

CI 00 SC 0 P L # 8
KANDALA, SRINIVAS Individual

Comment Type T Comment Status D

Future standardized waveforms use 40MHz (see 802.11n draft). These waveforms provide interoperability and coexistence only when channel centers are defined with 20MHz separation. There should be a requirement for new devices to have channel occupancy separated by 20MHz in 2.4 GHz. To minimize adjacent and co-channel interference, it would be best if the devices are centered in Channels 1, 6 or 11.

SuggestedRemedy

Restrict new devices to be centered on channels 1, 6 or 11.

Proposed Response Response Status W

PROPOSED REJECT.

The comment is out of scope for the current ballot. There has been no change in the channellization of any PHY in the 2.4 GHz band. The comment will be forwarded to the 802.11 Working Group for consideration in a future revision of the standard.

CI 00 SC 0 P L # 9
MYLES, ANDREW F Individual

Comment Type TR Comment Status D

In a previous ballots, I requested the removal of Annex N because I believed it had no value. This comment is a repeat of those comments

This request was previously rejected with, "The consensus of the working group is that the material in Annex N is useful. Inclusion of Annex N was approved unanimously in March 2005 (document 05/205r0, motion #7). This text was developed in response to requests from 802.11 members and external SDOs for additional description of AP functionality. Annex N describes the functions of an AP using a UML-based syntax to clarify AP function versus common implementations of AP devices. The burden of proving that Annex N is not useful is on the commenter.."

This response is unreasonable because it is impossible to prove no value. Given this is new material, I strongly believe that it is incumbent on the authors to describe what value is provided. They have failed to do so on multiple occasions

I would also note that it is somewhat misleading to believe the majority of the WG believes the material is useful based on a motion held in TGM . The most that can be said is that it was approved by those self selected individuals in the room at the time. The minutes do not record how many people voted in the affirmative but based on the previous motion it was probably less than 13 and possibly less than 7. I suspect the vast majority of WG members have no clue Annex N exists.

What I can say is that Annex N attempts to describe the functions of an AP using a abstract form, new terminology (eg mobile STAs) and a new language (eg based on UML). The majority of the annex is used to describe the new terminology and language. I assert the majority of knowledgeable WG members would not recognise the description.

SuggestedRemedy

Remove Annex N

Proposed Response Response Status W

PROPOSED REJECT.

The consensus of the task group, working group, and the sponsor group is that the material in Annex N is useful, as there has been no material support for its removal in any ballot.

The duty of the working group is to continue to move in the direction of consensus when resolving comments. Annex N describes the functions of an AP using a UML-based syntax to clarify AP function versus common implementations of AP devices.

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

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SC 0

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Cl 00 SC 0 P L # 10
COORDINATION, EDITORIAL

Comment Type GR Comment Status D

Please look at Clause 2 carefully. You have updated to the new IEEE introductory paragraph that states:
The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies. However, all of your references are still dated. Do you want users to update to the most recent edition? If so, you need to remove the dates while the draft is still being recirculated.

SuggestedRemedy

Remove dates of those references you would like to be automatically updated to the most recent edition.

Proposed Response Response Status W
PROPOSED ACCEPT.

Delete ":1997" from the reference to 3166-1.

Cl 00 SC 0 P L # 11
COORDINATION, EDITORIAL

Comment Type ER Comment Status D

As per IEEE style, the bibliography should always fall at the end or the beginning of the series of annexes. Currently, the bibliography falls right in the middle. I suggest moving it to the beginning since new annexes will continue to be added in the future.

SuggestedRemedy

Suggest moving bibliography to first or last annex.

Proposed Response Response Status W
PROPOSED ACCEPT.

Move the bibliography to the last annex. Leave Annex E empty to avoid renumbering the subsequent annexes and all the references thereto.

Cl 00 SC 0 P L # 12
COORDINATION, EDITORIAL

Comment Type ER Comment Status D

Figures in IEEE standards are printed in black ink only. Figure 4 is colored. Please make sure this figure will maintain its integrity when printed as black ink.

SuggestedRemedy

Proposed Response Response Status W
PROPOSED ACCEPT.

The figure has been printed in two prior versions of the standard without difficulty.

