

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**

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**

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

**Reason for Recommendation**

**Resolution of Group**

Decision of Group: **Accepted-Modified**

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

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 # **3020**

Comment submitted by: Dorothy

Stanley

Member

2005/03/09

|         |      |                    |                 |   |                 |            |         |   |
|---------|------|--------------------|-----------------|---|-----------------|------------|---------|---|
| Comment | Type | Technical, Binding | Starting Page # | 7 | Starting Line # | Fig/Table# | Section | 2 |
|---------|------|--------------------|-----------------|---|-----------------|------------|---------|---|

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. |
|---------|------|--------------------|-----------------|----|-----------------|---|------------|---------|----|

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 # **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 Resolution**

Recommendation: **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 # **3084**

Comment submitted by: **David**

**Castelow**

**Member**

**2005/03/09**

Comment Type **Technical, Binding** Starting Page # **26** Starting Line # **63** Fig/Table# Section **6.3.9.5**

The Corrigendum document does not contain the accepted resolution of comment 80216maint-04/010#614, dealing with Initial Ranging.

**Suggested Remedy**

Accept and adopt the latest revision of contribution C80216maint-05/009.

**Proposed Resolution**

**Recommendation: Withdrawn**

**Recommendation by** **David Castelow**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Withdrawn**

**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 # **3114**

Comment submitted by: **David**

**Castelow**

**Member**

**2005/03/09**

Comment Type **Technical, Binding**

Starting Page # **38**

Starting Line # **50**

Fig/Table#

Section **8.3.5.1**

Inclusion of

Suggested Remedy

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by **David Castelow**

Reason for Recommendation

Resolution of Group

Decision of Group: **Withdrawn**

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 # **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 | Technical, Binding | Starting Page # | 47(d) | 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.

**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 **Technical, Binding** Starting Page # **49** Starting Line # Fig/Table# **55** Section **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               | Starting Page # | Starting Line # | Fig/Table# | Section |
|--|--------------------|-----------------|-----------------|------------|---------|
| Page 49 - MKID is not defined in the list of acronyms. | Technical, Binding | 49              |                 |            |         |

**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 Group**

Decision 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 # **3174**Comment submitted by: **David****Castelow**

Member

2005/03/09

Comment Type **Technical, Binding** Starting Page # **100** Starting Line # **12** Fig/Table# **240** Section **8.4.7.1**

In C80216maint-04/09r4, comment 504 was marked as superceded.  
I think that the diagrams are worse than previously.

- (a) No definition of GRD: do you mean Guard?
- (b) shading of the 3rd and 7th grey boxes in figure 240 should be altered from diagonal top left/bottom right to diagonal top right/bottom left to match shading of destination areas (4th and 8th).

**Suggested Remedy**

(a) ?????

Page 100, line 12

- (b) Shading of the 3rd and 7th grey boxes in figure 240 should be altered from diagonal top left/bottom right to diagonal top right/bottom left to match shading of destination areas (4th and 8th).

**Proposed Resolution**Recommendation: **Withdrawn**Recommendation by **David Castelow****Reason for Recommendation****Resolution of Group**Decision of Group: **Withdrawn****Reason for Group's Decision/Resolution****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 # **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 Resolution**Recommendation: **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 Resolution Recommendation: 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 Resolution**Recommendation: **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 **subsectionfirst 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 **subsectionfirst 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**

**2005/06/27**

**IEEE 802.16-05/012r6**

**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 # **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    1) none needed

[duplicate](#)

Editor's Questions and Concerns

## Editor's Action Items

|   |                                       |                            |
|---|---------------------------------------|----------------------------|
| Document under Review: <b>P802.16e/D6</b> | Ballot Number: <b>0001010</b>         | Comment Date               |
| Comment # <b>3369</b>                     | Comment submitted by: Victor Stolpman | Member                     |
| Comment                                   | Type <b>Technical, Binding</b>        | Starting Page # <b>281</b> |
|   |                                       | Starting Line #            |
|   |                                       | Fig/Table#                 |
|   |                                       | Section <b>8.4.5.4.11</b>  |

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

[Nico van Waes is Satisfied with resolution.]

