

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4001**

Comment submitted by: Phillip

Barber

Member

2005/04/28

Comment Type **Editorial**Starting Page # **2**Starting Line # **57**

Fig/Table#

Section **1.4.1**

Clause Editor's revisions for improper instances of MS or SS in the document.

Suggested Remedy

Still in process. Will provide the final as a late contribution which hopefully the Chair will accept.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt Contribution C802.16e-05/266r0 with the exception of Remedy 1 , Remedy 5, and Remedy 18.

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

Vote: 3-5

Reason: This contribution addresses a larger problem than the original scope.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4002**Comment submitted by: **Mo-Han****Fong**

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
I object to the text change in section 1.4.2 because network reference model is out of scope for 16e.	Technical, Non-binding	3	1		1.4.2

Suggested Remedy

Delete entire section

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Change: "1.4.2 Network model for mobile communications"
to: "1.4.2 Network model for mobile communications (Informative)"**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted-Modified**Change: "1.4.2 Network model for mobile communications"
to: "1.4.2 Network model for mobile communications (Informative)"**Reason for Group's Decision/Resolution**

Vote 1: 19-6

Vote 2: 21-15

The reference model is required and necessary to show the distinction between fixed and mobile operation.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4003**

Comment submitted by: Jose

Puthenkulam

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	9	Starting Line #	Fig/Table#	Section	3.78
---------	------	------------------------	-----------------	---	-----------------	------------	---------	------

The current mobile station (MS) definition does not take into account that the need to support residential gateway type fixed applications.

Suggested Remedy

Appropriately change the definition to:

Mobile Station (MS): "A generalized subscriber equipment set, which can be in motion or stationary, that provides connectivity between subscriber equipment and a base station (BS) using features that are primarily defined for a mobile service but also deployable as a fixed service."

Proposed Resolution **Recommendation: Accepted**

Recommendation by

Appropriately change the definition to:

Mobile Station (MS): "A generalized subscriber equipment set, which can be in motion or stationary, that provides connectivity between subscriber equipment and a base station (BS) using features that are primarily defined for a mobile service."

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Vote: 12-13

Reason: Re-definition of MS is unnecessary. Definition of MS is already in the document and conforms to internationally definitions of mobile operation.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4004**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	9	Starting Line #	1	Fig/Table#	Section	3
---------	------	------------------------	-----------------	---	-----------------	---	------------	---------	---

[Submitted as Technical, Binding but with an Approve vote.]

SSID and BSID have been referenced extensively in the draft. However, there are no formal definition of SSID and BSID

Suggested Remedy

Define SSID and BSID

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Globally replace "SSID" with "subscriber station MAC address".

Reason for Recommendation

BSID is defined in the base standard.

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

Under Clause 4, define SSID as subscriber station MAC address

Reason for Group's Decision/Resolution

BSID is defined in the base standard.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4005**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **9**

Starting Line # **20**

Fig/Table#

Section **3**

The number "3.6" is already used.

Suggested Remedy

Renumber it accordingly.

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change 3.6 to 3.5.4

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change 3.6 to 3.5.4

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4006**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **9**

Starting Line # **24**

Fig/Table#

Section **3**

Line 24 and line 28 use the same sub-section number "3.71"

Suggested Remedy

Renumber them accordingly.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Line 24 and line 28 use the same sub-section number "3.71"
Renumber them accordingly.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Line 24 and line 28 use the same sub-section number "3.71"
Renumber them accordingly.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4007**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **9** Starting Line # **57** Fig/Table# Section **3**

I object to the implementation of Comment #3147 because GKEK is encrypted by not GKEKEK but KEK.

Suggested Remedy

Replace "GKEKEK" with "KEK" in GKEK definition as follows :

3.77 group key encryption key (GKEK): Encrypted by the ~~GKEKEK~~ KEK that is derived from the AK.**Proposed Resolution****Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Accepted**

Replace "GKEKEK" with "KEK" in GKEK definition as follows :

3.77 group key encryption key (GKEK): Encrypted by the ~~GKEKEK~~ KEK that is derived from the AK.**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4008**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **9** Starting Line # **58** Fig/Table# Section **3**

[Submitted as Technical, Binding but with an Approve vote.]
GKEKEK is not defined or used any more.

Suggested Remedy

Delete

"Encrypted by the GKEKEK that is derived from the AK."

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

Reason for Group's Decision/Resolution

See comment 4007

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4009**

Comment submitted by: **Wen**

Tong

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **9**

Starting Line # **59**

Fig/Table#

Section **3**

Add MIMO in abbreviation

Suggested Remedy

3.7.8 MIMO: Multiple Input Multiple Output

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Renumber to "3.7.8 MIMO: Multiple Input Multiple Output" and increment following accordingly.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Renumber to "3.7.8 MIMO: Multiple Input Multiple Output" and increment following accordingly.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4010**

Comment submitted by: **Mo-Han**

Fong

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **10**

Starting Line # **5**

Fig/Table#

Section **3.81**

The term MSS should be replaced by MS.

Suggested Remedy

Globally replace MSS by MS.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Globally replace MSS by MS.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Globally replace MSS by MS.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4011**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type Technical, Satisfied (was Starting Page # 13 Starting Line # 9 Fig/Table# Section 6.3.2.1

I object to the text change on D7 draft associated with the resolution of comments #3070, comment #3059, comment #3066, comment #3045, since the proposed text change was not incorporated properly in the D7 draft. Also, further clean-up is required on the MAC header section.

Suggested Remedy

Adopt the proposed text change in IEEE C802.16e-05/210 "Text Clarification and Clean-up for the MAC Header"

Proposed Resolution Recommendation: Accepted**Recommendation by**

Adopt C802.16e-05/210r2.

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

Adopt C802.16e-05/210r2.

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

Passed to Jose for translation into FrameMaker format.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4012**

Comment submitted by: **Bong Ho**

Kim

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **13**

Starting Line # **51**

Fig/Table# **Tabl**

Section **6.3.2.1**

Incorrect reference

Suggested Remedy

[Change the type field of Table 7e]

Table 7e - Bandwidth control and uplink sleep control header

Syntax | Size (bits) | Notes

...
Type | 3 | ~~Encoded as 0b000~~ Type = 0b101

...

Proposed Resolution

Recommendation: Superceded

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: Superceded

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4013**

Comment submitted by: Rainer

Ullmann

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **13** Starting Line # **54** Fig/Table# **4a** Section **6.3.2.1**

The acceptance of contribution C802.16-05/192r4 (Accepted-modified Comment #3070) lead to a more methodic and standardized way to describe MAC header types. However, the new table 4a describing MAC header HT/EC field encodings, contains a reference to "(DL only) compressed MAPS". This is misleading ! Compressed and reduced maps do not use MAC headers (see 8.3.6.6/8.3.6.7 private/reduced maps for OFDM, 8.4.5.6/8.4.5.8 Compressed/optional reduced AAS private maps) as this table would imply, but have a completely different structure. However, their construction is such, that the bit fields corresponding to the position of the HT/EC fields in a MAC header (i.e. the first two bits of the first data byte) represent a combination which identifies it as compressed/reduced maps. This should be specifically noted in text below the table.

The table also contains ?? as references to tables/figures within the standard
 Editorial instruction to include Table 4a is wrong (6.3.21 instead of 6.3.2.1)

Suggested Remedy

Replace :

[Insert new table into 6.3.21 as follows:]

by:

[Insert new table into 6.3.2.1 as follows:]

Change last entry in Table 4a and add footnote below according to:

1	1	DL only: compressed/reduced private MAP *	189,251c,e,305,308a
		UL only: Feedback MAC Header	20b-f 7h,j,k

* Note: compressed and reduced private maps do not use MAC headers as defined in 6.3.2.1, however, the first two bits of these maps overlay with HT/EC fields and are always set to 0b11 to identify them as such (see sections 8.3.6.3,8..6.7, 8.4.5.6 & 8.4.5.8).

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See 4011.

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4014**

Comment submitted by: Rainer

Ullmann

Member

2005/04/28

Comment Type **Editorial**
 table contains ?? as references

Starting Page # **15**Starting Line # **22**Fig/Table# **5a**Section **6.3.2.1.1****Suggested Remedy**

Change last three rows in table 5a according to:

101	BR with UL sleep control header	n/a	7e
110	SN Report	21a	7f
111	CQICH channel allocation request	20c	7c

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4015**Comment submitted by: **Rainer****Ullmann****Member****2005/04/28**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
Wrong reference. BR theaders are defined in tables 7a-c,e .	Editorial	15	35		

Suggested Remedy**Change:**

The Bandwidth Request PDU shall consist of bandwidth request header alone and shall not contain a payload. The bandwidth request header is illustrated in Table **7e**. An MS receiving a bandwidth request header on the downlink shall discard the PDU.

to

The Bandwidth Request PDU shall consist of bandwidth request header alone and shall not contain a payload. The bandwidth request header is illustrated in Table 7a.-c & 7e . An MS receiving a bandwidth request header on the downlink shall discard the PDU.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4016**

Comment submitted by: Yigal

Leiba

Member

2005/04/28

Comment Type Technical, Non-binding Starting Page # 15 Starting Line # 48 Fig/Table# Section 6.3.2.1.2

The number of MAC headers has greatly increased, and it is not clear whether they are all mandatory for the BS/MSS. Since for most of these headers no negotiation is defined, they seem to be mandatory for the BS, but optional for the MSS. I think the issue should be stated clearly, or a negotiation added for each header.

Suggested Remedy

Either:

1. Add for each header (sections 6.3.2.1.2.1, 6.3.2.1.2.2, 6.3.2.1.2.3, 6.3.2.1.3, 6.3.2.1.4, 6.3.2.1.5, 6.3.2.1.6) a sentence, "This subheader is **may** be used by an MSS, and **shall** be supported by a BS"

Or,

2. Add for eac of the sections mentioned above a negotiation, i.e. add a sentence, "Support of this subheader shall be negotiated between the BS and MSS as part of the registration dialog (REG-REQ/RSP)"

Also Add in section 11.7.25 on page 540, line 27 the following paragraph:

"11.7.24 Header support

The 'Header support' field indicates whether or not the MS and BS support various types of sub-headers. This field may be sent by either BS or MSS. Omission of this field from the RNG-REQ/RSP message indicates that none of the sub-headers are supported.

- Bandwidth request and UL Tx power report header
- Bandwidth request and downlink burst profile change request header
- CQICH Allocation Request Header
- PHY channel report header
- Bandwidth request and uplink sleep control header
- SN report header
- Feedback header

A bit value of 0 indicates "not supported" while 1 indicates it is supported.

Type	Length	Value	Scope
??	1	Bit #0: Bandwidth request and UL Tx power report header	RNG-REQ/RSP
		Bit #1: Bandwidth request and UL Tx power report header	
		Bit #2: Bandwidth request and downlink burst profile change request header	
		Bit #3: CQICH Allocation Request Header	
		Bit #4: PHY channel report header	
		Bit #5: Bandwidth request and uplink sleep control header	
		Bit #6: SN report header	
		Bit #7: Feedback header	

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

Add for each of the sections 6.3.2.1.2.1, 6.3.2.1.2.2, 6.3.2.1.2.3, 6.3.2.1.3, 6.3.2.1.4, 6.3.2.1.5, 6.3.2.1.6,
i.e. add a sentence:

"Support of this subheader shall be negotiated between the BS and MSS as part of the registration dialog (REG-REQ/RSP)"

Also Add in section 11.7.25 on page 540, line 27 the following paragraph:

"11.7.24 Header support

The 'Header support' field indicates whether or not the MS and BS support various types of sub-headers. This field may be sent by either BS or MSS. Omission of this field from the RNG-REQ/RSP message indicates that none of the sub-headers are supported.

- Bandwidth request and UL Tx power report header
- Bandwidth request and downlink burst profile change request header
- CQICH Allocation Request Header
- PHY channel report header
- Bandwidth request and uplink sleep control header
- SN report header
- Feedback header

A bit value of 0 indicates "not supported" while 1 indicates it is supported.

Type	Length	Value	Scope
??	1	Bit #0: Bandwidth request and UL Tx power report header	RNG-REQ/RSP
		Bit #1: Bandwidth request and UL Tx power report header	
		Bit #2: Bandwidth request and downlink burst profile change request header	
		Bit #3: CQICH Allocation Request Header	
		Bit #4: PHY channel report header	
		Bit #5: Bandwidth request and uplink sleep control header	
		Bit #6: SN report header	
		Bit #7: Feedback header	

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

Add for each of the sections 6.3.2.1.2.1, 6.3.2.1.2.2, 6.3.2.1.2.3, 6.3.2.1.3, 6.3.2.1.4, 6.3.2.1.5, 6.3.2.1.6,

i.e. add a sentence:

"Support of this subheader shall be negotiated between the BS and MSS as part of the registration dialog (REG-REQ/RSP)"

Also Add in section 11.7.25 on page 540, line 27 the following paragraph:

"11.7.24 Header support

The 'Header support' field indicates whether or not the MS and BS support various types of sub-headers. This field may be sent by either BS or MSS. Omission of this field from the RNG-REQ/RSP message indicates that none of the sub-headers are supported.

- Bandwidth request and UL Tx power report header
- Bandwidth request and downlink burst profile change request header
- CQICH Allocation Request Header
- PHY channel report header
- Bandwidth request and uplink sleep control header
- SN report header
- Feedback header

A bit value of 0 indicates "not supported" while 1 indicates it is supported.

Type	Length	Value	Scope
??	1	Bit #0: Bandwidth request and UL Tx power report header Bit #1: Bandwidth request and UL Tx power report header Bit #2: Bandwidth request and downlink burst profile change request header Bit #3: CQICH Allocation Request Header Bit #4: PHY channel report header Bit #5: Bandwidth request and uplink sleep control header Bit #6: SN report header Bit #7: Feedback header	RNG-REQ/RSP

Reason for Group's Decision/Resolution

Group's Notes

Note that these are D7 references, new mapping will be required after other comments have been adopted.

Group's Action Items

Editor's Notes

Editor's Actions k) done

New subclause went into 11.7.26 instead of 11.7.25.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4017**Comment submitted by: **Rainer****Ullmann**

Member

2005/04/28

Comment Type **Editorial**Starting Page # **16**Starting Line # **34**

Fig/Table#

Section **6.3.2.1.2.1**

First letter in sentence should be capitalized

Suggested Remedy

The allowed type for bandwidth request with UL Tx transmit power report is 0b011. The requested bandwidth is incremental.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4018**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type Technical, Binding Starting Page # 17 Starting Line # Fig/Table# 7a Section 6.3.2.1.2.1

The UL-Tx-Power field is sometimes defined as 7 bits and sometimes as 8 bits, with conflicting definitions of quantization:

In PHY channel report header it is 7 bits
 In table 7a it is UL-Tx-Power is 8 bits
 In table 7d it is UL-Tx-Power is 7 bits
 In figure 20a it is 8 bits.

In table 7a description, the defined quantization for the "8"-bit field is -16.0 dB to 47.5 dB in units of 0.5 dB, which is actually 7-bit quantization. However the same field also as reference to section 11.1.1 in the base document which truly defines 8-bit quantization (-64dbm...63.5dbm in steps of 0.5dB).

Suggested Remedy

Align the UL-Tx-Power fields and quantization with the base document:

- 1) figure 20d: change size of 'UL-Tx-Power' field in figure 20d to 8 bits, at the expense of 1 reserved bit.
- 2) table 7d:
 - Increase length of 'UL-Tx-Power' field in table 7d from 7 to 8 bits, at the expense of 1 reserved bit..
 - Replace description of the field with:

"UL Tx power level in dBm, for the burst that carries this Header (see section 11.1.1) ~~, from +63 to -64 in dBm in 1 dB steps~~. The maximum value ~~is~~ shall be reported for the burst."
- 3) remove text on page 17, lines 35-39.
- 4) remove the reserved bit from table 7a so that the number of bits in the table is byte-aligned.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Align the UL-Tx-Power fields and quantization with the base document:

- 1) figure 20d: change size of 'UL-Tx-Power' field in figure 20d to 8 bits, at the expense of 1 reserved bit.
- 2) table 7d:
 - Increase length of 'UL-Tx-Power' field in table 7d from 7 to 8 bits, at the expense of 1 reserved bit..
 - Replace description of the field with:

"UL Tx power level in dBm, for the burst that carries this Header (see section 11.1.1) ~~, from +63 to -64 in dBm in 1 dB steps~~. The maximum value ~~is~~ shall be reported for the burst "

- 3) remove text on page 17, lines 35-39.
4) remove the reserved bit from table 7a so that the number of bits in the table is byte-aligned.

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

Align the UL-Tx-Power fields and quantization with the base document:

- 1) figure 20d: change size of 'UL-Tx-Power' field in figure 20d to 8 bits, at the expense of 1 reserved bit.
2) table 7d:
- Increase length of 'UL-Tx-Power' field in table 7d from 7 to 8 bits, at the expense of 1 reserved bit..
- Replace description of the field with:
"UL Tx power level in dBm, for the burst that carries this Header (see section 11.1.1) ~~, from +63 to -64 in dBm in 1 dB steps.~~ The maximum value ~~is~~ shall be reported for the burst."
3) remove text on page 17, lines 35-39.
4) remove the reserved bit from table 7a so that the number of bits in the table is byte-aligned.

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

This resolution is confusing. I think the commenter is actually talking about Figure 20a, but in that figure, UL Tx Power is 8 bits. Also, I think the table is actually 7a, and that part makes sense. I didn't change the figure, but I did make the table adjustments.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4019**

Comment submitted by: **Jaehee**

Cho

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **17**

Starting Line # **27**

Fig/Table# **Table**

Section **6.3.2.1.2.1**

Reserved bit field does not exist in Description of fields BR and UL Tx power report header format.

Suggested Remedy

[Delete the row of reserved bit field from table 7a]

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4020**

Comment submitted by: **Rajesh**

Bhalla

Member

2005/04/28

Comment Type **Technical, Binding**

Starting Page # **17**

Starting Line # **37**

Fig/Table#

Section

6.3.2.1.2.1

UL Tx power unit should not be in dB, and the power range is too big for 8 bits

Suggested Remedy

This parameter indicates the UL Tx power in dBm, and it shall be interpreted as a single value from -16.0 dBm to 47.0 dBm in 0.5 dB steps.

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

[See comment 4018](#)

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See comment 4018](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4021**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **18** Starting Line #Fig/Table# **7b** Section **6.3.2.1.2.2**

Table 7b: The CINR field is defined as
 "CINR for the burst that carries this header(11.1.1)...".

This does not make much sense.

Suggested Remedy

Remove field 'CINR' from table 7b, add reserved bits at the end of the table for byte alignment.

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

Delete the description of CINR in Table 7b on page 18.

Change the CINR description on page 19 as follows:

This parameter indicates the CINR measured by the MS from the BS. It shall be interpreted as a single value from -16.0 dB to 47.5 dB in units of 0.5 dB.

Reason for Recommendation

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

Delete the description of CINR in Table 7b on page 18.

Change the CINR description on page 19 as follows:

This parameter indicates the CINR measured by the MS from the BS. It shall be interpreted as a single value from -16.0 dB to 47.5 dB in units of 0.5 dB.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4022**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **19** Starting Line # **11** Fig/Table# Section **6.3.2.1.2.3.**

I object to the text change on D7 draft associated with the resolution of comment #3045 since there needs to be text clean up and clarification on the CQICH allocation header.

