PROPOSED REJECT. Footnote placement is automatic in FRAME. This time pagination is
better, but there is no guarantee for future drafts. Editor included in draft 1.1 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

7/6/2005 10:15:58 AM

Cl **08**   *SC* **8.2.2.2.1**   *P* **0**   *L* **0**   *MyBallot #* 378

Watanabe, Fujio

Comment Type   **TR**   *Comment Status* **D**   *yyyyyyy*

Information items: is not as same as Table 13 Authentication frame body. Authentication algorithm dependent information (none) must mean the challenge text in Table 13. There is no statement about the status code.

SuggestedRemedy

revised baed on Table 13

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Add "The specific items in each of the messages described below is define in clause 7.2.3.10, Table 13, and Table 14." Editor included in draft 2.0 in 8.2.2.2.

Cl **08**   *SC* **8.2.2.2.1**   *P* **0**   *L* **0**   *MyBallot #* 379

Watanabe, Fujio

Comment Type   **TR**   *Comment Status* **D**

What Status code should be used for the first frame of Open System Authentication. No statements

SuggestedRemedy

make a clear statement (status code)

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. There is a clear statement in Table 14 that the Status Code is reserved in the first frame of the open authentication algorithm. 7.1.1 clearly states that reserved fields are transmitted with a value of zero. In Table 13, delete "and set to 0". Editor included in draft 1.1 in 7.2.3.10 (Table 13).

Cl **08**   *SC* **8.2.2.2.2**   *P* **0**   *L* **0**   *MyBallot #* 380

Watanabe, Fujio

Comment Type   **TR**   *Comment Status* **D**

Information items is not as same as Table 13. Also, there is not same sequence order as Table 13 shows.

SuggestedRemedy

revise based on Table 13

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See #378 for editorial resolution.

Cl **08**   *SC* **8.2.2.3**   *P* **0**   *L* **0**   *MyBallot #* 186

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

Shared key authentication is known to enable dictionary attacks.

SuggestedRemedy

Strongly deprecate it, and say that it should only be used for backwards compatibility in situations where dictionary attacks are defended against.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. In 8.2, the statement that is requested by the commenter already appears. No editorial resolution required.

Cl **08**   *SC* **8.2.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 382

Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**

Authentication algorithm dependent information= The authentication results means challenge text in Tale 13.

SuggestedRemedy

revised based on Table 13

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Add reference to Table 13 for Cahllenge Text.

Cl **08**   *SC* **8.2.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 383

Watanabe, Fujio

Comment Type   **TR**   *Comment Status* **D**

What Status code should be used for the second frame of Shared System Authentication. No statements

SuggestedRemedy

make a clear statement (status code)

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is a clear statement in Table 14 that the Status Code is reserved in the first (this is what is assumed to be meant by the commenter) frame of the shared key authentication algorithm. 7.1.1 clearly states that reserved fields are transmitted with a value of zero.

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   7/6/2005 10:15:58 AM

Page 48 of 118
Cl **08**   *SC* **8.2.2.3.2**

Submission   Bob O'Hara, Cisco Systems

Cl **08**   *SC* **8.2.2.3.2**   *P* **0**   *L* **0**   *MyBallot #* 381
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
   The result code of the requested authenticationà

SuggestedRemedy
   The status code of the requested authenticationà

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 8.2.2.3.2.

Cl **08**   *SC* **8.2.2.3.3**   *P* **0**   *L* **0**   *MyBallot #* 384
Watanabe, Fujio

Comment Type   **TR**   *Comment Status* **D**
   What Status code should be used for the third frame Shared System Authentication. No
   statements

SuggestedRemedy
   make a clear statement (status code)

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. There is a clear statement in Table 14 that the Status Code is
   reserved in the third frame of the shared key authentication algorithm. 7.1.1 clearly states tha
   reserved fields are transmitted with a value of zero.

Cl **08**   *SC* **8.2.2.3.4**   *P* **0**   *L* **0**   *MyBallot #* 385
Watanabe, Fujio

Comment Type   **E**   *Comment Status* **D**
   The result code of the requested authentication..

SuggestedRemedy
   The status code of the requested authenticationà

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 8.2.2.3.4.

Cl **08**   *SC* **8.3.3.3**   *P* **0**   *L* **0**   *MyBallot #* 284
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**
   Text and figure are inconsistent

SuggestedRemedy
   In figure 101 change "encrypted MPDU" to "encapsulated"

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The text in bullet f and the figure are consistent.

Cl **08**   *SC* **8.4.10**   *P* **0**   *L* **0**   *MyBallot #* 465
Ptasinski, Henry

Comment Type   **TR**   *Comment Status* **D**
   Deletion of PTKSA and GTKSA as described in first paragraph is too aggressive and results i
   unnecessary loss of connectivity. In an ESS, when a STA attempts to roam to a new AP, the
   STA should not delete the PTKSA or GTKSA for the old AP until a successful association
   response is received from the new AP. It should not delete the PTKSA or GTKSA e.g. when
   invoking authentication with an AP to which it currently is not associated.

SuggestedRemedy
   Relax the requirements for flushing PTKSA and GTKSA such that loss of connectivity is
   minimized.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT.   Replace "When an SME receives or invokes of any of the MLME
   association, reassociation, disassociation, authentication, or deauthentication request or
   indication primitives, or if it believes that it has drifted out of radio range of another STA, it will
   delete some security associations." with "When a non-AP STA SME receives a successful
   MLME association or reassociation confirm primitive or receives or invokes an MLME
   disassociation or deauthentication primitive, it will delete some security associations. Similarl
   when an AP SME receives an MLME association or reassociation indication primitive, or
   receives or invokes an MLME disassociation or deauthentication primitive it will delete some
   security associations. Editor included in draft 1.1 in 8.4.10.

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

7/6/2005 10:15:58 AM

Page 49 of 118
Cl **08**   *SC* **8.4.10**

Submission   Bob O'Hara, Cisco Systems

Cl **08**   *SC* **8.4.2**   *P* **0**   *L* **0**   *MyBallot #* 285
Kruys, Jan

Comment Type **E**   *Comment Status* **D**
   0

SuggestedRemedy
   Insert a empty line before NOTES and spell "Notes".

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. Inserted blank line. NOTES is used consistently.
   Editor included in draft 1.1 in 8.4.2.

Cl **08**   *SC* **8.5.1.3**   *P* **0**   *L* **0**   *MyBallot #* 464
Ptasinski, Henry

Comment Type **TR**   *Comment Status* **D**
   GMK concept is unnecessary, and is defined inconsistently in the draft. This clause states:
   "The GTK shall be derived from the GMK" and "The GTK shall be a random number", which
   seem to conflict. Also, clause 3 defines the GMK as: "3.51 group master key (GMK): An
   auxiliary key that may be used to derive a group temporal key (GTK)." Which is it, may or sha

SuggestedRemedy
   Delete GMK and Gnonce, or at least clarify that GMK is one possible method for deriving the
   GTK and remove any usage of 'shall' w.r.t. the GMK.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Remove "NOTES" and the numbers in front of the note items.
   Change "may" to "can", before update in the first note. In the second note, delete the first
   sentence. Then change "depicts one possible" to "depicts an example of a". Change "The
   Autenticator may derive" to "The Authenticator derives". Change "Here, the following" to "In
   this example, the following". Change "shall be a random" to "is a random". Change "GTK sha
   be derived" to "GTK is derived". Change "(TK) shall be" to "(TK) is". Editor included in draft 1
   in 8.5.1.3.

Cl **08**   *SC* **8.5.2**   *P* **0**   *L* **0**   *MyBallot #* 428
Chaplin, Clint

Comment Type **TR**   *Comment Status* **D**
   "EAPOL protocol version" is used only once in this draft, is defined nowhere in this draft, and
   does not have a refernce to a definition in any other standard.

SuggestedRemedy
   Please define, or point to a definition.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. Correct Figure 107 to include the Protocol Version (1
   byte), Packet Type (1 byte) and Packet Body Length (2 bytes) above the Descriptor Type in th
   current figure. In the text immediately below Figure 107, change "EAPOL-key frame" to
   "EAPOL-key frame body". Editor included in draft 1.1 in section 8.5.2, figure 107.

Cl **08**   *SC* **8.5.3.7**   *P* **0**   *L* **0**   *MyBallot #* 461
McClellan, Kelly

Comment Type **E**   *Comment Status* **D**
   This clause contains the statement: "None of the protocols defined by IEEE Std 802.11, 1999
   Edition, and IEEE P802.1X-REV permit the AS,
   the Authenticator, the Supplicant, or either STA to verify these assumptions." Since this now
   refers to the previous version of the standard, it should be updated.

SuggestedRemedy
   Change the informative reference from "1999 Edition" to "current edition" or "200_ edition" if th
   statement is still true.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. Changed to "this standard." Editor included in draft 1.1
   in 8.5.3.7.

Cl **08**   *SC* **8.5.6**   *P* **0**   *L* **0**   *MyBallot #* 286
Kruys, Jan

Comment Type **T**   *Comment Status* **D**
   This section describes the implementation of an entity that falls outside the scope of 802.11. I
   should be moved to an informative annex.

SuggestedRemedy
   0

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The functionality described is required for an 802.11 RSNA
   implementation to provide the correct key exchange operation.

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   7/6/2005 10:15:58 AM

Page 50 of 118
Cl **08**   *SC* **8.5.6**

Submission   Bob O'Hara, Cisco Systems

Cl **08**   *SC* **8.5.6.3**   *P* **0**   *L* **0**   *MyBallot #* 54
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**
   The pseudocode is inconsistent. Left arrow and an equals sign are both used to represent assignment.

SuggestedRemedy
   The assignments ot 802.1X::portValid on page 186 should be replaced with a left arrow symbol. Check also elsewhere this variable is used.
   Make pseudo-code snippets in the state machines (e.g. Figure 118) consistent.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. The proposed changes to assignment were accepted The editor reviewed the figure and found that the = operator is used throughout the figure without confusion and did not make that reqeusted chagne. Editor included in draft 1.1 in 8.5.6.3 in two places.

Cl **08**   *SC* **8.5.7**   *P* **0**   *L* **0**   *MyBallot #* 287
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
   See preceding

SuggestedRemedy
   0

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The functionality described is required for an 802.11 RSNA implementation to provide the correct key exchange operation.

Cl **08**   *SC* **8.5.8**   *P* **0**   *L* **0**   *MyBallot #* 288
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
   There seems to be an inconsistency in that the 256 bit output is dereived from a 256 RN input together with other parameters - clarification would help.

SuggestedRemedy
   See preceding wrt to placement of this text - maybe H.6 is better place?

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The PRF-256 is described in clause 8.5.1.1. The output of this function is 256 bits. It is not clear what needs to be clarified.

Cl **08**   *SC* **8.7**   *P* **0**   *L* **0**   *MyBallot #* 289
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
   This section descriibes implementation

SuggestedRemedy
   It should either be part of the SDL pseudo code or moved to an informative annex.

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. While purely informative, the text is very useful to provide a detailed understanding of WEP operation.

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 502
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
   After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
   Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the tas group.

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 55
Stephens, Adrian

Comment Type   **ER**   *Comment Status* **D**
   There seem to be some very high clause numbers in this section (e.g. 2019.2). While we're a productive group, I suspect we won't be into this kind of range until after my retirement.

SuggestedRemedy
   Suspect, check and correct references that start with a 4-digit string.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate. See comment #386 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   7/6/2005 10:15:58 AM

Page 51 of 118
Cl **09**   *SC* **9.**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 273
Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**
References to many clause numbers within the draft are preceded by incorrect values. See 1st paragraph of clause 9 for example

SuggestedRemedy
edit

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 578
McCann, Stephen

Comment Type   **E**   *Comment Status* **D**
Many section 9 internal section reference numbers appear to be mal-formed, e.g. 2019.2

SuggestedRemedy
Correct internal section reference numbers, e.g. 2019.2 -> 9.2

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 429
Chaplin, Clint

Comment Type   **TR**   *Comment Status* **D**
"These functions are expanded on in 2019.2 and 2159.3, and a complete functional descriptic of each is provided. Fragmentation and defragmentation are covered in 2239.4 and 2249.5. Multirate support is addressed in 2249.6. The allowable frame exchange sequences are listec in 2269.7. Finally, a number of additional restrictions to limit the cases in which MSDUs are reordered or discarded are described in 2289.8." Those references are incorrect; it seems as though quite a few references in this chapter have three digits prepended to them.

SuggestedRemedy
Correct

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 386
Watanabe, Fujio

Comment Type   **ER**   *Comment Status* **D**
These functions are expanded on in 2019.2 and 2159.3à2239.4..

SuggestedRemedy
Revise to the proper number

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.**   *P* **0**   *L* **0**   *MyBallot #* 627
Godfrey, Tim

Comment Type   **E**   *Comment Status* **D**
Clause reference numbers are incorrect throughout clause 9. For example: "IEEE 802.11 LAN are introduced in 9.1. These functions are expanded on in 2019.2 and 2159.3" . Other 2000-range references are found throughout this clause

SuggestedRemedy
Truncate the first 3 digits of references above 2000

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.1.1**   *P* **0**   *L* **0**   *MyBallot #* 430
Chaplin, Clint

Comment Type   **TR**   *Comment Status* **D**
Incorrect section references

SuggestedRemedy
Correct

Proposed Response   *Response Status* **W**
PROPOSED REJECT. It is unclear from the comment to which references the commenter refers.

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
7/6/2005 10:15:58 AM
Page 52 of 118
Cl **09**   *SC* **9.1.1**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.1.1**   *P* **0**   *L* **0**   *MyBallot #* 387
Watanabe, Fujio

Comment Type **ER**   *Comment Status* **D**
   see 2029.2.1, in 2019.2,

SuggestedRemedy
   revise to the proper number

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.1.3**   *P* **0**   *L* **0**   *MyBallot #* 290
Kruys, Jan

Comment Type **E**   *Comment Status* **D**
   The words "co-existence" and "concurrently" are confusing and not consistent with the rest of
   the DCF/PCF rules laid down in this standard

SuggestedRemedy
   Replace with: 9.1.3 Combined use of DCF and PCF   When a PC is operating in a BSS, the
   two access methods alternate, with a CFP followed by a CP. This is described in greater deta
   in 2159.3

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. The sentence was rewritten. Editor included in draft
   1.1 in 9.1.3.

Cl **09**   *SC* **9.1.4**   *P* **0**   *L* **0**   *MyBallot #* 391
Jokela, Jari

Comment Type **TR**   *Comment Status* **D**
   Text says that MSDU and MAC header and FCS are received from the LLC. This is not true,
   only MSDU is received from the LLC.

SuggestedRemedy
   Fix.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. See resolution to comment 347. See comment #347
   for editorial resolution.

Cl **09**   *SC* **9.1.4**   *P* **0**   *L* **0**   *MyBallot #* 56
Stephens, Adrian

Comment Type **TR**   *Comment Status* **D**
   The third paragraph in 9.1.4 only partly captures the normative requirements for fragmentation
   It is possible to receive an MSDU + Header + FCS less than the fragmentation threshold,
   which, after encapsulation for privacy is longer than it.

SuggestedRemedy
   This actually points out an architectural weakness. We don't have a really strong view of a
   transformational process that takes entities of type A and turns them into type B. We don't
   have good naming of the objects along these processes. If we did, we'd have names for thin
   like "MSDU + optional integrity check" and MSDU+optional integrity check + optional
   encapsulation.

   The alternative solution is to fix this para so that an MSDU is fragmented if the MSDU, plus
   optional MSDU integrity check, plus optional encapsulation, plus MPDU header and
   checksum is greater than the threshold.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. See resolution to comment 347. See comment #347
   for editorial resolution.

Cl **09**   *SC* **9.1.4**   *P* **0**   *L* **0**   *MyBallot #* 408
Edwards, Bruce

Comment Type **TR**   *Comment Status* **D**
   The text "When a directed MSDU plus MAC header and FCS is received from the LLCà" is
   confusing. I don't think that the MAC header and FCS are received from the LLC. I think that
   the text is trying to say something about the length of the MPDU produced from an MSDU.

SuggestedRemedy
   Fix up the text to be more explicit about talking about the length.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. See resolution to comment 347. See comment #347 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   7/6/2005 10:15:58 AM

Page 53 of 118
Cl **09**   *SC* **9.1.4**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.1.4**   *P* **0**   *L* **0**   *MyBallot #* 434
Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**

The added comment shows that the LLC layer needs to send down the MAC header and FCS field. Since FCS field is generated within MAC, I don't see any reason to pass it down as it's n really useful.

SuggestedRemedy

Remove FCS from that added text

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See resolution to comment 347. See comment #347 for editorial resolution.

Cl **09**   *SC* **9.1.4**   *P* **0**   *L* **0**   *MyBallot #* 347
Black, Simon

Comment Type   **TR**   *Comment Status* **D**

The text 'When a directed MSDU, plus MAC header and FCS, is received from the LLC' is not correct. The latter items are not received from LLC - only the MSDU is.

SuggestedRemedy

Replace with 'When a directed MSDU is received from the LLC or a directed MMPDU is received from the MLME that would result in a length greater than adot11FragmentationThreshold when the MAC header and FCS are added, the MSDU or MMPDU shall be fragmented.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 9.1.4.

Cl **09**   *SC* **9.1.4**   *P* **0**   *L* **0**   *MyBallot #* 201
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

"When a directed MSDU, plus MAC header and FCS, is received from the LLC or a directed MMPDU is received from the MLME with a length greater than adot11FragmentationThreshold," (1) LLC doesn't send "MSDU , plus MAC header and FCS" i just sends MSDU. (2) What about MSDUs received from the DS?

SuggestedRemedy

The reason why it's difficult to write good text to describe this is that it's trying to combine MMPDU and MSDU fragmentation when those things are at totally different levels of the architecture. If the whole of 9.1.4 was rewritten to talk in terms of MPDU fragmentation (as in fact the second paragraph already does) then it would flow much more easily.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See the resolution to comment 347. See resolution to comment 347. See comment #347 for editorial resolution.

Cl **09**   *SC* **9.10**   *P* **0**   *L* **0**   *MyBallot #* 65
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**

The heading is too generic as this is a concern only to ERP-OFDM phy usage.

SuggestedRemedy

Call it ERP OFDM Protection Mechanism

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Duplicate with #300. See #300 for editorial resolution.

Cl **09**   *SC* **9.10**   *P* **0**   *L* **0**   *MyBallot #* 300
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

"Protection Mechanism" is imprecise and

SuggestedRemedy

Change to "Protection mechanisms for non-ERP receivers".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 9.10

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

7/6/2005 10:15:58 AM

Page 54 of 118
Cl **09**   *SC* **9.10**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2**   *P* **0**   *L* **0**   *MyBallot #* 251
Tolpin, Alexander

Comment Type   **TR**   *Comment Status* **D**
"à shall only consider the frame body as the basis of a possible indicationà"

This is utterly meaningless.

SuggestedRemedy
Remove containing sentence.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Replace "only consider the frame body as the basis o
a possible indication to LLC" with "not indicate a data frame to LLC when the frame body is
null." Editor included in draft 1.1 in 9.2.

Cl **09**   *SC* **9.2**   *P* **0**   *L* **0**   *MyBallot #* 597
Newton, Paul

Comment Type   **E**   *Comment Status* **D**
BasicRate is referred to as "aBasicRateSet" it seems the rest of the mib variables are now
referenced with the prefix of do11?

SuggestedRemedy
Change from "aBasicRateSet" to "dot11BasicRateSet"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. This is not a MIB settings. As described in the text in the same
location, this is the parameter of the MLME-JOIN.request and MLME-START.request
primitives.

Cl **09**   *SC* **9.2**   *P* **0**   *L* **0**   *MyBallot #* 57
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
"CS shall be performed by both physical and virtual mechanisms".

Sigh, Sigh, Sigh.

Shall is supposed to introduce a normative requirement, and it is as clear a mud what this is
introducing. It sounds more like a normative requirement on the writers of the protocol to
include destails to support both physical and virtual mechanisms.

SuggestedRemedy
Turn this into an informative note.

This is also a general problem. I just happened to light on this and it exceeded my intertia
threshold. I recommend scanning for "shall" and replacing with "is" where it clearly describes
normative behaviour introduced elsewhere in the document. Ideally each use of the word sha
(and there are 2000+) should relate to an entry in the PICS.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. This is a normative requirement on the implementation of the MAC. I
is requiring that the MAC operate using both the physical carrier sense indication from the PH
and the NAV virtual carrier sense mechanism.

Cl **09**   *SC* **9.2**   *P* **0**   *L* **0**   *MyBallot #* 58
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
"à shall only cconsider the frame body as the basis of a possible indicationà"

This is utterly meaningless.

SuggestedRemedy
Remove containing sentence.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See resolution to comment 251. See #251 for editoria
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

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2**   *P* **0**   *L* **0**   *MyBallot #* 389

Watanabe, Fujio

Comment Type **E**   *Comment Status* **D**

If the return CTS is not detected by the STA originatingà. more quickly than if the long dataà. This statement is not clear. It means that the retransmission of RTS will have a higher priority transmission.

SuggestedRemedy

Make a clear statement for understanding.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The readers interpretation of what this means may not be true. The sentence seems to say what it means. It is discussing an advantage of the RTS/CTS system.

Cl **09**   *SC* **9.2**   *P* **0**   *L* **0**   *MyBallot #* 388

Watanabe, Fujio

Comment Type **E**   *Comment Status* **D**

Thus a STA can be unable to receive from the originating STA, yet stillà. Object is missing.

SuggestedRemedy

Make a clear statement. Receive a data frame from the originating STA, à

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Punctuation was cleaned up. The sentence seems to make a complete and correct statement.

Cl **09**   *SC* **9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 83

Oakes, Ivan

Comment Type **E**   *Comment Status* **D**

bad reference "2089.2.5.4", also in 9.2.2 three times and elsewhere.

SuggestedRemedy

Fix cross references

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.2.10**   *P* **0**   *L* **0**   *MyBallot #* 328

Sanwalka, Anil

Comment Type **TR**   *Comment Status* **D**

The new value of EIFS is not the same as the old value for legacy 11 and 11b MACs. Since th use of EIFS is required (shall) the new equation must resolve to the old value for legacy radio

SuggestedRemedy

Remove the DIFS from the equation.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The new equation for EIFS resolves to exactly the same value for the legacy .11 and the .11b PHYS as the original equation.

Cl **09**   *SC* **9.2.3.4**   *P* **0**   *L* **0**   *MyBallot #* 202

Mike, Moreton

Comment Type **TR**   *Comment Status* **D**

It concerns me that 11e have made significant changes in the area of EIFS. Which will take precedence? In fact both seem to be attempting to solve different problems with EIFS (TGe t slot reference point, TGm the NAV problem), so neither will be that desirable.

