

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3002**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	Gen	Starting Line #	Fig/Table#	Section	T
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I submitted 18 comments, but only 3 were answered in the files that were provided. I am repeating essentially all of my comments because the group did not bother to address them.

Suggested Remedy

The group needs to make sure that all comments are addressed before going out to ballot.

Proposed Resolution Recommendation: **Accepted** Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Accepted**

All comments, including those of Mr. Gilb, have always been, and will continue to be, addressed.

In the previous recirculation package, we recirculated the responses to all four of Mr. Gilb's comments that he had marked as "Technical". We did not recirculate the responses to the 14 comments Mr. Gilb had marked as "Editorial". In the current recirculation, we will provide access to the responses to editorial as well as technical comments.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3003**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	all	Starting Line #	vario	Fig/Table#	Section	various
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The level of editorial problems with this draft is such that even a 40 day ballot would not be sufficient to list all of them in detail.

Suggested Remedy

Spend some time to fix the draft so that it adheres to the 2005 IEEE Style Guide and have a 40 day ballot to review the draft.

Proposed Resolution	Recommendation: Accepted-Modified	Recommendation by
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Reason for Recommendation

Resolution of Group	Decision of Group: Accepted-Modified
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Substantial editorial changes are being implemented in the standard and will comply with 2005 style guidelines.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Editor's Notes	Editor's Actions	1) none needed
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The 2005 Style Manual is actually in the "review" stages at this point. Sections of it still have to be presented to ProCom. The important change that is being implemented now is to the reference clause. The title has been changed to "Normative References," which I did, but the group will have to change the introductory paragraph as needed. See the Style Guide for more info.

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3008**Comment submitted by: **Byoung-Jo****Kim**

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	Gen	Starting Line #	Fig/Table#	Section
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The new draft defines FS and MS for fixed and mobile subscribers. Then throughout the document, there is no more occurrence of FS, and most references to SS and MSS are replaced with MS, even including sections that clearly apply to both MS and FS such as the common MAC portions and Privacy sublayers, etc.. Clearly, certain functions specific to MS or FS or both can be for technical and regulatory reasons. Thus, without knowing whether this was an editorial error, or a deliberate technical decision, I regret to vote No with technical comments to ensure a resolution.

Suggested Remedy

The definitions and the superceding relationship between FS, MS, SS must be clarified further in the definitions section. The use of FS, MS, SS shall be consistently applied throughout the document, based on technical or other reasons to limit certain parts of the draft to FS or MS.

Proposed Resolution Recommendation:**Recommendation by**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3009**

Comment submitted by: N. K.

Shankaranarayanan

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	Gen	Starting Line #	Fig/Table#	Section
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This comment is similar to that of J Kim. 802.16e is an amendment to 802.16-2004 and should support combined fixed/mobile operation. However, the most recent draft D6 introduces new terms/acronyms FS (fixed subscriber station) and MS (mobile subscriber station). FS is not used in the document, and most references to SS and MSS are replaced with MS, even including sections that clearly apply to both MS and FS such as the common MAC portions and Privacy sublayers, etc. I am concerned that this may preclude the use of 802.16e enhancements for fixed subscriber stations. In some situations, it is perhaps not sufficient to say that a fixed subscriber is just a mobile station that happens to be stationary.

Suggested Remedy

The definitions and the superceding relationship between FS, MS, SS must be clarified further in the definitions section. Use SS or a new term for a station that could be FS or MS. The use of FS, MS, SS, or new terms shall be consistently applied throughout the document, based on technical or other reasons to limit certain parts of the draft to FS or MS.

Proposed Resolution	Recommendation:	Recommendation by
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Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation

Resolution of Group	Decision of Group: Accepted-Modified
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Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Editor's Notes	Editor's Actions
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duplicate

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3020**

Comment submitted by: Dorothy

Stanley

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	7	Starting Line #	Fig/Table#	Section	2
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Section 2, Page 7 of diffmarked version, References must be published standards, not drafts. Missing reference to RFC 3748.

Suggested Remedy

Proposed Resolution Recommendation: **Accepted-Modified** Recommendation by
 See resolution of comment 3123

Reason for Recommendation

Resolution of Group Decision of Group: **Accepted-Modified**
 See resolution of comment 3123

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3027**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **9** Starting Line # **56** Fig/Table# Section **3.71**

The definition of MS should explicitly state that a MS is a subscriber station (SS). Otherwise any protocol that is defined with the SS as the protocol peer will from the point of view of the MS be irrelevant. Another problem with the definition adopted as a result of the comment from Jose Costa is that it refers to 'the mobile service' which is 802.16 isn't defined. To me it unfortunately seems that if we want to harmonize our definition with the definition used in ITU this would require tens if not hundreds of changes to 802.16-2004.

Suggested Remedy

Replace the current definition for the MS with
 " mobile station(MS): A subscriber station that supports communications while in motion"

Proposed Resolution Recommendation: Recommendation by

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
 Delete the definition of FS

Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
 Delete the definition of FS

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Editor's Notes Editor's Actions |) none needed

duplicate

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3034**

Comment submitted by: Jonathan

Labs

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	13	Starting Line #	1	Fig/Table#	Section	6.
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I object to the resolution of comment 1945 in IEEE 802.16-05/010. This comment is about how the term MSS (now MS) has replaced SS in text pulled from the base document. The Decision of the Group was to supercede that comment by comment #71, and the reason for the Group's Decision was that "This comment has been superseded by comment #71 which changes the usage of MSS and SS." However, I cannot find comment #71 listed in IEEE 802.16-05/010 or IEEE 802.16-04/011. Going back to IEEE 802.16-04/69r4, I find comment #71 (which is also technically binding) , and the resolution of the group for that comment was "DJ, possibly David Castelov, possibly others to supply a specific list of changes to be made."

If this action item was done, I do not find that all the necessary fixes were made. The title of this ammendment is "Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems, Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands" I think many sections of this document lose sight of the fact that fixed systems must also be able operate.

My Suggested Remedy is an attempt to fix the SS/FS/MS language in all sections up to and including section 6. MAC Common part sublayer.

Suggested Remedy

- 1) On page 34, line 59, change "Initial ranging CID if the MSS has not yet registered" to "Initial ranging CID if the SS has not yet registered" (this feature for RNG_REQ messages are for both fixed and mobile SSs).
- 2) On page 35, line 4, change "the MS shall make UL BW request of sufficient size" to "the SS shall make UL BW request of sufficient size" (this feature for RNG_REQ messages are for both fixed and mobile SSs).
- 3) On page 35, line 8, change "when the MSS is attempting to join" to "when the SS is attempting to join" (the parameter that follow are for both fixed and mobile SSs).
- 4) On page 49, line 3, change "6.3.2.3.24 MS basic capability response (SBC-RSP) messge" to "6.3.2.3.24 SS basic capability response (SBC-RSP) messge"
- 5) On page 50, line 60, change "6.3.2.3.42 MS De-registration Request (DREG-REQ) message" to "6.3.2.3.42 SS De-registration Request (DREG-REQ) message"
- 6) On page 51, line 13, change "MSS De-Registration request from BS" to "SS De-Registration request from BS" (this De-Registration_Request_Code applies to both fixed and mobile SS's)
- 7) On page 51, line26, change "An MSS shall generate MSS DREG-REQs including the following parameters:" to "An SS shall generate SS DREG-REQs including the following parameters:"
- 8) On page 52, line 45, change "basic CIDs of MS connected with the BS" to "basic CIDs of SS connected with the BS" (text in D6 does not correctly copy the original text from 802.16-2004)
- 9) On page 52, line 49, change "n-bits of LSB of CID of MS." to "n-bits of LSB of CID of MS." (again text in D6 does not correctly copy the original text from 802.16-2004).
- 10) On page 54, line 22, change "the MS." to "the SS." (again text in D6 does not correctly copy the original text from 802.16-2004).

- 11) On page 54, line 26, change "by the MS in every 2^p frames." to "by the SS in every 2^p frames." (again text in D6 does not correctly copy the original text from 802.16-2004).
- 12) On page 54, line 29, change "The MS starts reporting at the frame of which the number has the same 3 LSB as the specified frame offset. If the current frame is specified, the MS should start reporting in 8 frames." to "The MSS starts reporting at the frame of which the number has the same 3 LSB as the specified frame offset. If the current frame is specified, the MSS should start reporting in 8 frames." (the original text from 802.16-2004 incorrectly refers to an MSS which is not defined for 802.16-2004).
- 13) On page 54, line 36, change "A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the MS for $2^{(d-1)}$ frames. If d is 0b1111, the MS should report until the BS commands the MS to stop." to "A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for $2^{(d-1)}$ frames. If d is 0b1111, the MSS should report until the BS commands the MSS to stop." (text in D6 does not correctly copy the original text from 802.16-2004, and the original text from 802.16-2004 incorrectly refers to an MSS which is not defined for 802.16-2004).
- 14) On page 74, line 6, change "~~MSS~~ sends CQI report in CQI region." to "SS sends CQI report in CQI region." (According to the text in 802.16-2004, this statement also applies to fixed SS's.)
- 15) On page 74, line 9, change "When there exist a need to allocate multiple CQICHs to a SS, the number of used subchannels for CQICH region shall be increased by the total number of additional CQICHs for all MS within the frame" to "When there exist a need to allocate multiple CQICHs to a SS, the number of used subchannels for CQICH region shall be increased by the total number of additional CQICHs for all SS within the frame" (The sentence starts to talk about SS's and later only MS's, which I try to fix).
- 16) On page 125, line 30, change "the MSS can request to change the size of the request opportunity using the extended piggyback and request headers." to "the SS can request to change the size of the request opportunity using the extended piggyback and request headers." (the text in the following paragraph seems to indicate that this feature is applicable to both mobile and fixed SS's.)
- 17) On page 126, line 18, change
- "Otherwise, for fixed SS and for MSs using IPv4 and not using mobile IP, the SS/MS shall invoke DHCP mechanisms [IETF RFC 2131] in order to obtain an IP address and any other parameters needed to establish IP connectivity. If the SS has a configuration file, the DHCP response shall contain the name of a file which contains further configuration parameters. For MS using IPv6 the SS/MS shall either invoke DHCPv6 [IETF RFC 3315] or IPv6 Stateless Address Autoconfiguration [IETF RFC 2462] based on the value of a TLV tuple in REG_RSP. Establishment of IP connectivity shall be performed on the SS's Secondary Management Connection (see Table 110)."
- to
- "Otherwise, for FSs and for MSs using IPv4 and not using mobile IP, the SS shall invoke DHCP mechanisms [IETF RFC 2131] in order to obtain an IP address and any other parameters needed to establish IP connectivity. If the SS has a configuration file, the DHCP response shall contain the name of a file which contains further configuration parameters. For SS using IPv6 the SS shall either invoke DHCPv6 [IETF RFC 3315] or IPv6 Stateless Address Autoconfiguration [IETF RFC 2462] based on the value of a TLV tuple in REG_RSP. Establishment of IP connectivity shall be performed on the SS's Secondary Management Connection (see Table 110)."
- 18) In 6.3.17 MAC support for H-ARQ starting on page 133, line 57, replace all instances of MS with SS. Otherwise, the text would indicate that

HARQ is no longer supported for fixed systems.