Suggested Remedy

Adopt the proposed text change in IEEE C80216e-05/235r0 "Clarification of CQICH allocation request header".

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4023**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	20	Starting Line #	4	Fig/Table#	Section	6.3.2.1.3
---------	------	-----------	-----------------	----	-----------------	---	------------	---------	-----------

According to the MAC header type, 6.3.2.1.3 , 6.3.2.1.4, and 6.3.2.1.5 should be a sub-section of 6.3.2.1.2 . In the figure of 6.3.2.1.5 the EC shall be 0. Compressed MAP description is missing here.

Suggested Remedy

Text changes needed

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4024**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **20** Starting Line # **53**

Fig/Table#

Section

6.3.2.1.3

In Table 7d, the UL power range from -64dBm to 63dBm is not reasonable.

Suggested Remedy

This parameter indicates the UL Tx power in dBm, and it shall be interpreted as a single value from -16.0 dBm to 47.0 dBm in 0.5 dB steps.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

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

[See comment 4018.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4025**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	21	Starting Line #	5	Fig/Table#	Section	6.3.2.3.61
---------	------	-----------	-----------------	----	-----------------	---	------------	---------	------------

This section should not be placed here. There is not enough description of compressed map before this section. It's not very clear to me how the Sub downlink/uplink map (SUB-DL-UL-MAP) message should work here without reading through the rest of the standard.

Suggested Remedy

Text changes needed

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

No specific 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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4026**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Editorial** Starting Page # **21** Starting Line # **24** Fig/Table# **Tabl** Section **6.3.2.1.4**
 With the type field of Bandwidth control and uplink sleep control header set to 0b000, the header is not distinguished from the incremental BR header.

Suggested Remedy

[Change the type field of Table 7e]

Table 7e - Bandwidth control and uplink sleep control header

Syntax | Size (bits) | Notes

Type	3	Encoded as 0b000 Type = 0b101
------	---	--

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

[See 4011.](#)

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

[See 4011.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4027**

Comment submitted by: Rainer

Ullmann

Member

2005/04/28

Comment Type **Editorial** Starting Page # **21** Starting Line # **24** Fig/Table# **7e** Section **6.3.2.1.4**

Type field value for BW control and UL sleep control header is 0b101 and not 0b000. This change was accepted as part of the contribution contribution C802.16-05/192r4 (Accepted-modified Comment #3070) but missed in the implementation

Suggested Remedy

Change table 7e according to:

Type	3	Encoded as 0b101
------	---	------------------

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4028**

Comment submitted by: **Rainer**

Ullmann

Member

2005/04/28

Comment Type **Editorial** Starting Page # **22** Starting Line # **4**

Fig/Table# **7f** Section **6.3.2.1.5**

Table 7f was placed in the wrong section. It should be in section 6.3.2.1.6 Feedback header

Suggested Remedy

Move Table 7f to the end of section 6.3.2.1.6 (i.e. page 23 line 44)

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4029**

Comment submitted by: **Bong Ho**

Kim

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **22**

Starting Line # **5**

Fig/Table#

Section **6.3.2.1.5**

Table 7f, page 22 is not necessary.

Suggested Remedy

[Delete Table 7f]

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4030**

Comment submitted by: Rainer

Ullmann

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **22** Starting Line # **5** Fig/Table# **7f** Section **6.3.2.1.5**

Table title wrong, references wrong or missing (or not necessary for Reserved), miscellaneous other typo.
Feedback type field is 4-bit not 5-bit.

Suggested Remedy

Table 7f—MAC Header Type Field Encodings with HT/EC=0b101

FHD/EHD	MAC header Type with HT/EC=0b11	Reference Figure	Reference Table
0	UL only: Feedback header, with another 54-bit type field, see Table 7d for its type encodings.	20d-a,b-f	7h,7j,7k ??
1	Reserved	??	??

In figure 21a replace
EC(1)=1
with
EX(1)=0

Proposed Resolution
See 4011.

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4031**

Comment submitted by: **Rajesh**

Bhalla

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **22**

Starting Line # **6**

Fig/Table#

Section **6.3.2.3.62**

This section should not be placed here. There is not enough description of compressed map before this section. It's not clear to me how the MIMO precoding setup/tear-down should work here without reading through the rest of the standard.

Suggested Remedy

Text changes needed

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

No specific 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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4032**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Editorial**
Editorial

Starting Page # **22**

Starting Line # **20**

Fig/Table#

Section **6.3.2.1.5**

Suggested Remedy

[Change the EC field of Figure 21a]

EC(1) = ~~1~~0

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4033**Comment submitted by: **Rainer****Ullmann****Member****2005/04/28**

Comment Type **Technical, Binding** Starting Page # **22** Starting Line # **60** Fig/Table# Section **6.3.2.1.5**

As part of the contribution contribution C802.16-05/192r4 (Accepted-modified Comment #3070) a sentence to make sure that the first byte of any MAC header is not allowed to read 0xFF was accpeted but missed in the implementation.

Suggested Remedy**Change:**

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.

to

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.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.**Reason for Recommendation****Resolution of Group**Decision of Group: **Superceded****See 4011.****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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4034**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **23**

Starting Line # **47**

Fig/Table#

Section **6.3.2.1.6.1**

wrong references

Suggested Remedy

correct references in first paragraph of 6.3.2.1.6.1 as follows:

The Feedback PDU shall consist of the Feedback header alone and shall not contain a payload. The Feedback header with and without CID field are illustrated in Figure 20e**b** and Figure 20e**c**

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4035**

Comment submitted by: **Rajesh**

Bhalla

Member

2005/04/28

Comment Type **Editorial** Starting Page # **26** Starting Line #

Fig/Table#

Section

6.3.2.1.6.1

Table 7i Feedback Type 1000 and 1011 are used twice for different feedback definitions

Suggested Remedy

1000 should be for MIMO feedback header (according to the later text description)

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See 4011.

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4036**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **26** Starting Line #

Fig/Table# **7i** Section **6.3.2.1.6.1**

Table 296d, referenced in the first entry of table 7i does not exist.

Suggested Remedy

Replace reference to table in first entry of table 7i with appropriate reference.

Proposed Resolution Recommendation: **Superceded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4037**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	26	Starting Line #	Fig/Table#	7i	Section	6.3.2.1.6.1
---------	------	------------------------	-----------------	----	-----------------	------------	----	---------	-------------

choice of words in entries 0001 and 1000 is confusing. CQI is an allocation for CINR or MIMO feedbacks. Also, CINR feedback over CQI can be either 4 or 5 bits.

Suggested Remedy

replace entry 0001 with the following entry:

0001 Downlink average CINR

Uses the format defined for transmission of CINR over a CQI channel (4-bit or 5-bit feedback), see sections 6.3.17.4 and 8.4.11.3.

replace entry 1000 with the following entry:

1000 Combined average CINR of active BSs

Combined average CINR value of all active BSs within the active set. Uses the format defined for transmission of CINR over a CQI channel (4-bit or 5-bit feedback), see sections 6.3.17.4 and 8.4.11.3.

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

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4038**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **26** Starting Line #
table 7i, entry 0101 refers to 'table 7a'. The reference should be to table 7d.

Fig/Table# **7i** Section **6.3.2.1.6.1**

Suggested Remedy

change reference in entry 0101 of table 7i from 'table 7a' to 'table 7d'.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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**

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4039**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Editorial** Starting Page # **26** Starting Line #

Fig/Table# **7i** Section **6.3.2.1.6.1**

Entries 1000 and 1001 of table 7i refer to tables 'Z' and 'Z2', both are not defined elsewhere.

Suggested Remedy

[Correct references.](#)

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

[See 4011.](#)

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

[See 4011.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4040**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **26** Starting Line # **58** Fig/Table# Section **6.3.2.1.6.2**
[Editorial]

In the last sponsor ballot recirc the comment #3066 which was accepted was improperly implemented by the editor.

Suggested Remedy

1.
[Delete section 6.3.2.1.6.2] : Mini feedback header
[Delete entire section]

2.
[Insert new section 6.3.2.2.13]
6.3.2.2.13 Mini-Feedback Extended Subheader
The format of the mini-feedback extended subheader is shown in table 13h:

Table 13i - Mini-feedback Extended Subheader Format (UL)

<u>Name</u>	<u>Length (bits)</u>	<u>Description</u>
<u>-Feedback Type</u>	<u>4</u>	<u>Type of feedback; see table 20c (Section 6.3.2.1.6.1)</u>
<u>-Feedback Content</u>	<u>12</u>	

Proposed Resolution Recommendation: **Accepted-Modified** Recommendation by
Remedy 1 is included in C802.16e-05/210r2 (adopted under comment 4011).

For remedy 2, adopt the proposed text change in IEEE C80216e-05/236r0 "Clarification of MAC Extended Subheader".

Reason for Recommendation

Resolution of Group Decision of Group: **Accepted-Modified**
Remedy 1 is included in C802.16e-05/210r2 (adopted under comment 4011).

For remedy 2, adopt the proposed text change in IEEE C80216e-05/236r0 "Clarification of MAC Extended Subheader".

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

Adopted C802.16e-05/236r0.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4041**

Comment submitted by: **Rajesh**

Bhalla

Member

2005/04/28

Comment Type **Editorial** Starting Page # **27** Starting Line # **10** Fig/Table# Section **6.3.2.1.6.1**

Suggested Remedy

Figure 20d and Figure20d in the text should be Figure 20b and Figure20c

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4042**

Comment submitted by: **Rainer**

Ullmann

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **27**

Starting Line # **36**

Fig/Table# **7j**

Section **6.3.2.1.6.2**

Table title **wrong**

Suggested Remedy

Replace
Table 7j—Description of the fields of Feedback header
with
Table 7j—Description of the fields of Mini Feedback header

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4043**Comment submitted by: **Bong Ho****Kim****Other****2005/04/28**

Comment Type **Editorial** Starting Page # **28** Starting Line # **4**

Editorial

Fig/Table# **Figur** Section **6.3.2.1.6.3**

Suggested Remedy

[Change Feedback Type of Figure 20e]

Feedback type= ~~Ob1000~~ [Ob1011](#)

[Change Feedback Type of Figure 20f]

Feedback type= ~~Ob1000~~ [Ob1011](#)

[Change line 41 g) as follows]

g) The TYPE field shall be ~~Ob1000~~ [Ob1011](#).**Proposed Resolution Recommendation: **Superceded******Recommendation by**[See 4011.](#)**Reason for Recommendation****Resolution of Group Decision of Group: **Superceded****[See 4011.](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4044**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment Type **Technical, Binding**Starting Page # **28**Starting Line # **10**

Fig/Table#

Section **6.3.2.1.6.1****Editorial fix needed****Suggested Remedy****In Figure 20e, field BPRI(1) is missing after SLPB(7). In Figure 20f, BPLI(2) should have been BPRI(2)****Proposed Resolution**Recommendation: **Superseded**

Recommendation by

See 4011.**Reason for Recommendation****Resolution of Group**Decision of Group: **Superseded****See 4011.****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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4045**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Editorial** Starting Page # **32** Starting Line # **21** Fig/Table# **Table 9** Section **6.3.2.2.2**

The size of extended PBR is inconsistent with the size of Table 9.

Suggested Remedy

[Change the Size field of Table 10 as follows:]

Table 10 - Grant management subheader fields

Name | Size

...

Extended PBR | ~~46~~11

...

Proposed Resolution Recommendation: **Accepted**

Recommendation by

[Change the Size field of Table 10 as follows:]

Table 10 - Grant management subheader fields

Name | Size

...

Extended PBR | ~~46~~11

...

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

[Change the Size field of Table 10 as follows:]

Table 10 - Grant management subheader fields

Name | Size

...

Extended PBR | ~~46~~11

...

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4046** Comment submitted by: [Bin-chul](#) [lhm](#) [Other](#) [2005/04/28](#)Comment Type [Technical, Non-binding](#) Starting Page # [32](#) Starting Line # [33](#) Fig/Table# Section [6.3.2.2.7](#)[Several accepted changes about Extended Subheader were not in the D7 and also some sections/figures/tables need to be reorganised to make everything consistent.](#)

Suggested Remedy

[Adopt the proposed text change in IEEE C80216e-05/236r0 "Clarification of MAC Extended Subheader".](#)Proposed Resolution Recommendation: **Superseded** Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Superseded**[See comment 4040.](#)

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4047**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **33**

Starting Line #

Fig/Table# **13b**

Section **6.3.2.2.7**

Reference errors: Section 3.2.2.7.1 and section 3.2.2.7.6 do not exist.

Suggested Remedy

Fix the wrong references.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See comment 4040.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4048**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **36** Starting Line # **38** Fig/Table# **Table 13i** Section **6.3.2.2.13**

I object to the implementation comment #3091.
It is accepted modified as "Adopt the suggested text change-2 in C80216e-05_095r3"
But change-3 in C80216e-05_095r3 is implemented instead of text change-2.
I propose to incorporate the text change-2 into specification and remove the text corresponding to text change-3.

Suggested Remedy

[Add 6.3.2.2.13 at the end of 6.3.2.2.12 in page 33 line 38]
6.3.2.2.13 UL Tx Power Report Extended Subheader
This subheader is sent from SS to BS to report the Tx power of the burst that carries this subheader.

Table 13i- UL Tx power report extended subheader format

Name	Length	Description
UL Tx power	8 bits	UL Tx power level for the burst that carries this Header (11.1.1). The maximum value shall be reported for the burst.

8.4.9.6 CC Zone boosting

[Delete from page 486 line 48 ~ page 486 line 61 in 8.4.9.6 CC Zone boosting]

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Superseded**

See comment 4040.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4049**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **36** Starting Line # **38** Fig/Table# Section **6.3.2.2.12**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

the section '6.3.2.2.x PDU SN Extended Subheader' is not reflected on IEEE802.16e/D7 as harmonized in 05/115r3

Suggested Remedy

Insert the following subclause after the section 6.3.2.2.12 SDU SN Extended Subheader

"

6.3.2.2.13 PDU SN Extended Subheader

Specify the PDU sequence number in a monotonic increasing manner.

Table 13xx.PDU (short) SN extended subheader

Name	Length(bits)	Description
PDU SN (short)	8	Specify the PDU SN number

Table 13xx.PDU SN (long) extended subheader

Name	Length(bits)	Description
PDU SN (long)	16	Specify the PDU SN number

"

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Superseded

See comment 4040.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4050** Comment submitted by: [Kiseon](#) [Ryu](#) Other [2005/04/28](#)

Comment Type [Technical, Non-binding](#) Starting Page # [40](#) Starting Line # [60](#) Fig/Table# Section [6.3.2.3.5](#)

[I object to the implementation of Comment #3112 because MAC Version TLV in RNG-REQ is not for expediting security authentication.](#)

Suggested Remedy

[Remove MAC Version at line 60, page 40 as follows :](#)

[The following parameter may be included in the RNG-REQ message when the MS is attempting to perform network re-entry or handover and the MS has a valid HMAC Tuple necessary to expedite security authentication.](#)

[HMAC Tuple \(see 11.1.2\)](#)

~~[MAC Version \(11.1.3\)](#)~~

Proposed Resolution Recommendation: [Withdrawn](#) Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4051**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment Type **Editorial**Starting Page # **42**Starting Line # **40**

Fig/Table#

Section **6.3.2.3.6**

This section is for RNG-RSP message, so it should be BS informing MS of sleep mode operation.

Suggested Remedy

Change paragraph "The following parameter may be included in RNG_REQ message when the MS is attempting to perform handover and needs to inform target BS of its preference to continue in Sleep Mode after handover to target BS." to the following: " The following parameter may be included in RNG-RSP message by the BS during handover process to inform the MS of its Sleep mode oerpaton".

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Change paragraph:

"The following parameter may be included in RNG_REQ message when the MS is attempting to perform handover and needs to inform target BS of its preference to continue in Sleep Mode after handover to target BS."

to the following:

"The following parameter may be included in RNG-RSP message by the BS during handover process to inform the MS of its Sleep mode operation".

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

Change paragraph:

"The following parameter may be included in RNG_REQ message when the MS is attempting to perform handover and needs to inform target BS of its preference to continue in Sleep Mode after handover to target BS."

to the following:

"The following parameter may be included in RNG-RSP message by the BS during handover process to inform the MS of its Sleep mode operation".

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4052**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **43** Starting Line # **30** Fig/Table# Section **6.3.2.3.6**

[Submitted as Technical, Binding but with an Approve vote.]
AKID and RandonBS should be replaced with SA-Challenge TLV

Suggested Remedy

Delete line 30-38

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Delete lines 26-38

Add after line 25

"The following TLVs may be present in RNG-RSP (see section 7.8.1)

SA-Challenge Tuple (11.7.23)

This carries the initial challenge of the 3way handshake."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Delete lines 26-38

Add after line 25

"The following TLVs may be present in RNG-RSP (see section 7.8.1)

SA-Challenge Tuple (11.7.23)

This carries the initial challenge of the 3way handshake."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4053**

Comment submitted by: **Mo-Han**

Fong

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **43**

Starting Line # **53**

Fig/Table#

Section **6.3.2.3.7**

Lines 53-55 are duplicates of lines 60-63

Suggested Remedy

Delete lines 53-55.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Delete lines 53-55.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Delete lines 53-55.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4054**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type Technical, Binding	Starting Page # 44	Starting Line # 1	Fig/Table#	Section 6.3.2.3.8
---------	--------------------------------	---------------------------	--------------------------	------------	--------------------------

Re: comment #3136

Security parameters (such as PKM version support , authorization policy support , MAC mode , PN window size) are negotiated in basic capability negotiation process . But because SBC-REQ/RSP message doesn't be integrity protected , attacker may juggle those security parameters , and reduce the security capability between MS and BS .

The contribution proposes to protect the security parameter of basic capability negotiation message. After authorization, MS sends REG-REQ message protected by OMAC or HMAC to BS. The REG-REQ message includes the security parameters which are identical to those in SBC-REQ message. When BS receives REG-REQ message, it should compare the security parameters between REG-REQ message and SBC-REQ message. If the security parameters are identical, BS can judge that the security parameters of SBC-REQ message have not been juggled by attacker.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/207 or the latest version.

Proposed ResolutionRecommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4055**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Editorial** Starting Page # **44** Starting Line # **37**Fig/Table# Section **6.3.2.3.8**

Some editorial correction needed on line 37-38.

Suggested Remedy

Make the following text change on lines 37-38:

When a BS has multiple ~~number~~ Provisioned service flows to transmit **to** an MS, the BS may include Total number of Provisioned service flow TLV (11.7.~~19~~~~20~~).

Proposed Resolution Recommendation: Accepted

Recommendation by

Make the following text change on lines 37-38:

When a BS has multiple ~~number~~ Provisioned service flows to transmit **to** an MS, the BS may include Total number of Provisioned service flow TLV (11.7.~~19~~~~20~~).

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

Make the following text change on lines 37-38:

When a BS has multiple ~~number~~ Provisioned service flows to transmit **to** an MS, the BS may include Total number of Provisioned service flow TLV (11.7.~~19~~~~20~~).

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4056**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **44** Starting Line # **47** Fig/Table# Section **6.3.2.3.9**

The current PKM is disorganized according to thoughtless provision of the PKMv2. It is necessary to redefine PKMv2 messages and flow.

Suggested Remedy

Adopt the contribution C802.16e-05/226.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C802.16e-05/226r1 with "EAP transfer complete" removed, renumber 21-29 accordingly.