Cl 03 SC 3.1 P 47 L 5 # 38
PALM, STEPHEN R Individual

Comment Type TR Comment Status D

STAs and APs are plain now. No need to reference Quality of Service

SuggestedRemedy

Delete "Quality of Service (QoS)"

Proposed Response Response Status W
PROPOSED REJECT.

The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard. Only the acronym was removed.

Cl 03 SC 3.118 P 12 L 51 # 22
CHAPLIN, CLINT F Individual

Comment Type E Comment Status D

Wrong article

SuggestedRemedy

Change "an non-QoS AP" to "a non-QoS AP"

Proposed Response Response Status W
PROPOSED ACCEPT.

Cl 03 **SC 3.118** **P 54** **L 49** # **29**
PALM, STEPHEN R Individual

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

The definition no longer needed since we are doing away with "Q"

SuggestedRemedy

Delete entire definition

Proposed Response **Response Status** **W**

PROPOSED REJECT.

The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
Only the acronym was removed.

Cl 03 **SC 3.119** **P 54** **L 54** # **30**
PALM, STEPHEN R Individual

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

The definition no longer needed since we are doing away with "Q"

SuggestedRemedy

Delete definition entirely

Proposed Response **Response Status** **W**

PROPOSED REJECT.

The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
Only the acronym was removed.

Cl 03 **SC 3.121** **P 55** **L 4** # **31**
PALM, STEPHEN R Individual

Comment Type **GR** **Comment Status** **D**

The definition no longer needed since we are doing away with "Q"

SuggestedRemedy

Delete definition entirely

Proposed Response **Response Status** **W**

PROPOSED REJECT.

The definition is still needed, as the term "QoS IBSS" is used elsewhere in the document.
Only the acronym was deleted, not the term.

Cl 03 **SC 3.122** **P 13** **L 8** # **23**
CHAPLIN, CLINT F Individual

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

Wrong article

SuggestedRemedy

Change "an non-QoS STA" to "a non-QoS STA"

Proposed Response **Response Status** **W**

PROPOSED ACCEPT.

Cl 03 **SC 3.122** **P 55** **L 7** # **32**
PALM, STEPHEN R Individual

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

The definition no longer needed since we are doing away with "Q"

SuggestedRemedy

Delete definition entirely

Proposed Response **Response Status** **W**

PROPOSED REJECT.

The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
Only the acronym was removed.

Cl 03 **SC 3.131** **P 55** **L 40** # **33**
PALM, STEPHEN R Individual

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

We agreed to remove "Q" and related

SuggestedRemedy

Delete: "Qualiy of Service (qos)"

Proposed Response **Response Status** **W**

PROPOSED REJECT.

The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
Only the acronym was 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

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SC 3.131

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Cl 03 **SC 3.135** **P 55** **L 55** # **34**
 PALM, STEPHEN R Individual
Comment Type **TR** **Comment Status** **D**
 We agreed to remove "Q" and related.
SuggestedRemedy
 Delete "Quality of Service (QoS)"
 Use "STA" (not "station") consistantly.
Proposed Response **Response Status** **W**
 PROPOSED REJECT.

 The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
 Only the acronym was removed.

 Editor to change "station" to "STA".

Cl 03 **SC 3.34** **P 49** **L 13** # **26**
 PALM, STEPHEN R Individual
Comment Type **TR** **Comment Status** **D**
 Renoving the "Q" was not done correctly here (and seveal other places). There are just
 APs and STA, not QoS APs nor QoS STAs.
SuggestedRemedy
 Delete "Quality of Service (qoS)"
 Replace "QoS Station" with STA
Proposed Response **Response Status** **W**
 PROPOSED REJECT.

 The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
 Only the acronym was removed.

Cl 03 **SC 3.36** **P 49** **L 21** # **27**
 PALM, STEPHEN R Individual
Comment Type **TR** **Comment Status** **D**
 Removal of "Q" artifacts handled inccorectly
SuggestedRemedy
 Delete "Quality of Service (QoS)".
 Delete "QoS" twice.
 consistantly only use "AP" and "STA", not the full words.
Proposed Response **Response Status** **W**
 PROPOSED REJECT.

 The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
 Only the acronym was removed.