SuggestedRemedy

I think the big error in EIFS is triggering it at all when NAV is set. EIFS is really a mechanism to reduce the chance of you trashing the ACK when you don't receive the data frame correctly Well if you're going to keep quiet for that period anyway then there's no point in triggering it. S rule becomes: (1) On incorrect frame RX switch to EIFS if EIFS > NAV + DIFS (or the TGe equiv). (2) Then use EIFS just like you would DIFS, (3) correct frame RX always changes ba to DIFS.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. The current text says exactly what you requested. There is nothing fo the editor to resolve.

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   7/6/2005 10:15:58 AM

Page 56 of 118
Cl **09**   *SC* **9.2.3.4**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2.3.4**   *P* **0**   *L* **0**   *MyBallot #* 59
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

This single para is symptomatic of "specification by normative verbosity" (that's the PC versic
of the expression).
The problem is we're trying to say something complex, and we heap normative sentence on
normative sentence.
What we actually need is some diagrammatic representation (such as a state machine) that is
normative.   This makes life a lot easier for the non-native English speakers, and makes
interpretation less error-prone.

SuggestedRemedy

Let's have a nice block diagram or state machine showing how the various counters and timer
relate.
(The SDL in the Annexes is not adequate for this purpose, although SDL would be one valid
representation of a state machine that could be used at this point (but It wouldn't be my first
choice)).

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The text is clear and concise. The commenter is solicited to provide a
diagram or other formal description that improves upon the text.

Cl **09**   *SC* **9.2.3.4**   *P* **0**   *L* **0**   *MyBallot #* 601
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

Word choice error "later" versus "latter"

SuggestedRemedy

Change "later" to "latter".

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Editor believes the word usage it correct in this case.

Cl **09**   *SC* **9.2.4**   *P* **0**   *L* **0**   *MyBallot #* 272
Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**

page 205, line 3, "2269.7" should be "9.7"

SuggestedRemedy

edit

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.2.4**   *P* **0**   *L* **0**   *MyBallot #* 203
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

I seem to remember there was an interpretation that described the CW having a double peak
with default values - maybe it would be a good idea for the diagram to show this?

SuggestedRemedy

See comment

Proposed Response   *Response Status* **W**

PROPOSED REJECT. It is not at all clear what the commenter is requesting. If there is an
interpretation request or response on this issue, please cite it.

Cl **09**   *SC* **9.2.5.1**   *P* **0**   *L* **0**   *MyBallot #* 634
Inoue, Yasuhiko

Comment Type   **E**   *Comment Status* **D**

Wrong reference:
"à when a STA desires to initiate the initial frame of one of the frame exchanges described in
2269.7"

"à the random backoff algorithm described in 2069.2.5.2 shall be followed."

"There are conditions, specified in 2069.2.5.2 and 2099.2.5.5, where the random backoff
algorithm ..."

SuggestedRemedy

2269.7 --> 9.7

2069.2.5.2 --> 9.2.5.2

2099.2.5.5 --> 9.2.5.5

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate. See comment #386 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

7/6/2005 10:15:58 AM

Cl **09**   *SC* **9.2.5.2**   *P* **0**   *L* **0**   *MyBallot #* 635
Inoue, Yasuhiko

Comment Type   **E**   *Comment Status*   **D**
Wong reference:
"The backoff procedure shall also be invoked when a transmitting STA infers a failed
transmission as defined in 2119.2.5.7 or 2129.2.8."

Similar corrections will be necessary for the rest of this subclause.

SuggestedRemedy
2119.2.5.7 --> 9.2.5.7

2129.2.8 --> 9.2.8

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.2.5.3**   *P* **0**   *L* **0**   *MyBallot #* 435
Raissinia, Ali

Comment Type   **E**   *Comment Status*   **D**
There is a typo on the 3rd paragraph regarding the section 2119.2.5.7 This should be section
9.2.5.7. Similarly, in 4th paragraph the referred section is 2129.2.8 and it should be 9.2.8. It
looks like this is a common problem in several more sections.

SuggestedRemedy
Make the corrections.

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.2.5.3**   *P* **0**   *L* **0**   *MyBallot #* 204
Mike, Moreton

Comment Type   **ER**   *Comment Status*   **D**
"the STA shall perform the ACK procedure, as
defined in 2129.2.8." - looks like an acrobat cut and paste error on the section number.

SuggestedRemedy
Correct section number. (There's also a 2189.3.2.2. later)

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 205
Mike, Moreton

Comment Type   **T**   *Comment Status*   **D**
Why place the requirement on the MAC to know which PHYs can make use of PHY-
CCARESET and which can't? Why not always send it, and leave it to the PHY what it does
with it?

SuggestedRemedy
Delete "for those PHYs that provide
a PHY-CCARESET.request primitive"

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 9.2.5.4.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 207
Mike, Moreton

Comment Type   **TR**   *Comment Status*   **D**
While there are numeric definitions of PHY-RX-START-Delay there doesn't seem to be any
textual description of it.

SuggestedRemedy
Refer to where it's described, or add a description.

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. A description of the parameter will be placed in the PHY clauses.
There is nothing for the editor to resolve for this item as each PHY is covered by seprate
comments.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 636
Inoue, Yasuhiko

Comment Type   **E**   *Comment Status*   **D**
Wong reference.

SuggestedRemedy
Please check the referred clause number.

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Duplicate. See comment #386 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   7/6/2005 10:15:58 AM

Page 58 of 118
Cl **09**   *SC* **9.2.5.4**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 252

Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

    No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

    Remove aPHY-RX-START-Delay from the paragraph

Proposed Response   *Response Status* **W**

    PROPOSED REJECT. The equation is correct. The actual values for this parameter in some of the PHYs are not be correct. This parameter accounts for the length of the preamble and PLCP header.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 206

Mike, Moreton

Comment Type   **T**   *Comment Status* **D**   *PHY*

    I think the stuff allowing you to clear NAV if you don't get the CTS should be deleted. It was reasonable when the standard was first written, but with all the protection of different modulations floating around, I don't think it's sensible any more. And deleting it won't actually effect interoperability.

SuggestedRemedy

    See comment

Proposed Response   *Response Status* **W**

    PROPOSED REJECT. The issue is already addressed in 9.10, in the discussion of the protection mechanisms.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 30

Ohtani, Yoshihiro

Comment Type   **TR**   *Comment Status* **D**

    No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

    Remove aPHY-RX-START-Delay from the paragraph

Proposed Response   *Response Status* **W**

    PROPOSED REJECT. The equation is correct. The actual values for this parameter in some of the PHYs are not be correct. This parameter accounts for the length of the preamble and PLCP header.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 21

Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

    No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

    Remove aPHY-RX-START-Delay from the paragraph

Proposed Response   *Response Status* **W**

    PROPOSED REJECT. The equation is correct. The actual values for this parameter in some of the PHYs are not be correct. This parameter accounts for the length of the preamble and PLCP header.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 249

Edney, Jon

Comment Type   **E**   *Comment Status* **D**

    Could not find section 2189.3.2.2

SuggestedRemedy

    Correct section reference

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.2.5.4**   *P* **0**   *L* **0**   *MyBallot #* 436

Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**

    The added text includes aPHY-RX-START-Delay. Not sure why we need this addition.

SuggestedRemedy

    Please clarify or Remove it.

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Definition of the term wil be added to the PHY clauses. There is nothing for the editor to resolve for this item as each PHY is covered by separate comments.

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

7/6/2005 10:15:58 AM

Page 59 of 118
Cl **09**   *SC* **9.2.5.4**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 348

Black, Simon

Comment Type   **TR**   *Comment Status* **D**

I'm not sure how the revised text here for CTSTimeout here works. Consider the HRDSSS PHY. We are told in clause 18 that the value of aPHY-RX-START-Delay is 0us. So after the end of an RTS frame we wait for aSIFS (10us) and aSlot (20us) + aPHY-RX-START-Delay (0us). If the CTS had occured, after SIFS correctly, we would (incorrectly) call a timeout 20us into the preamble. The MAC doesn't know about the CTS (ignoring a CCA indication) until PH RX-START.ind at the end of the PCLP header (this is what is used later in the clause to stop the timer). I thought maybe aPHY-RX-START-Delay was the length of time from the start of the packet to the PHY-RX-START, but then that doesn't make sense with it being 0 for the HRDSSS PHY (a secondary point that doesn't help is that aPHY-RX-START-Delay is given a value in the PHY clauses but we never really learn what the start and end points of this period are).

SuggestedRemedy

Please reviewà and at least define what the reference points for aPHY-RX-START-Delay are.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. PHY-RX_Start-Delay will be correctly defined and assigned a proper value in the PHY clauses.

There is nothing for the editor to resolve for this item as each PHY is covered by separate comments.

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 22

Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

The paragraph starting with "After transmitting an RTS frame," is very problematic.

For example, in case of successful sequence of 11b, PHY-RXSTART.indication will occur afte 202us (=10us:aSIFSTime + 144us:preamble + 48us:PLCPHeader) after PHY-TXEND.confirm while CTSTimeout = 30us. This means that CTSTimeout will be expired even for successful case and it makes no sense.

For OFDM PHYs, I don't understand where 24us comes from for aPHY-RX-START-Delay. It looks like CTSTimeout is too long (almost CTS frame length) and there could be the case that another STA rather than sending/receiving STA might interrupt this sequence.

After careful consideration based on above observation, the point of my suggestions are follow
- CTSTimeout will be expired if a PHY-CCA.indication(busy) does not occuer.
- No reason to keep aPHY-RX-START-Delay.
- aRXTXTurnaroundTime/aMACProccessingDelay should be taken into account for precise calculation.

SuggestedRemedy

Replace "a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" with "a value of aSIFSTime + aSlotTime - aRXTXTurnaroundTime - aMACProccessingDelay"

Replace "If a PHY-RXSTART.indication does not occur" with "If a PHY-CCA.indication(busy) does not occur".

Replace "If a PHY-RXSTART.indication does occur" with "If a PHY-CCA.indication(busy) does occur"

Replace "the STA shall wait for the corresponding PHY-RXEND.indication to determine whether the RTS transmission was successful." with "the STA shall wait for the corresponding PHY-RXSTART.indication and PHY-RXEND.indication to determine whether the RTS transmission was successful."

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The value for the PHY-RXSTART-Delay is not correct for the 11b PHY. It will be corrected.

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

7/6/2005 10:15:58 AM

Page 60 of 118
Cl **09**   *SC* **9.2.5.7**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 437
Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**
The added text includes aPHY-RX-START-Delay. Not sure why we need this addition.

SuggestedRemedy
Please clarify or Remove it.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. The parameter will be defined in the PHY clauses. There is nothing for the editor to resolve for this item as each PHY is covered by separate comments.

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 253
Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**
The modification "with a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" made in this clause adds the followig issues:

For 11b systems, PHY-RXSTART.indication will be 202us (=10us:aSIFSTime + 144us:preamble + 48us:PLCPHeader) after PHY-TXEND.confirm. However, CTSTimeout is 30us and CTSTimeout will be expired even for successful transmissions.

For OFDM PHYs, it is unclear why 24us (aPHY-RX-START-Delay) is necessary. It looks like CTSTimeout is too long (almost CTS frame length) and there could be a 3rd STA which is not sending/receiving, that might interrupt this sequence.

Thus, the suggestion is to consider aRXTXTurnaroundTime and aMACProccessingDelay instead.

SuggestedRemedy
Replace "a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" with "a value of aSIFSTime + aSlotTime - aRXTXTurnaroundTime - aMACProccessingDelay"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The PHY-RX-START-Delay term is correct, and for the 11b PHY will be defined and assigned a correct value.

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 326
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**
Specifying a required (shall) value for ctsTimeout is problematic now. There are a number of implementation in existence that probably wait longer. This would make them non-compliant

SuggestedRemedy
Change the sentence to state "with a value greater than à"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. If a STA has waited for a period as specified and then an additional length of time, the STA has waited for the initial specified time. It is compliant.

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

7/6/2005 10:15:59 AM

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 31
Ohtani, Yoshihiro

Comment Type   **TR**   *Comment Status* **D**

The paragraph starting with "After transmitting an RTS frame," is very problematic.

For example, in case of successful sequence of 11b, PHY-RXSTART.indication will occur afte
202us (=10us:aSIFSTime + 144us:preamble + 48us:PLCPHeader) after PHY-TXEND.confirm
while CTSTimeout = 30us. This means that CTSTimeout will be expired even for successful
case and it makes no sense.

For OFDM PHYs, I don't understand where 24us comes from for aPHY-RX-START-Delay. It
looks like CTSTimeout is too long (almost CTS frame length) and there could be the case tha
another STA rather than sending/receiving STA might interrupt this sequence.

After careful consideration based on above observation, the point of my suggestions are follo
- CTSTimeout will be expired if a PHY-CCA.indication(busy) does not occuer.
- No reason to keep aPHY-RX-START-Delay.
- aRXTXTurnaroundTime/aMACProccessingDelay should be taken into account for precise
calculation.

SuggestedRemedy

Replace "a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" with "a value of
aSIFSTime + aSlotTime - aRXTXTurnaroundTime - aMACProccessingDelay"

Replace "If a PHY-RXSTART.indication does not occur" with "If a PHY-CCA.indication(busy)
does not occur".

Replace "If a PHY-RXSTART.indication does occur" with "If a PHY-CCA.indication(busy) does
occur"

Replace "the STA shall wait for the corresponding PHY-RXEND.indication to determine
whether the RTS transmission was successful." with "the STA shall wait for the corresponding
PHY-RXSTART.indication and PHY-RXEND.indication to determine whether the RTS
transmission was successful."

Proposed Response   *Response Status* **W**
PROPOSED REJECT.   See resolution to comment 22.

Cl **09**   *SC* **9.2.5.7**   *P* **0**   *L* **0**   *MyBallot #* 208
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

PHY-RX-START-Delay seems to increase the chance of mis-aligned slots for OFDM phys,
and hence will increase the number of collisions.

SuggestedRemedy

Require PHY-RX-START-Delay to rounded up to a whole number of slot times. (maybe
simplest would be to change the units from time to slots)

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The values for the PHY-RXSTART-Delay are being corrected. Please
renew this comment if you continue to believe this problem persists.

Cl **09**   *SC* **9.2.5.8**   *P* **0**   *L* **0**   *MyBallot #* 438
Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**

The added text includes aPHY-RX-START-Delay. Not sure why we need this addition.

SuggestedRemedy

Please clarify or Remove it.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.   See resolution to comment 437. See #437 for editorial resolution.

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 327
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**

Specifying a required (shall) value for ackTimeout is problematic now. There are a number of
implementation in existence that probably wait longer. This would make them non-compliant

SuggestedRemedy

Change the sentence to state "with a value greater than à"

Proposed Response   *Response Status* **W**
PROPOSED REJECT.   See resolution to comment 326.

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

7/6/2005 10:15:59 AM

Page 62 of 118
Cl **09**   *SC* **9.2.8**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 210
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

"without regard to the busy/idle state of the medium." Does this mean CS busy, or physical medium busy? The spec could do with being clearer on this in a lot of places.

SuggestedRemedy

replace with "without regard to the busy/idle state of the CS mechanism"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 9.2.8.

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 349
Black, Simon

Comment Type   **TR**   *Comment Status* **D**

See this authors comment on CTSTimeout (9.2.5.7). Same applies here for ACKTimeout.

SuggestedRemedy

See this authors comment on CTSTimeout (9.2.5.7). Same applies here for ACKTimeout.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See resolution to comment 348.

No further action by the editor is required to resolve this comment.

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 254
Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

The modification "with a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" made in this clause adds the followig issues:

For 11b systems, PHY-RXSTART.indication will be 202us (=10us:aSIFSTime + 144us:preamble + 48us:PLCPHeader) after PHY-TXEND.confirm. However, ACKTimeout is 30us and ACKTimeout will be expired even for successful transmissions.

For OFDM PHYs, it is unclear why 24us (aPHY-RX-START-Delay) is necessary. It looks like ACKTimeout is too long (almost ACK frame length) and there could be a 3rd STA which is no sending/receiving, that might interrupt this sequence.

Thus, the suggestion is to consider aRXTXTurnaroundTime and aMACProccessingDelay instead.

SuggestedRemedy

Replace "a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" with "a value of aSIFSTime + aSlotTime - aRXTXTurnaroundTime - aMACProccessingDelay"

Proposed Response   *Response Status* **W**

PROPOSED REJECT. See resolution to comment 22.

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 209
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**   *PHY*

PHY-RX-START-Delay seems to increase the chance of mis-aligned slots for OFDM phys, and hence will increase the number of collisions.

SuggestedRemedy

Require PHY-RX-START-Delay to rounded up to a whole number of slot times. (maybe simplest would be to change the units from time to slots)

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This is not likely to cause the problem described by the commenter. I the ACK is lost and there are no other STAs transmitting, synchronizing to slot boundaries is not required. If another STA does transmit while the STA that did not receive the expected ACK is in backoff, that other STA's transmission will provide slot resynchronization. If the problem did exist, rounding to slots would only make the collision probability greater, not lesse than the specified behavior.

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   7/6/2005 10:15:59 AM

Page 63 of 118
Cl **09**   *SC* **9.2.8**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 32
Ohtani, Yoshihiro

Comment Type   **TR**   *Comment Status* **D**

It seems that the definition of ACKTimeout is illegally provided. For example, if we consider th
successful frame exchange sequence for 802.11b PHY, PHY-RXSTART.indication occurs
202us (= aSIFSTime + preamble + PLCPHeader) after PHY-TXEND.confirm, while
ACKTimeout = 30us. This means that ACKTimeout will be expired even for successful case.

SuggestedRemedy

Fix it.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.   See resolution to comment 22.

Cl **09**   *SC* **9.2.8**   *P* **0**   *L* **0**   *MyBallot #* 23
Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

The paragraph starting with "After transmitting an MPDU that requires an ACK frame as a
response" is very problematic.

For example, in case of successful sequence of 11b, PHY-RXSTART.indication will occur afte
202us (=10us:aSIFSTime + 144us:preamble + 48us:PLCPHeader) after PHY-TXEND.confirm
while ACKTimeout = 30us. This means that ACKTimeout will be expired even for successful
case and it makes no sense.

For OFDM PHYs, I don't understand where 24us comes from for aPHY-RX-START-Delay. It
looks like ACKTimeout is too long (almost ACK frame length) and there could be the case tha
another STA rather than sending/receiving STA might interrupt this sequence.

After careful consideration based on above observation, the point of my suggestions are follo
- ACKTimeout will be expired if a PHY-CCA.indication(busy) does not occuer.
- No reason to keep aPHY-RX-START-Delay.
- aRXTXTurnaroundTime/aMACProccessingDelay should be taken into account for precise
calculation.

SuggestedRemedy

Replace "a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay" with "a value of
aSIFSTime + aSlotTime - aRXTXTurnaroundTime - aMACProccessingDelay"

Replace "If a PHY-RXSTART.indication does not occur" with "If a PHY-CCA.indication(busy)
does not occur".

Replace "If a PHY-RXSTART.indication does occur" with "If a PHY-CCA.indication(busy) doe
occur"

Replace "the STA shall wait for the corresponding PHY-RXEND.indication to determine
whether the MPDU transmission was successful." with "the STA shall wait for the
corresponding PHY-RXSTART.indication and PHY-RXEND.indication to determine whether
the MPDU transmission was successful."

Proposed Response   *Response Status* **W**

PROPOSED REJECT. See resolution to comment 22.

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   7/6/2005 10:15:59 AM

Page 64 of 118
Cl **09**   *SC* **9.2.8**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.3**   *P* **0**   *L* **0**   *MyBallot #* 60
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
"Frames sent during under the DCF .. Function". This is a normative specification for the DCF. It is present in the DCF. It is redundant (and ungrammatical).

SuggestedRemedy
Remove this sentence.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in 9.3.

Cl **09**   *SC* **9.3**   *P* **0**   *L* **0**   *MyBallot #* 462
McClellan, Kelly

Comment Type   **E**   *Comment Status* **D**
The reference " Figure 122 (in 1999.1)" should be changed to the correct reference.

SuggestedRemedy
Change to "Figure 122 (in Clause 9.1)".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.3.2.1**   *P* **0**   *L* **0**   *MyBallot #* 61
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
The third para: "If there are buffered multicast à frames." This addition is wrong because these frames can only be transmitted after a beacon with a zero DTIM count, if there are any power savers.

SuggestedRemedy
I think this may be partly redundant with 9.3.3.1 "if there are associated à the broadcasts and multicasts .. with a value of 0".

Either fix it in situ, or descrive in 9.3.3.1 what hapeens if there are no assocaited STA in PS mode.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Add a reference to 9.3.3.1 at the end of the last sentence in the second paragraph: ", as described in 9.3.3.1" The text on multicast operation is below the bulleted list.

Cl **09**   *SC* **9.3.2.1**   *P* **0**   *L* **0**   *MyBallot #* 329
Sanwalka, Anil

Comment Type   **T**   *Comment Status* **D**
This change again potentially make legacy compliant radios non-compliant. In this case I don' know that there are implementations that do not do this.

SuggestedRemedy
Change the shall to a should.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The change does not make prior implementations noncompliant. An implementation built to the prior language would also wait for 1 SIFS period before transmission. The specification does not say that the transmission after this delay must occur immediately.

Cl **09**   *SC* **9.3.3.2**   *P* **0**   *L* **0**   *MyBallot #* 291
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
This section is advisory, there are other ways to achieve the required operational behavior

SuggestedRemedy
All "shall" must be changed to "should".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. The section is not advisory, but normative. There is nothing for the editor to resolve.

Cl **09**   *SC* **9.3.3.3**   *P* **0**   *L* **0**   *MyBallot #* 62
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
"maximum-sized MAC frame, expanded by WEP" This ignores RSNA

SuggestedRemedy
Replace "expanded by WEP" with something non-specific to WEP.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.   Replace "expanded by WEP" with "expanded by security mechanisms". Editor included in draft 1.1 in 9.3.3.3 and 9.3.3.

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   7/6/2005 10:15:59 AM

Page 65 of 118
Cl **09**   *SC* **9.3.3.3**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.3.3.3**   *P* **0**   *L* **0**   *MyBallot #* 292
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
   Same as preceding -

SuggestedRemedy
   replace first "shall" with "should"

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. Same as preceeding, see resolution to comment 291. There is nothin
   for the editor to resolve.

Cl **09**   *SC* **9.3.3.4**   *P* **0**   *L* **0**   *MyBallot #* 293
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**
   The last sentence does not specify a testable requirement

SuggestedRemedy
   replace first "shall" with "should"

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The condition does appear to be testable.

Cl **09**   *SC* **9.3.4.2**   *P* **0**   *L* **0**   *MyBallot #* 63
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
   "CFP (because they have to be awake to receive the DTIM that initiated the CFP), but not
   requiring them to stay awake". This is misleading. It is true only if the device wants to receive
   broadcast traffic while powersaving. However, if it does not, the AP would attempt to send it
   unicast data.