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    1) none needed

Editor's Questions and Concerns

## Editor's Action Items

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

Comment Date

Comment # **3376**

Comment submitted by: Brian

Kiernan

Member

2005/03/09

| Comment | Type               | Starting Page # | Starting Line # | Fig/Table# | Section |
|---------|--------------------|-----------------|-----------------|------------|---------|
|         | Technical, Binding | 282             | 48              |            |         |

I object to the changes incorporated into D6 as to being the correct resolution of comment #1445. Part of the resolution of comment #1445 was to incorporate the changes contained in contribution C802.16e-04/552r7 with certain text to be converted to tables and provided to the editor.

The tables that were provided to the editor contained additional technical material that was not approved by the ballot resolution committee and should not be included in the draft standard. The specific material is enumerated below in the suggested remedy.

**Suggested Remedy**

Since this text was never approved by the ballot resolution committee and needs to be voted on, it is proposed to accept the following text, which is already contained in the D6 draft.

Should this text not be accepted by the ballot resolution committee, the chair intends to rule, as a procedural matter, that it be deleted from the draft, since it never supposed to be in there in the first place.

The text proposed for acceptance:

Pg 282, lines 48-56  
 Pg 283, lines 26-31, table 298j  
 Pg 284, lines 17-24, table 298k  
 Pg 285, lines 10-17, table 298l  
 Pg 286, lines 19-29, table 298n  
 Pg 287, lines 30-38, table 298o  
 Pg 288, lines 38-47, table 298p  
 Pg 290, lines 44-51, table 298r  
 Pg 294, lines 31-36, table 298s  
 Pg 297, lines 27-35, table 298u  
 Pg 301, lines 18-28, table 298w  
 Pg 306, lines 56-63, table 298x  
 Pg 314, lines 16-26, table 298z  
 Pg 319, lines 56-63, table 298aa  
 Pg 327, lines 14-24, table 298ac  
 Pg 334, lines 42-50, table 298ad

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Vote: 19-29

Since this material currently exists in the text but was not accepted by the group, the Chair ruled procedurally to remove that material.

Editor is to remove the following text:

Pg 282, lines 48-56

Pg 283, lines 26-31, table 298j

Pg 284, lines 17-24, table 298k

Pg 285, lines 10-17, table 298l

Pg 286, lines 19-29, table 298n

Pg 287, lines 30-38, table 298o

Pg 288, lines 38-47, table 298p

Pg 290, lines 44-51, table 298r

Pg 294, lines 31-36, table 298s

Pg 297, lines 27-35, table 298u

Pg 301, lines 18-28, table 298w

Pg 306, lines 56-63, table 298x

Pg 314, lines 16-26, table 298z

Pg 319, lines 56-63, table 298aa

Pg 327, lines 14-24, table 298ac

Pg 334, lines 42-50, table 298ad

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

**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 # **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 Resolution**Recommendation: **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 # **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 # **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.]

[Nico van Waes is Satisfied with resolution.]

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 Resolution**Recommendation: **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**

2005/06/27

IEEE 802.16-05/012r6

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 [1\) none needed](#)

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: <b>Accepted-Modified</b> | 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 # **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: | <b>P802.16e/D6</b>             | Ballot Number:        | <b>0001010</b>  | Comment Date          |
| Comment #              | <b>3493</b>                    | Comment submitted by: | Victor Stolpman | Member                |
| Comment                | Type <b>Technical, Binding</b> | Starting Page #       | <b>478</b>      | Starting Line #       |
|                        |                                | Fig/Table#            |                 | Section <b>11.4.2</b> |

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

[Nico van Waes is Satisfied with resolution.]

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 # **3542**

Comment submitted by: David

Castelow

Member

2005-03-10

|         |      |                    |                 |    |                 |    |            |    |         |             |
|---------|------|--------------------|-----------------|----|-----------------|----|------------|----|---------|-------------|
| Comment | Type | Technical, Binding | Starting Page # | 17 | Starting Line # | 19 | Fig/Table# | 7b | Section | 6.3.2.1.2.2 |
|---------|------|--------------------|-----------------|----|-----------------|----|------------|----|---------|-------------|

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**

2005/06/27

IEEE 802.16-05/012r6

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

Ballot Number: **0001010**

Comment Date

Comment # **3548**

Comment submitted by: **David**

**Castelow**

**Member**

**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 Resolution**

Recommendation: **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**

Member

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 Resolution**Recommendation: **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

Member

2005-03-10

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