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

Adopt contribution C802.16e-05/226r1 with "EAP transfer complete" removed, renumber 21-29 accordingly.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4057**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	45	Starting Line #	1	Fig/Table#	Section	6.3.2.3.9.5
---------	------	------------------------	-----------------	----	-----------------	---	------------	---------	-------------

In order for the PKMv2 to fully operate, some PKM-related messages defined in the PKMv1 should be adopted to the PKMv2. In addition, the OMAC-Digest, the OMAC Packet Number Counter, and so on parameters needs to be added to those messages.

Suggested Remedy

Adopt the contribution C802.16e-05/228.

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

Adopt the contribution C802.16e-05/228r3.

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

Adopt the contribution C802.16e-05/228r3.

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

Proposed changes were to 16e/D7, so I assume the subclause deletions only apply to D7, not to the baseline document.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4058**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type Starting Page # 45 Starting Line # 44

Fig/Table# 26 Section 6.3.2.3.9

Pre-auth messages are not needed since pre-auth are voted out of scope of 16e.

Suggested Remedy

Delete code 14, 15, 16 and renumber the following codes accordingly.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete code 14, 15, 16 and renumber the following codes accordingly.

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

Delete code 14, 15, 16 and renumber the following codes accordingly.

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

Editor's Actions |) none needed

These lines were removed by a contribution.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4059**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **45** Starting Line # **50**Fig/Table# Section **6.3.2.3.9.22**

EAP start is missing from the PMK messages

Same resone for having EAPOL start for 802.1x state mashine.

Suggested Remedy*[Add and modify following entries to Table 26 PKM message codes]*

Code	PKM message type	MAC Management message name
0-2	Reserved	-
3	SA Add	PKM-RSP
...		
24	EAP Start	PKM-REQ
24 2425-255	reserved	-

*[Insert section 6.3.2.3.9.22]***6.3.2.3.9.23 EAP start**

When an MSS has to initiate an authentication process with a BS, it sends an EAP start message.

Code: 24

This message has no attribute.

Proposed Resolution Recommendation: Accepted**Recommendation by***[Add and modify following entries to Table 26 PKM message codes]*

Code	PKM message type	hMAC Management message name
0-2	Reserved	-
3	SA Add	PKM-RSP
...		
24	EAP Start	PKM-REQ
24 2425-255	reserved	-

*[Insert section 6.3.2.3.9.22]***6.3.2.3.9.23 EAP start**

When an MSS has to initiate an authentication process with a BS, it sends an EAP start message.

Code: 24

This message has no attribute

This message has no attribute.

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

[Add and modify following entries to Table 26 PKM message codes]

Code	PKM message type	hMAC Management message name
0-2	Reserved	-
3	SA Add	PKM-RSP
...		
24	EAP Start	PKM-REQ
24 25-255	reserved	-

[Insert section 6.3.2.3.9.22]

6.3.2.3.9.23 EAP start

When an MSS has to initiate an authentication process with a BS, it sends an EAP start message.

Code: 24

This message has no attribute.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Inserted this one at the end, as many others have been added prior to this (previous contribution). New code is 29.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4060**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **46** Starting Line # **1**

Fig/Table# Section **6.3.2.3.9.5**

This is a new message. So it is better to have a new name and treat as a new message

Suggested Remedy

Change

"6.3.2.3.9.5 Key Request message"

to

"6.3.2.3.9.5 PKMv2 Key Request message"

And add a new code in Table 26 accordingly.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"6.3.2.3.9.5 Key Request message"

to

"6.3.2.3.9.5 PKMv2 Key Request message"

And add a new code in Table 26 accordingly.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"6.3.2.3.9.5 Key Request message"

to

"6.3.2.3.9.5 PKMv2 Key Request message"

And add a new code in Table 26 accordingly.

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Appears to have been done by a contribution (including massive Table 26 changes).

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4061**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **46** Starting Line # **27**

Fig/Table# Section **6.3.2.3.9.6**

This is a new message. So it is better to have a new name and a new message code

Suggested Remedy

Change

"6.3.2.3.9.6 Key Reply message"

to

"6.3.2.3.9.6 PKMv2 Key Reply message"

And add a new message code in Table 26 accordingly.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"6.3.2.3.9.6 Key Reply message"

to

"6.3.2.3.9.6 PKMv2 Key Reply message"

And add a new message code in Table 26 accordingly.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"6.3.2.3.9.6 Key Reply message"

to

"6.3.2.3.9.6 PKMv2 Key Reply message"

And add a new message code in Table 26 accordingly.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

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

[Appears to have been done by a contribution \(including massive Table 26 changes\).](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4062**Comment submitted by: [Rajesh](#)[Bhalla](#)

Member

2005/04/28

Comment Type [Technical, Binding](#) Starting Page # [47](#) Starting Line # [20](#) Fig/Table# Section [6.3.2.3.9.12](#)

[I object to resolution of Comment #3116 . There are two issues in PKMv2 RSA authentication:](#)

- [1. In PKMv2, There are different procedures of RSA authentication for different authorization policy. In authorization based on RSA authentication and EAP authentication, BS and MS do not negotiate SAs in RSA authentication. But in authorization based on RSA-only authentication, BS and MS need negotiate SAs in RSA authentication. This causes PKMv2 authorization flow disorder, it needs to uniform PKMv2 authorization flow. To uniform PKMv2 authorization flow, SAs should be negotiated through 3 way SA-TEK exchange in every authorization policy.](#)
- [2. In PKMv1 RSA authentication, if BS fails to authenticate MS, BS will inform MS by sending Auth-reject message. But in PKMv2 RSA authentication, there doesn't define PKMv2 Auth-reject message.](#)

Suggested Remedy

[Adopt the resolution text in contribution IEEE C802.16e-05/208 or the latest version.](#)

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

Reason for Group's Decision/Resolution

[See comment 4064.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4063**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Editorial** Starting Page # **47** Starting Line # **20**

Fig/Table# Section **6.3.2.3.9.12**

Message name is different in different sections. Should be in syn

Suggested Remedy

Change

"6.3.2.3.9.12 Auth-Request message"

to

"6.3.2.3.9.12 PKMv2 Auth-Request message"

And

Change

"Code:21"

to

"Code:17"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"6.3.2.3.9.12 Auth-Request message"

to

"6.3.2.3.9.12 PKMv2 Auth-Request message"

And

Change

"Code:21"

to

"Code:17"

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Change

"6.3.2.3.9.12 Auth-Request message"

to

"6.3.2.3.9.12 PKMv2 Auth-Request message"

And

Change

"Code:21"

to

"Code:17"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Appears to have been done by a contribution (including massive Table 26 changes).

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4064**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **47** Starting Line # **49** Fig/Table# Section **6.3.2.3.9.12**

The several authorization policy can be supported in the PKMv2. However, the MS's authorization flow is disorganized. It is necessary to clearly correct the MS's authorization flow.

Suggested Remedy

Adopt the contribution [C802.16e-05/229](#).

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt contribution [C802.16e-05/229r3](#).

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Adopt contribution [C802.16e-05/229r3](#).

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

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

Unable to implement the changes to Clause 7. These changes did not correctly reference text in D7 or the baseline document, and also the changes would have shuffled text around, further complicating the editorial instructions at the beginning of Clause 7.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4065**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **47**

Starting Line # **49**

Fig/Table#

Section

6.3.2.3.9.13

Message name is different in different sections. Should be in syn

Suggested Remedy

Change

"6.3.2.3.9.13 Auth-Reply message"

to

"6.3.2.3.9.13 PKMv2 Auth-Reply message"

And change

"Code:22"

to

"Code:18"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"6.3.2.3.9.13 Auth-Reply message"

to

"6.3.2.3.9.13 PKMv2 Auth-Reply message"

And change

"Code:22"

to

"Code:18"

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Change

"6.3.2.3.9.13 Auth-Reply message"

to

"6.3.2.3.9.13 PKMv2 Auth-Reply message"

And change

"Code:22"

to

"Code:18"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Appears to have been done by a contribution (including massive Table 26 changes).

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4066**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment Type **Technical, Binding**Starting Page # **48**Starting Line # **15**

Fig/Table#

Section **6.3.2.3.9.13**

I object to the resolution of Comment #3116 from session #36 because the corrections for the SA-TEK exchange are incomplete. There needs some supplements about AK lifetime in the SA-TEK exchange. The AK lifetime is the minimum between PAK lifetime and PMK lifetime in current 802.16e/D7. But there is not description about how the PMK lifetime is generated and the MS gets the PMK lifetime in this current specification. Since the EAP protocol does not provide for explicit key lifetime negotiation (seen RFC 3748, Page 51), the exchange of PMK lifetime needs to be added after the EAP authentication process in the EAP-based authorization. So it brings the additional exchange in the EAP-based authorization and modification of the EAP-based authorization flow. We suggest to enhance the AK lifetime in the SA-TEK exchange in order to remain the existing EAP-based authorization flow and successfully get the AK lifetime in both sides.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/206 or the latest version.

Proposed ResolutionRecommendation: **Superseded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superseded****Reason for Group's Decision/Resolution**See [4173](#).**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4067**

Comment submitted by: tian

feng

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	48	Starting Line #	24	Fig/Table#	Section	6.3.2.3.9.13
---------	------	------------------------	-----------------	----	-----------------	----	------------	---------	--------------

In PKMv2 RSA authentication, SigBs is an RSA signature over all the message in the PKMv2 Auth reply message. But in 802.16e, it doesn't describe the signature algorithms. Common signature process may consists several steps: first use one-way hash function output message digest , then encrypt the digest . In PKCS#1, the signature algorithms combine RSA with either the MD2, MD5, or the SHA-1 one-way hash functions.

Suggested Remedy

change

6.3.2.3.9.13

" An RSA signature over all the other attributes in the PKMv2 Auth reply message, [the signature algorithm is defined in 7.5.7.](#) "

7.5.7 Digital sigtures

" The Protocol employs the RSA Signature Algorithm (PKCS #1) with SHA-1(FIPS 186-2) for both of its certificate types [and message signature.](#)

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Change page 184 line 65 to read:

- RSA protocol [PKCS #1 v2.1 with SHA-1(FIPS 186-2)]

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

Change page 184 line 65 to read:

- RSA protocol [PKCS #1 v2.1 with SHA-1(FIPS 186-2)]

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4068**

Comment submitted by: Li

Rui

Other

2005/04/28

Comment Type **Editorial** Starting Page # **48** Starting Line # **49** Fig/Table# **37d** Section **6.3.2.3.9.14**

There is an editorial error in the attribute column of Table 37d in section 6.3.2.3.9.14. The Key Update Command message is sent by BS to push the GTEK and/or GKEK parameters. But there are two GTEK-parameters attributes in Table 37d.

Suggested Remedy

change
Table 37d Key update command attributes

Attribute	Contents
GSAID	Security Association ID
Key Push Modes	Usage code of Key Update Command message.
Key Push Counter	Counter one greater than that of older generation.
GTEK-Parameters	"Newer" generation of key parameters relevant to GSAID
GTEK-Parameters	Group Key Encryption Key protected by KEK derived from shared AK and other GKEK parameter e.g. Key lifetime.
OMAC/HMAC-Digest	Message integrity code of this message.

to
Table 37d Key update command attributes

Attribute	Contents
GSAID	Security Association ID
Key Push Modes	Usage code of Key Update Command message.
Key Push Counter	Counter one greater than that of older generation.
GTEK-Parameters	"Newer" generation of key parameters relevant to GSAID
GTEK GKEK -Parameters	Group Key Encryption Key protected by KEK derived from shared AK and other GKEK parameter e.g. Key lifetime.
OMAC/HMAC-Digest	Message integrity code of this message.

Proposed Resolution

Recommendation: Accepted

Recommendation by

change
Table 37d Key update command attributes

Attribute	Contents
GSAID	Security Association ID
Key Push Modes	Usage code of Key Update Command message.
Key Push Counter	Counter one greater than that of older generation.
GTEK-Parameters	"Newer" generation of key parameters relevant to GSAID
GTEK-Parameters	Group Key Encryption Key protected by KEK derived from shared AK and other GKEK parameter e.g. Key lifetime.
OMAC/HMAC-Digest	Message integrity code of this message.

to
Table 37d Key update command attributes

Attribute	Contents
GSAID	Security Association ID
Key Push Modes	Usage code of Key Update Command message.
Key Push Counter	Counter one greater than that of older generation

Key Push Counter	Counter one greater than that of older generation.
GTEK-Parameters	"Newer" generation of key parameters relevant to GSAID
GTEK GKEK-Parameters	Group Key Encryption Key protected by KEK derived from shared AK and other GKEK parameter e.g. Key lifetime.
OMAC/HMAC-Digest	Message integrity code of this message.

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

change

Table 37d Key update command attributes

Attribute**Contents**

GSAID	Security Association ID
Key Push Modes	Usage code of Key Update Command message.
Key Push Counter	Counter one greater than that of older generation.
GTEK-Parameters	"Newer" generation of key parameters relevant to GSAID
GTEK-Parameters	Group Key Encryption Key protected by KEK derived from shared AK and other GKEK parameter e.g. Key lifetime.
OMAC/HMAC-Digest	Message integrity code of this message.

to

Table 37d Key update command attributes

Attribute**Contents**

GSAID	Security Association ID
Key Push Modes	Usage code of Key Update Command message.
Key Push Counter	Counter one greater than that of older generation.
GTEK-Parameters	"Newer" generation of key parameters relevant to GSAID
GTEK GKEK-Parameters	Group Key Encryption Key protected by KEK derived from shared AK and other GKEK parameter e.g. Key lifetime.
OMAC/HMAC-Digest	Message integrity code of this message.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4069**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **49**

Starting Line # **51**

Fig/Table# **37e**

Section **6.3.2.3.9.15**

HMAC can also be used as digest

Suggested Remedy

Change

"OMAC Digest"

to

"OMAC/HMAC Digest"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"OMAC Digest"

to

"OMAC/HMAC Digest"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"OMAC Digest"

to

"OMAC/HMAC Digest"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4070**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **50** Starting Line # **1** Fig/Table# Section **6.3.2.3.9.16**

The current 3-way SA-TEK exchange has some problems. This exchange way shall not be supported in the initial network entry. In addition, since the Key Request and the Key Reply messages are defined, this 3-way SA-TEK exchange are unnecessary burden.

Suggested Remedy

Adopt the contribution C802.16e-05/231.

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C802.16e-05/231r2.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Adopt contribution C802.16e-05/231r2.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4071**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **50**

Starting Line # **20**

Fig/Table# **37f**

Section **6.3.2.3.9.16**

Editorial changes

Suggested Remedy
Change

"OMAC/HMAC"

to

"OMAC/HMAC Digest"

And change

"Message integrity tuple for this message"

to

"Message integrity digest for this message "

Proposed Resolution

Recommendation: Rejected

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Covered by another comment

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4072**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **50**

Starting Line # **55**

Fig/Table# **37g**

Section **6.3.2.3.9.17**

Editorial change to make it clearer

Suggested Remedy

Change

"OMAC/HMAC"

to

"OMAC/HMAC Digest"

And change

"Message integrity code for this message"

to

"Message integrity digest for this message "

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change "Message integrity code of this message"

to

"Message integrity tuple for this message"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change "Message integrity code of this message"

to

"Message integrity tuple for this message"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions) none needed

Done by an edited contribution

2005/05/23

IEEE 802.16-05/023r6

Done by an adopted contribution.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4073**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **51**

Starting Line # **19**

Fig/Table# **37h**

Section **6.3.2.3.9.18**

Editorial change to make it clearer

Suggested Remedy

Change

"OMAC/HMAC"

to

"OMAC/HMAC Digest"

And change

"Message integrity tuple for this message"

to

"Message integrity digest for this message "

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Covered by another comment

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4074**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **51**

Starting Line # **22**

Fig/Table#

Section **6.3.2.3.9.19**

[Submitted as Technical, Binding but with an Approve vote.]

This section is useless. The function is already included in SA-TEK-Response. In addition, the message format is also wrong. It does not provide SA updates

Suggested Remedy

Delete section 6.3.2.3.9.19

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

See comment 4070

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See comment 4070

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4075**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **52** Starting Line # **14**

Fig/Table# **37i** Section **6.3.2.3.9.19**

[Submitted as Technical, Binding but with an Approve vote.]
Missing AK lifetime

Suggested Remedy

Add one table entry

"- AK Lifetime. AK aging timer."

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Unnecessary. The BS already includes it, the subscriber does not need it.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4076**Comment submitted by: **tian****feng**

Other

2005/04/28

Comment Type **Technical, Non-binding**Starting Page # **52**Starting Line # **15**Fig/Table# **table**Section **6.3.2.3.9.19**

In the table, the Mac tuple is not enough.

Suggested Remedy

change

" OMAC " to " OMAC/HMAC "" OMAC calculated using OMAC key derived from PAK. " to " OMAC/HMAC calculated using OMAC/HMAC key derived from PAK. "**Proposed Resolution**Recommendation: **Accepted**

Recommendation by

change

" OMAC " to " OMAC/HMAC "" OMAC calculated using OMAC key derived from PAK. " to " OMAC/HMAC calculated using OMAC/HMAC key derived from PAK. "**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted**

change

" OMAC " to " OMAC/HMAC "" OMAC calculated using OMAC key derived from PAK. " to " OMAC/HMAC calculated using OMAC/HMAC key derived from PAK. "**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4077**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	52	Starting Line #	19	Fig/Table#	Section	6.3.2.3.23
[Editorial]									

In the last sponsor ballot recirc the comment #3267 which was accepted was improperly implemented by the editor.

Suggested Remedy

in section 7.5.4, page 207 line 52 , make the following text change (replace "OMAC_PN" by "OMAC_PN_*"):

"The digest shall be calculated over a field consisting of the OMAC key sequence number followed by the OMAC_PN_* , "

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Section 7.5.4

change each OMAC_PN by "OMAC_PN_*

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Section 7.5.4

change each OMAC_PN by "OMAC_PN_*

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions) none needed

None found.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4078**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	53	Starting Line #	30	Fig/Table#	Section
---------	------	-----------	-----------------	----	-----------------	----	------------	---------

In multiple locations text "NNN MAC management message" appear, for example "SBC-REQ MAC management message". There is only one message named SBC-REQ in the standard and it is MAC management message, so such detailed naming looks redundant

Suggested Remedy

Change

"SBC-REQ/RSP MAC management messages"

to

"SBC-REQ/RSP messages"

Do similar replacement through all the document for all strings of the type

"<message name> MAC management message"

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

Change

"SBC-REQ/RSP MAC management messages"

to

"SBC-REQ/RSP messages"

Replace, through all the document, all strings of the type

"<message name> MAC management message" with:

"<message name> message"

Reason for Recommendation

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

Change

"SBC-REQ/RSP MAC management messages"

to

"SBC-REQ/RSP messages"

Replace, through all the document, all strings of the type

"<message name> MAC management message" with:

"<message name> message"

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

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4079** Comment submitted by: [Moo Ryong](#) [Jeong](#) [Other](#) [2005/04/28](#)

Comment Type [Editorial](#) Starting Page # [53](#) Starting Line # [42](#) Fig/Table# Section [6.3.2.3.26 & .42](#)

1. In Section 6.3.2.3.26 and Section 11.14, the descriptions on Bit #6 and Bit #7 of the Idle Mode Retain Information field in DREG-CMD message are inconsistent.