SuggestedRemedy
   Remove the enclosing sentence.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 9.3.4.2.

Cl **09**   *SC* **9.4**   *P* **0**   *L* **0**   *MyBallot #* 64
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
   "before WEP processing". Again, some generic means to refer to expansion as a result of th
   security encapsulation operation is required.

SuggestedRemedy
   Replace with a generic term.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Replace "before WEP processing" with "before processing by the
   security mechanism" Editor included in draft 1.1 in 9.4.

Cl **09**   *SC* **9.4**   *P* **0**   *L* **0**   *MyBallot #* 567
Odman, Knut

Comment Type   **E**   *Comment Status* **D**
   Page 223. Check all occurances of "an MPDU". The changes will sometimes cause it to
   become "a MPDU", which is wrong.

SuggestedRemedy
   correct typos

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor searched document for "a MPDU." Editor included in draft 1.1 i
   10.4.6.2. Not found in the section cited.

Cl **09**   *SC* **9.4**   *P* **0**   *L* **0**   *MyBallot #* 211
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
   The whole MSDU/MPDU/MMPDU is a conceptual mess (a search for MMPDU will show that
   in a huge number of cases it's preceded by "MPDU or" which alone is evidence that somethin
   has gone wrong) - it's not clear whether MMPDU is more like an MSDU or an MPDU which
   makes the whole thing very confused.

SuggestedRemedy
   Given it's unlikely anyone has the time to really sort this out, I actually prefer the original text
   about fragmentation in this section, so back out the changes.

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The text is clear and accurate.   The commenter is solicited to
   describe the ways in which the text is not correct.

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   7/6/2005 10:15:59 AM

Page 66 of 118
Cl **09**   *SC* **9.4**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.4**   *P* **0**   *L* **0**   *MyBallot #* 330
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**

In the second paragraph the change from fragment to MPDU is incorrect and confusing.

SuggestedRemedy

Reject the changes from fragment to MPDU.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The text is clear and accurate. The commenter is solicited to describe the ways in which the text is not correct.

Cl **09**   *SC* **9.6**   *P* **0**   *L* **0**   *MyBallot #* 295
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**

The fifth para refers to a disfunctional but not "illegal" choice of the implementation

SuggestedRemedy

replace "shall" with "should"

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The "shall" makes this an illegal choice for a STA. This is the intent.

Cl **09**   *SC* **9.6**   *P* **0**   *L* **0**   *MyBallot #* 212
Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**

The revision marking of the first occurence of "is of the same modulation type class" seems to have got messed up.

SuggestedRemedy

"type" should be struck through, "class" underlined.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed the referenced text in 9.6 in FRAME source and found it to be as suggested. Editor believes this to have been caused by output to PDF.

Cl **09**   *SC* **9.6**   *P* **0**   *L* **0**   *MyBallot #* 297
Kruys, Jan

Comment Type   **T**   *Comment Status* **D**

The sith and 7th para set down a complex set of alternatives for a rate choice that in most impllementations will be exceedingly simple - use the same rate and other PHY settings as th received message. The extra degrees of choice offered to the implementor by these two para add complexity but do little or nothing to improve performance. In any case, the responding P should be allowed to make the assumption that whatever rate it received at, is a valid rate.

SuggestedRemedy

Repace the two para's by a modified version of the last sentence of the sixth: The Control Response frame shall be sent using the same rate and PHY options as the received frame.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The intent of the specification is to ensure that all STAs in a BSS are able to receive the control frames. Changing the multirate mechanism as requested, would eliminate this intent.

Cl **09**   *SC* **9.6**   *P* **0**   *L* **0**   *MyBallot #* 409
Edwards, Bruce

Comment Type   **ER**   *Comment Status* **D**

Modulation types are not explicitly defined in section 9.6.1. They are kind of defined the footno at the bottom of the page.

SuggestedRemedy

Define what a modulation type is in section 9.6.1

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. There were some PDF conversion issues with revision marking that may have caused confusion. Editor has review the cited material in 9.6 nd 9.6.1 and believes that is meets the suggestions. Editor did remove all referece to modulation type in 9.6.1, leavi only modulation class. Editor included changes in draft 1.1 in 9.6.1.

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   7/6/2005 10:15:59 AM

Page 67 of 118
Cl **09**   *SC* **9.6**

Submission   Bob O'Hara, Cisco Systems

Cl **09** *SC* **9.6**   *P* **0** *L* **0** *MyBallot #* 294
Kruys, Jan

Comment Type **T** *Comment Status* **D**
The fourth para mentions "rate selection mechanism" the others para's do not. This is confusing.

SuggestedRemedy
First describe the conditions in which the rate selection mechanism determines the rate and then list the exceptions.

Proposed Response *Response Status* **W**
PROPOSED REJECT. The specification of the rate swithcing mechanism (algorithm) is out o scope and so stated in the clause. The conditions under which a STA can use the mechnism are stated as "some PHYs have multiple data rate capabilities".

Cl **09** *SC* **9.6**   *P* **0** *L* **0** *MyBallot #* 296
Kruys, Jan

Comment Type **T** *Comment Status* **D**
Sixth para, middle: Class or Type? The table in 9.6.1 says "class"

SuggestedRemedy
0

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.   Class is correct. Delete "type" and replace with "class". Editor included in draft 1.1 in 9.6.1.

Cl **09** *SC* **9.6.1**   *P* **0** *L* **0** *MyBallot #* 331
Sanwalka, Anil

Comment Type **TR** *Comment Status* **D**
The new paragraph is very confusing, with an incorrect clause reference. The referece to rows in the table is also confusing as the left hand cell in "row" 3 actually has 2 rows without a line through them.

SuggestedRemedy
Please clarify

Proposed Response *Response Status* **W**
PROPOSED ACCEPT. The reference will be corrected. The table is correct and holds no rows without dividing lines. Change "Description" in the top row of Table 36 to "Modulation Type". Editor included in draft 1.1 in 9.6.1, with changed wording.

Cl **09** *SC* **9.6.1**   *P* **0** *L* **0** *MyBallot #* 632
Olson, Tim

Comment Type **E** *Comment Status* **D**
Clause reference 2249.6 does not look right.

SuggestedRemedy
Correct

Proposed Response *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09** *SC* **9.6.1**   *P* **0** *L* **0** *MyBallot #* 127
Myles, Andrew

Comment Type **TR** *Comment Status* **D**
The text distinguishes between modulation type and class. It appears that multiple modulatior types make up a modulation class.

However, modulation type is never explicity defined

SuggestedRemedy
Define modulation type

Proposed Response *Response Status* **W**
PROPOSED ACCEPT. Modulation type is defined in the appropriate PHY clauses. There is nothing for the editor to resolve.

Cl **09** *SC* **9.6.1**   *P* **0** *L* **0** *MyBallot #* 265
Karcz, Kevin

Comment Type **E** *Comment Status* **D**
Page 225, "2249.6" should be "9.6"

SuggestedRemedy
edit

Proposed Response *Response Status* **W**
PROPOSED ACCEPT. Duplicate. See comment #386 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   7/6/2005 10:15:59 AM

Page 68 of 118
Cl **09** *SC* **9.6.1**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.6.1**   *P* **0**   *L* **0**   *MyBallot #* 445

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The text distinguishes between modulation type and class. It appears that multiple modulation types make up a modulation class.

However, modulation type is never explicity defined

SuggestedRemedy

Define modulation type

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Modulation type is defined in the appropriate PHY clauses. There is nothing for the editor to resolve in this clause.

Cl **09**   *SC* **9.6.1**   *P* **0**   *L* **0**   *MyBallot #* 213

Mike, Moreton

Comment Type   **E**   *Comment Status* **D**

The revision marking seems a bit strange - only part of it is underlined, and only part has a side bar.

SuggestedRemedy

Make it consistent.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. There were some PDF conversion issues with revision marking that may have caused confusion. Editor has review the cited material in 9.6.1 and believes that is meets the suggestions.

Cl **09**   *SC* **9.6.1.1**   *P* **0**   *L* **0**   *MyBallot #* 350

Black, Simon

Comment Type   **E**   *Comment Status* **D**

The reference in the first line of this clause is not meaningful

SuggestedRemedy

Correct

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate. See comment #386 for editorial resolution.

Cl **09**   *SC* **9.61.**   *P* **0**   *L* **0**   *MyBallot #* 128

Myles, Andrew

Comment Type   **ER**   *Comment Status* **D**

There is no need to have the material in 9.6.1 in a separate sub-section

SuggestedRemedy

Incorporate 9.6.1 into 9.6

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The material in 9.6.1 stands alone well and does not need to be integrated into 9.6.

Cl **09**   *SC* **9.61.**   *P* **0**   *L* **0**   *MyBallot #* 446

Myles, Andrew

Comment Type   **ER**   *Comment Status* **D**

There is no need to have the material in 9.6.1 in a separate sub-section

SuggestedRemedy

Incorporate 9.6.1 into 9.6

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The material in 9.6.1 stands alone well and does not need to be integrated into 9.6.

Cl **09**   *SC* **9.7**   *P* **0**   *L* **0**   *MyBallot #* 447

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The "frames in sequence" is often incorrect in Table 37 and Table 38

eg the 4th row of Table 37 claims there are 2 frames in the sequence, when there are clearly or more"

SuggestedRemedy

Correct all instances in Table 37 and 38

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Table 37: Change "2" to "2 or more" in the row for {RTS - CTS -} [Frag - ACK -] Last - ACK. Change "3" to "3 or more" in the row for PS-Poll - [Frag - ACK -] Last - ACK

Table 38: Change "1 or 2" to "1" in the row for Mgmt(bc).

Editor included in draft 1.1 in 9.7, Tables 37 & 38.

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   7/6/2005   10:15:59 AM

Page 69 of 118

Cl **09**   *SC* **9.7**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.7**   *P* **0**   *L* **0**   *MyBallot #* 332
Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**

In Table 38, removing the indicated sequence disallows sending frames to third parties during the CFP. This was previously allowed and could make legacy equipment non-compliant. I don see the need to do this.

SuggestedRemedy

Reject the change to table 38.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This row in the table conflicted with other parts of the standard. The deletion from the table corrects this.

Cl **09**   *SC* **9.7**   *P* **0**   *L* **0**   *MyBallot #* 129
Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The "frames in sequence" is often incorrect in Table 37 and Table 38

eg the 4th row of Table 37 claims there are 2 frames in the sequence, when there are clearly or more"

SuggestedRemedy

Correct all instances in Table 37 and 38

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See resolution to comment 447. See #447 for editorial resolution.

Cl **09**   *SC* **9.9**   *P* **0**   *L* **0**   *MyBallot #* 298
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

"Geo political" is the wrong word in this context

SuggestedRemedy

Replace with "regultory domain"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment #299 for editorial resolution.

Cl **09**   *SC* **9.9**   *P* **0**   *L* **0**   *MyBallot #* 299
Kruys, Jan

Comment Type   **E**   *Comment Status* **D**

The text is wordy potentially confusing

SuggestedRemedy

The PHY of a WLAN is subject to regulations that can vary significantly from one regulatory domain to another. This clause provides the framework for operation across regulatory domai and describes mechanism that allows stations to support cross-domain mobility and operation in multiple regulatory domains. When this mechansim is active, the dot11MultiDomainCapabilityEnabled attribute should be set to true.
NOTEùThis clause does not eliminate the need to obtain type acceptance, regulatory approva equipment authorization, or equipment certification in each of the regulatory domains in which the equipment will operate. The mechanisms described in this clause provide the information the station to identify the regulatory domain in which it is located and to cease operation while those domains for which it does not have type approval. It is incumbent upon the implemente to provide proof of compliance to the requirements of individual regulatory agencies.
Note that the method for configuring individual stations is outside the scope of this standard. A station must be properly configured
for operation in a particular regulatory domain prior to beginning normal operation. Particular care must be taken when operating in an IBSS configuration.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Paragraphs were reworded using this author's paragarphs, with slight rewording. Editor included in draft 1.1 in 9.9.

Cl **09**   *SC* **9.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 481
Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**

Table 39, 40 and 41, the index column headings do not line up with the corresponding column

SuggestedRemedy

line up the columns

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in Tables 39, 40, and 41. Change is not marked with revision bars.

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   7/6/2005 10:15:59 AM

Page 70 of 118
Cl **09**   *SC* **9.9.2.1**

Submission   Bob O'Hara, Cisco Systems

Cl **09**   *SC* **9.9.2.1**   *P* **0**   *L* **0**   *MyBallot #* 480
Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**
   incorrect reference to another clause

SuggestedRemedy
   reference to "described in 35214.6.8 or a hopping", should be "described in 14.6.8 or a hoppir

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor reviewed references in 9.9.2.1 in FRAME source and found no
   improper reference numbers. Editor believes this to have been caused by output to PDF.

Cl **10**   *SC* **10.**   *P* **0**   *L* **0**   *MyBallot #* 301
Kruys, Jan

Comment Type   **TR**   *Comment Status* **D**
   The opening sentence of 10.1 declares the subject matter to be conceptual whereas the last
   sentences require compliance - in this case with the management interfaces. It is a good idea
   keep a standard free of implementation descriptions/presciptions and one would not expect to
   see formal testing of these interfaces.

SuggestedRemedy
   The whole of this Clause should be labelled "informative" and moved to an annex.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. Replace normative usage of "shall" or "may" in the
   service primitives with descriptive verbs.

   Editor replaced all "shalls" with "is" in clause 10 in draft 1.1

   Editor replaced a single "should" with "is" in clause 10 in draft 1.1.

   Editor changed all "mays" to "cans" in clause 10 in draft 1.1.

Cl **10**   *SC* **10.**   *P* **0**   *L* **0**   *MyBallot #* 503
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
   After the combination of the base standard, the subsequent ammendments and more focused
   individual changes, there remain unresolved inconsistencies between the text in this clause a
   other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
   Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. No incosistencies were identified by the commenter or the task group

Cl **10**   *SC* **10.1**   *P* **0**   *L* **0**   *MyBallot #* 66
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
   "In order to provide correct MAC operation, an SME shall be present within each STA. The
   SME is a layerindependent
   entity that may be viewed as residing in a separate management plane or as residing ôoff to t
   side.ö The exact functions of the SME are not specified in this standard"

   Normative requirements relate to behaviour, not the presence of an entity with explicitly
   unspecified behaviour.
   Moreover if correct operation of the MAC depends on this unspecified behaviour, we have a
   problem, Houston.

SuggestedRemedy
   Replace first quoted sentence with: "An SME is present in each STA".

   Alternatively, one of my other comments points out that we do actually (and wrongly) define
   quite a lot of normative behaviour for the SME (for example in the state machines that show
   authentication being performed before association, and some of the procedures in the securit
   section). The harder (but better) solution is to identify that normative behaviour and move it to
   subclause labelled "required SME behaviour". Then you can require it to be present, and
   reference it from the PICS.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. See resolution to comment 301.

Cl **10**   *SC* **10.3**   *P* **0**   *L* **0**   *MyBallot #* 633
Olson, Tim

Comment Type   **E**   *Comment Status* **D**
   The vendor specific element is missing from all of the primitives.

SuggestedRemedy
   Add in the vendor specific element to associatation, reassociation, ect. Primitives.

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The parameters of the service primitives ar enot the only way to
   provide information to the MLME. Vendor-specific information can be provided through vendo
   specific means, including vendor-specific MIBs.

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   7/6/2005   10:15:59 AM

Page 71 of 118
Cl **10**   *SC* **10.3**

Submission   Bob O'Hara, Cisco Systems

Cl **10**   *SC* **10.3.10.2.2**   *P* **0**   *L* **0**   *MyBallot #* 482

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

Need to add another result code to fully address all the error conditions cited in clause 10.3.10.1.3.

SuggestedRemedy

Add the result code RESET_REQUIRED_BEFORE_START.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 10.3.10.2.2.

Cl **10**   *SC* **10.3.16.2.2**   *P* **0**   *L* **0**   *MyBallot #* 352

Black, Simon

Comment Type   **TR**   *Comment Status* **D**   *needs text*

The description column of the Resultcode parameter doesn't match the remainder of the text i this section. It reports the outcome of the request to send the frame and not the actual TPC adaptation procedure as 10.3.16.2.4 suggests.

SuggestedRemedy

Correct Description column in table to match remainder of section.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Add two rows to the table in 10.3.16.2.2. The first new row is: Transmit Power | Integer | -127 to 127 | Value of the Transmit Power field of the TPR Report element of the TPC Report frame.

The second new row is:
Link Margin | Integer | -127 to 127 | Value of the Link Margin field of the TPC Report element the TPC Report frame.

Add Transmit Power and Link Margin to the parameter list in 10.3.16.2.2.

Cl **10**   *SC* **10.3.2.1.2**   *P* **0**   *L* **0**   *MyBallot #* 333

Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**

Wildcard SSID is not defined anywhere.

SuggestedRemedy

Define it.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. It is defined in clause 7.3.2.1. No editorial resolution taken.

Cl **10**   *SC* **10.3.2.2.2**   *P* **0**   *L* **0**   *MyBallot #* 334

Sanwalka, Anil

Comment Type   **T**   *Comment Status* **D**

Since Beacon and Probe Response frames are required to contain the PHY Parameter set, I don't see the need for the extra sentence indicating what to do if it is not preset.

SuggestedRemedy

Delete the sentence "If no PHY Parameter Set is à"

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The PHY Parameter Set in the BSSDescription is a parameter that can be filled with values from the PHY Parameter Set information element. The change describes how to fill the parameter when the information element is not present, as is the case with some PHYs.

Add "information element" after "If no PHY Parameter Set" in the description column of table f the BSSDescription. Editor included in draft 1.1 in 10.3.2.2.2.

Cl **10**   *SC* **10.3.4.3**   *P* **0**   *L* **0**   *MyBallot #* 215

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

Note that the changes make this section inconsistent with 11.3.2 (at least). Same problem wit 10.3.4.3. While I don't mind either way about this change, I doubt it's worth anyone going to t effort of changing the other sections it impacts.

SuggestedRemedy

Remove changes to 10.3.4.3 and 10.3.4.4

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The revised service primitives provide the indented and correct mechanism.

Cl **10**   *SC* **10.3.4.4.2**   *P* **0**   *L* **0**   *MyBallot #* 602

Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

Spelling error "ResultCole"

SuggestedRemedy

Change "ResultCole" to "ResultCode".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #410. See #410 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

7/6/2005 10:15:59 AM

Page 72 of 118
Cl **10**   *SC* **10.3.4.4.2**

Submission   Bob O'Hara, Cisco Systems

Cl **10**   *SC* **10.3.4.4.2**   *P* **0**   *L* **0**   *MyBallot #* 410
Edwards, Bruce

Comment Type   **ER**   *Comment Status* **D**
    The table has an entry named "ResultCole"

SuggestedRemedy
    Replace with "ResultCode"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in 10.3.4.4.2.

Cl **10**   *SC* **10.3.4.6.2**   *P* **0**   *L* **0**   *MyBallot #* 411
Edwards, Bruce

Comment Type   **ER**   *Comment Status* **D**
    PeerStaAddress should say "...from which the authentication request was received."

SuggestedRemedy
    Make the change.

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. There is no such sub-clause number in the document. Editor cannot find any applicable correction.

Cl **10**   *SC* **10.3.6.1.2**   *P* **0**   *L* **0**   *MyBallot #* 335
Sanwalka, Anil

Comment Type   **T**   *Comment Status* **D**
    The change here indicates that the capability field is a request, but in some cases it is really a "capability". In clause 10.3.6.3.2 this field is called a capability definition when it is passed up the AP. I am not sure of the impetus for these changes.

SuggestedRemedy
    Please clarify

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. The text is correct and clear. Please indicate in a future comment where ambiguity exists.

Cl **10**   *SC* **10.3.6.2.2**   *P* **0**   *L* **0**   *MyBallot #* 351
Black, Simon

Comment Type   **TR**   *Comment Status* **D**
    The added Reasons to the ResultCode parameter in MLME-ASSOCIATE.cnf primitives are incomplete and in some cases have no obvious mappiing to the returned status code. This is logical interface so why not do the simple thing and simply return the status code from the frame if you must expand.

SuggestedRemedy
    Additions useful?

Proposed Response   *Response Status* **W**
    PROPOSED REJECT. The commenter is solicited to enumerate the status codes that are n represented in the clause.

Cl **10**   *SC* **10.3.6.3**   *P* **0**   *L* **0**   *MyBallot #* 216
Mike, Moreton

Comment Type   **E**   *Comment Status* **D**
    It's very difficult to find the beginning of each service primitive description due to the similar formatting.

SuggestedRemedy
    Any chance we could have each one starting on a new page?

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. What the editor gives, the staff can take away, but this is now included in draft 1.1.

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

7/6/2005 10:15:59 AM

Page 73 of 118
Cl **10**   *SC* **10.3.6.3**

Submission   Bob O'Hara, Cisco Systems

Cl **10**   *SC* **10.3.6.3.1, 10.3.6.4.1, 10**   *P* **0**   *L* **0**   *MyBallot #* 110
Bagby, David

Comment Type   **TR**   *Comment Status* **D**

(search for the phrase) û delete the trailing phrase ôwhich is acting as an APö û the condition appears not to be relevant to the sentence and MACS donÆt ôact as APsö, MACs are a component of a more complex thing called an AP. In general these sections all need some rethinking. The Mac protocol runs between two 802.11 mac instances. One of them may be a MAC that is part of an entity that people think of as an AP û but APs are not = to a MAC. The wording in several places also involves the phrase ôassigned by the APö û just how does this AP thing assign stuff and give it to the MAC (via what interface)? The choice of phrasing seems to raise more questions than it answers.

SuggestedRemedy

re-write impacted sections to be more precise to remove the objections noted.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. In all of clause 10: Replace all "acting as an AP" with "within an AP". Editor included in draft 1.1 through clause 10.

Cl **10**   *SC* **10.3.6.3.2**   *P* **0**   *L* **0**   *MyBallot #* 218
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

Is only generated indirectly "as a result of an MLME-ASSOCIATE.request".

SuggestedRemedy

Change to "on completion of the association procedure" or something like thatà

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.   Add "or receipt of an association response frame from the peer MAC entity" after "MLME-ASSOCIATE.request". Editor included in draft 1.1 in section 10.3.6.2.3.

Cl **10**   *SC* **10.3.6.3.2**   *P* **0**   *L* **0**   *MyBallot #* 603
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

The term "desired SSID" is redundant.

SuggestedRemedy

In SSID entry description, delete the word "desired".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 10.3.6.3.2.