Editor to change the definition to read:
 A bidirectional link from one non-AP quality of service (QoS) STA to another non-AP QoS
 STA operating in the same infrastructure QoS basic service set that does not pass through
 a QoS AP. Once a direct link has been set up, all frames between the two non-AP QoS
 STAs are exchanged directly.

Cl 03 **SC 3.51** **P 50** **L 21** # **28**
 PALM, STEPHEN R Individual
Comment Type **TR** **Comment Status** **D**
 Here as in several other places, "Q" removal was handled inccorectly.
SuggestedRemedy
 Delete "quality of Service (QoS)"
 Delete "QoS" twice
 Use "STA" and "AP" consistantly
Proposed Response **Response Status** **W**
 PROPOSED REJECT.

 The term QoS, when combined with BSS, IBSS, AP, or STA, is still used in the standard.
 Only the acronym was removed.

 The editor is to revise the definition as follows:
 The prioritized carrier sense multiple access with collision avoidance (CSMA/CA) access
 mechanism used by QoS STAs in a QoS basic service set. This access mechanism is also
 used by the QoS AP and operates concurrently with hybrid coordination function (HCF)
 controlled channel access (HCCA).

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 3.51

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Cl 03 **SC 3.65** **P 9** **L 21** # **1**
 STANLEY, DOROTHY V Individual
Comment Type **E** *Comment Status* **D**
 one instance of non-QSTA is still there
SuggestedRemedy
 Change from "non-QSTA" to "non-QoS STA"
Proposed Response *Response Status* **W**
 PROPOSED ACCEPT.

Cl 03 **SC 3.65** **P 9** **L 21** # **21**
 CHAPLIN, CLINT F Individual
Comment Type **E** *Comment Status* **D**
 One last QSTA that was missed
SuggestedRemedy
 Change "non-QSTAs" to "non-QoS STAs"
Proposed Response *Response Status* **W**
 PROPOSED ACCEPT.

Cl 05 **SC 5.2.6** **P 31** **L 27** # **24**
 CHAPLIN, CLINT F Individual
Comment Type **E** *Comment Status* **D**
 Wrong article
SuggestedRemedy
 Change "a AP" to "an AP"
Proposed Response *Response Status* **W**
 PROPOSED ACCEPT.

Cl 06 **SC 6.1.1** **P 93** **L 17** # **39**
 PALM, STEPHEN R Individual
Comment Type **TR** *Comment Status* **D**
 Was "QoS STA" an attempt to shorthand a "STA with QoS Facility". The shorthand is confusing and just a variant of "QSTA" that we agreed to get rid of the "Q" and just have "STA"s.
SuggestedRemedy
 Replace "QoS STA" with "STA with QoS Facility" in many places throughout the document.
Proposed Response *Response Status* **W**
 PROPOSED REJECT.

 The term "QoS STA" is defined in 3.122 as "a STA that implements the QoS facility". This allows consistent and unambiguous use of the term in the rest of the standard.

Cl 07 **SC 7.1.3.5.7** **P 70** **L 28** # **2**
 STANLEY, DOROTHY V Individual
Comment Type **E** *Comment Status* **D**
 Figure 21 includes a QAP
SuggestedRemedy
 Change "QAP" to "AP in Figure 21"
Proposed Response *Response Status* **W**
 PROPOSED ACCEPT.

CI 07 SC 7.3.2.2 P 145 L 23 # 35
PALM, STEPHEN R Individual

Comment Type TR Comment Status D

The current revisions are an improvement, but it seems that still more could be done to clarify. A few sentences later, a reference to a table of encodings is used. That seems better than using the current revised text which is not strictly logically correct.

SuggestedRemedy

Make the two data rate sentences consistent by using the later reference to the table in 10.4.4.2.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

The table in 10.4.4.2 is not complete and cannot serve as the sole reference for encoding these values.

Replace "bits 6 through 0 are set to the data rate, rounded up to the next 500kb/s (e.g., a 1 Mb/s rate contained in the BSSBasicRateSet parameter is encoded as X'82')."

with "bits 6 through 0 are set to the data rate, if necessary rounded up to the next 500kb/s, in units of 500 kb/s. For example, a 2.25 Mb/s rate contained in the BSSBasicRateSet parameter is encoded as X'85'."