1. In Section 6.3.2.3.42 and Section 11.15, the descriptions on Bit #6 and Bit #7 of the Idle Mode Retain Information field in DREG-REQ message are inconsistent

Suggested Remedy

[Accept Remedy 2 of the contribution C80216e-05/204](#)

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

[Adopt contribution C80216e-05/204](#)

Reason for Recommendation

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

[Adopt contribution C80216e-05/204](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4080**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **53** Starting Line # **59**
 I object change in 6.3.2.3.26 between D6 and D7 MS may e.g. decide to cancel deregistration

Fig/Table# Section **6.3.2.3.26****Suggested Remedy**

Change

REQ-duration

Waiting value for the DREG-REQ message re-transmission (measured in frames) If serving BS includes REQ-duration in a message including an Action Code = 0x05, the MS ~~shall~~ **may** initiate an Idle Mode request through a DREG-REQ with Action Code = 0x01, request for MS De-Registration from serving BS and initiation of MS Idle Mode, at REQ-duration expiration.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change

REQ-duration

Waiting value for the DREG-REQ message re-transmission (measured in frames) If serving BS includes REQ-duration in a message including an Action Code = 0x05, the MS ~~shall~~ **may** initiate an Idle Mode request through a DREG-REQ with Action Code = 0x01, request for MS De-Registration from serving BS and initiation of MS Idle Mode, at REQ-duration expiration.

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

Change

REQ-duration

Waiting value for the DREG-REQ message re-transmission (measured in frames) If serving BS includes REQ-duration in a message including an Action Code = 0x05, the MS ~~shall~~ **may** initiate an Idle Mode request through a DREG-REQ with Action Code = 0x01, request for MS De-Registration from serving BS and initiation of MS Idle Mode, at REQ-duration expiration.

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4081**

Comment submitted by: Joonsang

Choi

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **55** Starting Line # **62**
subtraction (by 0xFF) result is incorrect. It needs to be changed from 0xFFFFD to 0xFE01.

Fig/Table#

Section

6.3.2.3.43.3

Suggested Remedy

On page 55 change:

from (0xFFFFD - 0xFEFE) to (0xFE01 - 0xFEFE)

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4082**

Comment submitted by: Peiying

Zhu

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	61	Starting Line #	61	Fig/Table#	Section	8.4.4.5
---------	------	-----------	-----------------	----	-----------------	----	------------	---------	---------

Delete the sentences between lines 61-63. The slot is already defined in section 8.4.3.1, no need to explain here again.

Suggested Remedy

Delete the following sentences:

~~The size of a slot varies with the permutation schemes. For example, for uplink PUSC, one slot is one subchannel by 3 OFDMA symbols. For uplink using adjacent subcarrier permutation, one slot is one subchannel by one OFDMA symbol.~~

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete the following sentences:

~~The size of a slot varies with the permutation schemes. For example, for uplink PUSC, one slot is one subchannel by 3 OFDMA symbols. For uplink using adjacent subcarrier permutation, one slot is one subchannel by one OFDMA symbol.~~

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

Delete the following sentences:

~~The size of a slot varies with the permutation schemes. For example, for uplink PUSC, one slot is one subchannel by 3 OFDMA symbols. For uplink using adjacent subcarrier permutation, one slot is one subchannel by one OFDMA symbol.~~

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

Editor's Actions k) done

Also removed "For example, for uplink PUSC, one slot is one subchannel by 3 OFDMA symbols. ", which was sandwiched between the two deleted sentences.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4083**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	80	Starting Line #	1	Fig/Table#	Section	6.3.2.3.44
---------	------	------------------------	-----------------	----	-----------------	---	------------	---------	------------

I object to the resolution of Comment #3150 because the latest version of the proposed contribution is 110r2, not 110. Therefore, we propose to adopt the proposed text in IEEE C802.16e-05/110r2.

Suggested Remedy

Adopt the text proposed in contribution IEEE C802.16e-05/110r2

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Adopt the text proposed in contribution IEEE C802.16e-05/110r2

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

Adopt the text proposed in contribution IEEE C802.16e-05/110r2

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

Table 108h has changed to the extent were I can't find the text to change. I did manage to remove HMAC Tuple from the 3rd last row.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4084**

Comment submitted by: **Panyuh**

Joo

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **81**

Starting Line # **12**

Fig/Table#

Section

6.3.2.3.44

editor correction for unmatched syntax name

Suggested Remedy

change "Number_of_CIDs" to "Number_of_Sleep_CIDs"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

change "Number_of_CIDs" to "Number_of_Sleep_CIDs"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

change "Number_of_CIDs" to "Number_of_Sleep_CIDs"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4085**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Editorial** Starting Page # **81** Starting Line # **14** Fig/Table# **108c** Section **6.3.2.3.44**

I object to the implementation of Comment #3151 because MOB_SLP-REP still has editorial error.

Suggested Remedy

Replace "Number_of_Sleep_CIDs" with "Number_of_CIDs" in Table 108c, page 81, line 14, as follows :

Syntax	Size(bits)	Notes
Number_of_CIDs	3	-
for (i=0; i<Number_of_Sleep_CIDs; i++ {	-	-
CID	16	-

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

Replace "Number_of_Sleep_CIDs" with "Number_of_CIDs" in Table 108c, page 81, line 14, as follows :

Syntax	Size(bits)	Notes
Number_of_CIDs	3	-
for (i=0; i<Number_of_Sleep_CIDs; i++ {	-	-
CID	16	-

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

Replace "Number_of_Sleep_CIDs" with "Number_of_CIDs" in Table 108c, page 81, line 14, as follows :

Syntax	Size(bits)	Notes
Number_of_CIDs	3	-
for (i=0; i<Number_of_Sleep_CIDs; i++ {	-	-

CID	16	-
-----	----	---

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes **Editor's Actions** e) editor disagrees

This essentially un-does Comment 4084, so I performed the change for Comment 4084 and ignored this one.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4086**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	81	Starting Line #	38	Fig/Table#	Section	6.3.2.3.44
---------	------	------------------------	-----------------	----	-----------------	----	------------	---------	------------

I object resolution of comment #3151 which was incomplete: also some text in 6.3.2.3 should be clarified.

Suggested Remedy

Change

Power_Saving_Class_ID

Assigned Power Saving Class identifier. The ID shall be unique within the group of Power Saving Classes associated with the MS. This ID may be used in further MOB_SLP-REQ/RSP messages for activation / deactivation of Power Saving Class. **In case Definition = 0 Power_Saving_Class_ID has no meaning and should be encoded as 0**

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change

Power_Saving_Class_ID

Assigned Power Saving Class identifier. The ID shall be unique within the group of Power Saving Classes associated with the MS. This ID may be used in further MOB_SLP-REQ/RSP messages for activation / deactivation of Power Saving Class. **In case Definition = 0 Power_Saving_Class_ID has no meaning and should be encoded as 0**

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

Change

Power_Saving_Class_ID

Assigned Power Saving Class identifier. The ID shall be unique within the group of Power Saving Classes associated with the MS. This ID may be used in further MOB_SLP-REQ/RSP messages for activation / deactivation of Power Saving Class. **In case Definition = 0 Power_Saving_Class_ID has no meaning and should be encoded as 0**

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4087**

Comment submitted by: **Beomjoon**

Kim

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **82** Starting Line # **13** Fig/Table# Section **6.3.2.3.44**

Final-sleep window exponent is not used for Power Saving Class Type 2, but Power Saving Class Type 3.

Suggested Remedy

Line 13, Page 82

Change from

"For Power Saving Class type **2** ..."

to

"For Power Savning Class type **3**..."

Line 27, Page 85

Change from

"For Power Saving Class type **2** ..."

to

"For Power Savning Class type **3**..."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Line 13, Page 82

Change from

"For Power Saving Class type **2** ..."

to

"For Power Savning Class type **3**..."

Line 27, Page 85

Change from

"For Power Saving Class type **2** ..."

to

"For Power Savning Class type **3**..."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Line 13, Page 82

Change from

"For Power Saving Class type **2** ..."

to

"For Power Savning Class type **3**..."

Line 27, Page 85

Change from

"For Power Saving Class type 2 ..."
to
"For Power Saving Class type 3..."

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4088**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Editorial** Starting Page # **84** Starting Line # **16**Fig/Table# Section **6.3.2.3.45**

Correction for some typo and unmatched field name

Suggested Remedy

Change the following field in Table 108d
 in line 18 : if(**Maintained** Active Set and Anchor BS ID BSID **maintained**){\

Proposed Resolution Recommendation: Accepted**Recommendation by**

Change the following field in Table 108d
 in line 18 : if(**Maintained** Active Set and Anchor BS ID BSID **maintained**){\

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

Change the following field in Table 108d
 in line 18 : if(**Maintained** Active Set and Anchor BS ID BSID **maintained**){\

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4089**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **84**

Starting Line # **60**

Fig/Table#

Section **6.3.2.3.45**

REQ-duration parameter unexplained

Suggested Remedy

REQ-duration
Waiting value for the MOB-SLP-REQ message re-transmission (measured in MAC frames):
the MS may retransmit the MOB-SLP-REQ message after the time duration (REQ-duration)
provided in the message

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

REQ-duration
Waiting value for the MOB-SLP-REQ message re-transmission (measured in MAC frames):
the MS may retransmit the MOB-SLP-REQ message after the time duration (REQ-duration)
provided in the message

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

REQ-duration
Waiting value for the MOB-SLP-REQ message re-transmission (measured in MAC frames):
the MS may retransmit the MOB-SLP-REQ message after the time duration (REQ-duration)
provided in the message

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4090**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **86** Starting Line # **12** Fig/Table# Section **6.3.2.3.46**

I object to the implementation of Comment #3477 because more text related to Sleep mode multicast CID and Idle mode multicast CID should be added in draft. Sleep mode / Idle mode multicast CIDs are used for MOB_TRF-IND and MOB_PAG-ADV message. In several places, D7 describes that MOB_TRF-IND and MOB_PAG-ADV are transmitted only on broadcast CID.

Suggested Remedy

1. Modify the text at page 86, line 12, as follows :

6.3.2.3.46 Traffic Indication message (MOB_TRF-IND)

This message is sent from BS to MS on the broadcast CID [or Sleep mode multicast CID](#).

2. Modify the text at page 117, line 49, as follows :

6.3.2.3.55 BS Broadcast Paging (MOB_PAG-ADV) message

The MOB_PAG-ADV message shall be sent on the Broadcast CID [or Idle mode multicast CID](#) during the BS Paging Interval.

3. Modify the text at page 148, line 36, as follows :

A traffic indication (MOB_TRF-IND) message shall be sent by the BS on broadcast CID [or Sleep mode multicast CID](#) during listening window to alert MS of appearance of DL traffic demand at the corresponding connections.

Proposed Resolution Recommendation: Accepted**Recommendation by**

1. Modify the text at page 86, line 12, as follows :

6.3.2.3.46 Traffic Indication message (MOB_TRF-IND)

This message is sent from BS to MS on the broadcast CID [or Sleep mode multicast CID](#).

2. Modify the text at page 117, line 49, as follows :

6.3.2.3.55 BS Broadcast Paging (MOB_PAG-ADV) message

The MOB_PAG-ADV message shall be sent on the Broadcast CID [or Idle mode multicast CID](#) during the BS Paging Interval.

3. Modify the text at page 148, line 36, as follows :

A traffic indication (MOB_TRF-IND) message shall be sent by the BS on broadcast CID [or Sleep mode multicast CID](#) during listening window to alert MS of appearance of DL traffic demand at the corresponding connections.

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

1. Modify the text at page 86, line 12, as follows :

6.3.2.3.46 Traffic Indication message (MOB_TRF-IND)

This message is sent from BS to MS on the broadcast CID [or Sleep mode multicast CID](#).

2. Modify the text at page 117, line 49, as follows :

6.3.2.3.55 BS Broadcast Paging (MOB_PAG-ADV) message

The MOB_PAG-ADV message shall be sent on the Broadcast CID [or Idle mode multicast CID](#) during the BS Paging Interval.

3. Modify the text at page 148, line 36, as follows :

A traffic indication (MOB_TRF-IND) message shall be sent by the BS on broadcast CID [or Sleep mode multicast CID](#) during listening window to alert MS of appearance of DL traffic demand at the corresponding connections.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4091**

Comment submitted by: **Rajesh**

Bhalla

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **87** Starting Line # Fig/Table# Section **6.3.2.3.46**

FMT, short basic CID and Num_pos are referenced in the description text following table 108e, but, these parameters are not in table 108e

Suggested Remedy

Either remove the descriptions of those parameters or add them back to the table.

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4092.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4092**

Comment submitted by: Yigal

Leiba

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **87** Starting Line # **6** Fig/Table# **108e** Section **6.3.2.3.46**

RE: #397

The possibility to signal traffic indication using the CID, has been restored in session #36. However, table 108e, which was correct in 'P802.16e/D6' delta version, is now inconsistent with this capability.

Suggested Remedy

Changes the table as shown below:

Syntax	Size	Notes
MOB_TRF-IND_Message_Format() {		
Management message type = 52	8 bits	
<u>FMT</u>	<u>1 bit</u>	<u>0 = SLPID based format</u> <u>1 = CID based format</u>
if (FMT == 0) {		
<u>reserved</u>	<u>7 bits</u>	
SLPID Group Indication bit-map	32 bits	Nth bit of SLPID-Group indication bit-map [MSB corresponds to N = 0] is allocated to SLPID Group that includes MS with SLPID values from N*32 to N*32+31 Meaning of this bit 0 : There is no traffic for all the 32 MS which belong to the SLPIDGroup 1 : There is traffic for at least one MS in SLPID-Group.
Traffic Indication Bitmap	Variable	Traffic Indication bit map comprises the multiples of 32-bit long Traffic Indication unit. A Traffic Indication unit for 32 SLPIDs is added to MOB_TRFIND

		message whenever its SLPID Group is set to '1' 1 32 bits of Traffic Indication Unit (starting from MSB) are allocated to MS in the ascending order of their SLPID values 0 : Negative indication 1 : Positive indication
TLV encoded items	Variable	
} else {		
<u>Num-pos</u>	<u>7 bits</u>	<u>Number of CIDs on the positive indication list</u>
<u>for (i=0; i<Num-pos; i++) {</u>		
<u>Short Basic CID</u>	<u>12 bits</u>	<u>12 least significant bits of the Basic CID</u>
}		
<u>while (!(byte_boundary)) {</u>		
<u>Padding nibble</u>	<u>4 bits</u>	
}		
}		
}		

Proposed Resolution Recommendation: Accepted

Recommendation by

Changes the table as shown below:

Syntax	Size	Notes
--------	------	-------

MOB_TRF-IND_Message_Format() {		
Management message type = 52	8 bits	
<u>FMT</u>	<u>1 bit</u>	<u>0 = SLPID based format</u> <u>1 = CID based format</u>
if (FMT == 0) {		
<u>reserved</u>	<u>7 bits</u>	
SLPID Group Indication bit-map	32 bits	Nth bit of SLPID-Group indication bit-map [MSB corresponds to N = 0] is allocated to SLPID Group that includes MS with SLPID values from N*32 to N*32+31 Meaning of this bit 0 : There is no traffic for all the 32 MS which belong to the SLPIDGroup 1 : There is traffic for at least one MS in SLPID-Group.
Traffic Indication Bitmap	Variable	Traffic Indication bit map comprises the multiples of 32-bit long Traffic Indication unit. A Traffic Indication unit for 32 SLPIDs is added to MOB_TRFIND message whenever its SLPID Group is set to '1' 1 32 bits of Traffic Indication Unit (starting from MSB) are allocated to MS in the ascending order of their SLPID values 0 : Negative indication 1 : Positive indication
TLV encoded items	Variable	
} else {		
<u>Num-pos</u>	<u>7 bits</u>	<u>Number of CIDs on the positive indication list</u>

+-----+-----+-----+			
	<u>for (i=0; i<Num-pos; i++) {</u>		
+-----+-----+-----+			
	<u>Short Basic CID</u>	<u>12 bits</u>	<u>12 least significant bits of the Basic CID</u>
+-----+-----+-----+			
	<u>}</u>		
+-----+-----+-----+			
	<u>while (!(byte_boundary)) {</u>		
+-----+-----+-----+			
	<u>Padding nibble</u>	<u>4 bits</u>	
+-----+-----+-----+			
	<u>}</u>		
+-----+-----+-----+			
	<u>}</u>		
+-----+-----+-----+			
	<u>}</u>		
+-----+-----+-----+			

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

Changes the table as shown below:

+-----+-----+-----+			
	Syntax	Size	Notes
+-----+-----+-----+			
	MOB_TRF-IND_Message_Format() {		
+-----+-----+-----+			
	Management message type = 52	8 bits	
+-----+-----+-----+			
	<u>FMT</u>	<u>1 bit</u>	<u>0 = SLPID based format</u>
			<u>1 = CID based format</u>
+-----+-----+-----+			
	if (FMT == 0) {		
+-----+-----+-----+			
	<u>reserved</u>	<u>7 bits</u>	
+-----+-----+-----+			
	SLPID Group Indication bit-map	32 bits	Nth bit of SLPID-Group indication
+-----+-----+-----+			

<p>SLPID Group Indication Bit Map</p>	<p>Variable</p>	<p>bit-map [MSB corresponds to N = 0] is allocated to SLPID Group that includes MS with SLPID values from N*32 to N*32+31 Meaning of this bit 0 : There is no traffic for all the 32 MS which belong to the SLPIDGroup 1 : There is traffic for at least one MS in SLPID-Group.</p>
<p>Traffic Indication Bitmap</p>	<p>Variable</p>	<p>Traffic Indication bit map comprises the multiples of 32-bit long Traffic Indication unit. A Traffic Indication unit for 32 SLPIDs is added to MOB_TRFIND message whenever its SLPID Group is set to '1' 1 32 bits of Traffic Indication Unit (starting from MSB) are allocated to MS in the ascending order of their SLPID values</p>

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions e) editor disagrees

This table has been completely changed by another comment.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4093**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	87	52		

I object change in MOB_TRF-IND message that was not accompanied by change in explanatory text where some MOB-TRF_IND fields remain wre deleted from the message: FMT, Num-pos, Short Basic CID

Suggested Remedy

Delete:

~~FMT~~

~~The FMT field indicates one of the SLPID bit map based format and the Short Basic CID based format.~~

At p.87 line 26 delete:

~~Num-pos~~

~~The number of Positive indication.~~

~~Short Basic CID~~

~~The Basic CID for MS to be transited into an awake mode.~~

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

See comment 4092.

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4092.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4094**

Comment submitted by: Phillip

Barber

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	88	Starting Line #	47	Fig/Table#	Section	6.3.2.3.47
---------	------	--------------------	-----------------	----	-----------------	----	------------	---------	------------

I object to the resolution of comment 2095.

Resolution of comment 2095 removed reference and mechanics of the 'Neighbor Preference' from the Neighbor Advertisement (NBR-ADV) message. This feature had previously been added after substantial harmonization activity on NBR-ADV and reflected a perceived need by the group for BS broadcasting the NBR-ADV message to give a subjective/bias indication to MS receiving the message as to which Neighbor BS the Serving BS would prefer MS target for initial network entry as well as handover.