Proposed Resolution**Recommendation:****Recommendation by**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions |) none needed

duplicate

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3042**

Comment submitted by: Rainer

Ullmann

Member

2005/03/09

Comment Type **Technical, Binding**Starting Page # **14**Starting Line # **21**

Fig/Table#

Section **6.3.2.1.2**

This section is still really screwed up:

- under e) the allowed values for Type are 000, 001 and 111. type 011 is not allowed ? How about 100 ?
- no description for "CQICH channel allocation request." other than "BR may be 0". May I assume description follows Figure 20/Table 7 ?
- the description of the type field for table 7a allows 000 and 001, even though it can only be 011. Furthermore the title of the table is wrong (Table 7a—Description of fields of the PHY channel report header)
- reference to table "ddd"

Suggested Remedy

p.14 I.26:

The Bandwidth Request PDU shall consist of bandwidth request header alone and shall not contain a payload.

The bandwidth request header ~~is types are~~ illustrated in Figure 20, [Figure 20a](#) and [Figure 20ba](#). An SS receiving a bandwidth request header on the downlink shall discard the PDU.

p.14 I.45:

e) The allowed types for bandwidth requests are "000" for incremental and "001" for aggregate [BR](#), ["011" for BR and UL Tx power report header](#), ["100" for "BR and DBPC request header"](#) and "111" for CQICH channel allocation request.

p.14 I.45:

The fields of the bandwidth request header are defined in Table 7 for types "000", ["001 and "111"](#), [Table 7a for type "011" and Table 7b for "100"](#). Every header is encoded, starting with the HT and EC fields. The coding of these fields is such that the first byte of a MAC header shall never have the value of 0xFF. This prevents false detection of the stuff byte.

p.14 I.61

Figure ddd -> [Figure 20a](#)

p.15 I.34 replace

d) The allowed types for bandwidth requests are "000" for incremental, "001" for aggregate, and "011" for an aggregate request with UL Tx transmit power report.

with

d) The type for Bandwidth request with UL Tx transmit power report.bandwidth requests is "011" .
or even better, delete d) altogether

p.16 I.4:

Table 7a—Description of fields of the PHY channel report header -> Table 7a -- Description of fields of [BR and UL Tx power report header](#)

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

[See 3070](#)

Resolution of Group

Decision of Group: **Superseded**

Reason for Group's Decision/Resolution

[See 3070](#)

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions [1\) none needed](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3065**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment Type **Technical, Binding**Starting Page # **21**

Starting Line #

Fig/Table# **21a**Section **6.3.2.1.4.3**

The figure shall not be split across pages.

Suggested Remedy

Rework the figure so it stays on one page. Use Figure 20a as an example.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Rework the figure so it stays on one page. Use Figure 20a as an example.

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted**

Rework the figure so it stays on one page. Use Figure 20a as an example.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**Editor's Actions [k\) done](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3068**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **22** Starting Line # **49** Fig/Table# Section **6.3.2.1.4.3**

Table 7e: The header needs to be repeated on the continuation pages.

Suggested Remedy

"Fix the table so that the header is repeated on the pages where it is continued and add ""(continued)"" to the title."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

"Fix the table so that the header is repeated on the pages where it is continued and add ""(continued)"" to the title."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

"Fix the table so that the header is repeated on the pages where it is continued and add ""(continued)"" to the title."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions [k\) done](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3070**

Comment submitted by: Rainer

Ullmann

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	24	Starting Line #	21	Fig/Table#	Section	6.3.2.1.5
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Description of "Bandwidth request and uplink sleep control header" with HT=1, EC=0 and Type='000' is identical to "Incremental Bandwidth Request header" - how does an SS distinguish those ????

The table for MOB_SLP-ULC_Message_Format () does not have a title or number, should the name not be something like BR_SLP-ULC_Message_Format () ?

Also, wouldn't it be logic to add this section as subsection to 6.3.2.1.2 Bandwidth request header ?

Suggested Remedy

p.24 l.31 add
Table 7ea - Bandwidth request and uplink sleep control header format

p.24. l.40
Replace Type with "010"

Proposed Resolution **Recommendation: Accepted-Modified** **Recommendation by**
Adopt contribution C80216-05/192r4

Reason for Recommendation

Resolution of Group **Decision of Group: Accepted-Modified**
Adopt contribution C802.16-05/192r4

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Editor's Notes **Editor's Actions** k) done

The pagination really changed in this clause. Check cross-references. I have be setting cross-refs as I see them, but I am worried about the ones I did not mark.

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3121**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment Type **Technical, Binding**

Starting Page # **41**

Starting Line # **57**

Fig/Table#

Section **6.3.2.3.9.11**

PKM v2 is defined in the mobile amendment but is mobility support a necessary requirement for using it. From the current text it is not clear as MS and SS seem to be used incosistently.

Suggested Remedy

Change " MS" to "SS" on p41 l. 57

and on any other applicable instances.

Change "SS " to "MS" p.42 l. 51 and in all other applicable instances.

Proposed Resolution

Recommendation:

Recommendation by

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

duplicate

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3132**

Comment submitted by: Dorothy

Stanley

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
Page 47, Table 26a and innumerous following clauses - The EAP-Establish Key messages are not EAP messages. They are 802.16 messages which are used to derive temporal keys from the keys established using EAP.	Technical, Binding	47	(d)		

Suggested Remedy

Suggest removing "EAP" from these message names.

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Nothing needs to be done. This text has been deleted

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Nothing needs to be done. This text has been deleted

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3135**

Comment submitted by: Dorothy

Stanley

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **48** Starting Line #
Section 6.3.2.3.9.11, Page 48 of diffmarked version, line 16 Incorrect reference to RFC 2284bis.

Fig/Table#

Section

6.3.2.3.9.11

Suggested Remedy
Should be RFC3748

Proposed Resolution Recommendation: **Accepted-Modified** Recommendation by
See resolution of comment 3123

Reason for Recommendation

Resolution of Group Decision of Group: **Accepted-Modified**
See resolution of comment 3123

Reason for Group's Decision/Resolution

Group's Notes
Group's Action Items

Editor's Notes Editor's Actions [k\) done](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3137**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	49		55	6.3.2..3.26

The change from SS to MS in the five first instances (0x00-0x04) breaks backwards compatibility.

Suggested Remedy

Change from MS to SS in Action columns for codes 0x00-0x04.

Proposed Resolution**Recommendation:****Recommendation by**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** |) none needed

duplicate

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3138**

Comment submitted by: Dorothy

Stanley

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	49	Starting Line #	Fig/Table#	Section
Page 49 - MKID is not defined in the list of acronyms.							

Suggested Remedy

Page 49 - suggest renaming MKID to PMKID, as in table 133. Also makes the naming consistent with 802.11.

Proposed Resolution Recommendation: **Superseded**

Recommendation by

See resolution of comment # 3243

Reason for Recommendation

Referenced text was deleted.

Resolution of GroupDecision of Group: **Superseded**

See resolution of comment # 3243

Reason for Group's Decision/Resolution

Referenced text was deleted.

Group's Notes**Group's Action Items****Editor's Notes** Editor's Actions |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3183**

Comment submitted by: Yigal

Leiba

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	109	Starting Line #	50	Fig/Table#	Section	6.3.2.3.46
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RE: #397

The possibility to signal traffic indication using the CID, which is in many cases more efficient than using SLPID, has been removed in session #34.

For example: 512 UT per sector, 200 frames per second, sleep period of about 1 second, uniformly distributed

It turns out that about 3 UTs are going to wake up every frame. Signalling with CID would be much more efficient (and simple) in this case.

Suggested Remedy

Undo the changes of comment #397.

This can easily be done by undeleting lines 50 to 57 in the marked-up-changes vesrion of P802.16e/D6, on page 109

Proposed Resolution Recommendation: Accepted**Recommendation by**

Undo the changes of comment #397.

This can easily be done by undeleting lines 50 to 57 in the marked-up-changes vesrion of P802.16e/D6, on page 109

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**

Undo the changes of comment #397.

This can easily be done by undeleting lines 50 to 57 in the marked-up-changes vesrion of P802.16e/D6, on page 109

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3192**

Comment submitted by: Vladimir

Yanover

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	127	Starting Line #	8	Fig/Table#	Section	6.3.13
---------	------	--------------------	-----------------	-----	-----------------	---	------------	---------	--------

[Reiteration of Comment #570 which was rejected]

Section 6.3.13 contains unexplained terms and uses 802.16 MAC terms in different sense, sometimes in multiple senses . This makes the text unclear and in some cases misleading. For example, term "connection" is in case when a MS receives data from multiple BSs:

In contrast to Single-BS MBS connections, Multi-BS-MBS does not require that the MS be registered to the BS from which it receives the transmission, or to any other BS. To provide seamless multicast and broadcast service over multiple BS, a Multi-BS-MBS connection [as MS might be not registered to BS, it didn't pass phase of connections setup, so thereare no connections in the sense of 802.16 MAC] shall use the same CID, and transport the same data in a synchronized manner

Suggested Remedy

According to contribution IEEE C802.16e-05/102 "Clarification of Multicast and broadcast services section" by Vladimir Yanover et al

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Adopt IEEE C802.16e-05/102r1

Reason for RecommendationResolution of Group Decision of Group: **Accepted**

Adopt IEEE C802.16e-05/102r1

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Editor's Notes Editor's Actions k) done

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3223**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **160** Starting Line # **9** Fig/Table# Section **6.3.20.6**

Either provide a description conformant with ITU-T Z.100 or refrain from referring to the flowcharts as SDL.