CI 07 SC 7.4.5 P 152 L 48 # 19
STEPHENS, ADRIAN P Individual

Comment Type TR Comment Status D

The change highlights the question of what can go into or follow the vendor specific content. The implication of figure 118 is that the vendor specific content is of variable length and unconstrained (except through the MPDU length limits). However this is not true - there is an additional constraint, that the vendor specific content internally define its length. The reason for this is that the action frame format shown in Table 19, permits one or more vendor specific information elements to follow the action field. Without the Action field being able to determine its own length internally, it is not possible to parse the vendor-specific information elements.

SuggestedRemedy

In 7.2.3.12, after: "One or more... all other information elements" add: ", except this shall be absent in the case of the Vendor Specific action frame."

Proposed Response Response Status W

PROPOSED REJECT.

The vendor-specific content field of the vendor-specific action frame is totally unconstrained and forbidding the inclusion of vendor-specific information elements is not consistent with this.

The commenter is correct that, without knowledge of the structure of the vendor-specific action frame, it will be impossible to parse. It is not intended that all STAs be able to parse any portion of the vendor-specific content. Only those STAs that have a priori knowledge of the structure will be able to parse the frame.

CI 07 SC 7.4.5 P 194 L 47 # 37
PALM, STEPHEN R Individual

Comment Type TR Comment Status D

This is an improvement on previous, however, "fields" implies it must be more than one.

SuggestedRemedy

Replace "the vendor specific fields" with "vendor specific field(s)"

Proposed Response Response Status W

PROPOSED ACCEPT.

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

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SC 7.4.5

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Cl 08 **SC 8.1.4** **P 156** **L 53** # **3**
 STANLEY, DOROTHY V Individual
Comment Type **E** **Comment Status** **D**
 Typo
SuggestedRemedy
 Change "mastery" to "master"
Proposed Response **Response Status** **W**
 PROPOSED ACCEPT.

Cl 08 **SC 8.5.3.5** **P 217** **L 32** # **4**
 STANLEY, DOROTHY V Individual
Comment Type **E** **Comment Status** **D**
 Incorrect grammar
SuggestedRemedy
 Change from "SMKSA and their initiate" to "the SMKSA and initiate"
Proposed Response **Response Status** **W**
 PROPOSED ACCEPT.

Cl 08 **SC 8.5.5** **P 223** **L 39** # **7**
 STANLEY, DOROTHY V Individual
Comment Type **E** **Comment Status** **D**
 Simplify wording and add missing article
SuggestedRemedy
 Change from "At this point the Supplicant also enters PEERKEYINIT state" to
 "The Supplicant enters the PEERKEYINIT state"
Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.

1. In clause 8.5.5 paragraph 1
 Replace the sentence beginning "At this point" with the following sentence
 "A Supplicant enters the STAKEYSTART state on receiving an EAPOL-Key frame from the Authenticator"
 This reinstates the original text from 802.11i.
2. In figure 153, delete the arrow coming downwards out of the STAKEYSTART state and the "PeerKeyInit" text label
3. Move the following variable definitions from 8.5.5.2 to a new section, 8.5.5.5 "Supplicant PeerKey state machine variables":
 PeerKeyInit
 TimeoutEvt
 TimeoutCtr
 MICVerified - note-not the first one in the list, the second one
 SMKMsgNo
 STKMsgNo
 STA_P
 STA_I
 STKKey
4. Duplicate the following variable definition from clause 8.5.5.2 and insert them into 8.5.5.5:
 EAPOLKeyReceived
5. Change the name of clause 8.5.5.4 from Supplicant PeerKey state machine procedures to Supplicant PeerKey state machine states

CI 09 SC 9.1.3.2 P 298 L 14 # 40
PALM, STEPHEN R Individual

Comment Type TR Comment Status D

HCCA has turned out to be irrelevant, unimplemented and confusing to industry.

SuggestedRemedy

Delete HCCA functionality and all references to it.

Proposed Response Response Status W

PROPOSED REJECT.

The comment is out of scope for the current ballot. The text regarding HCCA has not changed. The comment will be forwarded to the 802.11 Working Group for consideration in a future revision of the standard.