The reason that this mechanic was removed through the resolution of 2095 was because of a perceived lack of defined/structured mechanics for objective differentiation of the various selection responses. Specifically, how does a given BS know whether to declare one neighbor BS a 'Preferred BS' and another neighbor BS a 'Normal BS'. While I agree that no objective mechanics were defined, that rationale for removal is flawed. It was always intended that selection of 'type' of Neighbor Preference would be entirely subjective; that this was a hook for different vendors to apply differing criteria in determining individual Neighbor Preference. For some networks, it might be based on some CINR threshold; on others it might be based on sector granularity for differently configured cells; for others it might be differentiating between pico, micro, and macro cells. The point is that it was entirely subjective, and there was nothing wrong with that. It would not interfere with interoperable performance to have this feature subjectively assigned, and inclusion provides a simple mechanism for networks to direct entering or re-entering MS toward neighbor BS that would in some way benefit the network; though the activity is not enforced through this mechanism.

Finally, through use of the new 'Skip-Optional-Fields bitmap' implementors of the standard need not use this feature, nor suffer the 1 byte transmission penalty, should they elect not to use this optional feature.

Suggested Remedy

In 6.3.2.3.47, Table 106d, page 91, line 16:

Insert before '}'

'reserved | 6 bits | Shall be set to zero

Neighbor Preference | 2 bits | 00 Normal

01 Preferred

10 Non-Preferred

11 Reserved'

In 6.3.2.3.47, page 93, line 14

Insert before '**DCD Configuration Change Count**'**' Neighbor Preference**

The Neighbor Preference field is present only if bit #3 of Skip-Optional-Fields bitmap is '0'. It defines an implementation specific, subjective preference for MS network entry and handover to neighbor BS, as determined by the serving BS (see section 6.3.21.1.1.1)'

Add section 6.3.21.1.1, page 151, line 40:

Insert new section 6.3.21.1.1.1

' 6.3.21.1.1.1 Neighbor preference

The message element "Neighbor Preference" in MOB_NBR-ADV MAC Management message defines a subjective assignment of handover priorities or preferences as determined and set by the serving base station. The serving BS may consider factors including, but not limited to, neighbor BS CINR service threshold, configuration including sectorization and service granularity support, coverage footprint, current loading, and QoS support in deciding to report a BS as a handover candidate, according to the rules specified by a handover policy management entity

out-of-scope of this standard. Neighbor Preference is a mechanism to permit a serving BS to influence MS decisions for network entry and handover. MS may use information obtained through Neighbor Preference to prejudice a decision on which BS to conduct initial network entry, or to construct and prioritize BS in a MOB_MSHO-REQ message.'

Proposed Resolution Recommendation: Accepted

Recommendation by

In 6.3.2.3.47, Table 106d, page 91, line 16:

Insert before '}'

'reserved | 6 bits | Shall be set to zero

Neighbor Preference | 2 bits | 00 Normal

01 Preferred

10 Non-Preferred

11 Reserved'

In 6.3.2.3.47, page 93, line 14

Insert before '**DCD Configuration Change Count**'

' **Neighbor Preference**

The Neighbor Preference field is present only if bit #3 of Skip-Optional-Fields bitmap is '0'. It defines an implementation specific, subjective preference for MS network entry and handover to neighbor BS, as determined by the serving BS (see section 6.3.21.1.1.1)'

Add section 6.3.21.1.1, page 151, line 40:

Insert new section 6.3.21.1.1.1

6.3.21.1.1.1 Neighbor preference

The message element "Neighbor Preference" in MOB_NBR-ADV MAC Management message defines a subjective assignment of handover priorities or preferences as determined and set by the serving base station. The serving BS may consider factors including, but not limited to, neighbor BS CINR service threshold, configuration including sectorization and service granularity support, coverage footprint, current loading, and QoS support in deciding to report a BS as a handover candidate, according to the rules specified by a handover policy management entity out-of-scope of this standard. Neighbor Preference is a mechanism to permit a serving BS to influence MS decisions for network entry and handover. MS may use information obtained through Neighbor Preference to prejudice a decision on which BS to conduct initial network entry, or to construct and prioritize BS in a MOB_MSHO-REQ message.'

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Vote: 8-4

For handoff, this capability already exists since target BS list is sorted by preference. This capability provides no real benefit for initial entry as the MS would not yet have a serving BS.

Group's Notes

Group's Action Items

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

Editor's Actions |) [none needed](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4095**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **90** Starting Line # **38** Fig/Table# **108f** Section **11.6**

Resolution of comment #3495 (contribution IEEE C802.16e-05/148r1) was not sufficient as problematic bit #7 in HO Process Optimization field stays.

At pp 90, 92, 106, 115 bit #7 (bit #6 at p.516) of HO Process Optimization field is defined as

"Bit #7: Full service and operational state transfer or sharing between serving BS and target BS (ARQ, timers, counters, MAC state machines, etc...)"

As opposite to definition of another bits, such definition does not provide for clear instructions with respect to HO flow [compare it to e.g. "Bit #1: Omit PKM Authentication phase except TEK phase during current re-entry processing"] and therefore is misleading

Suggested Remedy

Change definition of bit #7 in HO Process Optimization field at pp 90, 92, 106, 115 to "reserved"

Change definition of bit #6 in HO Process Optimization field at p. 516 to "reserved"

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change definition of bit #7 in HO Process Optimization field at pp 90, 92, 106, 115 to "reserved"

Change definition of bit #6 in HO Process Optimization field at p. 516 to "reserved"

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

[See comment 4130.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4096**

Comment submitted by: Vladimir Yanover

Member

2005/04/28

Comment	Type Technical, Non-binding	Starting Page # 91	Starting Line # 46	Fig/Table#	Section 6.3.2.3.47
---------	------------------------------------	---------------------------	---------------------------	------------	---------------------------

Clarification of the language

Suggested Remedy
Change

Total Fragmentation
 The Total Fragmentation field set to 1 when ~~no fragmentation exists~~ **the neighbor list is not fragmented.**
 Otherwise, ~~neighbor list is fragmented~~ and this field indicates the total number of ~~fragmentations~~ **fragments.**
 When the neighbor list is fragmented, the N_NEIGHBORS indicates the number of neighbor **BSs** in the current ~~fragmentation~~ **message**

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

Total Fragmentation
 The Total Fragmentation field set to 1 when ~~no fragmentation exists~~ **the neighbor list is not fragmented.**
 Otherwise, ~~neighbor list is fragmented~~ and this field indicates the total number of ~~fragmentations~~ **fragments.**
 When the neighbor list is fragmented, the N_NEIGHBORS indicates the number of neighbor **BSs** in the current ~~fragmentation~~ **message**

Reason for Recommendation

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

Total Fragmentation
 The Total Fragmentation field set to 1 when ~~no fragmentation exists~~ **the neighbor list is not fragmented.**
 Otherwise, ~~neighbor list is fragmented~~ and this field indicates the total number of ~~fragmentations~~ **fragments.**
 When the neighbor list is fragmented, the N_NEIGHBORS indicates the number of neighbor **BSs** in the current ~~fragmentation~~ **message**

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4097**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **91** Starting Line # **51** Fig/Table# **108f** Section **6.3.2.3.47**

I object to the implementation of Comment #3153 because MOB_NBR-ADV has inconsistency between Table and field description. Skip-Optional-Fields bitmap indicates omission of not only NBR BS ID field but also Operator ID field, HO process optimization field, and QoS related fields in MOB_NBR-ADV message.

Suggested Remedy

Modify the description of Skip-Optional-Fields Flag , page 91, line 51-57 :

from :

Skip-Optional-Fields Flag:

This is 1-bit Flag to show if the BSID fields are skipped fore neighbors with OFDMA PHY. Therefore if this flag is set to 1 and if a neighbor BS has OFDMA PHY, as indicated in its PHY Profile ID, then the BSID for that neighbor is not mentioned in this message. If this flag is set to 0, BSID is not omitted for any neighbor.

to :

Skip-Optional-Fields Flag

The Skip-Optional-Fields Flag indicates whether some fields in MOB-NBR_ADV message may be omitted in the MOB_NBR-ADV message. The field is omitted if the bit is set to 1.

- Bit #0: Omit Operator ID field
- Bit #1: Omit NBR BS ID field
- Bit #2: Omit HO process optimization field
- Bit #3: Omit QoS related fields

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

Modify the description of Skip-Optional-Fields Flag , page 91, line 51-57 :

from :

Skip-Optional-Fields Flag:

This is 1-bit Flag to show if the BSID fields are skipped fore neighbors with OFDMA PHY. Therefore if this flag is set to 1 and if a neighbor BS has OFDMA PHY, as indicated in its PHY Profile ID, then the BSID for that neighbor is not mentioned in this message. If this flag is set to 0, BSID is not omitted for any neighbor.

to :

Skip-Optional-Fields Flag

The Skip-Optional-Fields Flag indicates whether some fields in MOB-NBR_ADV message may be omitted in the MOB_NBR-ADV message. The field is omitted if the bit is set to 1.

- Bit #0: Omit Operator ID field
- Bit #1: Omit NBR BS ID field
- Bit #2: Omit HO process optimization field
- Bit #3: Omit QoS related fields

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

Modify the description of Skip-Optional-Fields Flag , page 91, line 51-57 :

from :

Skip-Optional-Fields Flag:

This is 1-bit Flag to show if the BSID fields are skipped fore neighbors with OFDMA PHY. Therefore if this flag is set to 1 and if a neighbor BS has OFDMA PHY, as indicated in its PHY Profile ID, then the BSID for that neighbor is not mentioned in this message. If this flag is set to 0, BSID is not omitted for any neighbor.

to :

Skip-Optional-Fields Flag

The Skip-Optional-Fields Flag indicates whether some fields in MOB-NBR_ADV message may be omitted in the MOB_NBR-ADV message.

The field is omitted if the bit is set to 1.

Bit #0: Omit Operator ID field

Bit #1: Omit NBR BS ID field

Bit #2: Omit HO process optimization field

Bit #3: Omit QoS related fields

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4098**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Editorial** Starting Page # **95** Starting Line # **1** Fig/Table# **108h** Section **6.3.2.3.48**

I object to the implementation of Comment #3161 because Scan duration field seems to be missed in Table 108h MOB_SCN-REQ message by mistake.

Suggested Remedy

Add Scan duration field in MOB_SCN-REQ message as follows :

Table 108h.MOB_SCN-REQ message format

Syntax	Size(bits)	Notes
MOB_SCN-REQ_Message_Format() {	-	-
Management Message Type = 54	8	-
<u>Scan duration</u>	<u>8</u>	<u>units are frame</u>
Scan type	1	0: Scanning 1: Association

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Add Scan duration field in MOB_SCN-REQ message as follows :

Table 108h.MOB_SCN-REQ message format

Syntax	Size(bits)	Notes
MOB_SCN-REQ_Message_Format() {	-	-
Management Message Type = 54	8	-
<u>Scan duration</u>	<u>8</u>	<u>units are frame</u>
Scan type	1	0: Scanning 1: Association

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Add Scan duration field in MOB_SCN-REQ message as follows :

Table 108h.MOB_SCN-REQ message format

Syntax	Size(bits)	Notes
MOB_SCN-REQ_Message_Format() {	-	-
Management Message Type = 54	8	-
<u>Scan duration</u>	<u>8</u>	<u>units are frame</u>
Scan type	1	0: Scanning 1: Association

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions e) editor disagrees

This table has been completely changed by another comment.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4099**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **95** Starting Line # **12** Fig/Table# **108h** Section **6.3.2.3.48**

I object changes in the format of message MOB_SCN-REQ between D6 and D7:

1. Misplaced field: loop counter should be outside the loop
2. N_Recommended_BS does not exist anymore

Suggested Remedy

1. Move "N_Recommended_BS_scanning" line to location preceding the loop

```
"For (j=0; j<N_Recommended_BS_Scanning; j++) {"
```

2. Delete comment "N_Recommended_BS can be derived from the known length of the MAC message"

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

1. Move "N_Recommended_BS_scanning" line to location preceding the loop

```
"For (j=0; j<N_Recommended_BS_Scanning; j++) {"
```

2. Delete comment "N_Recommended_BS can be derived from the known length of the MAC message"

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

1. Move "N_Recommended_BS_scanning" line to location preceding the loop

```
"For (j=0; j<N_Recommended_BS_Scanning; j++) {"
```

2. Delete comment "N_Recommended_BS can be derived from the known length of the MAC message"

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

Editor's Actions |) none needed

Appears to have been caught by another comment/contribution.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4100**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **96** Starting Line # **57** Fig/Table# **108i** Section **6.3.2.3.49**

I object to the changes in Section 6.3.2.3.49, because column 3, lines 57-59 are not needed since N_Recommended_BS_Scanning is already explicitly given in line 55.

Suggested Remedy

Delete column 3, line 57-59: "N_Recommended_BS can be derived from the length field in the MAC header of the message"

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Delete column 3, line 57-59: "N_Recommended_BS can be derived from the length field in the MAC header of the message"
On page 96, line 19: "is depicted in Table [108i](#)".

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

Delete column 3, line 57-59: "N_Recommended_BS can be derived from the length field in the MAC header of the message"
On page 96, line 19: "is depicted in Table [108i](#)".

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

Editor's Actions |) none needed

Corrected by another comment.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4101**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **97** Starting Line # **14** Fig/Table# **108i** Section **6.3.2.3.49**

I object to the changes in Section 6.3.2.3.49 because the size of the HMAC Tuple should be changed to 168 (21 bytes) as defined in other MOB related messages.

Suggested Remedy

Change Table 108i, page 97, line 14, column 2, to '168 (21 bytes)'.

Proposed Resolution Recommendation: Accepted**Recommendation by**

Change Table 108i, page 97, line 14, column 2, to '168 (21 bytes)'.

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

Change Table 108i, page 97, line 14, column 2, to '168 (21 bytes)'.

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

Table and entry change by a contribution.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4102**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	98	Starting Line #	Fig/Table#	Section	6.3.2.3.50
---------	------	--------------------	-----------------	----	-----------------	------------	---------	------------

Since autonomous neighbor scanning is added in the last session (section 8.4.13.1.3), scan report mechanism should be updated to allow reporting without scanning duration specified.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/221r0 or the latest version.

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

Adopt the resolution text in contribution IEEE C802.16e-05/221r1 with the following change:

In Table 108j:

N_current_BSs, Notes change (line 4):

"When FBSS/SHO is supported or the MS has an empty active... " to:

"When FBSS/SHO is **not** supported or the MS has an empty active... "

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

Adopt the resolution text in contribution IEEE C802.16e-05/221r1 with the following change:

In Table 108j:

N_current_BSs, Notes change (line 4):

"When FBSS/SHO is supported or the MS has an empty active... " to:

"When FBSS/SHO is **not** supported or the MS has an empty active... "

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4103**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **100** Starting Line # **30** Fig/Table# **108k** Section **6.3.2.3.51**

I object to the resolution of comment #3176, because some further correction is needed on the MOB-BSHO_REQ message. On page 100, line 30, the 'Network Assisted Handover' field is only applicable to hard handover, i.e. mode = 0b000. Therefore, it should be moved inside the case statement of mode = 0b000.

Suggested Remedy

Make the following text change:

Delete line 30-31 from Table 108k, page 100:

Network Assisted HO supported	1	Indicates that the BS supports Network Assisted HO
--	--------------	---

Add one row after line 60:

HO process optimization	8	
-------------------------	---	--

<u>Network Assisted HO supported</u>	<u>1</u>	<u>Indicates that the BS supports Network Assisted HO</u>
--------------------------------------	----------	---

HO_ID_included_indicator	1	bit To indicate if the field HO_IND is included
--------------------------	---	---

Move page 105, line 5-6 to page 105, after line 44.

Proposed Resolution Recommendation: Accepted**Recommendation by**

Make the following text change:

Delete line 30-31 from Table 108k, page 100:

Network Assisted HO supported	1	Indicates that the BS supports Network Assisted HO
--	--------------	---

Add one row after line 60:

HO process optimization	8	
-------------------------	---	--

<u>Network Assisted HO supported</u>	<u>1</u>	<u>Indicates that the BS supports Network Assisted HO</u>
--------------------------------------	----------	---

HO_ID_included_indicator	1	bit To indicate if the field HO_IND is included
--------------------------	---	---

Move page 105, line 5-6 to page 105, after line 44.

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Make the following text change:

Delete line 30-31 from Table 108k, page 100:

Network Assisted HO supported	1	Indicates that the BS supports Network Assisted HO
--	--------------	---

Add one row after line 60:

HO process optimization	8	
-------------------------	---	--

<u>Network Assisted HO supported</u>	<u>1</u>	<u>Indicates that the BS supports Network Assisted HO</u>
--------------------------------------	----------	---

HO_ID_included_indicator	1	bit To indicate if the field HO_IND is included
--------------------------	---	---

Move page 105, line 5-6 to page 105, after line 44.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4104**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type Technical, Satisfied (was Starting Page # **101** Starting Line # **36** Fig/Table# **108k** Section **6.3.2.3.51**

I object to the resolution of comment #3176, because some further correction is needed on the MOB-BSHO_REQ message to indicate which AK to use in the case of anchor BS switching in SHO/FBSS.

Suggested Remedy

Add 'AK Change Indicator.' (size = 1) to each SHO/FBSS mode, to indicate whether the AK being used should change when switching to a new Anchor BS.

Proposed text change is as follows:

[add a row to page 101, line 36 for mode = 001]

else if (Mode == 001) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned. For SHO, N_CIDs shall be set to zero.

[add a row to page 101, line 57 for mode = 010]

else if (Mode == 010) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>

}	-	-
---	---	---

[add a row to page 102, line 19 for mode = 011]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned.

[add a row to page 102, line 58 for mode = 100]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 103, line 36 for mode = 101]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 104, line 46 for mode = 110]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	<u>1</u>	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[Add the following explanatory text below Table 108k, on page 106, line 40]

AK Change Indicator - Indicates whether the AK being used should change when switching to a new Anchor BS. If set to 0, the MS should continue to use the AK currently in use; if set to 1, the MS should use the AK derived for use with the new Anchor BS.

Proposed Resolution

Recommendation: Accepted

Recommendation by

Add 'AK Change Indicator.' (size = 1) to each SHO/FBSS mode, to indicate whether the AK being used should change when switching to a new Anchor BS.

Proposed text change is as follows:

[add a row to page 101, line 36 for mode = 001]

else if (Mode == 001) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned. For SHO, N_CIDs shall be set to zero.

[add a row to page 101, line 57 for mode = 010]

else if (Mode == 010) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	—	—

[add a row to page 102, line 19 for mode = 011]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned.

[add a row to page 102, line 58 for mode = 100]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 103, line 36 for mode = 101]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 104, line 46 for mode = 110]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
-------------------	---	-------------------------

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Add 'AK Change Indicator.' (size = 1) to each SHO/FBSS mode, to indicate whether the AK being used should change when switching to a new Anchor BS.

Proposed text change is as follows:

[add a row to page 101, line 36 for mode = 001]

else if (Mode == 001) {		
-------------------------	--	--

else if (Mode == 001) {		
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS.</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned. For SHO, N_CIDs shall be set to zero.

[add a row to page 101, line 57 for mode = 010]

else if (Mode == 010) {		
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS.</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}		

[add a row to page 102, line 19 for mode = 011]

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4105**

Comment submitted by: **Mo-Han**

Fong

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **104**

Starting Line # **48**

Fig/Table# **108k**

Section **6.3.2.3.51**

Entries for "Resource Retain Type" and "TLV encoded information" are duplicated.