Cl **10**   *SC* **10.3.6.4.2**   *P* **0**   *L* **0**   *MyBallot #* 219
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

I don't think "REFUSED_NOT_AUTHENTICATED" should be a possible result code - the MAC should do this itself. Also 10.3.7.4.2

SuggestedRemedy

Remove "REFUSED_NOT_AUTHENTICATED" from 10.3.7.4.2 and 10.3.6.4.2

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 10.3.6.4.2 and 10.3.7.4.2.

Cl **10**   *SC* **10.3.6.4.2**   *P* **0**   *L* **0**   *MyBallot #* 220
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

I don't think "REFUSED_BASIC_RATES_MISMATCH" should be a possible result code - the MAC should do this itself. Also 10.3.7.4.2

SuggestedRemedy

Remove "REFUSED_BASIC_RATES_MISMATCH" from 10.3.7.4.2 and 10.3.6.4.2

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The SME will generate this result code when the appropriate condition applies. This is not generated in the MAC and no such specification exists in the standard.

Cl **10**   *SC* **10.3.6.4.4**   *P* **0**   *L* **0**   *MyBallot #* 221
Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**

"transmission of a response" - what sort of response?

SuggestedRemedy

"transmission of an AssociationResponse"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 10.3.6.4.4.

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

7/6/2005 10:15:59 AM

Page 74 of 118
Cl **10**   *SC* **10.3.6.4.4**

Submission   Bob O'Hara, Cisco Systems

Cl **10**   *SC* **10.3.7.1.2**   *P* **0**   *L* **0**   *MyBallot #* 336
Sanwalka, Anil

Comment Type   **T**   *Comment Status* **D**

The change here indicates that the capability field is a request, but in some cases it is really a
"capability". In clause 10.3.7.3.2 this field is called a capability definition when it is passed up
the AP. I am not sure of the impetus for these changes.

SuggestedRemedy

Please clarify

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The information is a real request and may not indicate all of the
capabilities of the STA.

Cl **10**   *SC* **10.3.7.3.2**   *P* **0**   *L* **0**   *MyBallot #* 604
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

The term "desired SSID" is redundant.

SuggestedRemedy

In SSID entry description, delete the word "desired".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #603. See #603 for editorial resolution.

Cl **11**   *SC* **11.**   *P* **0**   *L* **0**   *MyBallot #* 303
Kruys, Jan

Comment Type   **TR**   *Comment Status* **D**

Section 11 contains many references to the internal interfaces of the MLME and SME in the
sense of "shall do X". it should be clear that these "shall" do not define mandatory statements
that require verification testing etc. Also, the sections on TPC And DFS are not correct and
should better be moved to clause 9.

SuggestedRemedy

Ideally, the MLME related material should be removed or referenced to an Annex that deals w
the MLME. It may be more efficient to add a note to the beginning of this Clause that states
"where referecence is made to the MLME interfaces and interface primitives, it should be
understood that these refer to the informative models presented in Annexes "was clause 10".
None of the statements "shall......" are to be considered compliance criteria". Further, the
sections on TPC and DFS should be moved to Clause 9 - and the reference to
"ERC/DEC/(99)23" should be replaced by "Regulations that apply to the 5GHz band in most
regulatory domains". The reference "(see ETSI EN 301 893)" should be replaced by "(see
ETSI EN 301 893, FCC R&O 03-287 and other regulatory requirements documents.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
There is insufficient detail in the comment to identify the specific occurrences of the use of
MLME and SME to which the commenter objects. The commenter is solicited to supply this
detail in a subsequent ballot. Note: compliance requirements are identified in Annex A.

The TPC and DFS functionality is a management function and should remain in clause 11.

In 11.5 and 11.6, replace "ERC/DEC/(99)23" with"Regulations that apply to the 5GHz band in
most regulatory domains". Editor included in draft 1.1 in 11.5 and 11.6.

In 11.6.3, 11.6.4, and 11.6.5, delete "(see ETSI EN 301 893)". Editor included in draft 1.1 in
11.6.3, 11.6.4, and 11.6.5.

Cl **11**   *SC* **11.**   *P* **0**   *L* **0**   *MyBallot #* 504
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused
individual changes, there remain unresolved inconsistencies between the text in this clause a
other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies have been identified by the commenter or the tas
group.

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* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 527
Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

This indicates that synchronization is to within an accuracy of 4 symbols. For OFDM PHYs this is 16us, which is a lot different to the previous value of 4us.

Where does the additional 12us of uncertainty spring from?

SuggestedRemedy

Add a note justifying the new relaxed value, or restore it to the old value.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The old value did not change with the introduction of the OFDM PHY and was, consequently, incorrect. This new value does accommodate the OFDM PHY and th clock offsets that may exist between MAC and PHY in a STA and between two or more STAs In addition, this is not a requirement to be met, but a description of what is obtained using the specified mechanism (which did not change).

Cl **11**   *SC* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 448
Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The text claims that the TSF in a BSS is always maintained to within 4 symbols.

It is still unclear how this is calculated

SuggestedRemedy

Explain

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The old value did not change with the introduction of the OFDM PHY and was, consequently, incorrect. This new value does accommodate the OFDM PHY and th clock offsets that may exist between MAC and PHY in a STA and between two or more STAs In addition, this is not a requirement to be met, but a description of what is obtained using the specified mechanism (which did not change).

Cl **11**   *SC* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 33
Stephens, Adrian

Comment Type   **T**   *Comment Status* **D**

This indicates that synchronization is to within an accuracy of 4 symbols. For OFDM PHYs this is 16us, which is a lot different to the previous value of 4us.

Where does the additional 12us of uncertainty spring from?

SuggestedRemedy

Add a note justifying the new relaxed value, or restore it to the old value.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The old value did not change with the introduction of the OFDM PHY and was, consequently, incorrect. This new value does accommodate the OFDM PHY and th clock offsets that may exist between MAC and PHY in a STA and between two or more STAs In addition, this is not a requirement to be met, but a description of what is obtained using the specified mechanism (which did not change).

Cl **11**   *SC* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 130
Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The text claims that the TSF in a BSS is always maintained to within 4 symbols.

It is still unclear how this is calculated

SuggestedRemedy

Explain

Proposed Response   *Response Status* **W**

PROPOSED REJECT. See resolution to comment 448.

Cl **11**   *SC* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 131
Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

"contining" should be "continuing"

SuggestedRemedy

Correct

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #449. See #449 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

7/6/2005 10:15:59 AM

Page 76 of 118
Cl **11**   *SC* **11.1.2**

Submission   Bob O'Hara, Cisco Systems

Cl **11**   *SC* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 439
Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**
> The added text "data symbol contining the first bit of the timestamp" implies that MAC is aware of PHY data symbols. MAC only knows bits.

SuggestedRemedy
> Revert to the original text.

Proposed Response   *Response Status* **W**
> PROPOSED REJECT. The MAC does know when it delivers the first bit over the MAC-PHY interface. It is also required to know the processing delay through the PHY for the symbol containing that bit to reach the antenna. Therefore, the MAC knows when the data symbol containing the first bit of the timestamp reaches the antenna.

Cl **11**   *SC* **11.1.2**   *P* **0**   *L* **0**   *MyBallot #* 449
Myles, Andrew

Comment Type   **E**   *Comment Status* **D**
> "contining" should be "continuing"

SuggestedRemedy
> Correct

Proposed Response   *Response Status* **W**
> PROPOSED ACCEPT. Editor included in draft 1.1 in 11.1.2.

Cl **11**   *SC* **11.1.3**   *P* **0**   *L* **0**   *MyBallot #* 222
Mike, Moreton

Comment Type   **E**   *Comment Status* **D**
> Seem to have some small fonts in the middle of "Upon receipt of an MLME-SCAN.request with the broadcast SSID parameter set to the wildcard SSID, the STA
> shall passively scan for any Beacon frames, or actively transmit Probe frames containing the wildcard broadcast
> SSID, a"

SuggestedRemedy
> Make them the same size.

Proposed Response   *Response Status* **W**
> PROPOSED ACCEPT. Editor reapplied FRAME format to the entire paragraph in draft 1.1. Editor did not find any small fonts as indicated by the reader. Perhaps this was an Frame to Adobe problem.

Cl **11**   *SC* **11.1.3**   *P* **0**   *L* **0**   *MyBallot #* 67
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
> "If a STAÆs scanning does not result in finding a BSS with the desired SSID and of the desired type, or does
> not result in finding any BSS, the STA may start an IBSS"
>
> This behaviour is not performed in the MLME entity.

SuggestedRemedy
> Move to the SME.

Proposed Response   *Response Status* **W**
> PROPOSED REJECT. The statement is correct and relevant in its current location.

Cl **11**   *SC* **11.1.3.1**   *P* **0**   *L* **0**   *MyBallot #* 223
Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**
> There is no "aScanType" attribute - just a "ScanType" parameter.

SuggestedRemedy
> Change "If aScanType is passive," to "If the ScanType parameter indicates a passive scan"

Proposed Response   *Response Status* **W**
> PROPOSED ACCEPT. Editor included in draft 1.1 in 11.1.3.1.

Cl **11**   *SC* **11.1.3.1**   *P* **0**   *L* **0**   *MyBallot #* 354
Black, Simon

Comment Type   **TR**   *Comment Status* **D**
> Don't understand the change that's been made here - what is aScanType - surely this should the requested scan type, or ScanType parameter in MLME-SCAN.req.

SuggestedRemedy
> Clarify.

Proposed Response   *Response Status* **W**
> PROPOSED ACCEPT IN PRINCIPLE. The wording was chagned per comment #223. See #223 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   7/6/2005   10:15:59 AM

Page 77 of 118
Cl **11**   *SC* **11.1.3.1**

Submission   Bob O'Hara, Cisco Systems

Cl **11**   *SC* **11.1.3.1**   *P* **0**   *L* **0**   *MyBallot #* 353

Black, Simon

Comment Type   **TR**   *Comment Status*   **D**

In passive scan 'the STA shall listen to each channel scanned for no longer than a maximum duration defined by the ChannelTime parameter.' I saw a MaxChannelTime and MinChannelTime in MLME-SCAN.req but no ChannelTime.

SuggestedRemedy

Clarify.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Change "ChannelTime" to "MaxChannelTime". Editor included in drat 1.1 in 11.1.3.1.

Cl **11**   *SC* **11.1.3.2**   *P* **0**   *L* **0**   *MyBallot #* 483

Engwer, Darwin

Comment Type   **TR**   *Comment Status*   **D**

incorrect primitive reference.

SuggestedRemedy

Change "PHY-CCARESET.request" to "PHY-CCARESET.confirm".

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Incorrect clause reference: change 12.3.5.9.2 "PHY-CCARESET.request" to "PHY-CCARESET.confirm". Editor included in draft 1.1 in 12.3.5.9.2.

In 11.1.3.2, change "Probe frames" to "Probe Request frames". Editor included in draft 1.1 in 11.1.3 (twice) and 11.1.3.2.

Cl **11**   *SC* **11.1.3.2.2**   *P* **0**   *L* **0**   *MyBallot #* 355

Black, Simon

Comment Type   **ER**   *Comment Status*   **D**

There is a typo in bullet c - Reqeust

SuggestedRemedy

Correct

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 11.1.3.2.2.

Cl **11**   *SC* **11.1.3.2.2**   *P* **0**   *L* **0**   *MyBallot #* 584

McCann, Stephen

Comment Type   **E**   *Comment Status*   **D**

typo in point c)

SuggestedRemedy

change "reqeust" to "request"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Duplicate of #355. See #355 for editorial resultion.

Cl **11**   *SC* **11.1.3.2.2**   *P* **0**   *L* **0**   *MyBallot #* 356

Black, Simon

Comment Type   **TR**   *Comment Status*   **D**

In the active scan procedure the ProbeTimer is started after the probe request is sent. It is the compared to MinChannelTime and MaxChanneTime. In clause 10.3.2.1.2 these times are defined as the minimum, or maximum time to spend on the channel when scanning (e.g. MinChannelTime minimum is ProbeDelay). There is an inconsistency here - one is a probe response timeout the other is an on channel time.

SuggestedRemedy

As clause 11 is the normative text and clause 10 describes a logical interface it is probably clause 10 that should be brought into line with clause 11.

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. The use of the ChannelTime values is correct in this usage. The STA starts a ProbeTimer to measure the time after sending the probe request. If it has not detecte any activity by MinChannelTime, it assume there is no response coming. If it has detected activity, but not received a probe response by MaxChannelTime, it leaves to scan the next channel.

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   7/6/2005 10:15:59 AM   Page 78 of 118   *Cl* **11**   *SC* **11.1.3.2.2**

Submission   Bob O'Hara, Cisco Systems

Cl **11**   *SC* **11.1.3.4**   *P* **0**   *L* **0**   *MyBallot #* 68
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

This section highlights that the state machine described in 5.5 is an over simplification.   There
should be states to reflect that it is not synchronized (i.e. cannot exchange class 1 frames), is
synchronized (can exchange class 1 frames), authenticated (can exchange class 2 frames) an
associated (can exchange class 3 frames).

SuggestedRemedy

Add a state to the state diagram to show the process of transitioning from idle to synchronizec
and related to the procedures of this section.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The diagram in 5.5 is intended to be a very simple description and no
to include all of the protocol complexity.

Cl **11**   *SC* **11.1.3.4**   *P* **0**   *L* **0**   *MyBallot #* 580
McCann, Stephen

Comment Type   **E**   *Comment Status* **D**

Badly phrased sentence "will adopt the same parameters except also excluding CF paramete
set"

SuggestedRemedy

Not sure.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Chagned to "will adopt the same paramters except the CF parameter
set." Editor included in draft 1.1 in 11.1.3.4.

Cl **11**   *SC* **11.1.3.4**   *P* **0**   *L* **0**   *MyBallot #* 579
McCann, Stephen

Comment Type   **E**   *Comment Status* **D**

Inconsistant use of "an" and "a" with abbrevitations, e.g. "a STA".

SuggestedRemedy

Change to "an STA"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor searched the sited paragraph and found no
inconsistencies. Because most people say "Stay" rather than "Ess Tee Ay", the proper article
before STA is deemed to be "a". Editor searched entire document and removed the only "an
STA" in 19.3.2.3. Editor included in draft 1.1 in 19.3.2.3.

Cl **11**   *SC* **11.1.3.4**   *P* **0**   *L* **0**   *MyBallot #* 224
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

The resulting clause is still a mess, and it would probably be better to leave it alone rather tha
just add to the confusion. For example, the service primitive implies you can use a probe
request, but the description says you must wait for a beacon. How does data transfer apply to
joined/not joined state? When does the state change to join during this process? Why are yo
no longer allowed to join based on parameters stored from the scan?

SuggestedRemedy

Either write a more complete, more structured definition, or leave it as it was.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The original description is inadequate. The new text provides
clarification and is a result of processing interpretation requests.

Cl **11**   *SC* **11.2.1**   *P* **0**   *L* **0**   *MyBallot #* 357
Black, Simon

Comment Type   **E**   *Comment Status* **D**

Para 3 says: 'STAs operating in PS modes shall periodically listen for beacons, as determined
by the STAÆs ListenInterval and ReceiveDTIMs parameters of the MLME-
POWERMGT.request primitive.' ListenInterval is not in the primitive.

SuggestedRemedy

Reword. Add text in paren and delete text between //: 'STAs operating in PS modes shall
periodically listen for beacons, as determined by the STAÆs ListenInterval and (the)
ReceiveDTIMs parameter/s/ (in)/of/ the MLME-POWERMGT.request primitive.'

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 11.2.1.

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 **11**   *SC* **11.2.1**   *P* **0**   *L* **0**   *MyBallot #* 358

Black, Simon

Comment Type   **TR**   *Comment Status* **D**

A deferred PS Poll response is allowed in the frame exchange sequences (i.e. responding wit
an ACK and then later sending the MSDU) and described in 11.2.1 (para 4), but not mentione
in 11.2.1.4 - it ought to be mentioned in point (f). Also 11.2.1.6 (c) probably ought to make clea
that the response is a data frame

SuggestedRemedy

Consider clarification in 11.2.1.4 and 11.2.1.6.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. In 11.2.1.4 f) add after the first sentence: "The AP can respond with
either an immediate Data frame or with an ACK, while delaying the responsding Data frame."
Editor included in draft 1.1 in 11.2.1.4.

In 11.2.1.6 c) change "receives the response" to "receives the Data frame in response". Edito
included in draft 1.1 in 11.2.1.6.

Cl **11**   *SC* **11.2.1.1**   *P* **0**   *L* **0**   *MyBallot #* 440

Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**

Not sure what is the reason for added text regarding new rule for PM bit "The Power
Managment bit shall not be set in any managment frame"

SuggestedRemedy

Please clarify the reasons or remove it.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. There are no acceptable uses of setting the power management bit ir
the current standard. This was not clear without the aded text.

Change "in any management frame." to "in any management frame, except the Action frame.'
See #88 for editorial resolution.

Cl **11**   *SC* **11.2.1.1**   *P* **0**   *L* **0**   *MyBallot #* 88

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

The additions underlined ("data" and "The Power Managment bit shall not be set in any
management frame") change the legacy behavour which in my opinion was not broken or
ambiguous. Firstly the PS bit should be set uniformly over all frames - this includes
management, control, in fact every frame sent by a STA. This is also indicated by 11.2.1 "sha
inform the AP of this fact using the Power Management bits within the Frame Control field of
transmitted frames". Secondly management frames could be used to indicate PS change of
state - why not? Of course this did not happen in the past as there were no management
frames sent beyond auth and assoc, but now there is - e.g. "action".

SuggestedRemedy

Reverse the change to 11.2.1.1, removing the words "data" and "The Power Managment bit
shall not be set in any management frame."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Updated text to reflect the use of Action frames for
power management. Also Delete the inserted word "Data".

Editor included in draft 1.1 in 11.2.1.1.

Cl **11**   *SC* **11.2.1.1**   *P* **0**   *L* **0**   *MyBallot #* 337

Sanwalka, Anil

Comment Type   **TR**   *Comment Status* **D**

Changing the description to only allow power management information to be transferred to the
AP via Data frames is not acceptable. There are a number of implementation that use the PS-
Poll frame and Null frames to transfer this information. Forgetting about the issue of legacy
devices, I haven't seen any justification for this change

SuggestedRemedy

Reject change

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. The limitation to Data frames is removed. See #88 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   7/6/2005 10:15:59 AM

Page 80 of 118
Cl **11**   *SC* **11.2.1.1**

Submission   Bob O'Hara, Cisco Systems

Cl **11**   *SC* **11.2.1.4**   *P* **0**   *L* **0**   *MyBallot #* 392
Jokela, Jari

Comment Type   **TR**   *Comment Status* **D**
   Step f. Deferred and immediate responses shall be clarified

SuggestedRemedy
   Clarify that in case of deferred mode AP shall respond to PS POLL with ACK and send actual
   MPDU later on. In case of immediate mode actual MPDU is in response to PS POLL.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. See resolution to comment 358. See #358 for editorial resolution.

Cl **11**   *SC* **11.2.1.6**   *P* **0**   *L* **0**   *MyBallot #* 225
Mike, Moreton

Comment Type   **ER**   *Comment Status* **D**
   It's conventional when giving a time of the form "absolute time plus delta" to give it that way
   round, not "delta plus absolute time".

SuggestedRemedy
   Change "ListenInterval plus the last TBTT" to "the last TBTT plus the ListenInterval"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 11.2.1.6.

Cl **11**   *SC* **11.2.1.6**   *P* **0**   *L* **0**   *MyBallot #* 226
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
   bullet (a): Saying that something happens after a time corresponding to the end of an interval
   different to saying that it happens after the interval - it's the difference between an inclusive an
   exclusive limit. I doubt this change was deliberate! Overall I think the new text is at best no
   better than what it's replacing.

SuggestedRemedy
   Revert to the old bullet (a).

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The text reflects the corresponding behavior of the AP discarding of
   frames due to being older than ListenInterval.

Cl **11**   *SC* **11.2.1.6**   *P* **0**   *L* **0**   *MyBallot #* 227
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
   bullet (b) The delay is given as a numeric value. What are the units?

SuggestedRemedy
   Can't we just say that the basic access mechanisms are usedà

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT IN PRINCIPLE. Add "slots following a DIFS" after aCWmin. Editor
   included in draft 1.1 in 11.2.1.6.

Cl **11**   *SC* **11.2.1.6**   *P* **0**   *L* **0**   *MyBallot #* 359
Black, Simon

Comment Type   **TR**   *Comment Status* **D**
   Why has point (b) been changed here. The randomization is not required if only one STA is
   sending a PS-Poll.

SuggestedRemedy
   Why the change?

Proposed Response   *Response Status* **W**
   PROPOSED REJECT. The STA may collide with the AP, if randomization is not performed.

Cl **11**   *SC* **11.2.2.1**   *P* **0**   *L* **0**   *MyBallot #* 89
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
   The underlined test in 11.2.2.1 does not add any useful information as it does not say when th
   STA needs to remain awake nor is it accurate to say on STA's PS-state should imply
   another's. More accurate would be to indciate that when an ATIM window is present, then PS
   may be in use by STAs.

SuggestedRemedy
   Replace paragraph 1 by the modified version: "The basic approach is similar to the
   infrastructure case in that the STAs are synchronized, and multicast MSDUs and those
   MSDUs that are to be transmitted to a power-conserving STA are first announced during a
   period when all STAs are awake. The announcement is done via an ad hoc ATIM sent in an
   ATIM Window. A STA in the PS mode shall listen for these announcements to determine if it
   needs to remain in the awake state. The presence of the ATIM window in the IBSS indicates i
   the STA may use PS Mode. To maintain correct information on the power save state of other
   stations in an IBSS, a station needs to remain awake during the ATIM window. At other times
   the STA may enter the Doze state except as indicated in the following procedures."

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in 11.2.2.1.

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

7/6/2005 10:15:59 AM

Submission   Bob O'Hara, Cisco Systems

Cl **11**   *SC* **11.2.2.1**   *P* **0**   *L* **0**   *MyBallot #* 69
Stephens, Adrian

Comment Type **TR**   *Comment Status* **D**

"To maintain correct
information on the power save state of other stations in an IBSS, a station needs to remain
awake. If a
station changes to the PS mode, it shall assume that all other stations are in the PS mode als

This is both unnecessary and inadequate. An IBSS STA has to be robust with respect to
having perfect knowledge of the power-saving state of other STA, because power-saving stat
changes are communicated using unreliable broadcast transmissions.   The added text
mandates a delay of, on average, half a beacon interval on transmissions from a power-saver
a non-power-saver, because the power-saver is required to assume the non-power-saver mig
become one while it is asleep.

The solution that an IBSS STA has to implement to cope with its imprecise knowledge is if
there is a transmission failure to a STA that it thinks is a non-power-saver, it should retry that
frame on the assumption it is now a power saver.

This heuristic is adequate, and the addition that I have cited (with its bad effect on transport
delay) is unnecessary.