Suggested Remedy

In the title delete "SDLs"

On line 12 change "the SDL of" to the "the process of"
Do the same change on lines 54 and on the pages 161 l. 49 and 163 line 49.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In the title delete "SDLs"

On line 12 change "the SDL of" to the "the process of"
Do the same change on lines 54 and on the pages 161 l. 49 and 163 line 49.

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted**

In the title delete "SDLs"

On line 12 change "the SDL of" to the "the process of"
Do the same change on lines 54 and on the pages 161 l. 49 and 163 line 49.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions k) done

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3229**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **168** Starting Line # **53** Fig/Table# Section **6.3.21.8.2**

The absolute requirement (shall) that a BS sends a backbone message to the Paging Controller in a puzzling one since the Paging controller remains undefined. Also the fact that the backbone message remains undefined does not help.

Suggested Remedy

Change "The BS at which" to read " The BS at which the MS re-entered the network shall inform the appropriate element in the network of the re-entry of the MS. The means by which the BS accomplishes this is outside the scope of this specification."

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change "The BS at which" to read " The BS at which the MS re-entered the network shall inform the appropriate element in the network of the re-entry of the MS. The means by which the BS accomplishes this is outside the scope of this specification."

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted**

Change "The BS at which" to read " The BS at which the MS re-entered the network shall inform the appropriate element in the network of the re-entry of the MS. The means by which the BS accomplishes this is outside the scope of this specification."

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions k) done

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3230**Comment submitted by: **Carl****Eklund**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **169** Starting Line # **28**Fig/Table# Section **6.3.21.9.1.2**

The main part of the section concerns functionality outside the scope of the standard.

Suggested Remedy

Delete remainder of paragraph starting line 29 " This mechanism enables ..."

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete remainder of paragraph starting line 29 " This mechanism enables ..."

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted**

Delete remainder of paragraph starting line 29 " This mechanism enables ..."

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**Editor's Actions **k) done****Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3231**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	169	Starting Line #	40	Fig/Table#	Section	6.3.21.9.1.3
---------	------	--------------------	-----------------	-----	-----------------	----	------------	---------	--------------

Most of the paragraph is irrelevant to the air interface.

Suggested Remedy

Change the subsection to read:

" The MS shall attempt to complete a Location Update once as part of its orderly power down procedure. "

Add in section 3 a definition for

"Orderly power down procedure: The procedure which the MS performs when powering down as directed by e.g. user input or prompted by a automatic power down mechanism . "

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Change the ~~subsection~~first sentence in the subsection to read:

"The MS shall attempt to complete a Location Update once as part of its orderly power down procedure. "

Add in section 3 a definition for

"Orderly power down procedure: The procedure which the MS performs when powering down as directed by e.g. user input or prompted by a automatic power down mechanism . "

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

Change the ~~subsection~~first sentence in the subsection to read:

"The MS shall attempt to complete a Location Update once as part of its orderly power down procedure. "

Add in section 3 a definition for

"Orderly power down procedure: The procedure which the MS performs when powering down as directed by e.g. user input or prompted by a automatic power down mechanism . "

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3233**

Comment submitted by: Jonathan

Labs

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	173	Starting Line #	1	Fig/Table#	Section	7.
---------	------	--------------------	-----------------	-----	-----------------	---	------------	---------	----

I object to the resolution of comment 1945 in IEEE 802.16-05/010. This comment is about how the term MSS (now MS) has replaced SS in text pulled from the base document. The Decision of the Group was to supercede that comment by comment #71, and the reason for the Group's Decision was that "This comment has been superseded by comment #71 which changes the usage of MSS and SS." However, I cannot find comment #71 listed in IEEE 802.16-05/010 or IEEE 802.16-04/011. Going back to IEEE 802.16-04/69r4, I find comment #71 (which is also technically binding) , and the resolution of the group for that comment was "DJ, possibly David Castelov, possibly others to supply a specific list of changes to be made."

If this action item was done, I do not find that all the necessary fixes were made. The title of this ammendment is "Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems, Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands" I think many sections of this document lose sight of the fact that fixed systems must also be able operate.

My Suggested Remedy is an attempt to fix the SS/FS/MS language in section 7. Privacy sublayer.

Suggested Remedy

- 1) On page 173, line 6, change "connections between MS and BS." to "connections between SS and BS."
- 2) On page 173, line 12, change "keying material to client MS." to "keying material to client SS."
- 3) On page 173, line 13, change "digital-certificate-based MS device-authentication" to "digital-certificate-based SS device-authentication".
- 4) On page 175, starting on line 23, change all instances of MS to SS in Section 7.1 (including subsections).
- 5) I believe sections 7.2, 7.5, and 7.7 should have all instances of MS be change to SS as well.

Proposed Resolution**Recommendation:****Recommendation by**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution

2005/04/10

IEEE 802.16-05/019

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions [1\) none needed](#)

[duplicate](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3234**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	173	Starting Line #	17	Fig/Table#	Section	7
---------	------	--------------------	-----------------	-----	-----------------	----	------------	---------	---

The editorial instructions in this section should conform to the guidelines provided by IEEE-SA. These guidelines can be found at <http://standards.ieee.org/guides/style/2005Style.pdf>. Not only is the instruction non-conforming but also very confusing. Despite the problem being mostly editorial it has technical impact as the result of implementing the editorial instructions determines the technical content.

Suggested Remedy

Provide a section with text that conforms to the editorial guidelines.

Proposed Resolution	Recommendation: Accepted
---------------------	---------------------------------

Recommendation by

Provide a section with text that conforms to the editorial guidelines.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Provide a section with text that conforms to the editorial guidelines.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions	h) defer to next round
------------------	------------------------

This change requires not only re-arrangement of text currently in the 802.16e document, but also inclusion and re-arrangement of text currently in 802.16-2004. This is too much work and too much risk to drop in with the "regular" editorial work, so I recommend either we leave the mark-up as it is now, or we appoint a clause editor team to tackle the task. Essentially, we'd be replacing Clause 7 in 802.16-2004 with the contents of Clause 7 in 802.16e.

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3245**

Comment submitted by: Carl

Eklund

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **181** Starting Line # **2**Fig/Table# Section **7.2.1.3.2**

The specification should be clear with respect to which MAC management messages to use.

Suggested Remedy

Change " The message is encapsulated in a MAC Management PDU and transmitted." to read
 " The message shall be encapsulated in a PKM-REQ MAC Management message with Code = 13 (EAP Transfer)".

Do the corresponding change on line 17.

Proposed Resolution Recommendation: Accepted**Recommendation by**

Change " The message is encapsulated in a MAC Management PDU and transmitted." to read
 " The message shall be encapsulated in a PKM-REQ MAC Management message with Code = 13 (EAP Transfer)".

Do the corresponding change on line 17.

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**

Change " The message is encapsulated in a MAC Management PDU and transmitted." to read
 " The message shall be encapsulated in a PKM-REQ MAC Management message with Code = 13 (EAP Transfer)".

Do the corresponding change on line 17.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes** Editor's Actions k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3250**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **184** Starting Line # **12** Fig/Table# Section **7.2.2.2**

The cross refernces (See 7.x.x.x) are missing the subclause numbers.

Suggested Remedy

"Provide the correct subclause numbers here and throughout the draft, e.g., search for x.x. This was supposed to be fixed from the last revision, yet many remain in the current draft. I counted at least 6."

Proposed Resolution Recommendation: Accepted**Recommendation by**

"Provide the correct subclause numbers here and throughout the draft, e.g., search for x.x. This was supposed to be fixed from the last revision, yet many remain in the current draft. I counted at least 6."

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**

Provide the correct subclause numbers here and throughout the draft, e.g., search for x.x.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3252**

Comment submitted by: **Carl**

Eklund

Member

2005/03/09

Comment Type **Technical, Binding**

Starting Page # **191**

Starting Line # **61**

Fig/Table#

Section **7.2.5**

Inappropriate section heading.

Suggested Remedy

Change "MAC Management Messages" to "TEK State Machine"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change "MAC Management Messages" to "TEK State Machine"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change "MAC Management Messages" to "TEK State Machine"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions **k) done**

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3268**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **212** Starting Line # **38** Fig/Table# Section **8.4.6.1.1.2**

I object to the resolution of Comments 1327 because the original resolution requires exhaustive search for preamble sequences. Using a set of 4 PN sequences the preamble sequences can be divided into 4 sub-groups. Current contribution provides a solution for MSS to perform fast cell search.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/036r1 or the latest version.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution****Vote: 0-7**

Commenter proposes a solution without providing any technical justification for that solution.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3269**

Comment submitted by: Jonathan

Labs

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	213	Starting Line #	1	Fig/Table#	Section	8.
---------	------	--------------------	-----------------	-----	-----------------	---	------------	---------	----

I object to the resolution of comment 1945 in IEEE 802.16-05/010. This comment is about how the term MSS (now MS) has replaced SS in text pulled from the base document. The Decision of the Group was to supercede that comment by comment #71, and the reason for the Group's Decision was that "This comment has been superseded by comment #71 which changes the usage of MSS and SS." However, I cannot find comment #71 listed in IEEE 802.16-05/010 or IEEE 802.16-04/011. Going back to IEEE 802.16-04/69r4, I find comment #71 (which is also technically binding) , and the resolution of the group for that comment was "DJ, possibly David Castelov, possibly others to supply a specific list of changes to be made."

If this action item was done, I do not find that all the necessary fixes were made. The title of this ammendment is "Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems, Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands" I think many sections of this document lose sight of the fact that fixed systems must also be able operate.

My Suggested Remedy is an attempt to fix the SS/FS/MS language in section 8. PHY

Suggested Remedy

- 1) On page 243, line 36, change "for MSS supporting ~~H-ARQ~~HARQ." to "for SS supporting ~~H-ARQ~~HARQ."
- 2) On page 407, line 42, change "used by any MS that wants to synchronize" to "used by any SS that wants to synchronize" (a fixed SS still needs to be able to do inital ranging).
- 3) On page 407, line 56, change "onto those the MS shall transmit the two consecutive initial-ranging/handover-ranging codes" to "onto those the SS shall transmit the two consecutive initial-ranging/handover-ranging codes" (a fixed SS still needs to be able to do inital ranging).
- 4) On page 456, line 37, change "the correction term for MS-specific power offset." to "the correction term for SS-specific power offset." (fixed SS's still need power control).