CI 09 SC 9.12 P 310 L 13 # 5
STANLEY, DOROTHY V Individual

Comment Type E Comment Status D

QAP in table

SuggestedRemedy

Change to AP

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 09 SC 9.12 P 312 L 46 # 6
STANLEY, DOROTHY V Individual

Comment Type E Comment Status D

QAP term used

SuggestedRemedy

Change from "QAP" to "AP"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 11 SC 11.2.1.4 P 486 L 42 # 41
PALM, STEPHEN R Individual

Comment Type TR Comment Status D

This clause contains numerous technical errors.

SuggestedRemedy

Recommend that text be compared to WMM Specification and updated to correct technical errors.

Proposed Response Response Status W

PROPOSED REJECT.

The comment is out of scope of the current ballot. There are no technical changes to the text regarding APSD operation. The comment will be forwarded to the 802.11 Working Group for consideration in a future revision of the standard.

CI 17 SC 17.5.4.3 P 636 L 29 # 20
ECCLESINE, PETER Individual

Comment Type E Comment Status D

Heading of right column missing '5' in MHz channel spacing

SuggestedRemedy

Editor to insert 5

Proposed Response Response Status W

PROPOSED ACCEPT.

CI A SC A P 749 L 52 # 13
ECCLESINE, PETER Individual

Comment Type G Comment Status D

OF3.8.1 Status should be CF11, not CF10, as it applies to 4.9 GHz

SuggestedRemedy

Make Status use CF11

Proposed Response Response Status W

PROPOSED ACCEPT.

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

CI A
SC A

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CI **A** SC **A** P **750** L **5** # **14**
 ECCLESINE, PETER Individual
 Comment Type **G** Comment Status **D**
 OF3.8.2 Status should be CF11, not CF10, as it applies to 4.9 GHz
 SuggestedRemedy
 Make Status use CF11
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **A** SC **A** P **750** L **8** # **15**
 ECCLESINE, PETER Individual
 Comment Type **G** Comment Status **D**
 OF3.8.3 Status should be CF11, not CF10, as it applies to 4.9 GHz
 SuggestedRemedy
 Make Status use CF11
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **D** SC **D** P **999** L **7** # **25**
 CHAPLIN, CLINT F Individual
 Comment Type **E** Comment Status **D**
 Wrong article
 SuggestedRemedy
 Change "an non-QoS BSS" to "a non-QoS BSS"
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **I** SC **I** P **1148** L **13** # **17**
 ECCLESINE, PETER Individual
 Comment Type **E** Comment Status **D**
 Text and Figure Title refer to H.2, but should be I.1
 SuggestedRemedy
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **I** SC **I** P **1149** L **44** # **16**
 ECCLESINE, PETER Individual
 Comment Type **E** Comment Status **D**
 Figure I.6 on p1149 has a title in BLUE instead of BLACK, and is titled Figure H.3 on I22
 SuggestedRemedy
 Redraw figure to Style Guide req'ts and correctly title it (I.2)
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.

Also change reference to figure I.6 in line 22 to be I.2.

CI **J** SC **J.3** P **1154** L **29** # **18**
 ECCLESINE, PETER Individual
 Comment Type **G** Comment Status **D**
 Table J.3 does not show 5.25-5.35 GHz, which is available in Japan. See comment #297 on REV-MA D5.0 (06/91r2 p6). In Table J.3, insert Regulatory Class 30, Channel starting frequency 5, Channel spacing 20, Channel set 52, 56, 60, 64, Transmit power limit 22, Emissions limits set 1, Behavior limits set 1, 2, 6; and specify Regulatory classes 31-255 Reserved
 SuggestedRemedy
 Editor to add Regulatory Class 30 with text from comment.
 Proposed Response Response Status **W**
 PROPOSED REJECT.

This comment is out of scope for this recirculation ballot. No text in Annex J has changed. The comment will be forwarded to the 802.11 working group for consideration in a future revision of the standard.

Cl N SC N P1217 L 1 # 36
PALM, STEPHEN R Individual

Comment Type GR Comment Status D

Annex N attempts to redefine AP functionality. It's inclusion in the standard causes confusion

SuggestedRemedy

Delete Annex N. If desired, the contents may be contained in a separate document or contribution.

Proposed Response Response Status W

PROPOSED REJECT.

This comment is out of scope for this recirculation ballot. The comment will be forwarded to the 802.11 Working Group for consideration in a future revision of the standard.

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

Cl N
SC N

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