Suggested Remedy

Delete lines 48-52.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Delete lines 48-52.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Delete lines 48-52.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions e) editor disagrees

I believe this has been cleaned up by another comment/contribution.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4106**

Comment submitted by: Vladimir Yanover

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **104** Starting Line # **48** Fig/Table# **108k** Section
Resource Retain Type and TLV encoded information appear twice starting from D7

Suggested Remedy
Change

padding	variable	Padding bits to ensure byte aligned
Resource Retain Type	1	0: MS resource release
		1: MS resource retain
TLV encoded information variable	TLV specific	
Action time	7	—
Resource Retain Type	1	0: MS resource release
		1: MS resource retain
padding	variable	Padding bits to ensure byte aligned
TLV encoded information variable	TLV specific	

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

padding	variable	Padding bits to ensure byte aligned
Resource Retain Type	1	0: MS resource release
		1: MS resource retain
TLV encoded information variable	TLV specific	
Action time	7	—
Resource Retain Type	1	0: MS resource release
		1: MS resource retain
padding	variable	Padding bits to ensure byte aligned
TLV encoded information variable	TLV specific	

Reason for Recommendation

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

padding	variable	Padding bits to ensure byte aligned
Resource Retain Type	1	0: MS resource release
		1: MS resource retain
TLV encoded information variable	TLV specific	
Action time	7	—
Resource Retain Type	1	0: MS resource release

padding variable 1: MS resource retain
TLV encoded information variable Padding bits to ensure byte aligned
TLV specific

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions e) editor disagrees

I believe this has been cleaned up by another comment/contribution.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4107**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **104** Starting Line # **55** Fig/Table# **108k** Section **6.3.2.3.51**

I object to the resolution of comment #3176 since some more correction is needed on the MOB-BSHO_REQ message. The "Resource Retain Type" is only applicable to Handover, Mode 0b000. So it should be moved into the Mode 000 case.

Suggested Remedy

Move the "Resource Retain Type" field on lines 55-56 to within the "Mode 000" case on page 100, after line 49, i.e. the "N_Recommended" field

Proposed Resolution Recommendation: Accepted**Recommendation by**

Move the "Resource Retain Type" field on lines 55-56 to within the "Mode 000" case on page 100, after line 49, i.e. the "N_Recommended" field

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

Move the "Resource Retain Type" field on lines 55-56 to within the "Mode 000" case on page 100, after line 49, i.e. the "N_Recommended" field

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4108**

Comment submitted by: Yerang

Hur

Other

2005/04/28

Comment Type **Editorial** Starting Page # **104** Starting Line # **55,**

Fig/Table# **Tabl** Section **6.3.2.3.51**

Duplicate fields of Resource retain type and TLV encoded information.

Suggested Remedy

[Delete line 55, page 104 Resource Retain Type]

[Delete line 60, page 104 TLV encoded information]

Proposed Resolution Recommendation: Accepted

Recommendation by

[Delete line 55, page 104 Resource Retain Type]

[Delete line 60, page 104 TLV encoded information]

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

[Delete line 55, page 104 Resource Retain Type]

[Delete line 60, page 104 TLV encoded information]

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4109**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	106	Starting Line #	29	Fig/Table#	Section	6.3.2.3.51
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	------------

I object to the resolution of comment #3176, since some more correction is needed on the MOB-BSHO_REQ message. On line 29-31, the new CIDs should be enumerated by the ascending order of the SFIDs to avoid ambiguities since CIDs are reassigned per BS.

" Section 6.3.2.3.51 "BS HO Request (MOB_BSHO-REQ) message", page 106, line 29. Change sentence to read "New CIDs are enumerated by the ascending order of the corresponding current CIDs SFIDs". The rationale for this is that SFID values do not change over the life of a connection and are, therefore, an unambiguous reference; use of transient CID values may lead to ambiguous situations during handover at cell edges.

Suggested Remedy

Modify line 29 as follows:

New CID - New CIDs are enumerated by the ascending order of corresponding current ~~CIDs~~ SFIDs.**Proposed Resolution Recommendation: Accepted****Recommendation by**

Modify line 29 as follows:

New CID - New CIDs are enumerated by the ascending order of corresponding current ~~CIDs~~ SFIDs.**Reason for Recommendation****Resolution of Group****Decision of Group: Accepted**

Modify line 29 as follows:

New CID - New CIDs are enumerated by the ascending order of corresponding current ~~CIDs~~ SFIDs.**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4110**

Comment submitted by: Yigal

Leiba

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **106** Starting Line # **56** Fig/Table# Section **6.3.2.3.52**

Several field inside 'for-loop' are not byte-aligned in MSSHO-REQ, BSHO-RSP, BSHO-REQ. This situation is needlessly time and power consuming to handle in SW. Addition of small padding fields would easily resolve this issue.

The list below does not intend to solve all the cases, just where the overhead seems to justify the added efficiency

Suggested Remedy

Add the following padding fields:

Message	Section	Table number	Page	Line number	Size of padding field to add
BSHO-REQ	6.3.2.3.51	108k	100	47	4 bits
BSHO-REQ	6.3.2.3.51	108k	100	63	7 bits
MSHO-REQ	6.3.2.3.52	108l	107	14	4 bits
MSHO-REQ	6.3.2.3.52	108l	107	58	1 bits
BSHO-RSP	6.3.2.3.53	108m	110	18	5 bits
BSHO-RSP	6.3.2.3.53	108m	110	53	6 bits

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Add the following padding fields:

Message	Section	Table number	Page	Line number	Size of padding field to add
BSHO-REQ	6.3.2.3.51	108k	100	47	4 bits
BSHO-REQ	6.3.2.3.51	108k	100	63	7 bits
MSHO-REQ	6.3.2.3.52	108l	107	14	4 bits
MSHO-REQ	6.3.2.3.52	108l	107	58	1 bits
BSHO-RSP	6.3.2.3.53	108m	110	18	5 bits
BSHO-RSP	6.3.2.3.53	108m	110	53	6 bits

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

Add the following padding fields:

Message	Section	Table number	Page	Line number	Size of padding field to add
BSHO-REQ	6.3.2.3.51	108k	100	47	4 bits
BSHO-REQ	6.3.2.3.51	108k	100	63	7 bits

MSHO-REQ	6.3.2.3.52	108l	107	14	4 bits
MSHO-REQ	6.3.2.3.52	108l	107	58	1 bits
BSHO-RSP	6.3.2.3.53	108m	110	18	5 bits
BSHO-RSP	6.3.2.3.53	108m	110	53	6 bits

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4111**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Technical Non-binding**

Starting Page # **108**

Starting Line # **8**

Fig/Table# **Tabl**

Section **6.3.2.3.52**

HMAC Tuple shall be the last field of the message.

Suggested Remedy

[Exchange the third row with forth row such that Padding precedes HMAC Tuple]

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[Exchange the third row with forth row such that Padding precedes HMAC Tuple]

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

The field in question is just padding, so this rule does not apply.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4112**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type Technical, Satisfied (was Starting Page # 111 Starting Line # 12 Fig/Table# 108 Section 6.3.2.3.53

I object to the text change on 6.3.2.3.53 MOB-BSHO_RSP message, because some further correction is required to indicate which AK to use in the case of anchor BS switching in SHO/FBSS

Suggested Remedy

Add 'AK Change Indicator.' (size = 1) to each SHO/FBSS mode, to indicate whether the AK being used should change when switching to a new Anchor BS.

Proposed text change is as follows:

[add a row to page 111, line 12 for mode = 001]

else if (Mode == 001) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned. For SHO, N_CIDs shall be set to zero.

[add a row to page 111, line 33 for mode = 010]

else if (Mode == 010) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	—	—

[add a row to page 111, line 57 for mode = 011]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned.

[add a row to page 112, line 35 for mode = 100]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 113, line 4 for mode = 101]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 114, line 15 for mode = 110]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[Add the following explanatory text below Table 108m, on page 115, line 44]

For Mode != 0b000, the following parameters shall be included:

AK Change Indicator - Indicates whether the AK being used should change when switching to a new Anchor BS. If set to 0, the MS should continue to use the AK currently in use; if set to 1, the MS should use the AK derived for use with the new Anchor BS.

Proposed Resolution

Recommendation: Accepted

Recommendation by

Add 'AK Change Indicator.' (size = 1) to each SHO/FBSS mode, to indicate whether the AK being used should change when switching to a new Anchor BS.

Proposed text change is as follows:

[add a row to page 111, line 12 for mode = 001]

else if (Mode == 001) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned. For SHO, N_CIDs shall be set to zero.

[add a row to page 111, line 33 for mode = 010]

else if (Mode == 010) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	—	—

[add a row to page 111, line 57 for mode = 011]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned.

[add a row to page 112, line 35 for mode = 100]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 113, line 4 for mode = 101]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	-	-

[add a row to page 114, line 15 for mode = 110]

TEMP_BS_ID_Anchor	3	Temp BSID for Anchor BS
-------------------	---	-------------------------

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Add 'AK Change Indicator.' (size = 1) to each SHO/FBSS mode, to indicate whether the AK being used should change when switching to a new Anchor BS.

Proposed text change is as follows:

[add a row to page 111, line 12 for mode = 001]

else if (Mode == 001) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
N_CIDs	8	Number of CIDs needed to be reassigned. For SHO, N_CIDs shall be set to zero.

[add a row to page 111, line 33 for mode = 010]

[add a row to page 111, line 55 for mode = 010]

else if (Mode == 010) {	—	—
TEMP_BSID	3	TEMP_BS_ID of the recommended Anchor BS
<u>AK Change Indicator</u>	1	<u>To indicate whether the AK being used should change when switching to a new Anchor BS.</u> <u>If set to 0, the MS should continue to use the AK currently in use.</u> <u>If set to 1, the MS should use the AK derived for use with the new Anchor BS.</u>
}	—	—

[add a row to page 111, line 57 for mode = 011]

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4113**

Comment submitted by: Yerang

Hur

Other

2005/04/28

Comment Type **Technical Non-binding** Starting Page # **114** Starting Line # **20**
 As TLV of MOB_BSHO-RSP is optional, we need to specify when it shall be included.

Fig/Table# **Tabl** Section **6.3.2.3.53**

Suggested Remedy

Adopt C80216e-05_244.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt C80216e-05_244 with the following changes to the Table 108m:

Remove "If (Resource Retain Type == 10)", but retain "TLV encoded information" on the line.
 Change the length of "TLV encoded information" to "variable"

Move the padding to the row above the "TLV encoded information" row.

Change "Resource Retain Type" entry in Table 108m as follows:

```
Resource Retain Type | 1 | 0: Release connection information
                    |   | 1: Retain connection information
```

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

Adopt C80216e-05_244 with the following changes to the Table 108m:

Remove "If (Resource Retain Type == 10)", but retain "TLV encoded information" on the line.
 Change the length of "TLV encoded information" to "variable"

Move the padding to the row above the "TLV encoded information" row.

Change "Resource Retain Type" entry in Table 108m as follows:

```
Resource Retain Type | 1 | 0: Release connection information
                    |   | 1: Retain connection information
```

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

Group's Action Items

Editor's Notes Editor's Actions k) done

Adopted C802.16e-05/244r0 with the above changes. The changes effectively remove the "If" statement, and also result in changes to the body text describing resource retain type. I had to make some guesses here about the side effects.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4114**

Comment submitted by: Yerang

Hur

Other

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
Editorial	Editorial	115	41		6.3.2.3.53

Suggested Remedy

The MOB_BSHO-~~REQ~~ RSP may contain the following TLVs.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

The MOB_BSHO-~~REQ~~ RSP may contain the following TLVs.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

The MOB_BSHO-~~REQ~~ RSP may contain the following TLVs.

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4115**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Binding**

Starting Page # **119**

Starting Line # **26**

Fig/Table# **108t**

Section **6.3.2.3.56**

[MBS relevancy](#)

Session 36 clarifies the use of Multi MAP MBS, how ever it makes significant realtime / processing time requirment n the MSS size.

Suggested Remedy

Please adoupt contribution number C80216e-05_203

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

[Adopt contribution C802.16e-05/242r1.](#)

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

[Adopt contribution C802.16e-05/242r1.](#)

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4116**

Comment submitted by: **Panyuh**

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **119** Starting Line # **26**
Discuss and Adopt C802.16e-05/242 MBS Refinement

Fig/Table# Section **6.3.2.3.56**

Suggested Remedy

Adopt proposed text change of C802.16e-05/242

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See comment 4115.](#)

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4117**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Technical Non-binding**
Clarification of MBS-MAP message.

Starting Page # **120** Starting Line # **5**

Fig/Table# **Tabl** Section **6.3.2.3.56**

Suggested Remedy

Adopt **C80216e-05_245**.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment **4115**.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4118**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **123**

Starting Line # **42**

Fig/Table# **Tabl**

Section **6.3.2.3.56**

Incorrect field name

Suggested Remedy

[Change line 42 as follows:]

~~SPIC~~-[SPID](#)

Defines SubPacket ID, which ..

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[Change line 42 as follows:]

~~SPIC~~-[SPID](#)

Defines SubPacket ID, which ..

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

[Change line 42 as follows:]

~~SPIC~~-[SPID](#)

Defines SubPacket ID, which ..

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4119**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding**

Starting Page # **124**

Starting Line #

Fig/Table# **108t**

Section **6.3.2.3.57**

The 'power control mode change' field in PMC_REQ should include all three power control modes (closed loop, open loop active mode, open loop passive mode), as exists in the corresponding PCM_RSP message.

Suggested Remedy

[Modify table 108t (PMC_REQ) as follows:]

...		
Power control mode change	4 <u>2</u>	0: Closed loop power control mode 1: Open loop power control mode <u>0b00: Closed loop power control mode</u> <u>0b01: Reserved</u> <u>0b10: Open loop power control passive mode</u> <u>0b11: Open loop power control active mode</u>

...		
Reserved	6 <u>5</u>	shall be set to zero

Proposed Resolution Recommendation: Accepted

Recommendation by

[Modify table 108t (PMC_REQ) as follows:]

...		
Power control mode change	4 <u>2</u>	0: Closed loop power control mode 1: Open loop power control mode <u>0b00: Closed loop power control mode</u> <u>0b01: Reserved</u> <u>0b10: Open loop power control passive mode</u> <u>0b11: Open loop power control active mode</u>

...		
Reserved	6 <u>5</u>	shall be set to zero

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

[Modify table 108t (PMC_REQ) as follows:]

...		
Power control mode change	4 <u>2</u>	0: Closed loop power control mode 1: Open loop power control mode <u>0b00: Closed loop power control mode</u> <u>0b01: Reserved</u> <u>0b10: Open loop power control passive mode</u> <u>0b11: Open loop power control active mode</u>
...		
Reserved	6 <u>5</u>	shall be set to zero
...		
...		

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4120**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **124** Starting Line # **5** Fig/Table# **table** Section **6.3.2.3.57**

1. The closed loop power control shall be default power control scheme before directing to switch to open loop power control.
2. The message type if different from table 14. Corect type number is 63 instead of 64.

Suggested Remedy

[Add the following text at the end of the first paragraph in 6.3.2.3.57]

[Before the first PMC_RSP message from BS, the default power control mode shall be the closed power control scheme.](#)

[Change the PMC-REQ message type: 64->63 in table 108t]

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

[Add the following text at the end of the first paragraph in 6.3.2.3.57]

[Before the first PMC_RSP message from BS, the default power control mode shall be the closed power control scheme.](#)

[Change the PMC-REQ message type: 64->63 in table 108t]

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

[Add the following text at the end of the first paragraph in 6.3.2.3.57]

[Before the first PMC_RSP message from BS, the default power control mode shall be the closed power control scheme.](#)

[Change the PMC-REQ message type: 64->63 in table 108t]

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4121**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **125** Starting Line # **4** Fig/Table# **table** Section **6.3.2.3.58**

1. The closed loop power control shall be default power control scheme before directing to switch to open loop power control.
2. The message name shall be PMC_RSP instead of PMC-REQ.
3. The message type if different from table 14. Corect type number is 64 instead of 65.

Suggested Remedy

[Add the following text at the end of the first paragraph in 6.3.2.3.58]

Before the first PMC_RSP message from BS, the default power control mode shall be the closed power control scheme.

[Change the PMC-RSP message type: 65->64 in table 108u]

[Change the text as follows in syntax column of table 108u, pp125, line 14]

PMC_~~REQ~~RSP message format {

[Change the text as follows pp125, line 54]

CID shall be the basic CID of SS. SS shall generate the PMC_~~REQ~~RSP message including the following parameters.

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

[Add the following text at the end of the first paragraph in 6.3.2.3.58]

Before the first PMC_RSP message from BS, the default power control mode shall be the closed power control scheme.

[Change the PMC-RSP message type: 65->64 in table 108u]

[Change the text as follows in syntax column of table 108u, pp125, line 14]

PMC_~~REQ~~RSP message format {

[Change the text as follows pp125, line 54]

CID shall be the basic CID of SS. SS shall generate the PMC_~~REQ~~RSP message including the following parameters.

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

[Add the following text at the end of the first paragraph in 6.3.2.3.58]

Before the first PMC_RSP message from BS, the default power control mode shall be the closed power control scheme.

[Change the PMC-RSP message type: 65->64 in table 108u]

[Change the text as follows in syntax column of table 108u, pp125, line 14]

PMC_~~REQ~~RSP message format {

[Change the text as follows pp125, line 54]

CID shall be the basic CID of SS. SS shall generate the PMC_~~REQ~~RSP message including the following parameters.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4122**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type Technical, Non-binding Starting Page # 125 Starting Line # 45 Fig/Table# table Section 6.3.2.3.58

The unit of Offset_BSperSS is 0.2 dB different from the 0.25dB unit of other power control commands like RNG-RSP, Power control IE, Fast power control message etc.

We propose to change the unit of Offset_BSperSS is 0.2 dB to 0.25 dB.

Suggested Remedy

[Change the text as follows in notes column of table 108u, pp125, line 42]

Signed integer, which expresses the change in power level (in multiples of 0.25 dB) that the SS shall apply to the open loop power control formula in 8.4.10.3.2.

[Change the text as follows pp126, line 17]

Offset_BSperSS

Signed integer, which expresses the change in power level (in multiples of 0.25 dB) that the SS shall apply to the open loop power control formula in 8.4.10.3.2.

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

[Change the text as follows in notes column of table 108u, pp125, line 42]

Signed integer, which expresses the change in power level (in multiples of 0.25 dB) that the SS shall apply to the open loop power control formula in 8.4.10.3.2.

[Change the text as follows pp126, line 17]

Offset_BSperSS

Signed integer, which expresses the change in power level (in multiples of 0.25 dB) that the SS shall apply to the open loop power control formula in 8.4.10.3.2.

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

[Change the text as follows in notes column of table 108u, pp125, line 42]

Signed integer, which expresses the change in power level (in multiples of 0.25 dB) that the SS shall apply to the open loop power control formula in 8.4.10.3.2.

[Change the text as follows pp126, line 17]

Offset_BSperSS

Signed integer, which expresses the change in power level (in multiples of 0.25 dB) that the SS shall apply to the open loop power control formula in 8.4.10.3.2.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4123** Comment submitted by: Haixiang He Member 2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **127** Starting Line # Fig/Table# **108** Section **6.3.2.3.59**

[Submitted as Technical, Binding but with an Approve vote.]
Naming usage wrong

Suggested Remedy

Change the second "GTEK-Parameters" to "GKEK-Parameters".