Proposed Resolution**Recommendation:****Recommendation by**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution**Group's Notes**

Group's Action Items

Editor's Notes Editor's Actions |) none needed

duplicate

Editor's Questions and Concerns

Editor's Action Items

Document under Review:	P802.16e/D6	Ballot Number:	0001010	Comment Date	
Comment #	3272	Comment submitted by:	Ron Murias	Member	2005/03/09
Comment	Type Technical, Binding	Starting Page #	215	Starting Line #	20
		Fig/Table#		Section	8.3.5.1.1

Clarify PMP DL subchannelization zone to indicate that it is OFDMA.

Suggested Remedy

Change:
8.3.5.1.1 PMP DL subchannelization zone
to:
8.3.5.1.1 PMP DL subchannelization zone (OFDMA)

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 6-6
This section is not talking about multiple access.

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions |) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3275**

Comment submitted by: Rainer

Ullmann

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **220** Starting Line # Fig/Table# **251a** Section **8.3.6.3.9**

The table (Fast_Ranging_IE) still does not follow the structure of an OFDM UL-MAP extended IE. since it contains fields already defined in the body of the UL-MAP itself. The entries for CID, UIUC and Reserved have to be deleted. My comment 2170 which dealt with this section was accpeted (see 80216-05_001r3.usr) but only partly implemented. Somehow further entries made it into this table in this revision which also have to be deleted. An editorial correction wihtin the original comment was also missed.

Suggested Remedy

In table 251a delete entries for

CID

Start time

Subchannel Index

UIUC

as they are already part of the UL-MAP_IE body. Furthermore delete

Reserved

as it is not necessary to reach a byte boundary and the length of the IE is 8 bytes

p.219 l 61. extend UIUC -> extended UIUC

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Superseded**[See comment 3276](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

2005/04/10

IEEE 802.16-05/019

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3277**

Comment submitted by: Rainer

Ullmann

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **221** Starting Line # **53** Fig/Table# Section **8.3.6.6**

The titles for 8.3.6.6.1 and 8.3.6.6.2 are sort of misleading since they seem to indicate that this subsections deals with compressed versions of standard DL/UL-MAPs rather than private maps.

Also there is a typo and a missing table reference in line 19 "presneted in Table AAA"

On the other hand Reduced Compressed Private Maps (8.3.6.7) sounds a bit like overkill, Reduced Private Maps would do too....in fact that's what they are called in subsections 8.3.6.7.1 & 2

Here comes the technical part:

According to the text the Compressed private UL-MAP is appended to the compressed private DL-MAP if the UL-MAP appended bit is set. This is not reflected in Table 251c. Here the bit would basically only indicate an HCS on/off option. The if -clause should contain an "else branch in which the Compressed_Private_UL-MAP() is included.

Suggested Remedy

p. 221 I.53

The presence of the compressed **private** DL-MAP format is indicated by the contents of the most significant two bits of the first data byte. These bits overlay the HT and EC bits of a generic MAC header. When these bits are both set to 1 (an invalid combination for a standard header), the compressed **private** DL-MAP format is present. A compressed **private** UL-MAP shall only appear immediately after a compressed **private** DL-MAP. The presence of a compressed **private** UL-MAP is indicated by a bit in the compressed **private** DL-MAP data structure.

p. 222 I.16

8.3.6.6.1 Compressed **private** DL-MAP

The compressed private DL-MAP format is presented in Table 251c.

p. 222 I.28

Table 251c - Compressed **private** DL-MAP message format

Compressed_**Private**_DL-MAP()

p. 223 I.59

8.3.6.6.2 Compressed **private** UL-MAP

The compressed **private** UL-MAP format is presented in Table 251d. The message may only appear after a compressed **private** DL-MAP message to which it shall be appended. The message presents the same information as the standard format with the exception that the Generic MAC header and the Uplink Channel ID are omitted.

Table 251d- Compressed **private** UL-MAP message format

Compressed_**Private**_UL-MAP()

8.3.6.7 Reduced ~~Compressed~~ Private Maps

Reduced ~~compressed~~ private maps are based upon the compressed map format, however they are specifically designed to support a single unicast ID per map. Their use is identical to standard compressed private maps. However, fields have been removed that are not required to support a single ID. The reduced private

map will be pointed to by a broadcast map or private compressed map which will define the values of several fields that will be constant for the duration of the private map chain. The behavior of the compressed map fields that are not present in the reduced private map are described below:

Note: strikeouts in the above paragraph are only to indicate change w.r.t. the working draft but should not be included into the draft, since the changes are w.r.t. Std IEEE 802.16-2004

Modify Table 251c line 17ff: (note: I changed the NOT condition - positive is my preference...)

if (UL-MAP appended) {		
Compressed_Private_UL-MAP()	Variable	
}		
else {		
HCS	bits	
}		

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[p. 221 I.53](#)

The presence of the compressed [private](#) DL-MAP format is indicated by the contents of the most significant two bits of the first data byte. These bits overlay the HT and EC bits of a generic MAC header. When these bits are both set to 1 (an invalid combination for a standard header), the compressed [private](#) DL-MAP format is present. A compressed [private](#) UL-MAP shall only appear immediately after a compressed [private](#) DL-MAP. The presence of a compressed [private](#) UL-MAP is indicated by a bit in the compressed [private](#) DL-MAP data structure.

[p. 222 I.16](#)

8.3.6.6.1 Compressed [private](#)_DL-MAP

The compressed private DL-MAP format is presented in Table [251c](#).

[p. 222 I.28](#)

Table 251c - Compressed [private](#) DL-MAP message format

Compressed_Private_DL-MAP()

[p. 223 I.59](#)

8.3.6.6.2 Compressed [private](#) UL-MAP

The compressed [private](#) UL-MAP format is presented in Table 251d. The message may only appear after a compressed [private](#) DL-MAP message to which it shall be appended. The message presents the same information as the standard format with the exception that the Generic MAC header and the Uplink Channel ID are omitted.

Table 251d- Compressed [private](#) UL-MAP message format

Compressed_Private_UL-MAP()

8.3.6.7 Reduced ~~Compressed~~ Private Maps

Reduced ~~compressed~~ private maps are based upon the compressed map format, however they are specifically designed to support a single unicast ID per map. Their use is identical to standard compressed private maps. However, fields have been removed that are not required to support a single ID. The reduced private map will be pointed to by a broadcast map or private compressed map which will define the values of several fields that will be constant for the duration of the private map chain. The behavior of the compressed map fields that are not present in the reduced private map are described below:

Note: strikeouts in the above paragraph are only to indicate change w.r.t. the working draft but should not be included into the draft, since the changes are w.r.t. Std IEEE 802.16-2004

Modify Table 251c line 17ff: (note: I changed the NOT condition - positive is my preference...)

	if (!UL-MAP appended) {			
	Compressed_Private_UL-MAP()		Variable	
	}			
	else {			
	HCS		bits	
	}			

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

p. 221 I.53

The presence of the compressed **private** DL-MAP format is indicated by the contents of the most significant two bits of the first data byte. These bits overlay the HT and EC bits of a generic MAC header. When these bits are both set to 1 (an invalid combination for a standard header), the compressed **private** DL-MAP format is present. A compressed **private** UL-MAP shall only appear immediately after a compressed **private** DL-MAP. The presence of a compressed **private** UL-MAP is indicated by a bit in the compressed **private** DL-MAP data structure.

p. 222 I.16

8.3.6.6.1 Compressed **private**_DL-MAP

The compressed private DL-MAP format is presented in Table 251c.

p. 222 I.28

Table 251c - Compressed **private** DL-MAP message format

Compressed_**Private**_DL-MAP()

p. 223 I.59

p. 223 1.09

8.3.6.6.2 Compressed **private** UL-MAP

The compressed **private** UL-MAP format is presented in Table 251d. The message may only appear after a compressed **private** DL-MAP message to which it shall be appended. The message presents the same information as the standard format with the exception that the Generic MAC header and the Uplink Channel ID are omitted.

Table 251d- Compressed **private** UL-MAP message format

Compressed_**Private**_UL-MAP()

8.3.6.7 Reduced ~~Compressed~~ Private Maps

Reduced ~~compressed~~ private maps are based upon the compressed map format, however they are specifically designed to support a single unicast ID per map. Their use is identical to standard compressed private maps. However, fields have been removed that are not required to support a single ID. The reduced private map will be pointed to by a broadcast map or private compressed map which will define the values of several fields that will be constant for the duration of the private map chain. The behavior of the compressed map fields that are not present in the reduced private map are described below:

Note: strikeouts in the above paragraph are only to indicate change w.r.t. the working draft but should not be included into the draft, since the changes are w.r.t. Std IEEE 802.16-2004

Modify Table 251c line 17ff: (note: I changed the NOT condition - positive is my preference...)

```

-----
|   if (!UL-MAP appended) {           |           |           |
-----
|           Compressed_Private_UL-MAP( ) | Variable |           |
-----
|   }                                 |           |           |
-----
|   else {                             |           |           |

```

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3279**Comment submitted by: **Rainer****Ullmann**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **225** Starting Line # **6**Fig/Table# Section **8.3.6.7.1**

Tables 257e/f - HELP !!!!!

- OFDM has neither HARQ/CQICH, nor repetition coding , Fast Feedback,....
- HCS should be at the end of table 257e with an if/else clause to distinguish UL-MAP appended case.
- HCS missing at the end of Table 257f
- Size fields often lack units (i.e. bit or bits)
- No Length field
- Preamble Time Shift descriptors after Table point to wrong section

Suggested Remedy

Consider document C8016e-05_138.doc

Proposed Resolution Recommendation: Accepted**Recommendation by**

Adopt C8016e-05_138.doc

Reason for Recommendation**Resolution of Group Decision of Group: Accepted**

Adopt C8016e-05_138.doc

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3285**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **233** Starting Line # **16** Fig/Table# Section **Table 268**

"I object to the current DL-MAP transmission structure for not providing STC option in the first PUSC zone. For deployments using STC zones, not providing STC in the first PUSC zone causes large MAC overhead in the DL-MAP and imbalance of cell coverage."

Suggested Remedy

Adopt contribution C80216e-05_29 or the latest revision.

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C80216e-05_29r2

Reason for Recommendation**Resolution of Group**Decision of Group: **Rejected****Reason for Group's Decision/Resolution****Vote:** 34-27

Putting an optional coding on a mandatory message effectively makes it mandatory for everyone.