SuggestedRemedy

Remove the quoted text, and possible add an informative note relating to the retry heuristic I
mention.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. See the resolution to comment 89.

Cl **11**   *SC* **11.2.2.1**   *P* **0**   *L* **0**   *MyBallot #* 228
Mike, Moreton

Comment Type **ER**   *Comment Status* **D**

A preposition is a word you shouldn't end a sentence with.

SuggestedRemedy

Change "If a station changes to the PS mode, it shall assume that all other stations are in the
PS mode also." to "If a station changes to the PS mode, it shall assume that all other stations
are also in the PS mode."

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Also functions as an adverb in the cited sentence.

Cl **11**   *SC* **11.3**   *P* **0**   *L* **0**   *MyBallot #* 214
Mike, Moreton

Comment Type **TR**   *Comment Status* **D**

The clause should be called "Authentication and Deauthentication".

SuggestedRemedy

See comment

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 11.3.

Cl **11**   *SC* **11.4.2**   *P* **0**   *L* **0**   *MyBallot #* 217
Mike, Moreton

Comment Type **TR**   *Comment Status* **D**

You can't just delete the name of the primitive used for communication between the SME and
the MAC and hope that no-one notices that this section is now inconsistent with the primitive
description! Same applies to 11.4.4

SuggestedRemedy

Change 11.4.4 and 11.4.2 to be consistent with the change to the (re)association primitives.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. In 11.4.2 c) and 11.4.4 c) Insert "Upon receipt of an MLME-
Associate.response service primitive," before the first sentence. Editor included in draft 2.0 in
11.4.2 and 11.4.4.

11.4.2 e) and 11.4.4 e) should be deleted. Editor included in draft 2.0 in 11.4.2 and 11.4.4.
Items will be renumbered when revision marks are removed.

Cl **11**   *SC* **11.5**   *P* **0**   *L* **0**   *MyBallot #* 90
Oakes, Ivan

Comment Type **TR**   *Comment Status* **D**

The first two paragraphs add nothing and may be incomplete given recent FCC rulings.

SuggestedRemedy

Remove first and second paragraphs of 11.5 starting "ERC/DEC/(99)23à", edit paragraph 2 to
say "This subclause describes TPC procedures that may be used to satisfy regulatory
requirements in Europe and similar elsewhere".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Duplicate of comment #91. See #91 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

7/6/2005 10:15:59 AM

Submission   Bob O'Hara, Cisco Systems

Cl **11**   *SC* **11.5**   *P* **0**   *L* **0**   *MyBallot #* 70
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**
"dot11SpectrumManagementRequired shall be set to TRUE when regulatory authorities requi
TPC."

How is this normative requirement testable? All normative requirements should be testable.

SuggestedRemedy
Replace "shall be" with "is".   Consider adding: "NOTE - the mechanisms to achieve this are
beyond the scope of this standard."

Proposed Response   *Response Status* **W**
PROPOSED REJECT. This is easily testable by examining the MIB of a product configured
for a domain where TPC is required.

Cl **11**   *SC* **11.6**   *P* **0**   *L* **0**   *MyBallot #* 91
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
The first two paragraphs add nothing and may be incomplete given recent FCC rulings.

SuggestedRemedy
Remove first and second paragraphs of 11.6 starting "ERC/DEC/(99)23à", edit paragraph 2 to
say "This subclause describes TPC procedures that may be used to satisfy regulatory
requirements in Europe and similar elsewhere".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Replace "ERC/DEC/(99)23" with "Some radio
regulations". Editor included similar wording from another commend resolution in draft 1.1 in
11.6.

In the second paragraph, replace "may be used" with "can be used" and delete "in Europe" ar
delete "in other regulatory domains and". Editor included similar wording in draft 1.1 in 11.6.

Cl **12**   *SC* **12.**   *P* **0**   *L* **0**   *MyBallot #* 505
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused
individual changes, there remain unresolved inconsistencies between the text in this clause a
other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **13**   *SC* **13.**   *P* **0**   *L* **0**   *MyBallot #* 506
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused
individual changes, there remain unresolved inconsistencies between the text in this clause a
other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **14**   *SC* **14.**   *P* **0**   *L* **0**   *MyBallot #* 507
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused
individual changes, there remain unresolved inconsistencies between the text in this clause a
other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

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   7/6/2005 10:15:59 AM

Page 83 of 118
Cl **14**   *SC* **14.**

Submission   Bob O'Hara, Cisco Systems

Cl **14**   *SC* **14.**   *P* **0**   *L* **0**   *MyBallot #* 183
Mike, Moreton

Comment Type   **T**   *Comment Status* **D**

With the ever growing length of the standard it seems reasonable to remove some of the stuff that is no longer used where this will not cause compatibility problems with existing equipmen Surely it's acceptable to say that equipment that wishes to interoperate with other equipment using these obsolete procedures should follow the 1999 version of the standard?

SuggestedRemedy

Replace clauses 14 with a direction to the 1999 version of the standard.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. After adoption of this revision to the standard, the 1999 version will cease to exist.

Cl **14**   *SC* **14.9**   *P* **0**   *L* **0**   *MyBallot #* 24
Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 79.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Change the "0us" to "128us" for the value of aPHY-RX-START-Delay in Table 79. Also add the description to the same row: "The delay from the start of the preamble to the issuance of the RX-START.indicate by the PHY." This value is required for certain MAC timeouts. Editor included in draft 1.1 in 14.9.

Cl **14**   *SC* **14.9**   *P* **0**   *L* **0**   *MyBallot #* 255
Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 79.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Change the "0us" to "128us" for the value of aPHY-RX-START-Delay in Table 79. Also add the description to the same row: "The delay from the start of the preamble to the issuance of the RX-START.indicate by the PHY." See comment #24 for editorial resolution.

Cl **14**   *SC* **14.9**   *P* **0**   *L* **0**   *MyBallot #* 36
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

Table 79 declares aPHY-RX-START-Delay to be 0us.   From figure 161, the PHY-RXSTART.ind occurs after the PLCP header has been received, which is 96+32 us from the start of the packet.

SuggestedRemedy

Replace value of 0 with value of 128

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment #24 for editorial resolution.

Cl **14**   *SC* **14.9**   *P* **0**   *L* **0**   *MyBallot #* 528
Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

Table 79 declares aPHY-RX-START-Delay to be 0us.   From figure 161, the PHY-RXSTART.ind occurs after the PLCP header has been received, which is 96+32 us from the start of the packet.

SuggestedRemedy

Replace value of 0 with value of 128

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment #24 for editorial resolution.

Cl **15**   *SC* **15.**   *P* **0**   *L* **0**   *MyBallot #* 508
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

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

7/6/2005 10:15:59 AM

Submission   Bob O'Hara, Cisco Systems

Cl **15**   *SC* **15.3.3**   *P* **0**   *L* **0**   *MyBallot #* 37

Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

Table 81 declares aPHY-RX-START-Delay to be 0us.   From figure 173, the PHY-RXSTART.ind occurs after the PLCP header has been received (although curiously, figure 17 shows the indication during the middle of the received CRC).

SuggestedRemedy

Replace value of 0 with value of 144+48 = 192us.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate with #529. See comment #256 for editorial resolution.

Cl **15**   *SC* **15.3.3**   *P* **0**   *L* **0**   *MyBallot #* 25

Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 81.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Duplicate with #256. See comment #256 for editorial resolution.

Cl **15**   *SC* **15.3.3**   *P* **0**   *L* **0**   *MyBallot #* 529

Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

Table 81 declares aPHY-RX-START-Delay to be 0us.   From figure 173, the PHY-RXSTART.ind occurs after the PLCP header has been received (although curiously, figure 17 shows the indication during the middle of the received CRC).

SuggestedRemedy

Replace value of 0 with value of 144+48 = 192us.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment #256 for editorial resolution.

Cl **15**   *SC* **15.3.3**   *P* **0**   *L* **0**   *MyBallot #* 256

Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 81.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Change the "0us" to "192us" for the value of aPHY-RX-START-Delay in Table 81. Editor included in draft 1.1 in 15.3.3.

Cl **15**   *SC* **15.4.7.4; pg 393**   *P* **393**   *L* **0**   *MyBallot #* 343

Hillman, Garth

Comment Type   **TR**   *Comment Status* **D**

We need to identify that channel 14 in the 2.4 band is 'different' and describe its transmit mas separately

SuggestedRemedy

Add a separate transmit mask for Channel 14 in the 2.4 GHz band.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. The commenter is solicited to provide the text and figure for the additional spectrum mask. Editor not able to resolve this without input.

Cl **16**   *SC* **16.**   *P* **0**   *L* **0**   *MyBallot #* 509

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focuse individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

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

7/6/2005 10:15:59 AM

Page 85 of 118
Cl **16**   *SC* **16.**

Submission   Bob O'Hara, Cisco Systems

Cl **16**   *SC* **16.**   *P* **0**   *L* **0**   *MyBallot #* 185
Mike, Moreton

Comment Type   **T**   *Comment Status* **D**

With the ever growing length of the standard it seems reasonable to remove some of the stuff that is no longer used where this will not cause compatibility problems with existing equipmen Surely it's acceptable to say that equipment that wishes to interoperate with other equipment using these obsolete procedures should follow the 1999 version of the standard?

SuggestedRemedy

Replace clauses 16 with a direction to the 1999 version of the standard.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. With the approval of this revision to the standard, the 1999 version wi cease to exist.

Cl **16**   *SC* **16.4**   *P* **0**   *L* **0**   *MyBallot #* 530
Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

Table 98 declares aPHY-RX-START-Delay to be 0us.

SuggestedRemedy

It needs to be aPreambleLength+aPLCPHeaderLength. In the IR PHY, these depend also or the data rate. So you can take your pick - but it definitely isn't zero.

Alternatively mark clause 16 as deprecated with a note that it is not maintained, and remove t parameter.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Change the "0us" to "57us" for the value of aPHY-RX START-Delay in Table 98." Editor included in draft 1.1 in 16.4.

Cl **16**   *SC* **16.4**   *P* **0**   *L* **0**   *MyBallot #* 35
Stephens, Adrian

Comment Type   **T**   *Comment Status* **D**

It is nice to see table 98 being maintained. It is so useful, after all.

SuggestedRemedy

Or perhaps remove the IR PHY, or mark it deprecated and unmaintained.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is no technical reason to remove this clause.

Cl **16**   *SC* **16.4**   *P* **0**   *L* **0**   *MyBallot #* 257
Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 98.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Change the "0us" to "57us" for the value of aPHY-RX-START-Delay in Table 98." See #530 for editorial resolution.

Cl **16**   *SC* **16.4**   *P* **0**   *L* **0**   *MyBallot #* 38
Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

Table 98 declares aPHY-RX-START-Delay to be 0us.

SuggestedRemedy

It needs to be aPreambleLength+aPLCPHeaderLength. In the IR PHY, these depend also or the data rate. So you can take your pick - but it definitely isn't zero.

Alternatively mark clause 16 as deprecated with a note that it is not maintained, and remove t parameter.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Duplicate of #530. See #530 for editorial resolution.

Cl **16**   *SC* **16.4**   *P* **0**   *L* **0**   *MyBallot #* 26
Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 98.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Change the "0us" to "57us" for the value of aPHY-RX-START-Delay in Table 98." See #530 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   7/6/2005 10:15:59 AM

Page 86 of 118
Cl **16**   *SC* **16.4**

Submission   Bob O'Hara, Cisco Systems

Cl **17**   *SC* **17.**   *P* **0**   *L* **0**   *MyBallot #* 510

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **17**   *SC* **17.3.10.5**   *P* **0**   *L* **0**   *MyBallot #* 304

Kruys, Jan

Comment Type   **TR**   *Comment Status* **D**

The CCA definition is ambiguous and unless more clearly defined may not be useful as tool to detect other spectrum users. This is becoming an issue with the possibility of 802.16 systems being deployed in the 5.8 GHz range. Therefore it is necessary to be able to differentiate between energy and a .11signal. Since defering for other energy sources may be subject to a different threshold than defering to .11 signals, a separate threshold is needed for each. (note this addition of the CS

SuggestedRemedy

The start of a valid OFDM transmission at a receive level equal to or greater than the minimum modulation and coding rate sensitivity (û82 dBm for 20 MHz channel spacing and û85 dBm fo 10 MHz channel spacing) shall cause CCA to indicate busy with a probability > 90% within 4 ? for 20 MHz channel spacing and 8 ?s for 10 MHz channel spacing. In addition and irrespectiv of preamble detection, the receiver shall hold the ED signal busy for any signal above the sensitivity levels given above. Note for the editor: this change requires consequent changes th have not been provideed here. Internal Note1: the addition of the ED signal allows the MAC to interpret the RSSI value more precisely as belonging to a signal or just energy. Deciding to defer transmission for a given combination of ED, CCA and RSSI values is left to implementation.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Adding this would make implementations previously compliant with clause 17 become noncompliant.

Cl **17**   *SC* **17.3.9.2**   *P* **0**   *L* **0**   *MyBallot #* 397

LEMBERGER, URIEL

Comment Type   **TR**   *Comment Status* **D**

Spectral mask is defined in figure 199 and again in I.2.3

SuggestedRemedy

Have one location in the document where the definition are written and reference to this point where necessary in other parts of the document.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Move figure 199 and associated text to annex I as a "default" regulato class. Editor included in draft 2.0 in 17.3.9.2 and Annex I sub-clause I.2.3.

Cl **17**   *SC* **17.4.4**   *P* **0**   *L* **0**   *MyBallot #* 441

Raissinia, Ali

Comment Type   **TR**   *Comment Status* **D**

The added aPHY-RX-START-Delay in Table 113 is 24us.

SuggestedRemedy

What is the reason for selected 24us number.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. The parameter accounts for the PLCP header and preamble times, plus the Viterbi delay before PHY-RXSTART.indicate is generated.

The value in the 10MHz column is not correct. Change the value in the 10MHz column to "48us". Editor included in draft 1.1 in 17.4.4.

Cl **17**   *SC* **17.4.4**   *P* **0**   *L* **0**   *MyBallot #* 27

Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 113.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This value is required for correct operation of certain MAC timeouts.

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

7/6/2005 10:15:59 AM

Page 87 of 118
Cl **17**   *SC* **17.4.4**

Submission   Bob O'Hara, Cisco Systems

Cl **17**   *SC* **17.4.4**   *P* **0**   *L* **0**   *MyBallot #* 258

Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 113.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This value is required for correct operation of certain MAC timeouts.

Cl **18**   *SC* **18.**   *P* **0**   *L* **0**   *MyBallot #* 511

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **18**   *SC* **18.3.3**   *P* **0**   *L* **0**   *MyBallot #* 259

Miki, Morgan

Comment Type   **TR**   *Comment Status* **D**

No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 121.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.   This value is required for correct operation of certain MAC timeouts.

Cl **18**   *SC* **18.3.3**   *P* **0**   *L* **0**   *MyBallot #* 39

Stephens, Adrian

Comment Type   **TR**   *Comment Status* **D**

Table 121 shows the aPHY-RX-START-Delay to be 0us. This is wrong.

SuggestedRemedy

Set to value of 192us.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #531. See #531 for editorial resolution.

Cl **18**   *SC* **18.3.3**   *P* **0**   *L* **0**   *MyBallot #* 531

Jalfon, Marc

Comment Type   **TR**   *Comment Status* **D**

Table 121 shows the aPHY-RX-START-Delay to be 0us. This is wrong.

SuggestedRemedy

Set to value of 192us.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 18.3.3.

Cl **18**   *SC* **18.3.3**   *P* **0**   *L* **0**   *MyBallot #* 28

Gohda, Wataru

Comment Type   **TR**   *Comment Status* **D**

No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 121.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This value is required for correct operation of certain MAC timeouts.

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

7/6/2005 10:15:59 AM

Page 88 of 118
Cl **18**   *SC* **18.3.3**

Submission   Bob O'Hara, Cisco Systems

Cl **18**   *SC* **18.4.6.2**   *P* **0**   *L* **0**   *MyBallot #* 398

LEMBERGER, URIEL

Comment Type   **TR**   *Comment Status* **D**

Table 126 is incorrect.

SuggestedRemedy

Correct the table content, for example , FCC allows Ch 12,13 with mask restrictions, France is part of ETSI.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This table does not show all the possible channels for each domain (as identified by the value at the head of each column), but only those specifically allowed by 802.11. Changing this table would result in making currently compliant implementations noncompliant.

Cl **18**   *SC* **18.4.7.1**   *P* **0**   *L* **0**   *MyBallot #* 399

LEMBERGER, URIEL

Comment Type   **ER**   *Comment Status* **D**

Transmit power level in subclause 17 refers to annex I and in subclause 18 it appears in table 136 137 , and again in table I.6

SuggestedRemedy

use consistant way to define Transmit power requirement in all sections.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. At this point only OFDM is described in annex I. These tables refer to DSSS and CCK operation.

Cl **19**   *SC* **19.**   *P* **0**   *L* **0**   *MyBallot #* 512

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **19**   *SC* **19.3.2.1**   *P* **0**   *L* **0**   *MyBallot #* 460

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The text in 19.3.2.1 specifies that all ERP systems shall set the Locked Clock Bit equal to 1, including 1 & 2Mb/s systems. The text in 15.2.3.4 specifies this bit is reserved for 1 & 2Mb/s systems, ie set equal to 0 on transmit.

Unfortunately, some test houses have interpreted the text in 19.3.2.1 to mean that all 1 & 2Mb systems shall set the Locked Clock Bit equal to 1.

SuggestedRemedy

Change 19.3.2.1 to make clear that the Locked Clock bit make be set equal to 0 for 1 & 2Mb/s systems

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. In the fifth sentence of the paragraph above Table 140, change "the Locked Clock Bit shall be set to 1." to "the Locked Clock Bit shall be set to 1, when transmittir at an ERP-PBCC rate or at a data rate described in clause 18." Editor included in draft 1.1 in 19.3.2.1.

Cl **19**   *SC* **19.3.2.4.1**   *P* **0**   *L* **0**   *MyBallot #* 2

Adachi, Tomoko

Comment Type   **E**   *Comment Status* **D**

There is "à" in the expression but it is unclear what it means. There is a similar expression for calculating the LENGTH field in clause 19.8.3.3 but there is no "à" for this case.

SuggestedRemedy

Delete "à" in the expression.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. The cited equation contains an elipsis which should be deleted. Editor included in draft 1.1 in 19.3.2.4.1.

Cl **19**   *SC* **19.4.6**   *P* **0**   *L* **0**   *MyBallot #* 3

Adachi, Tomoko

Comment Type   **E**   *Comment Status* **D**

There is a phrase "ERP PHY" but this will be Extended rate PHY PHY. PHY is redundant.

SuggestedRemedy

Express this as "ERP". (Delete "PHY".)

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 19.4.6.

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

7/6/2005 10:15:59 AM

Page 89 of 118
Cl **19**   *SC* **19.4.6**

Submission   Bob O'Hara, Cisco Systems

Cl **19**   *SC* **19.7.2.6**   *P* **0**   *L* **0**   *MyBallot #* 243

Palm, Stephen

Comment Type **TR**   *Comment Status* **D**

The term "802.11g" is used without being defined or referenced.

SuggestedRemedy

Clearly provide references for all of the 802.11a through 802.11j amendments.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. In the first sentence below Figure 248, change "in the 802.11g header" to "in the header". All of the amendments (and their titles) cease to exist afte the approval of the revision to the standard. Editor included in draft 1.1 in 19.7.2.6.

Cl **19**   *SC* **19.8.4**   *P* **0**   *L* **0**   *MyBallot #* 260

Miki, Morgan

Comment Type **TR**   *Comment Status* **D**

No reason to consider aPHY-RX-STARTDelay. See comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 144.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This value is required for correct operation of certain MAC timeouts.

Cl **19**   *SC* **19.8.4**   *P* **0**   *L* **0**   *MyBallot #* 41

Stephens, Adrian

Comment Type **TR**   *Comment Status* **D**

aPHY-RX-START-Delay is not zero for non-ERP-OFDM cases.
However because this table is specific to the ERP-OFDM case the phrase "and 0us otherwise is unnecessary (and wrong).

SuggestedRemedy

Remove quoted phrase.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 19.8.4.

Cl **19**   *SC* **19.8.4**   *P* **0**   *L* **0**   *MyBallot #* 29

Gohda, Wataru

Comment Type **TR**   *Comment Status* **D**

No reason to keep aPHY-RX-STARTDelay. See my comments on section 9.2.5.7 and 9.2.8.

SuggestedRemedy

Remove aPHY-RX-START-Delay from table 144.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This value is required for correct operation of certain MAC timeouts.

Cl **A**   *SC* **A.**   *P* **0**   *L* **0**   *MyBallot #* 513

Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **A**   *SC* **A.**   *P* **0**   *L* **0**   *MyBallot #* 463

McClellan, Kelly

Comment Type **TR**   *Comment Status* **D**

The conformance coverage of the PICS is stated as "IEEE Std 802.11, 1999". The scope of the PICS includes newer options that are not part of the 1999 revision.

SuggestedRemedy

Change to appropriate publication/revision date, and add an informative note relating the 199 revision to newer extensions to the standard.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in Annex A.1. I did not include an informative note as this will be covered in the introduction 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   7/6/2005 10:15:59 AM

Page 90 of 118
Cl **A**   *SC* **A.**

Submission   Bob O'Hara, Cisco Systems

Cl **A**   *SC* **A.4.10**   *P* **0**   *L* **0**   *MyBallot #* 360
Black, Simon

Comment Type **TR**   *Comment Status* **D**
Most of PICS Item MD1 concerns the country element and its fields. However the dot11MultiDomainCapabilityEnabled attribute dot11MultiDomainCapability Enabled attribute seem to have sneaked into the middle of the text (and are not in the references).

SuggestedRemedy
Clarify

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Delete the two occurrences of dot11MultiDomainCapabilityEnabled. Editor included in draft 1.1 in A.4.10.

Cl **A**   *SC* **A.4.3**   *P* **0**   *L* **0**   *MyBallot #* 163
Ecclesine, Peter

Comment Type **E**   *Comment Status* **D**
The tickmark boxes in the Support column are circles

SuggestedRemedy
change to boxes

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The circles are use consistently throughout and need not be boxes.

Cl **A**   *SC* **A.4.8**   *P* **0**   *L* **0**   *MyBallot #* 162
Ecclesine, Peter

Comment Type **TR**   *Comment Status* **D**
Item OF9.4.4 RATE 36 Mbit/s status shown as M, and should be O

SuggestedRemedy
change Status to O

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in A.4.8.

Cl **C**   *SC* **C.**   *P* **0**   *L* **0**   *MyBallot #* 459
Myles, Andrew

Comment Type **TR**   *Comment Status* **D**
The SDL is mostly incorrect and has little connect to the current standard. It just wastes paper/bits

SuggestedRemedy
Remove entire annex

Proposed Response   *Response Status* **W**
PROPOSED REJECT. There is still normative behavior described only in the SDL. Deleting the annex would also delete these normative behaviors.