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Change the second "GTEK-Parameters" to "GKEK-Parameters".

Reason for Recommendation

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

Change the second "GTEK-Parameters" to "GKEK-Parameters".

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4124**

Comment submitted by: **Dave**

Pechner

Other

2005/04/28

Comment Type **Technical, non-binding**

Starting Page # **131**

Starting Line # **16**

Fig/Table#

Section **6.3.2.3.61**

With the current defintion of submaps, there is ambiguity on how UL allocations are made in an UL AAS zone

Suggested Remedy

Incorporate changes defined in C80216e-05/223

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Adopt C80216e-05/223

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Adopt C80216e-05/223

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4125**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type Technical, Satisfied (was Starting Page # **131** Starting Line # **61** Fig/Table# Section **6.3.4.3.4**

I object to the resolution of comment #3336 because some clarification text is needed on the ARQ text to ensure ARQ retransmission operation is only triggered after the HARQ fails.

Suggested Remedy

Add the following text on line 61:

*[Change 6.3.4.3.4 as indicated]***6.3.4.3.4 ARQ_RETRY_TIMEOUT**

ARQ_RETRY_TIMEOUT is the minimum time interval a transmitter shall wait before retransmission of an unacknowledged block for retransmission. The interval begins when the ARQ block was last transmitted. The ARQ_RETRY_TIMEOUT value shall be set accordingly to allow HARQ retransmission operation of the ARQ block to be completed before ARQ retransmission occurs.

Proposed Resolution Recommendation: Accepted**Recommendation by**

Add the following text on line 61:

*[Change 6.3.4.3.4 as indicated]***6.3.4.3.4 ARQ_RETRY_TIMEOUT**

ARQ_RETRY_TIMEOUT is the minimum time interval a transmitter shall wait before retransmission of an unacknowledged block for retransmission. The interval begins when the ARQ block was last transmitted. The ARQ_RETRY_TIMEOUT value shall be set accordingly to allow HARQ retransmission operation of the ARQ block to be completed before ARQ retransmission occurs.

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

Add the following text on line 61:

*[Change 6.3.4.3.4 as indicated]***6.3.4.3.4 ARQ_RETRY_TIMEOUT**

ARQ_RETRY_TIMEOUT is the minimum time interval a transmitter shall wait before retransmission of an unacknowledged block for retransmission. The interval begins when the ARQ block was last transmitted. The ARQ_RETRY_TIMEOUT value shall be set accordingly to allow HARQ retransmission operation of the ARQ block to be completed before ARQ retransmission occurs.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4126**

Comment submitted by: Panyuh Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **132** Starting Line #Fig/Table# Section **6.3.5.2.2.1****Discuss and Adopt C802.16e-05/243 Refinement of the extended rtPS****Suggested Remedy****Adopt proposed text change C802.16e-05/243**Proposed Resolution Recommendation: **Accepted-Modified** Recommendation by**Adopt proposed text change C802.16e-05/243r3****Reason for Recommendation**Resolution of Group Decision of Group: **Accepted-Modified****Adopt proposed text change C802.16e-05/243r3****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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4127**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Editorial** Starting Page # **132** Starting Line # **23** Fig/Table# Section **6.3.5.2.2.1**
 [Editorial]

In the last sponsor ballot recirc the comment #3083 which was accepted was improperly implemented by the editor.

Suggested Remedy

[Change in section 6.3.5.2.2.1]

6.3.5.2.2.1 Extended rtPS

Extended rtPS is a scheduling mechanism which builds on the efficiency of both UGS and rtPS. The BS shall provide unicast grants in an unsolicited manner like in UGS, thus saving the latency of a bandwidth request.

However, whereas UGS allocations are fixed in size, ertPS allocations are dynamic. The SS can change the size of the periodic allocation using regular bandwidth requests. The size of bandwidth requested shall be treated by the BS as the size of the periodic allocation to grant the SS (See 6.3.2.2.1, Extended Piggyback Request field).

~~The extended rtPS has the additional functionality of rtPS.~~ The Extended rtPS is designed to support real-time service flows that generate variable size data packets on a periodic basis, such as Voice over IP services with silence suppression.

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

See 4126.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4128**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **141** Starting Line # **17** Fig/Table# Section **6.3.17**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

 The following sentence shall be removed as harmonized in 05/115r3

"HARQ is enabled on a CID basis. An HARQ enabled CID must have ARQ enabled as well for this CID. See 6.3.17.6."

Suggested Remedy

Delete the following text

~~HARQ is enabled on a CID basis. An HARQ enabled CID must have ARQ enabled as well for this CID. See 6.3.17.6.~~

Proposed ResolutionRecommendation: **Superseded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superseded**[See 4424](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4129**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	145	Starting Line #	57	Fig/Table#	Section	6.3.20.1.3
[Editorial]									

In the last sponsor ballot recirc the comment #3206 which was accepted was not implemented by the editor.

Suggested Remedy

Incorporate changes documented in IEEE C802.16e-05/143r5.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Incorporate changes documented in IEEE C802.16e-05/143r8.

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

Incorporate changes documented in IEEE C802.16e-05/143r8.

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

Note that the editor is to only implement the parts of this document that are GREEN.

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

Editor's Actions c) instructions unclear

New Table 107h in the contribution is incorrect and incomplete. In the interest of progress, I implemented my interpretation of what I think was required.

Text changes for 8.4.7.1 do not correctly refer to the baseline document or to D7. I did my best.

There is an instruction to modify 8.4.7.1 but no description on what to do. I imagine this is a mistake in the contribution.

Changes to 6.3.22.8.1 do not refer to text in D7 and I've chosen not to try to understand what's wanted there, or any further along in this contribution.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4130**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	151	Starting Line #	3	Fig/Table#	Section	6.3.21
---------	------	--------------------	-----------------	-----	-----------------	---	------------	---------	--------

I object text changes in the section 6.3.20 in 802.16e/D6 (section 6.3.21 in 802.16e/D7) that didn't take into account IEEE C802.16e-05/143 which was accepted as part of resolution to the comment #3206 but not implemented in D7.

I object also resolution of the comment #3208 which was incomplete

See the contribution IEEE C802.16e-05/214 "Clarification for HO section" by Vladimir Yanover et al

Suggested Remedy

According to the contribution IEEE C802.16e-05/214 "Clarification for HO section" by Vladimir Yanover et al

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

Adopt contribution IEEE C802.16e-05/214r5 "Clarification for HO section"

Reason for Recommendation

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

Adopt contribution IEEE C802.16e-05/214r5 "Clarification for HO section"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4131**

Comment submitted by: Vladimir Yanover

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **154** Starting Line # **45** Fig/Table# **130** Section

Term "cell reselection" from D7 appears in 6.3.21.2, but not in Fig. 130b

Suggested Remedy

Change in the dotted box:

Cell reselection:

Scanning intervals for detecting and evaluating neighbor BS

Proposed Resolution Recommendation: Accepted

Recommendation by

Change in the dotted box:

Cell reselection:

Scanning intervals for detecting and evaluating neighbor BS

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Change in the dotted box:

Cell reselection:

Scanning intervals for detecting and evaluating neighbor BS

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4132**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	154	Starting Line #	45	Fig/Table#	130	Section
---------	------	------------------------	-----------------	-----	-----------------	----	------------	-----	---------

I object change in Fig 130b:

One of boxes ain Fig. 130b says

"Close all MS connections (break before make)"

while another one in similar situation

"Close all MS connections with the former Sserving BS (make before break)"

[Seems that intention was to say that connections [to Serving BS] may be closed either

before or after network re-entry to Target BS].

It is measleading as in both cases no "closing" procedure involved. "Closing" procedure of connections

does not exist [except DSD which obviously is not applied here]

Suggested Remedy

Either delete both boxes [preferable] or clarify

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Delete the box containing:

"Close all MS Connections

(break before make)"

and delete the box containing:

"Close all MS connections

with the former Sserving BS

(make before break)"

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

Delete the box containing:

"Close all MS Connections

(break before make)"

and delete the box containing:

"Close all MS connections

with the former Sserving BS

(make before break)"

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

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4133** Comment submitted by: Vladimir Yanover Member 2005/04/28

Comment Type **Technical, Binding** Starting Page # **157** Starting Line # **7** Fig/Table# Section **6.3.21.2.2**

I object text changes in the section 6.3.20 in 802.16e/D6 (section 6.3.21 in 802.16e/D7) that didn't take into account IEEE C802.16e-05/143 which was accepted as part of resolution to the comment #3206 but not implemented in D7. I object also resolution of the comment #3208 which was incomplete See contribution IEEE C802.16e-05/212 "Network re-entry optimization" by V.Yanover et al.

Suggested Remedy

According to contribution IEEE C802.16e-05/212 "Network re-entry optimization" by V.Yanover et al.

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

Adopt contribution IEEE C802.16e-05/212r8.

Reason for Recommendation

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

Adopt contribution IEEE C802.16e-05/212r8.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Changes to 6.3.21.2.2 HO decision & initiation overlapped another contribution. I did my best to consolidate the changes.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4134**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **157** Starting Line # **52** Fig/Table# Section **6.3.21.2.3**
[SN_REPORT header for Hard HO](#)

To maintain continuity of DL traffic when switching from one BS (old Serving BS) to another BS (Target BS or new Serving BS), the last information unit successfully received by the MS needs to be identified and conveyed to the new Serving BS. Otherwise, ARQ DL window will have to be reset or SDU's will be retransmitted, thus introducing additional HO latency.

For FBSS, the standard provides a method to help overcome this problem, based on virtual SDU sequential numbering (SDU SN) for non-ARQ enabled connections and using the SN_REPORT header.

We offer to adopt and extend to the benefit of hard HO systems

Suggested Remedy

[Adopt contribution C80216e-05/254](#)

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

[Adopt contribution C80216e-05/254r4](#)

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

[Adopt contribution C80216e-05/254r4](#)

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

[Re-numbered subclause as I believe the subclause named in the contribution editor's notes is incorrect.](#)

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4135**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Editorial	158			6.3.21

The subsection ordering in section 6.3.21 HO Process is still incorrect. Comment #3221 was accepted in session #36, but not applied

Suggested Remedy

Please modify the section according to comment #3221 from session #36

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superceded****[See 4136](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4136**Comment submitted by: **Mo-Han****Fong**

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	158	Starting Line #	49	Fig/Table#	Section	6.3.21.2.6
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	------------

I object to the text incorporation into D7 draft for comment #3221, because the SHO/FBSS sections/text still need to reorganized properly according to what was proposed in IEEE C802.16e-05/003r3 .

Suggested Remedy

Apply appropriate changes to D7 draft based on the proposed text change in IEEE C802.16e-05/003r3.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt C802.16e-05/264r0

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

Adopt C802.16e-05/264r0

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

Editor's Actions k) done

A new subclause, "MS-Assisted coordination of DL transmission at new Anchor BS" was added, so I created "6.3.21.3.5 MS-Assisted coordination of DL transmission" and placed subclauses 6.3.21.3.5.1 and 6.3.21.3.5.2 below that subclause.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4137**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Satisfied (was** Starting Page # **161** Starting Line # **25** Fig/Table# Section **6.3.21.2.6.3**

I object to the resolution of comment #3036 because the same changes regarding the SN reporting in the SN report header is in ascending order of SFIDs instead of CIDs, need to be applied to the SHO/FBSS section 6.3.21.2.6.3.

Suggested Remedy

Make the following text change to line 25-26:

The MSS shall send the sequence number in numerical ascending order of the values of the ~~CIDs~~**SFIDs** values.

Proposed Resolution Recommendation: Accepted

Recommendation by

Make the following text change to line 25-26:

The MSS shall send the sequence number in numerical ascending order of the values of the ~~CIDs~~**SFIDs** values.

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

Make the following text change to line 25-26:

The MSS shall send the sequence number in numerical ascending order of the values of the ~~CIDs~~**SFIDs** values.

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

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

This text appears to have been changed by another comment.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4138**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **165** Starting Line # **4** Fig/Table# Section **6.3.21.4**
 Clarification of Network reentry optimization process during Drop during HO situation.

Suggested Remedy*[In IEEE P80216e_D7, section 6.3.21.4, modify as follows:]*

When the MS has detected a drop during network re-entry with a target BS, it shall attempt network re-entry with its preferred target BS as presented in MOB_BSHO-REQ or MOB_BSHO-RSP, and may include resuming communication with the Serving BS by sending MOBHO-IND message with HO_IND type = 0b01 (HO cancel).

MS shall perform CDMA ranging with Target BS using codes from HO codes domain.

Upon Target BS sending RNG-RSP with 'ranging status'=success, Target BS shall provide CDMA_ALLOC_IE with appropriate UL allocation for RNG-REQ from MS. MS sends RNG-REQ with MAC address and OMAC/HMAC. Target BS may now identify that HO attempt by MS was not coordinated with Serving BS and may request all relevant MS context from Serving BS. Using this info Target BS will now send RNG-RSP with 'HO process optimization' bitmap and NW re-entry may continue as in the typical, non-drop case

If it fails with the network re-entry with its preferred Target BS, the MSS shall follow the network initial entry procedure to enter the network.

When the serving BS has detected a drop, it shall react as if a MOB_HO-IND MAC Management message has been received with HO_IND_type indicating serving BS release.

Proposed Resolution Recommendation: Accepted-Modified**Recommendation by***[In IEEE P80216e_D7, section 6.3.21.4, modify as follows:]*

When the MS has detected a drop during network re-entry with a target BS, it shall attempt network re-entry with its preferred target BS as presented in MOB_BSHO-REQ or MOB_BSHO-RSP, and may include resuming communication with the Serving BS by sending MOBHO-IND message with HO_IND type = 0b01 (HO cancel).

MS shall perform CDMA ranging with Target BS using codes from HO codes domain.

Upon Target BS sending RNG-RSP with 'ranging status'=success, Target BS shall provide CDMA_ALLOC_IE with appropriate UL allocation for RNG-REQ from MS. MS shall send RNG-REQ with MAC address and OMAC/HMAC. Target BS may now identify that HO attempt by MS was not coordinated with Serving BS and may request all relevant MS context from Serving BS. Using this info Target BS shall now send RNG-RSP with 'HO process optimization' bitmap and NW re-entry may continue as in the typical, non-drop case

If it fails with the network re-entry with its preferred Target BS, the MSS shall follow the network initial entry procedure to enter the network.

When the serving BS has detected a drop, it shall react as if a MOB_HO-IND MAC Management message has been received with HO_IND_type indicating serving BS release.

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

[In IEEE P80216e_D7, section 6.3.21.4, modify as follows:]

When the MS has detected a drop during network re-entry with a target BS, it shall attempt network re-entry with its preferred target BS as presented in MOB_BSHO-REQ or MOB_BSHO-RSP, and may include resuming communication with the Serving BS by sending MOBHO-IND message with HO_IND type = 0b01 (HO cancel).

MS shall perform CDMA ranging with Target BS using codes from HO codes domain.

Upon Target BS sending RNG-RSP with 'ranging status'=success, Target BS shall provide CDMA_ALLOC_IE with appropriate UL allocation for RNG-REQ from MS. MS shall send RNG-REQ with MAC address and OMAC/HMAC. Target BS may now identify that HO attempt by MS was not coordinated with Serving BS and may request all relevant MS context from Serving BS. Using this info Target BS shall now send RNG-RSP with 'HO process optimization' bitmap and NW re-entry may continue as in the typical, non-drop case

If it fails with the network re-entry with its preferred Target BS, the MSS shall follow the network initial entry procedure to enter the network.

When the serving BS has detected a drop, it shall react as if a MOB_HO-IND MAC Management message has been received with HO_IND_type indicating serving BS release.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4139**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	165	Starting Line #	15	Fig/Table#	Section	6.3.21.4
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	----------

I object to the implementation of Comment #3218 because more clarification is needed for HO section, especially drop during HO.

If an MS goes through drop during HO, it may attempt re-entry to the target BS or return to serving BS which retains the resource associated with the MS.

Suggested Remedy

Modify the text at page 165, line 15-21, as follows :

When the MS has detected a drop during network re-entry with a target BS, it ~~shall~~ may attempt network re-entry with its preferred target BS as presented in MOB_BSHO-REQ or MOB_BSHO-RSP, and may include resuming communication with the Serving BS by sending MOBHO-IND message with HO_IND type = 0b01 (HO cancel). If it fails ~~with the~~ network re-entry with its preferred Target BS, the MS ~~S~~ shall ~~follow the network~~ perform the initial network entry procedure ~~to with the BS enter the network~~.

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

Modify the text at page 165, line 15-21, as follows :

When the MS has detected a drop during network re-entry with a target BS, it ~~shall~~ may attempt network re-entry with its preferred target BS as presented in MOB_BSHO-REQ or MOB_BSHO-RSP, and may include resuming communication with the Serving BS by sending MOBHO-IND message with HO_IND type = 0b01 (HO cancel). If it fails ~~with the~~ network re-entry with its preferred Target BS, the MS ~~S~~ shall ~~follow the network~~ perform the initial network entry procedure ~~to with the BS enter the network~~.

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

Modify the text at page 165, line 15-21, as follows :

When the MS has detected a drop during network re-entry with a target BS, it ~~shall~~ may attempt network re-entry with its preferred target BS as presented in MOB_BSHO-REQ or MOB_BSHO-RSP, and may include resuming communication with the Serving BS by sending MOBHO-IND message with HO_IND type = 0b01 (HO cancel). If it fails ~~with the~~ network re-entry with its preferred Target BS, the MS ~~S~~ shall ~~follow the network~~ perform the initial network entry procedure ~~to with the BS enter the network~~.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4140**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	166	Starting Line #	18	Fig/Table#	Section	6.3.21.5
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	----------

I object to the implementation of Comment #3222 because there is an HO optimization procedure not be supported in current scheme.

Type of TLV items are defined seperately for each MAC management message.

D7 describes that the target BS may include REG-RSP specific or SBC-RSP specific message items as TLV items in the RNG-RSP for HO optimization. However, In D7 there is no type for REG/SBC-RSP TLV items to be appended in RNG-RSP.

Suggested Remedy

1. Delete the text in 6.3.21.5 Network entry/re-entry at page 166, line 18-19, as follows :

As indicated in the HO Process Optimization TLV settings, the target BS may elect to use MS service and operational information obtained over the backbone network to build and send unsolicited SBC-RSP and/or REG-RSP management messages to update MS operational information;
~~or to include REG-RSP specific or SBC-RSP specific message items as TLV items in the RNG-RSP.~~

2. Delete the text in 6.3.22.10 Network Re-Entry from Idle Mode at page 178, line 46-47, as follows :

Regardless of the HO Process Optimization TLV settings, the target BS may elect to use MS service and operational information obtained over the backbone network to build and send unsolicited SBC-RSP and/or REG-RSP management messages to update MS operational information;
~~or to include 11.7 REG-RSP specific or 11.8 SBC-RSP specific message items as TLV items in the RNG-RSP.~~

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See comment 4340.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4141**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **166** Starting Line # **38** Fig/Table# Section **6.3.21.5**

The description should be more precise.

Suggested Remedy

Change

"...then the MS shall include the HMAC Tuple as the last message item in the RNG-REQ management message."

to

"...then the MS shall include the HMAC Tuple as the last message item in the RNG-REQ management message using the Authorization Key and Key Sequence Number derived for use on the target BS."