Group's Notes**Group's Action Items****Editor's Notes**

Editor's Actions |) none needed

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3294**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **236** Starting Line # Fig/Table# Section **8.4.5.3**
 contribution 802.16e-05/084r4 was accepted in session #35 but was not incorporated into 802.16e/D6 due to an editorial error in the original contribution.

Suggested Remedy

Adopt 802.16e-05/84r5 which corrects the editorial error.

Proposed Resolution Recommendation: **Accepted-Modified** Recommendation by
 Incorporate the changes suggested in C80216e-05/084r6

Reason for Recommendation

Resolution of Group Decision of Group: **Accepted-Modified**

Incorporate the changes suggested in C802.16e-05/084r6

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Editor's Notes Editor's Actions |) none needed

[Dupe of previous resolution](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3301**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **240** Starting Line # **10** Fig/Table# Section **Table 279**

"I object to the current solutions of providing only PUSC or FUSC(or the like) deployments only. In multiple sector deployment scheme, the current PUSC deployment incurs large equipment cost on antenna subsystems whereas FUSC deployment needs to overcome interference problem. By introducing a hybrid scheme of transmit diversity, the OFDMA deployment brings about a mild increase of equipment cost while delivering interference mitigation."

Suggested Remedy

Adopt contribution C80216e-05_30 or the latest revision.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected**

Out of scope of the recirc.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3323**

Comment submitted by: **James**

Gilb

Member

2005/03/09

Comment Type **Technical, Binding**

Starting Page # **259**

Starting Line # **5**

Fig/Table#

Section

8.4.5.3.21.3

"The table, 258l, is missing its title."

Suggested Remedy

Add a title.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Add the tile: Skip IE

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Add the tile: Skip IE

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions **k) done**

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3325**

Comment submitted by: Mark

Cudak

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	259	Starting Line #	28	Fig/Table#	Section	8.4.5.3.22
---------	------	--------------------	-----------------	-----	-----------------	----	------------	---------	------------

[Identical comment submitted by Les Eastwood, Qiang Guo, John Barr, Colin Frank, Ricard Pace, Nat Natarajan, Scott Migaldi, Mark Cudak]
 The draft standard contains a new HARQ DL MAP IE. As this is a new addition, it is important that the MAP be reasonably flexible to allow for future capabilities and optimization by the system implementation. In addition, the capability expansion must be efficient so as not to degrade the coverage reliability of the DL_MAP.

Suggested Remedy

Adopt the resolution in contribution C80216e-05_132.pdf

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt the resolution in contribution C80216e-05_132r1.pdf

Reason for Recommendation**Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Vote: 24-20

Adds complexity, based on what may be a future amendment.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3327**Comment submitted by: **Mark****Cudak**

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	259	Starting Line #	28	Fig/Table#	Section	8.4.5.3.22
---------	------	--------------------	-----------------	-----	-----------------	----	------------	---------	------------

This comment suggests a clarification to the contribution IEEE C802.16e-05/038r1, which was adopted at the last meeting but not incorporated into the D6 document (so the page number and section number for D6 is not known). When an assignment is made to multiple users (MU=1), it needs to be clarified that each of the multiple users should be assigned its own ACK channel.

Suggested Remedy

Above Table 306i in IEEE C802.16e-05/038r1, insert the following text:

"When MU Indicator = 1 for a particular loop index j in the MIMO DL Chase H-ARQ Sub-Burst IE, MIMO DL IR H-ARQ Sub-Burst IE, or the MIMO DL IR H-ARQ for CC Sub-Burst IE, each layer shall be allocated it's own ACK channel. In this case, the number of ACK channels associated with the sub-burst IE will be greater than N_sub_burst."

Above Table 306t in IEEE C802.16e-05/038r1, insert the following text:

"When MU Indicator = 1 for a particular loop index j in the MIMO UL Chase H-ARQ Sub-Burst IE, MIMO UL IR H-ARQ Sub-Burst IE, or the MIMO UL IR H-ARQ for CC Sub-Burst IE, each layer shall be allocated it's own bit position in the ACK channel bitmap. In this case, the number of bits in the ACK channel bitmap associated with the sub-burst IE will be greater than N_sub_burst."

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superceded****[See comment 3333](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3331**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **259** Starting Line # **55** Fig/Table# Section **8.4.5.3.22**

The type of fast-feedback encoding (4-bit or enhanced 6-bit) to be used by CQI channels allocated through H-ARQ IEs is not clear.

Suggested Remedy

Clarify that FFB CQI channels allocated through H-ARQ IEs are enhanced feedback channels (6 bits):

add the following text to page 259, line 55:

The enhanced feedback 6-bit channel type shall be used for CQI channels allocated through any of the DL HARQ sub-burst IEs.**Proposed Resolution****Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superseded****[See comment 3336](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** [1\) none needed](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3339**

Comment submitted by: Mark

Cudak

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	261			8.4.5.3.22

Contributions IEEE C802.16e-05/23r5 introduced CQICH control as optional dedicated control within each DL HARQ sub-burst IE. However, this control field can be inefficient in a number of ways.

In general, a system employing adaptive modulation and coding should assign feedback prior to the first packet transmission and discontinue feedback once the final packet in the queue has been successfully received. The CQI report is used to select the appropriate DIUC prior for the HARQ sub-burst transmission. However, the CQICH control is the DL HARQ sub-burst IE does serve either purpose. The CQICH control can not be used to assign resource prior to the first transmission or deallocate resources after the last successful transmission. The CQI Alloc IE must be used for this purpose.

The CQI control could be made more efficient and useful.

Suggested Remedy

Adopt the changes proposed in contribution IEEE C802.16e-05/133

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Superseded**

[See comment 3336](#)

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3340**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **261** Starting Line #Fig/Table# **285n** Section **8.4.5.3.22**

The 'ACK disable' field is defined in 285o for DL HARQ IR CTC sub-burst IE.
For consistency, this field should be defined for the other HARQ sub-burst IEs.

Suggested Remedy

Add the following field to table 285n ("DL HARQ Chase sub-burst IE") after the AI_SN field:

ACK disable **1 bit** **When this bit is "1" no ACK channel is allocated and the SS shall not reply with an ACK**

Add the following field to table 285p ("DL HARQ IR CC sub-burst IE") after the AI_SN field:

ACK disable **1 bit** **When this bit is "1" no ACK channel is allocated and the SS shall not reply with an ACK**

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superseded****[See comment 3336](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions**) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3342**Comment submitted by: **Mark****Cudak****Member****2005/03/09**

Comment Type **Technical, Binding** Starting Page # **261** Starting Line # **36** Fig/Table# Section **8.4.5.3.22**
 The ACK disable bit is not present in the DL HARQ Chase sub-burst IE.

Suggested Remedy

Add a new row to the DL HARQ Chase sub-burst IE immediately after the AI_SN row. Use the new row for specifying the ACK_disable bit. Specifically, the contents of the new row are the same as Table 285o, page 262 line 63:

ACK_disable || 1 bit || When this bit is set to "1" no ACK channel is allocated and the SS shall not reply with an ACK.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Accepted-Modified**[See comment 3336](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** [k\) done](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3343**

Comment submitted by: Mark

Cudak

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **261** Starting Line # **42** Fig/Table# **285n** Section **8.4.5.3.22**

[Identical comment submitted by Les Eastwood, Qiang Guo, John Barr, Colin Frank, Ricard Pace, Nat Natarajan, Scott Migaldi, Mark Cudak]

The DL HARQ Chase sub-burst IE format in Table 285n does not allow the system to adjust the modulation and coding on a per sub-burst basis. The DIUC should optionally be allowed to vary on per sub-burst.

Suggested Remedy

Adopt the resolution in contribution C80216e-05_131.pdf

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superseded****[See comment 3336](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions**) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3355**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment	Type Technical, Binding	Starting Page # 269	Starting Line # 8	Fig/Table#	Section 8.4.5.3.26
---------	--------------------------------	----------------------------	--------------------------	------------	---------------------------

"I object to the DL-MAP and UL-MAP IE without providing the CID table at the beginning. MSS should be able to only check this table to determine whether there is traffic designated in the frame. As defined in the current 802.16e standard, a MSS has to, at the minimum, finish listening to the whole DL-MAP and UL-MAP regardless there is DL traffic or UL traffic for the MSS in the current frame."

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/059r2 or the latest version.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected**

Out of scope of the recirc.

These are new sections to provide new capabilities.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3358**

Comment submitted by: Herbert

Ruck

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **271** Starting Line # **39** Fig/Table# Section **8.4.5.3**

Some services need a constant bit rate for an extended time. In such cases the overhead used to allocate bandwidth frame by frame is wasted.

Suggested Remedy

We propose a method to allocate multiple frames when requested by the subscriber station without changing the current method of normal burst allocation. To make this possible we change a single bit in the PAPR/Safety Zone IE and create two short IEs. Adopt the proposal in IEEE C802.16e-05/158

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Out of scope of the recirc. Adds new capability and new material.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions**) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3359**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **272** Starting Line # **30** Fig/Table# **298a** Section **8.4.5.4.10.4**

The tables describing 6-bit enhanced feedback (section 8.4.5.4.10.4) have been replaced with 3-bit encoding tables.

Suggested Remedy

Undo the changes to 8.4.5.4.10.4 in 802.16e/D6

or

add 6-bit encoding tables for enhanced feedback channels

or

explain how 6-bit encoding can be obtained from the 3-bit encoding tables.

Proposed Resolution Recommendation: **Accepted-Modified** Recommendation by

Insert the table spanning page 260, line 58 - page 264, line 49 in D5a into page 273 line 20 in D6

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**

Insert the table spanning page 260, line 58 - page 264, line 49 in D5a into page 273 line 20 in D6

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**Editor's Actions [k\) done](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3363**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
There is a picture here without a figure title. It looks suspiciously like Figure 229c.	Technical, Binding	275	1		8.4.5.4.10.6

Suggested Remedy

Probably the best thing to do here is to delete the extra picture. Even better would be for the draft to have been read through by a few people before it was sent for ballot with so many obvious mistakes.

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Delete the first figure (page 275).

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**

Delete the first figure (page 275).

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** k) done

You need a title for the second (now the first) figure in 8.4.5.4.10.6. Also, you will need to provide electronic copies of these figures with your submittal to the IEEE, since they are not drawn into the Frame file.

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3367**

Comment submitted by: Yigal

Leiba

Member

2005/03/09

Comment Type **Technical, Binding**Starting Page # **280** Starting Line # **8**

Fig/Table#

Section **8.5.4.3.25**

Re: #1519

PUSC-ASCA permutation accepted in session #34 requires support from the MAC for proper operation.
 THE STANDARD IS BROKEN WITHOUT THIS MAC SUPPORT.