Cl **C**   *SC* **C.**   *P* **0**   *L* **0**   *MyBallot #* 42
Stephens, Adrian

Comment Type **TR**   *Comment Status* **D**
The SDL is a maintenance nightmare and is practically useless.
Few task groups have the means to maintain this model.   The model itself contains some ver questionable use of SDL (such as extensive sharing of variables), structuring of the model does not match the architecture presented in the body text, and it has not been updated to reflect the changes approved in 802.11i.
Those who have seriously tried to use the model (I have) descover that it has a very blinkered view of 802.11 - yet it is somehow "normative".

SuggestedRemedy
Firstly scan Annex C for normative behaviour not defined elsewhere and move to appropriate sections in the body text (there should be none).

Remove Annex C.
Alternatively mark is as "Informative - historic interest only".

Proposed Response   *Response Status* **W**
PROPOSED REJECT. There is still normative behavior described only in the SDL. Deleting the annex would also delete these normative behaviors. The commenter is solicited to provid the text for the normative behaviors to add to the other clauses of the standard, so that the annex might then be removed.

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   7/6/2005 10:15:59 AM   Page 91 of 118   *Cl* **C**   *SC* **C.**

Submission   Bob O'Hara, Cisco Systems

Cl **C**   *SC* **C.**   *P* **0**   *L* **0**   *MyBallot #* 514
Engwer, Darwin

Comment Type   **TR**   *Comment Status*   **D**
After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **C**   *SC* **C.**   *P* **0**   *L* **0**   *MyBallot #* 141
Myles, Andrew

Comment Type   **TR**   *Comment Status*   **D**
The SDL is mostly incorrect and has little connect to the current standard. It just wastes paper/bits

SuggestedRemedy
Remove entire annex

Proposed Response   *Response Status*   **W**
PROPOSED REJECT. There is still normative behavior described only in the SDL. Deleting the annex would also delete these normative behaviors.

Cl **C**   *SC* **C.**   *P* **0**   *L* **0**   *MyBallot #* 533
Jalfon, Marc

Comment Type   **TR**   *Comment Status*   **D**
The SDL is a maintenance nightmare and is practically useless.

SuggestedRemedy
Remove Annex C.
Alternatively mark is as "Informative - historic interest only".

Proposed Response   *Response Status*   **W**
PROPOSED REJECT. There is still normative behavior described only in the SDL. Deleting the annex would also delete these normative behaviors.

Cl **C**   *SC* **C. page 597**   *P* **0**   *L* **0**   *MyBallot #* 344
Hillman, Garth

Comment Type   **T**   *Comment Status*   **D**
I thought IEEE 802.11 had decided to deprecate the SDL description?

SuggestedRemedy
If we have then so state.

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Such a decision has not been made. No statement is required. Nothing for the editor to resolve.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 167
Ecclesine, Peter

Comment Type   **TR**   *Comment Status*   **D**
on p820, dot11RegulatoryClasses TABLE is missing after dot11SpectrumManagement

SuggestedRemedy
Insert TABLE in proper place

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 174
Ecclesine, Peter

Comment Type   **TR**   *Comment Status*   **D**
on page 855, 802.11j deprecated SMT base 3, and added dot11RegulatoryClasses Implemented and dot11RegulatoryClassesRequired to SMT base 5. Both SMT base 3 and SMT base 4 are shown as current

SuggestedRemedy
insert SMTbase5 from Amendment 802.11j and deprecate SMTbase3 and SMTbase4

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT. Editor reviewed entire MIB. 802.11j was found missing entirely and has been added. 802.11j fixed SMT base 3. Editor will also depracate SMT base 4. Editor included in draft 1.1 in D.

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   7/6/2005 10:15:59 AM

Page 92 of 118
Cl **D**   *SC* **D.**

Submission   Bob O'Hara, Cisco Systems

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 168

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

on page 840, The Japanese regulatory authority is no longer MKK, nor MPHPT. Suggest just using Japan, like France and Spain

SuggestedRemedy

Change dot11RegDomainsSupportedTable and dot11RegDomainsSupportedValue from MKK to Japan

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in dot11RegDomainsSupportedTableand dot11RegDomainsSupportedValue.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 593

Richard, Paine

Comment Type   **E**   *Comment Status* **D**

P876L5 Is the Editor's Note really necessary?

SuggestedRemedy

Drop the Editor's Note

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Unable to locate editor note on page 876 in D. In any case, editor note go away after each draft.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 170

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

on page 845, the 802.11j values and text is missing

SuggestedRemedy

insert corrections from Amendment 802.11j

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 164

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

dot11RegulatoryClassesTable, dot11smt 13 missing on page 802

SuggestedRemedy

Insert after dot11RSNAStatsTable

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 166

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

page 810, missing attributes for dot11RegulatoryClassesImplemented and dot11RegulatoryClassesRequired

SuggestedRemedy

insert after dot11RSNAPreauthenticationImplemented

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 172

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

on page 851, the 802.11j dot11RegulatoryClassesGroup is missing

SuggestedRemedy

insert reference from Amendment 802.11j

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

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

7/6/2005 10:15:59 AM

Page 93 of 118
Cl **D**   *SC* **D.**

Submission   Bob O'Hara, Cisco Systems

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 146

Visscher, Bert

Comment Type   **TR**   *Comment Status* **D**

dot11SpectrumManagementImplemented has MAX-ACCESS read-write. Adding/removing parts in the implementation of the device is a neat trick, but unfortunately not possible

SuggestedRemedy

Change MAX-ACCESS into read-only

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in dot11SpectrumManagementImplemente

---

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 361

Black, Simon

Comment Type   **TR**   *Comment Status* **D**

Additions to the .11 MIB for spectrum management don't seem to have made it into any conformance group.

SuggestedRemedy

Review conformance groups.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor reviewed the entire MIB and all elements for 802.11h were found to be present. However, editor found 802.11j MIB missing. Editor include in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 145

Visscher, Bert

Comment Type   **TR**   *Comment Status* **D**

dot11MultiDomainCapabilityImplemented has MAX-ACCESS read-write. Adding/removing parts in the implementation of the device is a neat trick, but unfortunately not possible

SuggestedRemedy

Change MAX-ACCESS into read-only

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #146. See #146 for editorial resolution.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 171

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

on page 845, the 802.11j dot11ChannelStartingFactor object is missing

SuggestedRemedy

insert object from Amendment 802.11j

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 169

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

on page 844/5, dot11ChannelStartingFactor is missing

SuggestedRemedy

insert , dot11ChannelStartingFactor Integer 32 after entry for dot11FrequencyBandsSupporte INTEGER

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 173

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

on page 854, the 802.11j dot11ChannelStartingFactor object is missing

SuggestedRemedy

insert object from Amendment 802.11j

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

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

7/6/2005 10:15:59 AM

Page 94 of 118
Cl **D**   *SC* **D.**

Submission   Bob O'Hara, Cisco Systems

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 515

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **D**   *SC* **D.**   *P* **0**   *L* **0**   *MyBallot #* 165

Ecclesine, Peter

Comment Type   **TR**   *Comment Status* **D**

page 802, missing dot11RegulatoryClassesImplemented and dot11RegulatoryClassesRequire Truth Values

SuggestedRemedy

insert after dot11RSNAPreauthenticationImplemented

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor reviewed entire MIB and found 802.11j MIB missing. Editor included in draft 1.1 in D.

Cl **E**   *SC* **E.**   *P* **0**   *L* **0**   *MyBallot #* 526

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

Missing a reference to the Unified Modeling Language Reference manual per the editor's instructions in doc 11-05-0120-09, see page 10 in that submission.

SuggestedRemedy

Add the reference to the UML reference manual.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.Editor included in draft 1.1 in E.1.

Cl **E**   *SC* **E.**   *P* **0**   *L* **0**   *MyBallot #* 568

Odman, Knut

Comment Type   **E**   *Comment Status* **D**

The bibliography clause shall be the first or last clause in a standard. Ref. IEEE standards sty guide, clause 19: "Complete and current information for bibliographic entries shall be supplied by the working group. The bibliography always shall be an informative numbered annex that appears as either the first or last annex of the standard (see Annex B for an example bibliography). "

SuggestedRemedy

Reorder with the new annexes so that the bibliography clause becomes Annex N

Proposed Response   *Response Status* **W**

PROPOSED REJECT. As Annex A is well known as our PIC and as makging this the last Annex would cuase endless problems with ammendments, this comment is declined.

Cl **E**   *SC* **E.**   *P* **0**   *L* **0**   *MyBallot #* 494

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

Missing a citation for 802.11F per references in Annex M.

SuggestedRemedy

Add a reference to 802.11F in Annex E.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in E.1.

Cl **E**   *SC* **E.**   *P* **0**   *L* **0**   *MyBallot #* 516

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

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   7/6/2005 10:15:59 AM

Page 95 of 118
Cl **E**   *SC* **E.**

Submission   Bob O'Hara, Cisco Systems

Cl **E**   *SC* **E.**   *P* **0**   *L* **0**   *MyBallot #* 493
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**   *Ask Darwin*
Missing a citation to an ISO standard per Message Sequence Charts used in the draft (first reference is in clause 5.9.2.1).

SuggestedRemedy
Add a reference to the corresponding ISO standard. add a reference to an ISO standard that describes Message Sequence Charts (MSC) per multiple uses throughout the 2005 draft

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Add a reference to ITU-T Z.120 "Message Sequence Chart (MSC)", 11/99. Editor included in draft 2.0 in Annex E.

Cl **F**   *SC* **F.**   *P* **0**   *L* **0**   *MyBallot #* 517
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **G**   *SC* **G.**   *P* **0**   *L* **0**   *MyBallot #* 518
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **H**   *SC* **H.**   *P* **0**   *L* **0**   *MyBallot #* 519
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **H**   *SC* **H.3.2**   *P* **0**   *L* **0**   *MyBallot #* 43
Stephens, Adrian

Comment Type   **E**   *Comment Status* **D**
The phrase "what do ya wantà" is not gramatically correct. Also in table H.10.

SuggestedRemedy
Replace "ya" with "you", and recalculate the PRF-512.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The exmaple is not constrained to gramatically correct phrases.

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   7/6/2005 10:15:59 AM

Page 96 of 118
Cl **H**   *SC* **H.3.2**

Submission   Bob O'Hara, Cisco Systems

Cl **H**   *SC* **H.4.1**   *P* **0**   *L* **0**   *MyBallot #* 412
Chaplin, Clint

Comment Type   **TR**   *Comment Status* **D**

The following sentence "A pass-phrase typically has about 2.5 bits of security per character, s
the pass-phrase mapping converts an n octet password into a key with about 2.5n + 12 bits of
security." is not technically correct. It is mixing two different types of measurements of
security, and the two types are not comparable. I look at this as comparable to trying to
compare and add together measurements of pound force and pound mass.
The measurement of pass phrase security of 2.5 bits per character is really a measurement o
cryptographic entropy, which is a precisely defined measurement in the crypto world. The
measurement of 12 bits of security is, on the other hand, really a measurement of the
computational complexity of the task of the hash. It is unclear that a bit of the pass phrase
security measurement is equal to a bit of the computational effort (the ratio is probably differer
with different processor architectures), so simple addition of these two measurements cannot
be done.

SuggestedRemedy

Delete the sentence. Alternatively, change the sentence to, "A pass-phrase typically has abo
2.5 bits of cryptographic entropy per character, while the pass-phrase mapping converts the
pass-phrase into a key requiring quite a bit of computational effort"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Delete the sentence "A pass-phrase typically has
about 2.5 bits of security per character, so the pass-phrase mapping converts an n octet
password into a key with about 2.5n + 12 bits of security." Replace the sentence immediately
following this with "Keys derived from the pass phrase provide relatively low levels of security,
especially with keys generated form short passwords, since they are subject to dictionary
attack." Editor included in draft 1.1 in H.4.1.

Cl **H**   *SC* **H.6**   *P* **0**   *L* **0**   *MyBallot #* 400
LEMBERGER, URIEL

Comment Type   **E**   *Comment Status* **D**

Table H.3 is confusing Does the 04 05 in second raw belongs to description #1?

SuggestedRemedy

Clarify the table, combine raw 1,2 in column 2.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Move the 04 05 to the first row and delete the second row. Editor
included in draft 1.1 in H.6.1.

Cl **H**   *SC* **H.7.1**   *P* **0**   *L* **0**   *MyBallot #* 587
Cam-Winget, Nancy

Comment Type   **T**   *Comment Status* **D**

The test vectors use the incorrect nonce lengths (20 whereas they should be 23).

SuggestedRemedy

Stretch the nonces to be as required for 802.11i (e.g. 32 octets).

For the Anonce, use: {0xe0, 0xe1, 0xe2, 0xe3, 0xe4, 0xe5, 0xe6, 0xe7, \
            0xe8, 0xe9, 0xf0, 0xf1, 0xf2, 0xf3, 0xf4, 0xf5, \
            0xf6, 0xf7, 0xf8, 0xf9, 0xfa, 0xfb, 0xfc, 0xfd, \
            0xfe, 0xff, 0x00, 0x01, 0x02, 0x03, 0x04, 0x05}
For the SNonce, use: {0xc0, 0xc1, 0xc2, 0xc3, 0xc4, 0xc5, 0xc6, 0xc7, \
            0xc8, 0xc9, 0xd0, 0xd1, 0xd2, 0xd3, 0xd4, 0xd5, \
            0xd6, 0xd7, 0xd8, 0xd9, 0xda, 0xdb, 0xdc, 0xdd, \
            0xde, 0xdf, 0xe0, 0xe1, 0xe2, 0xe3, 0xe4, 0xe5}

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in H.7.1.

Cl **H**   *SC* **H.7.1.1**   *P* **0**   *L* **0**   *MyBallot #* 588
Cam-Winget, Nancy

Comment Type   **T**   *Comment Status* **D**

Using the correct test vectors, the TK needs to be updated.

SuggestedRemedy

The TK is now: b2 36 0c 79 e9 71 0f dd
 58 be a9 3d ea f0 65 99

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in H.7.1.1.

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   7/6/2005 10:15:59 AM

Page 97 of 118
Cl **H**   *SC* **H.7.1.1**

Submission   Bob O'Hara, Cisco Systems

Cl **H**   *SC* **H.7.1.2**   *P* **0**   *L* **0**   *MyBallot #* 589

Cam-Winget, Nancy

Comment Type   **T**   *Comment Status*   **D**

Using the correct test vectors, the Keys need to be updated.

SuggestedRemedy

KCK = 37 9f 98 52 d0 19 92 36
 b9 4e 40 7c e4 c0 0e c8
KEK = 47 c9 ed c0 1c 2c 6e 5b
 49 10 ca dd fb 3e 51 a7
TK = b2 36 0c 79 e9 71 0f dd
 58 be a9 3d ea f0 65 99
 db 98 0a fb c2 9c 15 28
 55 74 0a 6c e5 ae 38 27

Authenticator Tx Key = db 98 0a fb c2 9c 15 28
Supplicant Tx Key = 55 74 0a 6c e5 ae 38 27

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in H.7.1.2.

Cl **I**   *SC* **I.**   *P* **0**   *L* **0**   *MyBallot #* 520

Engwer, Darwin

Comment Type   **TR**   *Comment Status*   **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **I**   *SC* **I.**   *P* **0**   *L* **0**   *MyBallot #* 637

Inoue, Yasuhiko

Comment Type   **E**   *Comment Status*   **D**

MPHPT (Ministry of Public Management, Home, Post and Telecommunication) has changed its English name to MIC (Ministry of Internal Affairs and Communications)

SuggestedRemedy

Please change "MPHPT" to "MIC"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in 15.4.7.1, 18.4.6, 18.4.6.1, 18.4.6.8, 18.4.7.1, 19.4.1, and throughout Annex I and J.

Cl **J**   *SC* **J.**   *P* **0**   *L* **0**   *MyBallot #* 521

Engwer, Darwin

Comment Type   **TR**   *Comment Status*   **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **J**   *SC* **J.**   *P* **0**   *L* **0**   *MyBallot #* 401

LEMBERGER, URIEL

Comment Type   **ER**   *Comment Status*   **D**

The document is inconsistant, for a,b,g ammendmends the informative information regarding regulatory requirement is part of the subclauses 15,18,19 while j ammendmend is only an annex and the regulatory requiments are seperated as informative and put in annex I.

SuggestedRemedy

Move relative regulatory references to annex J

Proposed Response   *Response Status*   **W**

PROPOSED REJECT. Such a restructuring of the document would introduce difficulties in determining that no normative changes were made. This would also affect the MIBs for these PHYs and would affect interoperability.

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

7/6/2005 10:15:59 AM

Page 98 of 118
Cl **J**   *SC* **J.**

Submission   Bob O'Hara, Cisco Systems

Cl **J**   *SC* **J.**   *P* **0**   *L* **0**   *MyBallot #* 638

Inoue, Yasuhiko

Comment Type **E**   *Comment Status* **D**

MPHPT (Ministry of Public Management, Home, Post and Telecommunication) has changed its English name to MIC (Ministry of Internal Affairs and Communications)

SuggestedRemedy

Please change "MPHPT" to "MIC"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment #637 for editorial resolution.

Cl **J**   *SC* **J.1**   *P* **0**   *L* **0**   *MyBallot #* 402

LEMBERGER, URIEL

Comment Type **TR**   *Comment Status* **D**   *ask Jan*

To which regulatory class belongs Ch 165 in the US?

SuggestedRemedy

Add this channel to the table

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The OFDM PHY is not defined for the ISM band, only for the U-NII bands. An entirely new regulatory class would be required for this purpose.

Cl **J**   *SC* **J.1**   *P* **0**   *L* **0**   *MyBallot #* 403

LEMBERGER, URIEL

Comment Type **TR**   *Comment Status* **D**   *ask Jan*

To which regulatory class belongs Ch 100-140 in the US?

SuggestedRemedy

Add these channels to the table

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Add a row in Table J.1:
4 | 5 | 20 | 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 | 200 | 1 | 1

Change 4-255 in the last row to 5-255.

Editor included in draft 2.0 in J.1 Table J.1.

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 485

Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**

Figure K1 is wrong, should not show AID 0 pointing to two bits, only one. In general, figure K1 should be made to agree with the example 1 figure in doc 11-05-0069-02

SuggestedRemedy

Delete the angled AID 0 notation line.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Correct the figure as noted. Editor removed angle arrow. Editor included in draft 1.1 in K.2 Figure K1.

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 488

Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**

Sample code: Build_TIM (): The second for() loop has a test condition "i > 0"; this is wrong the loop should terminate at one, since AID 0 is never used.

SuggestedRemedy

Change "(i > 0)" to "(i > 1)".

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter. Nothing for the editor to resolve.

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 486

Engwer, Darwin

Comment Type **TR**   *Comment Status* **D**

Figure K2 is wrong, should not show AID 0 pointing to two bits, only one. In general, figure K2 should be made to agree with the example 2 figure in doc 11-05-0069-02

SuggestedRemedy

Delete the angled AID 0 notation line.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Correct the figure as noted. Editor removed angle arrow. Editor included in draft 1.1 in K.2 Figure K2.

The value for B0 in the second byte should be zero in figure K2. Editor included in draft 2.0 in K.2 Figure K2.

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

7/6/2005 10:15:59 AM

Page 99 of 118
Cl **K**   *SC* **K.**

Submission   Bob O'Hara, Cisco Systems

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 522

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No incosistencies were identified by the commenter or the task group

---

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 484

Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**

use spaces rather than tabs to make the source code indents line up correctly

SuggestedRemedy

see new submission 11-05-0069-03, which inclues all my requested changes to the source code that are cited in my letter ballot comments.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor sees nothing in the source code to line up correctly. However, source code form 11-05-0069-04 was included. Editor included in draft 1.1 in K.3.

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 487

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

Sample code: Build_TIM (): The first for() loop has an initial statement of "i = 0"; this is wrong the loop should start at one, since AID 0 is never used.

SuggestedRemedy

Change "for (i = 0;" to "for (i = 1;".

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter. Nothing for the editor to resolve.

Cl **K**   *SC* **K.**   *P* **0**   *L* **0**   *MyBallot #* 489

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

Sample code: Update_VirtualBitMap(): It is illegal to try to set AID 0 since that value is never used. The function should validate the incoming paramters to ensure this condition.

SuggestedRemedy

Place the bulk of the operational lines of the function within a conditional block as follows: "if ((aid > 0) && (aid < AID_SIZE))".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Source code form 11-05-0069-04 was included. Editor included in draft 1.1 in K.3.

Cl **K**   *SC* **K.; clause K.1; page 94**   *P* **0**   *L* **0**   *MyBallot #* 345

Hillman, Garth

Comment Type   **E**   *Comment Status* **D**

typo

SuggestedRemedy

a the -> a

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in K.1.

Cl **K**   *SC* **K.1**   *P* **0**   *L* **0**   *MyBallot #* 267

Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**

extra "a" in "encoding a the Partial"

SuggestedRemedy

edit

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate of #345. See #345 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

7/6/2005 10:15:59 AM

Page 100 of 118
Cl **K**   *SC* **K.1**

Submission   Bob O'Hara, Cisco Systems

Cl **K**   *SC* **K.2**   *P* **0**   *L* **0**   *MyBallot #* 605
Reuss, Edward

Comment Type **E**   *Comment Status* **D**
The term "broadcasts and multicasts" is too colloquial. Elsewhere, the term "broadcast" was changed to "wildcard"

SuggestedRemedy
Change all instances of "broadcasts and multicasts" to "broadcast and multicast packets".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. 802.11 deals only in MSDUs, not packets. Change "broadcasts and multicasts" to "broadcasts and multicast MSDUs". (Note that the cited "wildcard" change is a separate, unrelated matter that has nothing to do with broadcast/multicast frames/MSDUs/packets.) Editor included in draft 1.1 in K.2.

Cl **K**   *SC* **K.2**   *P* **0**   *L* **0**   *MyBallot #* 266
Karcz, Kevin

Comment Type **E**   *Comment Status* **D**
"inforamtion" is mispelled

SuggestedRemedy
edit

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in K.2.

Cl **K**   *SC* **K.2**   *P* **0**   *L* **0**   *MyBallot #* 606
Reuss, Edward

Comment Type **E**   *Comment Status* **D**
Poor syntax - "in AP"

SuggestedRemedy
Change all instances of "in AP" to "in the AP".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included 3 times in draft 1.1 in K.2.

Cl **K**   *SC* **K.2**   *P* **0**   *L* **0**   *MyBallot #* 585
McCann, Stephen

Comment Type **E**   *Comment Status* **D**
typo in second paragraph

SuggestedRemedy
change "inforamtion" to "information"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of #266. See #266 for editorial resolution.