Suggested Remedy

Add the following text:

"8.4.5.3.26 PUSC ASCA Allocation

In the DL-MAP, a BS may transmit DIUC=15 with the PUSC_ASCA_IE() to indicate that data is transmitted to a PUSC-ASCA supporting MSS using the PUSC-ASCA permutation.

Syntax	Size	Notes
PUSC_ASCA_Alloc_IE {		
Extended DIUC	4 bits	
Length	4 bits	Length = 0x06
DIUC	4 bits	
Short Basic CID	12 bits	12 least significant bits of the Basic CID
OFDMA Symbol offset	8 bits	
Subchannel offset	6 bits	
No. OFDMA Symbols	7 bits	
No. Subchannels	6 bits	
Repetition Coding Indication	2 bits	0b00 - No repetition coding 0b01 - Repetition coding of 2 used 0b10 - Repetition coding of 4 used 0b11 - Repetition coding of 6 used
Permutation ID	4 bits	
}		

DIUC used for the burst.

Short Basic CID

12 least significant bits of the Basic CID

OFDMA Symbol offset

The offset of the OFDMA symbol in which the burst starts, measured in OFDMA symbols from beginning of the downlink frame in which the DL-MAP is transmitted.

Subchannel offset

The lowest index OFDMA subchannel used for carrying the burst, starting from subchannel 0.

No. OFDMA Symbols

The number of OFDMA symbols that are used (fully or partially) to carry the downlink PHY Burst.

No. of subchannels

The number of subchannels with subsequent indexes, used to carry the burst.

Repetition coding Indication

Indicates the repetition code used inside the allocated burst.

Permutation ID

Identifies the MIMO PUSC permutation used to carry the burst."

Proposed Resolution

Recommendation: Accepted-Modified

Recommendation by

Add the following text:

"8.4.5.3.26 PUSC ASCA Allocation

In the DL-MAP, a BS may transmit DIUC=15 with the PUSC_ASCA_IE() to indicate that data is transmitted to a PUSC-ASCA supporting MSS using the PUSC-ASCA permutation.

Syntax	Size	Notes
PUSC_ASCA_Alloc_IE {		
Extended DIUC	4 bits	
Length	4 bits	Length = 0x06
DIUC	4 bits	
Short Basic CID	12 bits	12 least significant bits of the Basic CID

OFDMA Symbol offset	8 bits	
Subchannel offset	6 bits	
No. OFDMA Symbols	7 bits	
No. Subchannels	6 bits	
Repetition Coding Indication	2 bits	0b00 - No repetition coding 0b01 - Repetition coding of 2 used 0b10 - Repetition coding of 4 used 0b11 - Repetition coding of 6 used
Permutation ID	4 bits	
}		

DIUC

DIUC used for the burst.

Short Basic CID

12 least significant bits of the Basic CID

OFDMA Symbol offset

The offset of the OFDMA symbol in which the burst starts, measured in OFDMA symbols from beginning of the downlink frame in which the DL-MAP is transmitted.

Subchannel offset

The lowest index OFDMA subchannel used for carrying the burst, starting from subchannel 0.

No. OFDMA Symbols

The number of OFDMA symbols that are used (fully or partially) to carry the downlink PHY Burst.

No. of subchannels

The number of subchannels with subsequent indexes, used to carry the burst.

Repetition coding Indication

Indicates the repetition code used inside the allocated burst.

Permutation ID

Identifies the ~~MIMO~~-PUSC ASCA permutation used to carry the burst."

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

Add the following text:

"8.4.5.3.26 PUSC ASCA Allocation

In the DL-MAP, a BS may transmit DIUC=15 with the PUSC_ASCA_IE() to indicate that data is transmitted to a PUSC-ASCA supporting MSS using the PUSC-ASCA permutation.

Syntax	Size	Notes
PUSC_ASCA_Alloc_IE {		
Extended DIUC	4 bits	
Length	4 bits	Length = 0x06
DIUC	4 bits	
Short Basic CID	12 bits	12 least significant bits of the Basic CID
OFDMA Symbol offset	8 bits	
Subchannel offset	6 bits	
No. OFDMA Symbols	7 bits	
No. Subchannels	6 bits	
Repetition Coding Indication	2 bits	0b00 - No repetition coding 0b01 - Repetition coding of 2 used 0b10 - Repetition coding of 4 used 0b11 - Repetition coding of 6 used
Permutation ID	4 bits	
}		

DIUC

DIUC used for the burst.

Short Basic CID

12 least significant bits of the Basic CID

OFDMA Symbol offset

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3369** Comment submitted by: Victor Stolpman Member 2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	281			8.4.5.4.11

[Identical comments submitted by Nico van Waes and Victor Stolpman.]

The matrix codebooks specified in 8.4.5.4.11 only allow 3-bit and 6-bit codebooks.

However, with a large antenna configuration a 9-bit can bring the performance much

closer to the optimal solution. Since both 3-bit and 6-bit CQICHs are already available

in the spec 8.4.5.4.15 table 302a, it is possible to combine a 3-bit and a 6-bit CQICH to allow a 9-bit payload.

Suggested Remedy

Adopt the proposal in contribution C80216-05_104r2

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Out of scope of the recirc. Adds new capability and new material.

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions l) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3372**

Comment submitted by: Mark

Cudak

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	281	Starting Line #	51	Fig/Table#	Section	8.4.5.4.10
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MIMO transmission can greatly increase the capacity of the system especially when combined with receivers implementing successive cancellation. However, the decoded BER performance of successive cancellation receivers is limited by the performance of the stream with the highest mean squared error. The decoded BER performance of a successive cancellation receiver can be greatly improved by applying a different power weighting to each MIMO stream in a frequency-selective communications channel. Moreover, it is possible to further simplify the receiver by predetermining the successive cancellation decoding order. Unequal power weighting on MIMO streams can provide a 5.0 dB improvement in frequency-selective channels over MIMO with equal power on each stream.

Per-stream power weighting was adopted into the standard as part of the Closed-Loop MIMO framework (Contribution 04/552r7). Table 302a of the D6 draft provides the ability to feedback per-stream power control values (Feedback type = 101). However, the specification text for enabling the use of per-stream power control is missing from the D6 draft.

Suggested Remedy

Adopt Contribution IEEE C802.16e-05/142

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt Contribution IEEE C802.16e-05/142 remedy 1.

Reason for Recommendation**Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Vote: 10-15

Simulation results for this specific remedy were not provided.

Group's Notes**Group's Action Items****Editor's Notes**

Editor's Actions |) none needed

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3384**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	319	Starting Line #	vario	Fig/Table#	Section	C
---------	------	--------------------	-----------------	-----	-----------------	-------	------------	---------	---

{pages 319-332:}

"The following commands are in the figure, but not the document: HO-notification-*, HO-pre-*. It is incorrect to justify it by claiming a forward reference to an unpublished draft, i.e., 802.16g."

Suggested Remedy

"Either define the commands or delete them. If the MSCs don't work without them, then delete the MSCs because they can't possibly inform the reader if they use undefined commands"

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Remove Figure C6 through Figure C12, Figure C18, Figure C19.

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted-Modified**

Remove Figure C6 through Figure C12, Figure C18, Figure C19.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Refer these figures over to 802.16g

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3385**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **332** Starting Line # **vario** Fig/Table# Section **C**

"The MSC references 2 commands, I-am-host-of and MS-info-req, that do not appear in this document or in 802.16-2001. It is incorrect to justify it by claiming a forward reference to an unpublished draft, i.e., 802.16g."

Suggested Remedy

"Either define the commands or delete them. If the MSCs don't work without them, then delete the MSCs because they can't possibly inform the reader if they use undefined commands"

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Remove Figure C20

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted**

Remove Figure C20

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items**

Refer these figures over to 802.16g

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3388**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **335** Starting Line # **14** Fig/Table# **302a** Section **8.4.5.4.15**

CQICH-related control elements should specify on which zone CINR should be reported, since CINR measurements are very much dependent on the zone type (for example whether it is reuse-1, reuse-3, etc.)

Suggested Remedy

Adopt contribution 802.16e-05/150 ("Corrections to CINR feedback through CQI Channels")

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Technically incomplete.
Ran Yaniv requested this be rejected as technically incomplete.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3405**

Comment submitted by: **Mark**

Cudak

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **348** Starting Line # **48** Fig/Table# Section **8.4.5.4.25**

The dedicated control indicator appears both before the sub-burst IEs as well as inside the sub-burst IEs. This could create confusion/conflicts or unnecessary duplication of the dedicated control information.

Suggested Remedy

Keep the dedicated control indicator in the sub-burst IEs but remove it from the parent HARQ UL_MAP_IE. This means delete lines 48-51 from Table 302l.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

[See comment 3336](#)

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3409**Comment submitted by: **Mark****Cudak**

Member

2005/03/09

Comment **Type** **Technical, Binding** **Starting Page #** **351** **Starting Line #** **37** **Fig/Table#** **Section** **8.4.5.4.25.1**

The dedicated control IE for the uplink is currently empty. It needs to be revised to provide at least the same functionality as already defined for the downlink.

Suggested Remedy

Replace the content of section 8.4.5.4.25.1 (Dedicated UL control IE) with the content of section 8.4.5.3.21 (Dedicated DL control IE), but replace "DL" with "UL" and make the table number 302p.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group:** **Superseded**[See comment 3336](#)**Reason for Group's Decision/Resolution****Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** [1\) none needed](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3420**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **376** Starting Line # **6** Fig/Table# Section **8.4.6.1.1.1**

I object to that the standard can only allow the Common SYNC symbol to be transmitted in every fourth downlink frame. It may introduce too much overhead for system of short frames and my not be frequent enough for system of long frames.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/128 or the latest version.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Out of scope of the recirc.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3424**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **380** Starting Line # **61** Fig/Table# **311** Section **8.4.6.1.2.2**

The current value of of PermutationBase in table 311b (FUSC for FFT-512) results in a high hit ratio. The maximum hit ratio between two subchannels from different cells can reach 38%.

This can be reduced to 25% through a simple change to the PermutationBase value.