Cl **K**   *SC* **K.3**   *P* **0**   *L* **0**   *MyBallot #* 230
Mike, Moreton

Comment Type **TR**   *Comment Status* **D**
"#if 0", "#if 1" - these just look silly in example code.

SuggestedRemedy
Pass a parameter to the program indicating which test you want to run.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Replace the sample source code in 802.11REV-ma-D1.0 with the updated code in doc 11-05-0069-04. Editor included in draft 1.1 in K.3.

Cl **K**   *SC* **K.3**   *P* **0**   *L* **0**   *MyBallot #* 229
Mike, Moreton

Comment Type **TR**   *Comment Status* **D**
If you must define new names for standard C constructs, it would be wise to use ones that aren't as vague as "BYTE" and "WORD" - after all we don't use byte elsewhere in the document for that reason.

SuggestedRemedy
"uint8" and "uint16" seem to be fairly common.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Replace the sample source code in 802.11REV-ma-D1.0 with the updated code in doc 11-05-0069-04. Editor included in draft 1.1 in K.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   7/6/2005   10:15:59 AM

Page 101 of 118
Cl **K**   *SC* **K.3**

Submission   Bob O'Hara, Cisco Systems

Cl **K**   *SC* **K.3**   *P* **0**   *L* **0**   *MyBallot #* 268
Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**
   misspellings in "no efficienty or appropirateness"

SuggestedRemedy
   edit

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Editor included in draft 1.1 in K.3.

Cl **K**   *SC* **K.3**   *P* **0**   *L* **0**   *MyBallot #* 608
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**
   The C language #define statements are not formatted correctly.

SuggestedRemedy
   Change "ADD_TIM_BIT0" to "ADD_TIM_BIT 0", "REMOVE_TIM_BIT1" to
   REMOVE_TIM_BIT 1", "TIM_ELEMENT_ID5" to "TIM_ELEMENT_ID 5",
   "TIM_BASE_SIZE3" to "TIM_BASE_SIZE 3", "AID_SIZE2008" to "AID_SIZE 2008",
   "VBM_SIZE251" to "VBM_SIZE 251".

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Replace the sample source code in 802.11REV-ma-D1.0 with the
   updated code in doc 11-05-0069-04. Editor included in draft 1.1 in K.3.

Cl **K**   *SC* **K.3**   *P* **0**   *L* **0**   *MyBallot #* 607
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**
   Multiple spelling and syntax errors

SuggestedRemedy
   Change "efficiency or appropirateness for actual implementation" to "efficiency or
   appropriateness of the actual implementation".

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Duplicate with #268. See #268 for editorial resolution.

Cl **L**   *SC* **L.**   *P* **0**   *L* **0**   *MyBallot #* 101
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
   Annex L uses the term "Portal integration" and "integration function" when it should use
   "Integration Service" as defined previosuly (see 3.57, 5.2)

SuggestedRemedy
   Replace the text "Portal integration" and "integration function" in Annex L by "Integration
   Service"

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Changes are in document 11-05-0257-04-0apf. Editor included in
   draft 1.1 in Annex L.

Cl **L**   *SC* **L.**   *P* **0**   *L* **0**   *MyBallot #* 523
Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**
   After the combination of the base standard, the subsequent ammendments and more focused
   individual changes, there remain unresolved inconsistencies between the text in this clause a
   other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy
   Resolve the inconsistencies.

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

Cl **L**   *SC* **L.**   *P* **0**   *L* **0**   *MyBallot #* 147
Visscher, Bert

Comment Type   **TR**   *Comment Status* **D**
   The translation of Ethernet type encoded and LLC encoded tagged frames is often the source
   of interoperability issues but is unfortunately not spelled out in the tables L.2 and L.3

SuggestedRemedy
   Add tagged frame translation in tables L.2 and L.3

Proposed Response   *Response Status* **W**
   PROPOSED ACCEPT. Added examples to both tables that clarify the expected
   encapsulation. See document 11-05-0257-04-0apf. Editor included in draft 1.1 in Annex L.

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   7/6/2005   10:15:59 AM

Page 102 of 118
Cl **L**   *SC* **L.**

Submission   Bob O'Hara, Cisco Systems

Cl **L**   *SC* **L.**   *P* **0**   *L* **0**   *MyBallot #* 231
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
The title and introduction to this annex are incorrect. It does not describe the integration
function or portal - it describes the 802.1H selective translation. While a portal may include an
802.1H translation function there is no need for it to do so, and 802.1H selective translations
may also take place in STAs.

SuggestedRemedy
Replace all references to integration and portal in this annex with "IEEE Std. 802.1H-1997
(ISO/IECTR11802-5:1997) translation function"

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The commenter is mistaken. The purpose of the annex is to
recommend the behavior of a Portal. A STA need not translate MSDUs at all. It would be
advisable to represent their format in the same way as a Portal would, but this is not a
requirement. Moreover, this Recommended Practice does not simply recommend 802.1H, as
most vendors use an 802.11-specific STT, rather than the one suggested in Annex A of 802.1

Cl **L**   *SC* **L.; clause L.1; page 947** *P* **0**   *L* **0**   *MyBallot #* 346
Hillman, Garth

Comment Type   **E**   *Comment Status* **D**
typo

SuggestedRemedy
of of -> of

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in L.1.

Cl **L**   *SC* **L.1**   *P* **0**   *L* **0**   *MyBallot #* 269
Karcz, Kevin

Comment Type   **E**   *Comment Status* **D**
"of of a WLAN system that includes a portal integration the WLAN"
should be
"of a WLAN system that includes a portal integration of the WLAN"

SuggestedRemedy
edit

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Duplicate of #306. See #306 for editorial resolution.

Cl **L**   *SC* **L.1**   *P* **0**   *L* **0**   *MyBallot #* 111
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
missing word û should be ôàportal integration of the WLANàö

SuggestedRemedy
correct

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in L.1.

Cl **L**   *SC* **L.2**   *P* **0**   *L* **0**   *MyBallot #* 112
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
foot note 30 is interesting historically but not useful to the content of the annex

SuggestedRemedy
remove footnote

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Changed "NTI STT" to "802.11 Integration Service STT" to clarify its
role. Editor included in draft 1.1 in L.2.

Cl **L**   *SC* **L.2**   *P* **0**   *L* **0**   *MyBallot #* 413
Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**
"It is recommended that any WLAN system that logically incorporates a portal integrating the
WLAN system with an Ethernet V2.0/IEEE 802.3 LAN use the procedures defined in IEEE Std
802.1H-1997 (ISO/IEC TR11802-5:1997), with the 2-entry Selective Translation Table shown
in Table L.1, to perform the Integration Function.." Note the two periods at the end of this
sentence.

SuggestedRemedy
Delete one of the periods.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor included in draft 1.1 in L.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   7/6/2005 10:15:59 AM

Page 103 of 118
Cl **L**   *SC* **L.2**

Submission   Bob O'Hara, Cisco Systems

Cl **L**   *SC* **L.2**   *P* **0**   *L* **0**   *MyBallot #* 232
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

These changes are not specific to 802.11 - they are generally applicable to all 802.1H implementations. If the changes are left in this document readers will not know which document to select for details of 802.1H - 802.1H itself or (bizarrly) 802.11. These changes a an infringement of TGma's PAR.

SuggestedRemedy

Delete clause L.2 and forward it as a liaison to 802.1.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. This recommended practice differs from 802.1H because it uses a different STT. This Annex recommends a widespread practice already implemented by many 802.11 implementations. The use of a different STT, together with the translation rules for using that table defined in 802.1H is completely unambiguous in the format presented here.

Cl **L**   *SC* **L.3**   *P* **0**   *L* **0**   *MyBallot #* 414
Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**

"Table L.2 shows the encapsulation example, and Table L.3 shows the decapsulation example..." Do we really want three periods (or an elipse) at th eend of this sentence?

SuggestedRemedy

Use a single period.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in L.3.

Cl **L**   *SC* **L.3**   *P* **0**   *L* **0**   *MyBallot #* 233
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

There is no 802.11 specific information in this clause - it is purely an example of how to implement 802.1H and so should be in that document.

SuggestedRemedy

Delete clause L.3 and forward it as a liaison to 802.1.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. A Portal is not an 802.1D bridge, because (a) the DS is not itself an 802 LAN, (b) it is permissible for a conformant 802.11 ESS to be transparent to Bridge PDUs, and (c) the portal abstraction deliberately hides the details of reassociation from a bridge. Requiring a Portal to be a bridge would render many systems non-compliant for no readily-evident reason.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 122
Bagby, David

Comment Type   **ER**   *Comment Status* **D**

Section M needs a spell check = example ôextendesö and ôEnhancmentsö û spell check & correct as necessary.

SuggestedRemedy

run spell check & correct errors

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in Annex M.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 117
Bagby, David

Comment Type   **ER**   *Comment Status* **D**

Edit 1: The core IEEE 802.11 conceptual definitions that surround the AP (refer to Clause 5) are abstract (and can sometimes also cause some confusion), but they are crafted to do so while maintaining the stated goal of flexibility and and hence serve to allow the adaptation an extension of the standard in a wide variety of ways.

SuggestedRemedy

Change as suggested

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor included in draft 1.1 in M.1 with additional editing.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 490
Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**

The proportions are wrong on figure M3

SuggestedRemedy

Repaste the figure from the source document (11-05-0120-09)

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor has redrawn figures and reimported with improved text size and proportion to fit on A4.

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   7/6/2005 10:15:59 AM

Page 104 of 118
Cl **M**   *SC* **M.**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 94

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

This section does not add clarity. Whilst perhaps useful in a book on 802.11, it is better left out of here. It also replicates section 5 and is debatable in its accuracy.

SuggestedRemedy

The definition in 3.2 is sufficient to define an AP, remove the new Annex M.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Annex M is completely informative material.
The APF description is intended (only) as an abstract model to help in "systems" level
work when thinking of or working with 802.11 technology.
The value is helping people to formulate and hold in their mind a clear and consistent model
of the functions of an 802.11 device (in general) and esp. an AP, including the entities usually
found in typical device implementations.
Annex M is the primary result of the work of the AP Functionality (APF) chair's ad hoc cmtee.
The APF cmtee was formed as a result of requests from several others groups (both within 80
and outside 802) to clarify the AP functionality. Refer to submissions 11-04-0544-00-0wng-ap
functional-needs-capwap.ppt and 11-04-0481-03-0wng-thoughts-on-ap-functional-
descriptions.ppt and 11-04-0540-01-0wng-need-ap-functional-descriptions.ppt and 11-04-060
00-0wng-ap-functional-descriptions-update.ppt which articulate the need for the APF group an
the results it will generate.
Anticipated users of the new descriptive material are: IETF CAPWAP, 802.1X, 802.11 TGs
and 802.21.
The purpose of Annex M is to add clarity to the standard in the form of addition informative
descriptions. In reviewing the APF output document (11-05-0120-09) with various parties
everyone's understanding of the 802.11 architecture was improved. Annex M thus succeeds
providing a clearer mental mode for people to better understand 802.11. Note that due to an
editoral compilation error, Annex M does not reflect the actual and full contents of the approve
submission 11-05-0120-09.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 617

Turner, Sandra

Comment Type   **E**   *Comment Status* **D**

05-120r9 Diagram Syntax notes are missing

SuggestedRemedy

Include 05/120r9 Diagram Syntax notes.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. The footnote text from 11-05-0120-09 is being adapted
into main body text. Editor included in draft 1.1 in Annex M for text introducing each figure.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 123

Bagby, David

Comment Type   **ER**   *Comment Status* **D**

Edit 7: The term ôfiltering dataö would read better in most places as ôdata filteringö.

SuggestedRemedy

change as suggested

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Use case action phrases work best when they start with a verb. Henc
the use of the term "filtering data".

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 491

Engwer, Darwin

Comment Type   **ER**   *Comment Status* **D**

Annex M makes reference to some terms from 802.11F, this requires a corresponding
annotation in Annex E.

SuggestedRemedy

Add a reference to 802.11F in Annex E.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor included in draft 1.1 in Annex E.

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

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 136

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

This annex provides very limited value given the large number of new terms and the semi-forn
specification language

SuggestedRemedy

Remove entire annex

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Annex M is completely informative material.
The APF description is intended (only) as an abstract model to help in "systems" level
work when thinking of or working with 802.11 technology.
The value is helping people to formulate and hold in their mind a clear and consistent model
of the functions of an 802.11 device (in general) and esp. an AP, including the entities usually
found in typical device implementations.
Annex M is the primary result of the work of the AP Functionality (APF) chair's ad hoc cmtee.
The APF cmtee was formed as a result of requests from several others groups (both within 80
and outside 802) to clarify the AP functionality. Refer to submissions
11-04-0544-00-0wng-ap-functional-needs-capwap.ppt and 11-04-0481-03-0wng-thoughts-on-
ap-functional-descriptions.ppt and
11-04-0540-01-0wng-need-ap-functional-descriptions.ppt and 11-04-0604-00-0wng-ap-
functional-descriptions-update.ppt
which articulate the need for the APF group and the results it will generate.
Anticipated users of the new descriptive material are: IETF CAPWAP, 802.1X, 802.11 TGs
and 802.21.
The purpose of Annex M is to add clarity to the standard in the form of additional informative
descriptions. In reviewing the APF output document (11-05-0120-09) with various parties,
everyone's understanding of the 802.11 architecture was improved. Annex M thus succeeds
providing a clearer mental model for people to better understand 802.11. Note that due to an
editorial compilation error, Annex M does not reflect the actual and full contents of the approve
submission 11-05-0120-09. The commenter is solicited to provide more detail as to the
changes (other than complete removal) that would be acceptable to the annex.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 119

Bagby, David

Comment Type   **ER**   *Comment Status* **D**

Edit 3: The primary functions of the WLAN System can be further characterized as a) Provid
LAN access 1) includes MU validation 2) includes moving data (between the MUs and the LA
includingwith a special data movement function called ôfiltering dataö

SuggestedRemedy

Change as suggested for wording - replacve formatting that had to be lost to paste edits into
this broken spread sheet.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. "with a special data movement" should be subordinate
to item 2. This item 2a was lost in the editorial compliation process.

Changing item 2a phrasing from "with" to "includes" has undesired implications. Filtering Dat
is a more specific form of Move Data, as indicated by the hollow triangle terminated line in
the diagram. Therefore changing 2a from "with" to "including" would alter the sematics in an
undesired manner.

Change
   "2) includes moving data (between the MUs and the LAN) with a special data movement
function called filtering data"
to
   "2) includes moving data (between the MUs and the LAN)
      2a) with a special data movement function called "filtering data""

Editor included in draft 1.1 in M.2 & M.4.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 120

Bagby, David

Comment Type   **ER**   *Comment Status* **D**

edit 4: Footer spelling problem: Corrections, Clarifications & Enhancments P802.11ma/D1.0

SuggestedRemedy

Correct

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor included in draft 1.1 in all headings. Not shown
with revision marks.

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   7/6/2005 10:15:59 AM

Page 106 of 118
Cl **M**   *SC* **M.**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 524

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

   After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause a other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

   Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

   PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task grou

---

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 417

Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**

   This annex mixes the use of "ACM STA" and "ACM_STA".

SuggestedRemedy

   Please pick one or the other, and stick with it.

Proposed Response   *Response Status* **W**

   PROPOSED ACCEPT. Editor has replaced ACM STA with ACM_STA. Editor included in draf 1.1 throughout Annex M.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 454

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

   This annex provides very limited value given the large number of new terms and the semi-forr specification language

SuggestedRemedy

   Remove entire annex

Proposed Response   *Response Status* **W**

   PROPOSED REJECT.

   This comment was WITHDRAWN by the commenter.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 234

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

   While I appreciate a lot of hard work went into this annex, I don't really understand the point. seems to be saying "For those of you who didn't understand section 5, how about we invent a whole new set of terminology and explain it again." and all that's likely to do is to increase the confusion.

SuggestedRemedy

   If there are valuable new concepts in this annex then incorporate them into clause 5, and dele the rest of this annex.

Proposed Response   *Response Status* **W**

   PROPOSED REJECT.
   Annex M is completely informative material.
   The APF description is intended (only) as an abstract model to help in "systems" level work when thinking of or working with 802.11 technology.
   The value is helping people to formulate and hold in their mind a clear and consistent model of the functions of an 802.11 device (in general) and esp. an AP, including the entities usually found in typical device implementations.
   Annex M is the primary result of the work of the AP Functionality (APF) chair's ad hoc cmtee. The APF cmtee was formed as a result of requests from several others groups (both within 80 and outside 802) to clarify the AP functionality. Refer to submissions 11-04-0544-00-0wng-ap functional-needs-capwap.ppt and 11-04-0481-03-0wng-thoughts-on-ap-functional-descriptions.ppt and 11-04-0540-01-0wng-need-ap-functional-descriptions.ppt and 11-04-060 00-0wng-ap-functional-descriptions-update.ppt which articulate the need for the APF group ar the results it will generate.
   Anticipated users of the new descriptive material are: IETF CAPWAP, 802.1X, 802.11 TGs and 802.21.
   The purpose of Annex M is to add clarity to the standard in the form of addition informative descriptions. In reviewing the APF output document (11-05-0120-09) with various parties everyone's understanding of the 802.11 architecture was improved. Annex M thus succeeds providing a clearer mental mode for people to better understand 802.11. Note that due to an editoral compilation error, Annex M does not reflect the actual and full contents of the approve submission 11-05-0120-09.

   All of the terms used in annex M except for ACM_STA, MU, and AU are terms that are define in the existing standard. The usage of those terms is completely consisten with their definition and meaning. What Annex M does is to clarify those terms with respect to each other. Even though ACM_STA and MU are new terms they do not define anything new. They just give a name to existing modes of STA operation that then allow those modes to be easily and concisely referenced. The new term AU is cited only in passing as an example product instantiation, only in order to provide a basis for the abstract descriptions.

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   7/6/2005 10:15:59 AM
SORT ORDER: Clause, Subclause, page, line

Page 107 of 118
Cl **M**   *SC* **M.**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 118

Bagby, David

Comment Type   **TR**   *Comment Status* **D**

Edit 2: <just before figure M2> An infrastructure WLAN system contains one or more APs and zero or more portals in addition to the DS.

SuggestedRemedy

Change as suggested

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in M.2.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 598

Newton, Paul

Comment Type   **E**   *Comment Status* **D**

In submission 11-05-0120 the diagrams referenced in Annex M had footnotes explaining in detail the UML terminology giving a clearer understanding of each UML diagram.

SuggestedRemedy

Add the footnotes from submission 11-05-0120 to annex M.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate with #607. See #607 for editorial resolution.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 121

Bagby, David

Comment Type   **ER**   *Comment Status* **D**

Edit 5: System Configuratione the system <also change term in figures>

SuggestedRemedy

change as suggested

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Declined. Use case action phrases work best when they start with a verb. Changing to "System configuration" would make it a noun and lose the sense of action.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 492

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

In compiling the 802.11REV-m-aD1.0 draft the Annex M page footnotes from source documer 11-05-0120-09 were omitted. These notes need to be included because they are crucial to th effective communication of the diagrams and the material within to the reader.

SuggestedRemedy

Add the missing footnotes, or add descriptive in-line text to explain/ introduce the UML diagra syntax to the reader.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate with #607. See #607 for editorial resolution.

Cl **M**   *SC* **M.**   *P* **0**   *L* **0**   *MyBallot #* 362

Black, Simon

Comment Type   **E**   *Comment Status* **D**

Editorial on the basis that this is informative text. In the text above figure M2 I would say that provision of connectivity between MUs is not a secondary function. Also in this annex care is required when using 'LAN'. I read this as non-IEEE802.11 LAN - if this is the case it might be useful to define it as so.

SuggestedRemedy

Consider rewording for the first point. For the second: throughout this secton I would suggest looking far all occurences of LAN and clarifying (by perhaps defining the term to mean nonIEEE802.11 LAN). Sometimes LAN is used, others 'external LAN'.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. The comment is broekn into parts:

1. connectivity between MUs is not a secondary function. Declined. Providing MUs with acces to each other is secondary because this is a natural outcome of providing the MUs with acces to the DS. Conceptually such traffic transits the AP, is forwarded to the DS, is returned to the same AP by the DS and then transmitted to the destination MU. Many AUs optimize this process by checking their local tables and U-turning such traffic directly within the AU. But conceptually this traffic is still traversing the DS. Therefore this portion of your comment is declined.

2. inconsistent LAN references. Accepted.
Change all Annex M LAN references from "LAN" (whole word only) to "non-IEEE 802.11 LAN"

Editor included in draft 1.1 throughout Annex M.

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   7/6/2005 10:16:00 AM

Page 108 of 118
Cl **M**   *SC* **M.**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M. page 949**   *P* **0**   *L* **0**   *MyBallot #* 339
Hillman, Garth

Comment Type   **E**   *Comment Status* **D**
    Thank you. I recommend that a first time reader start here and then go back to the beginning.

SuggestedRemedy
    In Chapter 1 add a Clause entitled Organization. In that clause 'briefly' describe how and why
    the standard is organized as it is (i.e., a tiny bit of history) and suggest that a good place to sta
    might be Annex M and then proceed with Chapter 2 etc.

Proposed Response   *Response Status* **W**
    PROPOSED REJECT.

Cl **M**   *SC* **M.1**   *P* **0**   *L* **0**   *MyBallot #* 113
Bagby, David

Comment Type   **TR**   *Comment Status* **D**
    amusing language û I suspect the phrase ôàbut they do soàö was intended to refer to the
    definitions being abstract and not to the definitions being confusing û right?

SuggestedRemedy
    Reword to eliminate the ambiguity of reference.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Change "but they do so while maintaining the stated goal of flexibility"
    to "but the Clause 5 definitions maintain flexibility".

    Editor included similar wording in draft 1.1 in M.1.

Cl **M**   *SC* **M.1**   *P* **0**   *L* **0**   *MyBallot #* 415
Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**
    "At times there is some confusion surrounding the term AP and the relation of that term to the
    AP functions and common implementations of AP devices." I think the sentence would be
    more precise if the first use of AP is surrounded by quotes.

SuggestedRemedy
    Change to: At times there is some confusion surrounding the term "AP" and the relation of tha
    term to the AP functions and common implementations of AP devices.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in M.1.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 469
Yang, Lily

Comment Type   **E**   *Comment Status* **D**
    "Infrastructure mobile STAs operate in infrastructure BSS mode. I.e. they are the users of an
    AP.": use "Infrastructure mobile STAs operate in infrastructure BSS mode, i.e. they are the
    users of an AP."