Suggested Remedy

Modify the value of the 'PermutationBase' field in table 311b to

2,0,1,6,4,3,5,7

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Modify the value of the 'PermutationBase' field in table 311b to

2,0,1,6,4,3,5,7

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Modify the value of the 'PermutationBase' field in table 311b to

2,0,1,6,4,3,5,7

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3454**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **425** Starting Line # **20** Fig/Table# Section **8.4.8.3.7**

I object to the resolution of Comment 1541 in 80216-05_010.pdf comment resolution database that current CL-MIMO solution that the power can not be redistributed effectively among streams.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/125 or the latest version.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Out of scope of the recirc.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3456**

Comment submitted by: Victor

Stolpman

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	444			8.4.9.2.5.1

The document structure of 5.1 and 5.2 substantially violates IEEE layout guidelines.

It is "not done" to insert somewhere in the middle of 5.1 the words "informative" and make that by vague implication apply to 5.2.

In the current section 5.2, under method 1 an equivalent second method is snuck in. Given that all methods are equivalent, because the output is the same, this ought to be listed as "method 2".

The spec should not have page after page of informative implementation garbage, which is absolutely unnecessary for even a novice engineer to implement this spec and for which I can think up any number of alternatives, litter this already huge spec of normative language.

Suggested Remedy

Make "Direct Encoding (Informative)" a proper header 5.2, remove the current header 5.2.

Insert "method 2" above "equivalently" and rename the current method 2 to method 3

Bury the newly created 5.2 in a subsubsection of an appendix, or by substantial preference, move it to /dev/null

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Accepted-Duplicate**

[See 3458 \(contains solutions\)](#)

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3457**

Comment submitted by: Nico

van Waes

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	444			8.4.9.2.5.1

The document structure of 8.4.9.2.5.1 and 8.4.9.2.5.2 substantially violates IEEE layout guidelines.

It is "not done" to insert somewhere in the middle of 5.1 the words "informative" and make that by vague implication apply to 8.4.9.2.5.2.

In the current section 8.4.9.2.5.2, under method 1 an equivalent second method is snuck in. Given that all methods are by definition equivalent, because the output is exactly the same, this ought to be listed as "method 2".

The spec should not have page after page of informative implementation garbage (which is absolutely unnecessary for even a novice engineer to implement this spec and for which I can think up any number of alternatives) litter this already huge spec of normative language.

Suggested Remedy

Make "Direct Encoding (Informative)" a proper header 8.4.9.2.5.2, remove the current header 8.4.9.2.5.2.

Insert "method 2" above "equivalently" and rename the current method 2 to method 3

Bury the newly created 8.4.9.2.5.2 in a subsubsection of an appendix, or by substantial preference, move it to /dev/null

Proposed Resolution **Recommendation: Accepted-Modified** **Recommendation by**

Change "Method 1, second method equivalent to Method 1, and Method 2" to three distinct methods: Method 1a, Method 1b, and Method 2.

Newly renamed "Method 1b" should be inserted on page 449 line 8 above the words "equivalently, ..."

Make "Direct Encoding (Informative)" a proper header 8.4.9.2.5.2, remove the current header 8.4.9.2.5.2.

In the change from contribution 134, there's a comment to move the line "Direct Encoding (Informative)". Remove the "(Informative)" because the entire subclause is now informative.

Reason for Recommendation

Resolution of Group **Decision of Group: Accepted-Modified**

Change "Method 1, second method equivalent to Method 1, and Method 2" to three distinct methods: Method 1a, Method 1b, and Method 2.

Newly renamed "Method 1b" should be inserted on page 449 line 8 above the words "equivalently, ..."

Make "Direct Encoding (Informative)" a proper header 8.4.9.2.5.2, remove the current header 8.4.9.2.5.2.

In the change from contribution 134, there's a comment to move the line "Direct Encoding (Informative)". Remove the "(Informative)" because the entire subclause is now informative.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns

IEEE does not support informative text within the "normative" part of the document. They usually prefer informative text to appear as a Note within the body or as an annex. I don't think Michelle Turner will let this through.

Editor's Action Items

Document under Review:	P802.16e/D6	Ballot Number:	0001010	Comment Date
Comment #	3460	Comment submitted by:	Rajesh Bhalla	Member
Comment	Type	Starting Page #	Starting Line #	Section
	Technical, Binding	444	10	8.4.9.2.5.1

I object to resolution of Comment 1606 in 80216-05_010.pdf comment resolution database that the current LDPC solution that the 5/6 coding rate is missing from the standard.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/126 or the latest version.

Proposed Resolution **Recommendation:** **Accepted-Modified** **Recommendation by**

Adopt the resolution text in contribution IEEE C802.16e-05/126 or the latest version.

Reason for Recommendation

Resolution of Group **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

Vote: 26-25
The performance improvement between 3/4 and 5/6 is too small to justify an extra mode.

Group's Notes**Group's Action Items**

Editor's Notes **Editor's Actions** 1) none needed

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3463**

Comment submitted by: Victor

Stolpman

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	445	Starting Line #	Fig/Table#	Section	8.4.9.2.5.1
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	-------------

Code rate 2/3 A is at its best less than .1 dB better than 2/3 B for a few cases, whereas 2/3 B is better in all other cases.

From the scheduler's perspective, choosing between the two will be an exercise in futility.

In addition, it requires a complete different computation rule to create, which adds unnecessary complexity if we want to avoid storing the entire set of matrices (which is best avoided because of the huge storage requirements).

This additional complexity is by no means justified by the minute achieved gain in those few cases.

Suggested Remedy

Delete code rate 2/3 A and the corresponding shift rule.

Proposed Resolution **Recommendation: Accepted**

Recommendation by

Delete code rate 2/3 A and the corresponding shift rule.

Reason for Recommendation**Resolution of Group**

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Vote: 5-8

The rate 2/3 A code has better FER performance than the rate 2/3 B code for a few code block sizes.

Group's Notes**Group's Action Items****Editor's Notes**

Editor's Actions |) none needed

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3464**

Comment submitted by: Victor

Stolpman

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	445	Starting Line #	Fig/Table#	Section	8.4.9.2.5.1
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	-------------

[Identical comments submitted by Nico van Waes and Victor Stolpman.]

Code rate 3/4 A is according to the published results always worse than 3/4 B (not by much, but anyway). Despite the warm and fuzzy feeling of stacking everybody's favorite numbers on top of each other, this type of redundancy for the sake of redundancy has zero technical justification. In fact the additional storage requirements and needless complexity are a good justification to toss it.

Suggested Remedy

Delete code rate 3/4 A

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete code rate 3/4 A

Reason for Recommendation**Resolution of Group**Decision of Group: **Rejected****Reason for Group's Decision/Resolution**

Vote: The rate 3/4 A code has a complexity advantage over the rate 3/4 B code (because it is a regular code), and it is desirable to retain the flexibility between processing complexity and performance.

Group's Notes**Group's Action Items****Editor's Notes**

Editor's Actions |) none needed

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3465**

Comment submitted by: Nico

van Waes

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	445			8.4.9.2.5.1

Code rate 2/3 A is at its best less than .1 dB better than 2/3 B for a few cases, whereas 2/3 B is better in all other cases. From the scheduler's perspective, choosing between the two will be an exercise in futility and not something anybody is going to have simultaneously active in burst profiles. In addition, it requires a complete different computation rule to create, which adds unnecessary complexity if we want to avoid storing the entire expanded matrices (which is best avoided because of the huge storage requirements).

This additional complexity is by no means justified by the minute achieved gain in those few cases.

Suggested Remedy

Delete code rate 2/3 A and the corresponding shift rule.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Rejected-Duplicate**

[See comment 3463](#)

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions) none needed

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3468**

Comment submitted by: James

Gilb

Member

2005/03/09

Comment Type **Technical, Binding**

Starting Page # **446**

Starting Line # **12**

Fig/Table#

Section

8.4.9.2.5.1

It is not proper to mark a subclause as informative (see 2005 IEEE Style Guide).

Suggested Remedy

[Move this text to an informative Annex.](#)

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

[Same issue was addressed by comment 3457.](#)

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3470**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	456	Starting Line #	3	Fig/Table#	Section	8.4.10.3
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The power control scheme in 8.4.10 requires some corrections and clarifications. For example:

- 1) Open loop power control mechanism should be divided into two explicit categories - passive open loop and active open loop, where in passive open loop the MSS estimates the path loss but does not update its Offset_SSperSS variable.
- 2) The open power control mechanism for initial ranging should be made consistent with the mechanism for regular transmission.
- 3) The units of measurement are not consistent between different power control parameters. They should be given in dbm/subcarrier.

Suggested Remedy

Adopt contribution 802.16e-05/137 "Correction to Power Control for OFDMA PHY".

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt contribution 802.16e-05/137r1

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted-Modified**

Adopt contribution C802.16e-05/137r1

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions k) done

Could not find change 8 regarding the BS EIRP field in BS EIRP.

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3472**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment	Type	Technical, Binding	Starting Page #	458	Starting Line #	40	Fig/Table#	Section	8.4.11.3
---------	------	--------------------	-----------------	-----	-----------------	----	------------	---------	----------

The current 802.16e SINR reporting mechanism requires the MSS to report a straightforward CINR measurement. This mechanism does not provide the BS with any knowledge on the frequency selectivity of the channel and noise (especially prominent with partially loaded cells and with multipath). This knowledge is important since, contrary to the AWGN channel, in a frequency selective channel there is no 1 to 1 relation between amount of increase in power and amount of improvement in "effective SINR" . Furthermore, the relation is dependent on MCS level. This results in larger fade margins, which translates directly to reduction in capacity.

In this contribution we propose a mechanism based on the "Exponential Effective SIR Mapping" (EESM) model that provides the BS with sufficient knowledge on the channel-dependent relationship between power increase, MCS change and improvement in effective SINR.

Suggested Remedy

Adopt contribution 802.16e-05/141 "CINR measurements using the EESM method"

Proposed Resolution	Recommendation: Accepted-Modified	Recommendation by
---------------------	--	-------------------

Adopt contribution 802.16e-05/141r2 "CINR measurements using the EESM method"

Duplicate 8.4 changes in 8.3

Reason for Recommendation**Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Vote: 30-15

Does not show performance gain over the conventional method.