SuggestedRemedy
    use the suggested text.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Editor included in draft 1.1 in M.2.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 450
Myles, Andrew

Comment Type   **E**   *Comment Status* **D**
    "I.e." should be "i.e"

SuggestedRemedy
    Correct

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Duplicate with #469. See #469 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 **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 116

Bagby, David

Comment Type   **TR**   *Comment Status* **D**

I find the use of the people symbols distracting as none of the entities shown are commonly peopleà

SuggestedRemedy

just use the terms (STA, DS) with out the people outline in the picture.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The syntax used in the diagrams is not arbitrary.
The diagrams are UML-style Use Case and Object Model Diagrams. In such diagrams the proper syntax is to show entities that are outside the system boundary box as stick people.
The reason is that these external entities represent the actors (formal term), or users, of the system. Since they are outside the system boundary, their internal behavior is not described. Instead, references to the external entities are limited to descriptions of their interactions with, and expectations of, the system, which is accomplished by describing the use cases and scenarios (i.e. functions)
of the system along with a decomposition of the entities (objects and behaviors) that provide that functionality.
That said, not all readers will recognize or know the syntax of the diagram so diagram syntax notes were included.
The submission from which Annex M was created included footnotes describing the diagram syntax.
Due to an editoral compilation error Annex M does not reflect the actual and full contents of th approved submission 11-05-0120-09.
The commenter is requested to review the original submission 11-05-0120-09 paying close attention to the page footnotes that describe the diagram syntax.

See #607 for editorial resolution.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 92

Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**

STA can also act in a WDS mode, and although not clearly defined by 802.11-1999 it is implie by the existance of the A4 frame fromat. It could be argued that sucha WDS STA can act in a ad-hoc-like way (i.e. no association, no security), a infrastructure-like way and a AP-like way (e.g. usign WEP or RSN).

SuggestedRemedy

Add WDS modes to list and describe.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is no such thing as WDS mode, only a four address mechanism, the use of which is not currently defined, therefore it cannot be described.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 115

Bagby, David

Comment Type   **TR**   *Comment Status* **D**

ôThe connection lines in a use case diagramô û whatÆs a connection line? The red horizonta lines?

SuggestedRemedy

change language or label the lines or ?

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The syntax used in the diagrams is not arbitrary.
The diagrams are UML-style Use Case and Object Model Diagrams.
That said, not all readers will recognize or know the syntax of the diagram so diagram syntax notes were included.
The submission from which Annex M was created included footnotes describing the diagram syntax.
Due to an editoral compilation error Annex M does not reflect the actual and full contents of th approved submission 11-05-0120-09.
The commenter is requested to review the original submission 11-05-0120-09 paying close attention to the page footnotes that describe the diagram syntax.

See #607 for editorial resolution.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 114

Bagby, David

Comment Type   **TR**   *Comment Status* **D**

The reintroduction of the term Ad-hic is confusing. This is an example of the reason the standard uses the term IBSS û because an infrastructure networks can also be ôad-hocö û witness the sale of small ôtravel apö devices. It would be better not to attempt to redefine ad-hoc from itÆs english meaning into the equivalent of ônot infrastructureö.

SuggestedRemedy

Rewrite as needed to avoid this problem.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The term "ad hoc" is (and has been for some time) defined elsewhere in the standard and referenced as needed. See clauses 1.2, 3.4, 5.2.1, 5.2.3.1 among many others.

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

7/6/2005 10:16:00 AM

Page 110 of 118
Cl **M**   *SC* **M.2**

Cl **M** *SC* **M.2**   *P* **0**   *L* **0** *MyBallot #* 96

Oakes, Ivan

Comment Type **TR** *Comment Status* **D**

11e uses the term "Non-AP STA" rather than MU, introduction of the term "MU" is just going to
confuse.

SuggestedRemedy

Replace MU by "Non-AP STA" in Annex M.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The Venn diagram grouping of "non-AP STA" is different from what is desired here, since non
AP STA includes IBSS (or ad hoc mode) STAs. The specific terms used in Annex M are
designed to be very specific and clear.

Cl **M** *SC* **M.2**   *P* **0**   *L* **0** *MyBallot #* 97

Oakes, Ivan

Comment Type **TR** *Comment Status* **D**

There is no "Access Control Mode" just a STA that accepts association.

SuggestedRemedy

Remove use of Access control mode STAs and replace it by text that says "STAs that accept
association".

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The STA within an AP operates quite differently than an infrastructure
mode or ad hoc mode mobile STA.
It does much more than just accept associations. For example, an ACM_STA sends beacons
which instantiate
and create the timing for the BSS - this is quite different from how beacons are created in an
IBSS.
Please refer to clause M.3 for a description of the primary functions of an ACM_STA. The
commenter is also advised to peruse the source document from which Annex M was distilled.
The source document is 11-04-1225-08. That spreadsheet enumerates all the functions of an
ACM_STA, not just the primary functions. Also, 11-04-1225-08 compares and contrasts all the
STA functions across the various types of STAs.

Cl **M** *SC* **M.2**   *P* **0**   *L* **0** *MyBallot #* 416

Chaplin, Clint

Comment Type **TR** *Comment Status* **D**

I forsee problems with this definition: "The mobile STAs are the STA entities that are ordinarily
moving around, but may also be in a fixed location. The mobile adjective prefix often helps in
visualizing the type of STA under discussion." There are already APs that move, and with
active meshing, the mobility of APs is going to increase.

SuggestedRemedy

0

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
That is why the term description specification specifically identifies an MU as an "infrastructure
mode mobile STA".

Cl **M** *SC* **M.2**   *P* **0**   *L* **0** *MyBallot #* 470

Yang, Lily

Comment Type **TR** *Comment Status* **D**

Figure M2: So WLAN system is not the same as ESS. WLAN system might be a superset of
ESS. Correct?

SuggestedRemedy

A bit more clarification of the terminilogies used in Annex M in relation of the terminologies us
in clause 5 would be helpful.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
"WLAN system" is defined in clause 3.122
This is a long standing definition present in the 802.11 standard since the 1997 edition.
The previous name assigned to this definition was "infrastructure", which was deemed to be to
general and difficult to differentiate from other uses of the word "infrastrucutre".
Hence the term was renamed to "WLAN system". The actual definition was unchanged.
Annex M then uses the "WLAN system" term in conjunction with corresponding diagrams
to accurately convey the same information.
An ESS does not include all the items in a WLAN system, for example it does not include the
DS, which is hierarchically above the BSSs. See the response to your other comment on that
same subject.

Change "it is helpful to refer to a more general case" to "it is helpful to discuss the abstract
case". Editor included in draft 1.1 in M.2.

Also, make identical change to definition of WLAN System, as is done in 3.122 (now 3.121).
Change "The WLAN System includes the DS, AP, the AP's station (STA) and portal entities."
to "The WLAN System includes the DS, AP, and portal entities." Editor included similar
wording in draft 1.1 in 1.22.

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   7/6/2005 10:16:00 AM

Page 111 of 118
Cl **M** *SC* **M.2**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 132

Myles, Andrew

Comment Type **E**   *Comment Status* **D**

"I.e." should be "i.e"

SuggestedRemedy

Correct

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Duplicate with #469. See #469 for editorial resolution.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 98

Oakes, Ivan

Comment Type **T**   *Comment Status* **D**

Figure M.4, The definition of a protal is the interworkign unit between the 802.11 and non-802.11 LAN segments. As The DS may or may not be 802.11, it may not even be a 802 network, then I think the position of the "Portal" in this figure is inaccurate, it is more accurate place it between the AP and DS. Further the defineition of an AP "An entity that has STA functionality and provides access to the distribution services" (3.2), means the AP logically contains both the STA and portal components and it not a connector between the two.

SuggestedRemedy

Remove Annex M as it is inaccurate.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The commenter is referred to the baseline descriptions in clause 5. Therein the placement of and function
of the portal is defined, both in text and diagrams. Annex M reflects this information in a consistent manner.

Cl **M**   *SC* **M.2**   *P* **0**   *L* **0**   *MyBallot #* 95

Oakes, Ivan

Comment Type **TR**   *Comment Status* **D**

The use of "mobile" just adds confusion

SuggestedRemedy

Remove the word "mobile" from within M.2 and references to it, e.g. paragraph after c) in m.2.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Acknowledged that the term mobile is somewhat arbitrary since a non AP station can be stationary and an AP can be mobile. Yet, in RF terms even a stationary no AP STA must be considered "mobile" at all times. The term mobile (and the distinction it implies) was added at the explicit request of
many of the initial reviewers of the material in order to help clarify the terms.

Cl **M**   *SC* **M.3**   *P* **0**   *L* **0**   *MyBallot #* 418

Chaplin, Clint

Comment Type **E**   *Comment Status* **D**

The sentence "Move data (between the MUs and the AP)" does not need the parenthesis.

SuggestedRemedy

Get rid of the parenthesis.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in M.2 & M.3.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 610

Reuss, Edward

Comment Type **E**   *Comment Status* **D**

Poor syntax - "to/ from"

SuggestedRemedy

Change "to/ from" to "to and from".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 453

Myles, Andrew

Comment Type **TR**   *Comment Status* **D**

The text refers to IAPP-ADD and IAPP-MOVE indications

However, these concepts are from 802.11F, which has very poor acceptance and may never become a non-trial recommended practice

SuggestedRemedy

Remove references to 802.11F concepts

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

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

7/6/2005 10:16:00 AM

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 133

Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

    "extendes" should be "extends"

SuggestedRemedy

    Correct

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 134

Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

    "notyfing" should be "notifying"

SuggestedRemedy

    Correct

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 609

Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

    Multiple spelling errors

SuggestedRemedy

    Change "extendes" to "extends" and "notyfing" to notifying".

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 451

Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

    "extendes" should be "extends"

SuggestedRemedy

    Correct

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 618

Turner, Sandra

Comment Type   **E**   *Comment Status* **D**

    The word "extends" is spelled incorrectly in M.4 a1

SuggestedRemedy

    Replace "extendes" with "extends"

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 452

Myles, Andrew

Comment Type   **E**   *Comment Status* **D**

    "notyfing" should be "notifying"

SuggestedRemedy

    Correct

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Editor included in draft 1.1 in M.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

7/6/2005 10:16:00 AM

Page 113 of 118
Cl **M**   *SC* **M.4**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 135

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

The text refers to IAPP-ADD and IAPP-MOVE indications

However, these concepts are from 802.11F, which has very poor acceptance and may never become a non-trial recommended practice

SuggestedRemedy

Remove references to 802.11F concepts

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. In Annex M it is better to reference something more generic. i.e. the updates come from other APs, but it is beyond the scope of Annex M to say exactly *how* that happens.

Therefore, change the text from:
"The AP may also receive access control updates from other APs in the form of IAPP-ADD ar IAPP-MOVE indications."
to:
"An AP may also receive access control updates from other APs in the form of inter access point notifications of MU association events and transitions."

Editor included in draft 1.1 in M.4.

Cl **M**   *SC* **M.4**   *P* **0**   *L* **0**   *MyBallot #* 611

Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

This sentence is difficult to read.

SuggestedRemedy

Change "adjustments based on notification from the APs of changes" to "adjustments, based on notification from the APs, of changes".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. The cited reference in clause M.5, not M.4.

Change
   "The DS map determines"
to
   "The DS's MU-to-AP map determines".
Change
   "adjustments based on notification from the APs of changes"
to
   "adjustments, which are based on notification from the APs, of changes"

Editor included in draft 1.1 in M.5.

Cl **M**   *SC* **M.6**   *P* **0**   *L* **0**   *MyBallot #* 586

Montemurro, Michael

Comment Type   **T**   *Comment Status* **D**

M.6 or another section must address Broadcast/Multicast traffic as well as unicast traffic. L2/L protocols such as ARP, DHCP are critical to operations in an IP network. Transmission of broadcast/multicast MSDUs are critical to AP functions.

SuggestedRemedy

Expand the description on portal and DS functions to address transmission of Broadcast/Multicast traffic.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Those are secondary funcitons driven by specific use case scenarios, i.e., more refined or specialized, or extended capabilities, that only apply in some situations. Annex N is a better place to address this comment.

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

7/6/2005 10:16:00 AM

Page 114 of 118
Cl **M**   *SC* **M.6**

Submission   Bob O'Hara, Cisco Systems

Cl **M**   *SC* **M.6**   *P* **0**   *L* **0**   *MyBallot #* 612

Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

Poor syntax - "to/from"

SuggestedRemedy

Change "to/from" to "to and from".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in M.6.

Cl **M**   *SC* **M.7**   *P* **0**   *L* **0**   *MyBallot #* 419

Chaplin, Clint

Comment Type   **E**   *Comment Status* **D**

The sentence fragment "Since transiting from a DS through a portal onto an integrated LAN, and then subsequently via another portal onto its DS is transparent," I am having problems parsing, because of comma placement.

SuggestedRemedy

Change to: "Since transiting from a DS through a portal onto an integrated LAN and then subsequently via another portal onto its DS is transparent,"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Editor included in draft 1.1 in M.7.

Cl **N**   *SC* **N.**   *P* **0**   *L* **0**   *MyBallot #* 458

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

There is little obvious value in this annex

SuggestedRemedy

Remove entire annex

Proposed Response   *Response Status* **W**

PROPOSED REJECT. As part of the AP Functional descriptions effort we were asked to add this information to the draft.

Cl **N**   *SC* **N.**   *P* **0**   *L* **0**   *MyBallot #* 525

Engwer, Darwin

Comment Type   **TR**   *Comment Status* **D**

After the combination of the base standard, the subsequent ammendments and more focused individual changes, there remain unresolved inconsistencies between the text in this clause and other clauses. This applies to this clause and all subclauses thereof.

SuggestedRemedy

Resolve the inconsistencies.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. No inconsistencies were identified by the commenter or the task group

Cl **N**   *SC* **N.**   *P* **0**   *L* **0**   *MyBallot #* 236

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

It's not clear how this SAP fits into the architecture.

SuggestedRemedy

Please supply an architecture diagram showing where it fits in.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Diagram from 5/262r2 will be added. Editor included diagram in draft 2.0 in clause N.1.

Cl **N**   *SC* **N.**   *P* **0**   *L* **0**   *MyBallot #* 140

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

There is little obvious value in this annex

SuggestedRemedy

Remove entire annex

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter. (dup)

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   7/6/2005 10:16:00 AM

Page 115 of 118
Cl **N**   *SC* **N.**

Submission   Bob O'Hara, Cisco Systems

Cl **N**   *SC* **N.**   *P* **0**   *L* **0**   *MyBallot #* 242
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
This interface can perfectly well be described in terms of the standard 802.1 M-UNITDATA primitives and the 802.11 MLME primitives. Why pick an incompatible API for no reason?

SuggestedRemedy
Change the text in this annex to re-use the indicated interfaces, or delete it entirely.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The DS SAP is unlike 802.1 M-UNITDATA or 802.11 MLME. The commentor is referred to the original submission (doc 5/262r2) and 802.11REV-ma--D1.1 to see where the DS SAP fits into the architecture.

Cl **N**   *SC* **N.**   *P* **0**   *L* **0**   *MyBallot #* 235
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
This annex should be part of section 6 (just like the interface to LLC)

SuggestedRemedy
See comment

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The DS SAP is not like the LLC interface. The commentor is referred to the original submission (doc 5/262r2) and 802.11REV-ma--D1.1 to see where the DS SAP fits into the architecture. The material is here in an annex because 802.11 does not define the DS, and hence this informative information belongs in an informative annex.

Cl **N**   *SC* **N.1**   *P* **0**   *L* **0**   *MyBallot #* 100
Oakes, Ivan

Comment Type   **TR**   *Comment Status* **D**
The definition of an AP (3.2) "An entity that has STA functionality and provides access to the distribution services" means an AP contrains the portal and the integration service. The AP does not interface to the portal. A portal is a SAP between the MAC and the Integration Service, it is not a module or unit. There is no AP-SAP, there is a MAC-SAP. Finally, the interface to the DS may be the SAP to some other MAC, this is not in scope, nor should it be. It is the job of the Integration Service, an "interworking unit" in classic protocol terminology, is map and convert the MAC-SAP to the DS-SAP, how it does this is also out of scope except as guidelines (e.g. Annex L). e.g. what if the DS is a GPRS network, there is no STA-NOTIFY.request in GPRS. The 802.11 spec should define the MAC-SAP no the DS-SAP, thus this Annex is not required.

SuggestedRemedy
Remove Annex N.

Proposed Response   *Response Status* **W**
PROPOSED REJECT. The assumption by the commenter that the AP contains both the portal and integration service is incorrect. See clause 5 for the description of the location of these items in the architecture.

Cl **N**   *SC* **N.1**   *P* **0**   *L* **0**   *MyBallot #* 614
Reuss, Edward

Comment Type   **E**   *Comment Status* **D**
Poor syntax - "and/or"

SuggestedRemedy
Change "and/or" to "and".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Duplicate with 613. See #613 for editorial resolution.

Cl **N**   *SC* **N.1**   *P* **0**   *L* **0**   *MyBallot #* 237
Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**
This clause is written in a very conversational style.

SuggestedRemedy
Please reword to be more consistent with the style used in other sections of the document.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Editor changed classification to editorial. Annex was reviewed and rewritten for style.

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

7/6/2005 10:16:00 AM

Page 116 of 118
Cl **N**   *SC* **N.1**

Submission   Bob O'Hara, Cisco Systems

Cl **N**   *SC* **N.1**   *P* **0**   *L* **0**   *MyBallot #* 613

Reuss, Edward

Comment Type   **E**   *Comment Status* **D**

    Poor syntax - "in/out"

SuggestedRemedy

    Change "in/out" to "in or out".

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT IN PRINCIPLE. Editor included in draft 1.1 in N.1

Cl **N**   *SC* **N.2.1.1**   *P* **0**   *L* **0**   *MyBallot #* 238

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

    As described, a received MSDU can be routed to LLC (via the MA-UNITDATA.indication primitive) or to the DS (via the DS-UNITDATA.request primitive). I think having "request" for one and "indication" for the other is inconsistent.

SuggestedRemedy

    Swap the request and indication.

Proposed Response   *Response Status* **W**

    PROPOSED REJECT.   DS-UNITDATA.request sends an SDU to the DS. DS-UNITDATA.indication accepts an SDU from the DS. All 802.11 SDUs that come out of the ACM_STA (via the MAC_SAP) use the MA-UNITDATA.indication to get the SDU to the AP. The AP then uses DS-UNITDATA.request to forward the SDU to the DS.

Cl **N**   *SC* **N.2.1.1.2**   *P* **0**   *L* **0**   *MyBallot #* 455

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

    It is not clear why the Source Type is useful

SuggestedRemedy

    Explain function of Source Type

Proposed Response   *Response Status* **W**

    PROPOSED REJECT.

    This comment was WITHDRAWN by the commenter. (dup)

Cl **N**   *SC* **N.2.1.1.2**   *P* **0**   *L* **0**   *MyBallot #* 240

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

    I don't believe the DS behaves any differently for an AP than it does for a portal. This view is supported by the lack of any described use of the "DestinationType" parameter. In any case, this sort of information should be provided by a management interface, not with every MSDU.

SuggestedRemedy

    Delete the "SourceType" parameter.

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT IN PRINCIPLE. Source type affects the handling of broadcast and multicast MSDUs. Add " A directed DSSDU from an AP or a portal is distributed through the DS to the corresponding AP or portal. A broadcast or multicast DSSDU from an AP is distributed to all APs and all portals, including the originating AP. A broadcast or multicast DSSDU from a portal is distributed to all APs and all portals, except the originating portal." to end of N.2.1.1.4. Editor included in draft 2.0 in N.2.1.1.4.

Cl **N**   *SC* **N.2.1.1.2**   *P* **0**   *L* **0**   *MyBallot #* 137

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

    It is not clear why the Source Type is useful

SuggestedRemedy

    Explain function of Source Type

Proposed Response   *Response Status* **W**

    PROPOSED ACCEPT. Source type affects the handling of broadcast and multicast MSDUs. See #240 for editorial resolution.

Cl **N**   *SC* **N.2.1.1.2**   *P* **0**   *L* **0**   *MyBallot #* 239

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

    Something of type "802.11 MSDU" does not contain (almost by definition) the parameters that accompany an MSDU when passed over another interface.

SuggestedRemedy

    List all the parameters.

Proposed Response   *Response Status* **W**

    PROPOSED REJECT. The DS carries 802.11 MSDUs. Rather than respecify that here we point to clause 6.2.1.1.2 for the complete definition there. If that definition changes this descriptions remains intact. Since the DS SAP connects to the MAC SAP through the AP the both have exactly the same parameters available.

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

7/6/2005 10:16:00 AM

Page 117 of 118
Cl **N**   *SC* **N.2.1.1.2**

Submission   Bob O'Hara, Cisco Systems

Cl **N**   *SC* **N.2.1.2.2**   *P* **0**   *L* **0**   *MyBallot #* 241

Mike, Moreton

Comment Type   **TR**   *Comment Status* **D**

The DS tells the recipient whether it's an AP or Portal??? Surely the recipient must already know this!

SuggestedRemedy

Delete the "DestinationType" parameter.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

See resolution to comment #138.

Cl **N**   *SC* **N.2.1.2.2**   *P* **0**   *L* **0**   *MyBallot #* 138

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

It is not clear why the Destination Type is useful

SuggestedRemedy

Explain function of Destination Type

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Remove the Destination Type parameter from the parameter list and from the parameter table. Editor included in draft 2.0 in N.2.1.2.2.

Cl **N**   *SC* **N.2.1.2.2**   *P* **0**   *L* **0**   *MyBallot #* 456

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

It is not clear why the Destination Type is useful

SuggestedRemedy

Explain function of Destination Type

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter. (dup)

Cl **N**   *SC* **N.2.2.1.2**   *P* **0**   *L* **0**   *MyBallot #* 457

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

If the Enumeration is MOVE then it appears a "move to à" parameter is missing

SuggestedRemedy

Add another parameter

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter. (dup)

Cl **N**   *SC* **N.2.2.1.2**   *P* **0**   *L* **0**   *MyBallot #* 139

Myles, Andrew

Comment Type   **TR**   *Comment Status* **D**

If the Enumeration is MOVE then it appears a "move to à" parameter is missing

SuggestedRemedy

Add another parameter

Proposed Response   *Response Status* **W**

PROPOSED REJECT. An AP can "ADD" a DS STA-to-AP mapping to itself, or it can "MOVE" a DS STA-to-AP mapping to itself, or it can "DELETE" a DS STA-to-AP mapping to itself.

Cl **O**   *SC* **O.**   *P* **0**   *L* **0**   *MyBallot #* 20

Aboba, Bernard

Comment Type   **TR**   *Comment Status* **D**

Add Appendix O on "EAP Method Requirements for WLAN".

SuggestedRemedy

Add Appendix O containing material from RFC 4017.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. We have accepted your proposal on RFC 4017 in comment #6. See comment #6 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

7/6/2005 10:16:00 AM

Page 118 of 118
Cl **O**   *SC* **O.**

Submission   Bob O'Hara, Cisco Systems