The proposal introduces a deployment specific parameter, beta, which is not explicitly specified.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3473**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **460** Starting Line # **55** Fig/Table# Section **8.4.16**

"I object to the current draft for not specifying PHY performance requirement related to mobile handoffs. Without the specifying the requirements, equipments can have dissimilar timing reference points and dissimilar neighbor cell scanning mechanism. It will cause interoperation problems. "

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/033 or the latest version.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt the resolution text in contribution IEEE C802.16e-05/033r4

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted-Modified**

Adopt the resolution text in contribution IEEE C802.16e-05/033r4

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**Editor's Actions [k\) done](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3474**

Comment submitted by: Jonathan

Labs

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **461** Starting Line # **4** Fig/Table# Section **9.**

I object to the resolution of comment 1945 in IEEE 802.16-05/010. This comment is about how the term MSS (now MS) has replaced SS in text pulled from the base document. The Decision of the Group was to supercede that comment by comment #71, and the reason for the Group's Decision was that "This comment has been superseded by comment #71 which changes the usage of MSS and SS." However, I cannot find comment #71 listed in IEEE 802.16-05/010 or IEEE 802.16-04/011. Going back to IEEE 802.16-04/69r4, I find comment #71 (which is also technically binding) , and the resolution of the group for that comment was "DJ, possibly David Castelov, possibly others to supply a specific list of changes to be made."

If this action item was done, I do not find that all the necessary fixes were made. The title of this ammendment is "Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems, Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands" I think many sections of this document lose sight of the fact that fixed systems must also be able operate.

My Suggested Remedy is an attempt to fix the SS/FS/MS language in section 9. Configuration

Suggested Remedy

On page 461, line 4, change "**9.1 MS IP addressing**" to "**9.1 SS IP addressing**"

Proposed Resolution

Recommendation:

Recommendation by

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3480**

Comment submitted by: Jonathan

Labs

Member

2005/03/09

Comment Type **Technical, Binding**Starting Page # **467**Starting Line # **1**

Fig/Table#

Section **11**

I object to the resolution of comment 1945 in IEEE 802.16-05/010. This comment is about how the term MSS (now MS) has replaced SS in text pulled from the base document. The Decision of the Group was to supercede that comment by comment #71, and the reason for the Group's Decision was that "This comment has been superseded by comment #71 which changes the usage of MSS and SS." However, I cannot find comment #71 listed in IEEE 802.16-05/010 or IEEE 802.16-04/011. Going back to IEEE 802.16-04/69r4, I find comment #71 (which is also technically binding) , and the resolution of the group for that comment was "DJ, possibly David Castelov, possibly others to supply a specific list of changes to be made."

If this action item was done, I do not find that all the necessary fixes were made. The title of this ammendment is "Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems, Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands" I think many sections of this document lose sight of the fact that fixed systems must also be able operate.

My Suggested Remedy is an attempt to fix the SS/FS/MS language in section 11. TLV Encodings

Suggested Remedy

- 1) On p. 483, starting line 28, change MS to SS through out section 11.7.6.
- 2) On p. 483, line 48, change "**11.7.8 MS capabilities encodings**" to "**11.7.8 SS capabilities encodings**"
- 3) On p. 494, line 1, change "**11.8.3.7.2 OFDMA MS demodulator**" to "**11.8.3.7.2 OFDMA SS demodulator**"
- 4) On p. 495, line 31, change "**11.8.3.7.3 OFDMA MSS modulator**" to "**11.8.3.7.3 OFDMA SS modulator**"
- 5) On p. 495, line 61, change "**11.8.3.7.5 OFDMA MSS Permutation support**" to "**11.8.3.7.5 OFDMA SS Permutation support**"

Proposed Resolution

Recommendation:

Recommendation by

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances.
Delete the definition of FS

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

All of the specific instances above were changed. Not every instance throughout document.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**

Ballot Number: **0001010**

Comment Date

Comment # **3493**

Comment submitted by: Victor

Stolpman

Member

2005/03/09

Comment Type **Technical, Binding**

Starting Page # **478**

Starting Line #

Fig/Table#

Section **11.4.2**

[Identical comments submitted by Nico van Waes and Victor Stolpman.]

There are only so many burst profiles that can be simultaneously active. Setting up so many different flavors of LDPC FEC code types, some of which provide no relevant difference in performance, is hence not only absurd, but downright bad engineering. I'd like to see the first implementation that is having both A and B versions of a code simultaneously active. In practice, the person implementing this stuff will make an arbitrary choice between the two and never enable the other one, making it de facto a "for extra-expensive testpurposes and needless implementation cost only" feature.

Suggested Remedy

Undo the changes made to table 361, deleting all references to A and B flavors.

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

As comment said, it is totally implementation dependent. It cannot be the reason that the value field should not specify which code is used.

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions l) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3503**

Comment submitted by: Tal

Kaitz

Member

2005/03/09

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	496			8.4

The standard does not provide any means for the MS to send mobility related PHY parameters to the BS. Important parameters include a mobility indication (can be related to Doppler spread), and indication of change in the distance from BS (changes to round trip delay).

Suggested Remedy**Proposed Resolution****Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

No text provided.

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3520**Comment submitted by: **Rajesh****Bhalla**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **527** Starting Line # **30** Fig/Table# Section **12.4**

I object to the resolution of Comment #1850, #1859, #1861, #1864 in 80216-05_010.pdf comment resolution because I believe that specific system profiles should be included in the standard for mobility operation.

Suggested Remedy

Adopt contribution C80216e-05_60r2 or the latest revision.

Proposed Resolution Recommendation: Accepted**Recommendation by**

Adopt contribution C80216e-05_60r2 or the latest revision.

Reason for Recommendation**Resolution of Group****Decision of Group: Rejected****Reason for Group's Decision/Resolution**

Vote: 48-23

This contribution is incomplete in several ways:

- it only defines a few parameters for the MAC and PHY, but there is a lot more than what's being proposed
- incomplete in terms of frequency bands, parameters, options

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** |) none needed**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3521**

Comment submitted by: Herbert

Ruck

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **527** Starting Line # **30** Fig/Table# Section **12.4.3**

We propose to include in the text a profile for OFDMA systems with 5 MHz bandwidth. The frame duration shall be 10 ms for the base station and 10 ms and 5 ms (with auto detect) for the subscriber station. The unresolved comment 1855 referred to the need of a 5 MHz profile. Several other comments and contributions recognized the need for additions and changes in the profile section.

Suggested Remedy

Adopt the proposal in IEEE C802.16e-05/154

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Adopt the proposal in IEEE C802.16e-05/154

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 6-12

This contribution is incomplete in several ways:

- it only defines a few parameters for the MAC and PHY, but there is a lot more than what's being proposed
- incomplete in terms of frequency bands, parameters, options

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

2005-03-10

Comment # **3542**

Comment submitted by: David

Castelow

Comment	Type	Technical, Binding	Starting Page #	17	Starting Line #	19	Fig/Table#	7b	Section	6.3.2.1.2.2
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I disagree with the resolution of comment xxx.
 CINR is not a measure of UL Tx Power, so either rename or replace description.
 Also no units specified.

Suggested Remedy

Page 17, line 19, replace "UL Tx power level" with "CINR".
 Page 17, line 21, replace "Tx power" with "CINR".
 Style question: should the units be mentioned in the table, or the body, or in both?
 Re format columns of table to avoid unnecessary hyphenation (page 17, line 26).

Proposed Resolution**Recommendation: Accepted****Recommendation by**

Page 17, line 19, replace "UL Tx power level" with "CINR".
 Page 17, line 21, replace "Tx power" with "CINR".
 Style question: should the units be mentioned in the table, or the body, or in both?
 Re format columns of table to avoid unnecessary hyphenation (page 17, line 26).

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**

Page 17, line 19, replace "UL Tx power level" with "CINR".
 Page 17, line 21, replace "Tx power" with "CINR".
 Style question: should the units be mentioned in the table, or the body, or in both?
 Re format columns of table to avoid unnecessary hyphenation (page 17, line 26).

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes****Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3548**Comment submitted by: **David****Castelow**

2005-03-10

Comment Type **Technical, Binding** Starting Page # **20** Starting Line # **54** Fig/Table# **7d** Section **6.3.2.1.4.2**

I disagree with the resolution of comments because

the various headers are incompatible with requirements on headers.

The first byte of the minifeedback header can take on the value "0xFF", disallowed by base standard (see .16e/D6 page 14 line 50-52).

Either delete section 6.3.2.1.4.2 or delete last three rows of Table 7d (page 20, lines 54-62).

Suggested Remedy

Delete section 6.3.2.1.4.2

Proposed ResolutionRecommendation: **Accepted-Duplicate**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted-Duplicate**

See comment 3066

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**

Editor's Actions |) none needed

Waiting for resolution of 3066

Editor's Questions and Concerns**Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3552**Comment submitted by: **David****Castelow**

2005-03-10

Comment Type **Technical, Binding** Starting Page # **25** Starting Line # **6** Fig/Table# **21c** Section **6.3.2.1.6**

Mismatch between Table 7f and Figure 21c.
SDU_SN(18) in Figure but 3 separate 6 bit fields in Table 7f.

Suggested Remedy

Specify ordering by changing Figure 21c to make explicit three 6-bit fields marked "SDU SN 1 (6)", "SDU SN 2 (6)", "SDU SN 3 (6)".

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Specify ordering by changing Figure 21c to make explicit three 6-bit fields marked "SDU SN 1 (6)", "SDU SN 2 (6)", "SDU SN 3 (6)".

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted**

Specify ordering by changing Figure 21c to make explicit three 6-bit fields marked "SDU SN 1 (6)", "SDU SN 2 (6)", "SDU SN 3 (6)".

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes**Editor's Actions **k) done****Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D6**Ballot Number: **0001010**

Comment Date

Comment # **3553**

Comment submitted by: David

Castelow

2005-03-10

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	26	51		6.3.2.2

The requirement at page 26, line 51:

If the Mesh subheader is indicated, it shall precede all other subheaders.

is incompatible with the requirement at page 28, line 6:

The Extended Subheader Field subheader is specified in Table 13a. The Extended Subheader Field, when used, shall always appear immediately after the GMH and before all other subheaders, as described in 6.3.2.2.

Also, what is a GMH? (Actually used in 802.16-2004, so this becomes a corrigendum issue).

Suggested Remedy

State that extended subheaders cannot be used in MESH mode.

Proposed Resolution Recommendation: Accepted**Recommendation by**

State that extended subheaders cannot be used in MESH mode.

Reason for Recommendation**Resolution of Group Decision of Group: Accepted**

State that extended subheaders cannot be used in MESH mode.

Reason for Group's Decision/Resolution**Group's Notes****Group's Action Items****Editor's Notes Editor's Actions** k) done**Editor's Questions and Concerns****Editor's Action Items**