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change

"...then the MS shall include the HMAC Tuple as the last message item in the RNG-REQ management message."

to

"...then the MS shall include the HMAC Tuple as the last message item in the RNG-REQ management message using the Authorization Key and Key Sequence Number derived for use on the target BS."

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

Change

"...then the MS shall include the HMAC Tuple as the last message item in the RNG-REQ management message."

to

"...then the MS shall include the HMAC Tuple as the last message item in the RNG-REQ management message using the Authorization Key and Key Sequence Number derived for use on the target BS."

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4142**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **178** Starting Line # **62** Fig/Table# Section **7.3.22.10**
 Editorial change

Suggested Remedy Change

"...MS and target BS shall use the embedded TLV PKM-REQ information and the re-authorization process as defined in 7.2."

to

"...MS and target BS shall use the RNG-RSP SA Challenge Tuple information to initiate the 3-way handshake re-authorization process as defined in 7.8.1."

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

For a security keying process that has not been determined to be omitted in the HO Process Optimization TLV settings, if MS RNG-REQ includes Ranging Purpose Indication TLV with bit #0 set to 1 and Paging Controller ID TLVs, and target BS has **keying material for the MS**, received a backbone message (see Backbone network HO procedures) containing MS information, ~~MS and target BS shall use the embedded TLV PKM-REQ information and the re-authorization process as defined in 7.2.~~ **the MS and target BS shall use the RNG-RSP SA Challenge Tuple information to initiate the 3-way handshake re-authorization process as defined in 7.8.1.**

Reason for Recommendation

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

For a security keying process that has not been determined to be omitted in the HO Process Optimization TLV settings, if MS RNG-REQ includes Ranging Purpose Indication TLV with bit #0 set to 1 and Paging Controller ID TLVs, and target BS has **keying material for the MS**, received a backbone message (see Backbone network HO procedures) containing MS information, ~~MS and target BS shall use the embedded TLV PKM-REQ information and the re-authorization process as defined in 7.2.~~ **the MS and target BS shall use the RNG-RSP SA Challenge Tuple information to initiate the 3-way handshake re-authorization process as defined in 7.8.1.**

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4143**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment **Type** **Technical, Non-binding** **Starting Page #** **183** **Starting Line #** **26** **Fig/Table#** **Section** **7.1**

The exiting protocol stack for security sublayer is wrong-arranged. It is necessary to clearly arrange the protocol stack for security components.

Suggested Remedy

Adopt the contribution C802.16e-05/225.

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Adopt the contribution C802.16e-05/225r2.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Adopt the contribution C802.16e-05/225r2.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4144**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **12**

Fig/Table# Section **7.1.1**

There is no section "6.4.3.6". Reference error.

Suggested Remedy

Find the correct section and change the reference accordingly.

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

Remove the sentence on page 184, line 12.

Reason for Recommendation

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

Remove the sentence on page 184, line 12.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4145**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **184**

Starting Line # **23**

Fig/Table#

Section **7.1.2**

[Submitted as Technical, Binding but with an Approve vote.]

In PKMv1 case, the AK exchange is not protected using symmetric encryption algorithm.

Suggested Remedy

Change:

"It uses strong symmetric encryption algorithms to perform key exchanges between an MS and BS."

to

"It uses strong encryption algorithms to perform key exchanges between an MS and BS."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change:

"It uses strong symmetric encryption algorithms to perform key exchanges between an MS and BS."

to

"It uses strong encryption algorithms to perform key exchanges between an MS and BS."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change:

"It uses strong symmetric encryption algorithms to perform key exchanges between an MS and BS."

to

"It uses strong encryption algorithms to perform key exchanges between an MS and BS."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4146**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **29** Fig/Table# Section **7.1.2**

The claim is not true for PKMv2 since public key operation is not used for key distribution.

Suggested Remedy

Change:

"This two-tiered mechanism for key distribution permits refreshing of TEKs without incurring the overhead of computation-intensive public-key operations."

to

"This two-tiered mechanism for key distribution permits refreshing of TEKs without incurring the overhead of computation-intensive operations."

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change:

"This two-tiered mechanism for key distribution permits refreshing of TEKs without incurring the overhead of computation-intensive public-key operations."

to

"This two-tiered mechanism for key distribution permits refreshing of TEKs without incurring the overhead of computation-intensive operations."

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

Change:

"This two-tiered mechanism for key distribution permits refreshing of TEKs without incurring the overhead of computation-intensive public-key operations."

to

"This two-tiered mechanism for key distribution permits refreshing of TEKs without incurring the overhead of computation-intensive operations."

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4147**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **184**

Starting Line # **51**

Fig/Table#

Section **7.1.2**

Reference error.

Suggested Remedy

Change

"6.4.2.3"

to

"6.3.2.3".

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"6.4.2.3"

to

"6.3.2.3".

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"6.4.2.3"

to

"6.3.2.3".

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4148**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **65**

Fig/Table# Section **7.1.3**

[Submitted as Technical, Binding but with an Approve vote.]
RSA should not be mandatory in 16e.

Suggested Remedy

Change

"- RSA [PKCS #1] (support is mandatory in all devices)"

to

"- RSA [PKCS #1] (support is optional unless specifically required)"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change:

"- RSA [PKCS #1] (support is mandatory in all devices)"

to

"- RSA [PKCS #1] (support is mandatory in PKMv1, support is optional in PKMv2)"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change:

"- RSA [PKCS #1] (support is mandatory in all devices)"

to

"- RSA [PKCS #1] (support is mandatory in PKMv1, support is optional in PKMv2)"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

Note: this text was applied over another text change. The end result is a combination of the two.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4149**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **185** Starting Line # **19**

Fig/Table# Section **7.1.3.1**

Description should be more specific

Suggested Remedy

Change

"All SSs shall have factory-installed RSA"

to

"All SSs using RSA authentication shall have factory-installed RSA"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change

"All SSs shall have factory-installed RSA"

to

"All MSs using RSA authentication shall have factory-installed RSA"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change

"All SSs shall have factory-installed RSA"

to

"All MSs using RSA authentication shall have factory-installed RSA"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4150**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **186** Starting Line # **43** Fig/Table# Section **7.2**

Pre-authentication is not a major feature any more since there is no detailed description of pre-authentication

Suggested Remedy

Delete

"pre-authentication"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Delete

"pre-authentication"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Delete

"pre-authentication"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4151**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **187** Starting Line # **34**

Fig/Table#

Section **7.2.1.3**

Sentence clean up

Suggested Remedy

Change

"The BS and MS establishing a shared AK by either RSA or EAP,"

to

"The BS and MS establishing a shared AK by RSA or EAP or a combination of RSA and EAP,"

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See comment 4152

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4152**

Comment submitted by: Li

Rui

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **187** Starting Line # **34** Fig/Table# Section **7.2.1.3**

I object to the implement in the draft of Comment #3243 in the 802.16e-05/012r3 because other contents concerning EAP shall also be removed in section 7.2.1.3 in PKMv1.

Suggested Remedy

In section 7.2.1.3 change

a) The BS and MS establishing a shared AK by either RSA or EAP, from which a key encryption key (KEK), EAP Integrity Key (EIK) and message authentication keys are derived.

b) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically reauthorize with the BS; reauthorization is also managed by the MS's Authorization state machine. TEK state machines manage the refreshing of TEKs. The MS or BS may run optional authenticated EAP messages for additional authentication.

to

a) The BS and MS establishing a shared AK by ~~either RSA or EAP~~, from which a key encryption key (KEK), ~~EAP Integrity Key (EIK)~~ and message authentication keys are derived.

b) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically reauthorize with the BS; reauthorization is also managed by the MS's Authorization state machine. TEK state machines manage the refreshing of TEKs.

~~The MS or BS may run optional authenticated EAP messages for additional authentication.~~

In section 7.2.1.3.1 change

To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MS's AKs (see 7.4), ensures that the MS can refresh.

After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP message shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.

to

To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MS's AKs (see 7.4), ensures that the MS can refresh.

~~After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP message shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.~~

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

In section 7.2.1.3 change

- a) The BS and MS establishing a shared AK by either RSA or EAP, from which a key encryption key (KEK), EAP Integrity Key (EIK) and message authentication keys are derived.
 - b) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.
- After achieving initial authorization, an MS periodically reauthorize with the BS; reauthorization is also managed by the MS's Authorization state machine. TEK state machines manage the refreshing of TEKs. The MS or BS may run optional authenticated EAP messages for additional authentication.

to

- a) The BS and MS establishing a shared AK by ~~either RSA or EAP~~, from which a key encryption key (KEK), ~~EAP Integrity Key (EIK)~~ and message authentication keys are derived.
 - b) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.
- After achieving initial authorization, an MS periodically reauthorize with the BS; reauthorization is also managed by the MS's Authorization state machine. TEK state machines manage the refreshing of TEKs. ~~The MS or BS may run optional authenticated EAP messages for additional authentication.~~

In section 7.2.1.3.1 change

To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MS's AKs (see 7.4), ensures that the MS can refresh.

After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP message shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.

to

To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MS's AKs (see 7.4), ensures that the MS can refresh.

~~After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP message shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.~~

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

In section 7.2.1.3 change

- a) The BS and MS establishing a shared AK by either RSA or EAP, from which a key encryption key (KEK), EAP Integrity Key (EIK) and message authentication keys are derived.
- b) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.
- After achieving initial authorization, an MS periodically reauthorize with the BS; reauthorization is also managed by the MS's Authorization state machine. TEK state machines manage the refreshing of TEKs. The MS or BS may run optional authenticated EAP messages for additional authentication.

to

- a) The BS and MS establishing a shared AK by ~~either RSA or EAP~~, from which a key encryption key (KEK), ~~EAP Integrity Key (EIK)~~ and message authentication keys are derived.
- b) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.
- After achieving initial authorization, an MS periodically reauthorize with the BS; reauthorization is also managed by the MS's Authorization state machine. TEK state machines manage the refreshing of TEKs. ~~The MS or BS may run optional authenticated EAP messages for additional authentication.~~

In section 7.2.1.3.1 change

To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MS's AKs (see 7.4), ensures that the MS can refresh.

After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP message shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.

to

To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MS's AKs (see 7.4), ensures that the MS can refresh.

~~After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP message shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.~~

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4153**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **188** Starting Line # **39**

Fig/Table# Section **7.2.1.3.1**

Reference error

Suggested Remedy
Change

"Subclause 7.2.4's"

to

"Subclause 7.2.1.6's"

Proposed Resolution
Change

Recommendation: **Accepted**

Recommendation by

"Subclause 7.2.4's"

to

"Subclause 7.2.1.6's"

Reason for Recommendation

Resolution of Group
Change

Decision of Group: **Accepted**

"Subclause 7.2.4's"

to

"Subclause 7.2.1.6's"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4154**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	189	21		

[Submitted as Technical, Binding but with an Approve vote.]

A description of EAP-based authorization seems to be missing. Insert a cleaned-up version of the D6 section §7.2.1.3.2 "Authorization via PKM Extensible Authentication Protocol (EAP)".

Suggested Remedy

A description of EAP-based authorization seems to be missing. Insert a cleaned-up version of the D6 section §7.2.1.3.2 "Authorization via PKM Extensible Authentication Protocol (EAP)".

Proposed Resolution Recommendation: **Rejected**

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4155**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	190	Starting Line #	40	Fig/Table#	Section	7.2.2.2
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	---------

[Submitted as Technical, Binding but with an Approve vote.]

Unicast and multicast traffic keys are not derived but are distributed from BS to MS

Suggested Remedy

Change

"The keys used to protect unicast and multicast traffic are derived from source key material generated by the authentication and authorization processes."

to

"The keys used to protect unicast and multicast traffic keys are derived from source key material generated by the authentication and authorization processes."

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Change

"The keys used to protect unicast and multicast traffic are derived from source key material generated by the authentication and authorization processes."

to

"The keys used to protect management message integrity and transport the traffic encryption keys are derived from source key material generated by the authentication and authorization processes."

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

Change

"The keys used to protect unicast and multicast traffic are derived from source key material generated by the authentication and authorization processes."

to

"The keys used to protect management message integrity and transport the traffic encryption keys are derived from source key material generated by the authentication and authorization processes."

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4156**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **190** Starting Line # **41**

Fig/Table# Section **7.2.2.2**

Description should be more precise

Suggested Remedy

Change

"The authorization process yields"

to

"The RSA-based authorization process yields "

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"The authorization process yields"

to

"The RSA-based authorization process yields "

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"The authorization process yields"

to

"The RSA-based authorization process yields "

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4157**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **190**

Starting Line # **50**

Fig/Table#

Section **7.2.2.2**

[Reference error](#)

Suggested Remedy

[Delete](#)

["\[3\]"](#)

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

[Remove "As detailed in \[3\],"](#)

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

[Remove "As detailed in \[3\],"](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4158**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment **Type** **Technical, Non-binding** **Starting Page #** **190** **Starting Line #** **55** **Fig/Table#** **Section** **7.2.2.2.1**

To generate more secure Authorization Key, the nonces from an SS and a BS should be used. In addition, the current PKMv2 key hierarchy needs to be clearly corrected.

Suggested Remedy

Adopt the contribution C802.16e-05/230.

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

Commenter requested rejection.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4159**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Editorial	191			7.2.2.2

In section 7.2.2.2 of page 191, AK generation formula is described, but the length 280 should be changed to 288 because total length of EIK length (128B) + PMK length (160B) is 288

Suggested Remedy[Change 280 into 288](#)**Proposed Resolution**Recommendation: **Accepted**

Recommendation by

[Change 280 into 288](#)**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted**[Change 280 into 288](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4160**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
Deriving EIK PAK formular of section 7.2.2.2.1 in page 190 is different from that of figure 131 of page 193	Editorial	191			7.2.2.2.1

Suggested Remedy

In section 7.2.2.2.1 of page 190, the BSID should be added in deriving EIK|PAK

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

1. In section 7.2.2.2.1 of page 190, the BSID should be added in deriving EIK|PAK

2. Add the following sentence to the end of section 7.2.2.2.1:

PAK as a result of RSA-mutual authentication between MS and BS can be re-used for generating an AK for other BSes (at handover in particular)

Reason for Recommendation

First accept/modified resolution failed by vote: 19-11

Reason: The PAK should not be used by other BS to generate AK.

Adopted a modified version of the original comment below:

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

On page 190, line 61, make the following change:

| EIK | PAK = Dot16KDF(pre-PAK, SSID | BSID | "EIK+PAK", 288)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4161**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	191	Starting Line #	Fig/Table#	Section	7.2.2.2.3
---------	------	------------------------	-----------------	-----	-----------------	------------	---------	-----------

In section 7.2.2.2.3 of page 191, the next sentence cause cause confusion

"Note that PAK may be used only in initial network entry. In cases of HO and reauthentication: Only EAP keys are applicable."

Because of two reason

- 1) Re-entry PKM operation is already negotiated by authorization policy during SBC procedure. it is described in section 11.8.4.2
- 2) HO case PKM operation is determined by HO_authorization_policy

Suggested Remedy

In section 7.2.2.2.3 of page 191, the next sentence should be removed

"Note that PAK may be used only in initial network entry. In cases of HO and reauthentication: Only EAP keys are applicable."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

In section 7.2.2.2.3 of page 191, the next sentence should be removed

"Note that PAK may be used only in initial network entry. In cases of HO and reauthentication: Only EAP keys are applicable."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

In section 7.2.2.2.3 of page 191, the next sentence should be removed

"Note that PAK may be used only in initial network entry. In cases of HO and reauthentication: Only EAP keys are applicable."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4162**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **191** Starting Line # **4**

Fig/Table# Section **7.2.2.2.2**

[Submitted as Technical, Binding but with an Approve vote.]
Where is EEK coming from and how is it used?

Suggested Remedy

Change

"EIK and EEK are 128 bits long."

to

"EIK is 128 bits long."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"EIK and EEK are 128 bits long."

to

"EIK is 128 bits long."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"EIK and EEK are 128 bits long."

to

"EIK is 128 bits long."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4163**

Comment submitted by: Li

Rui

Other

2005/04/28

Comment	Type	Editorial	Starting Page #	191	Starting Line #	5	Fig/Table#	Section	7.2.2.2.2
---------	------	-----------	-----------------	-----	-----------------	---	------------	---------	-----------

I object to the resolution of Comment #3249 and #3250 in the 802.16e-05/012r3 because the corrections in two comments are not sufficient in section 7.2.2.2.

EEK is not derived from pre-PAK to protect the EAP messages. But the EEK is stated in the section 7.2.2.2.2. So we suggest to remove the EEK. In addition there is an editorial error in the formula of the derivation of EIK and PMK. The EIK and PMK are derived by truncating the AAA-key to 288 bits. But the EIK and PMK are derived to 280 bits in the formula. We suggest to modify the formula.

Suggested Remedy

In section 7.2.2.2.2 change

If a RSA mutual authorization took place before the EAP exchange, the EAP messages may be protected using EIK - EAP Integrity Key derived from pre-PAK (see 7.2.2.2.1). EIK and EEK are 128 bits long. The product of the EAP exchange which is transferred to 802.16 layer is the AAA-key. This key is derived (or may be equivalent to the 512-bits Master Session Key (MSK)). This key is known to the AAA server, to the Authenticator* (transferred from AAA server) and to the MS. The MS and the authenticator derive a PMK (Pairwise Master Key) and optional EIK by truncating the AAA-key to 288 bits. The PMK and EIK derivation from the AAA-key is as follows:
EIK | PMK = truncate (AAA-key, 280)

to

If a RSA mutual authorization took place before the EAP exchange, the EAP messages may be protected using EIK - EAP Integrity Key derived from pre-PAK (see 7.2.2.2.1). EIK ~~and EEK are~~ is 128 bits long. The product of the EAP exchange which is transferred to 802.16 layer is the AAA-key. This key is derived (or may be equivalent to the 512-bits Master Session Key (MSK)). This key is known to the AAA server, to the Authenticator* (transferred from AAA server) and to the MS. The MS and the authenticator derive a PMK (Pairwise Master Key) and optional EIK by truncating the AAA-key to 288 bits. The PMK and EIK derivation from the AAA-key is as follows:
EIK | PMK = truncate (AAA-key, ~~280~~ 288)

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

see 4162

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4164** Comment submitted by: [Haixiang](#) [He](#) Member [2005/04/28](#)

Comment Type [Technical, Non-binding](#) Starting Page # [191](#) Starting Line # [15](#) Fig/Table# Section [7.2.2.2.2](#)

[\[Submitted as Technical, Binding but with an Approve vote.\]](#)

[The AAA-Key should be truncated for 288 bits not 280 bits.](#)

Suggested Remedy

[Change](#)

["EIK | PMK = truncate \(AAA-key, 280 \)"](#)

[to](#)

["EIK | PMK = truncate \(AAA-key, 288 \)"](#)

Proposed Resolution Recommendation: **Superceded** Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Superceded**

[See 4159](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4165**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Editorial** Starting Page # **191** Starting Line # **15** Fig/Table# Section **7.2.2.2.2**

I object to the implementation of Comment #3249 because the length of EIK and PMK are 128 bits and 160 bits for each.

Suggested Remedy

Modify the key length from 280 to 288 in PMK and EIK derivation function as follows :

EIK | PMK = truncate (AAA-key, ~~280~~288)

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

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

See 4159.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4166**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Editorial** Starting Page # **191** Starting Line # **29** Fig/Table# Section **7.2.2.2.3**

Suggested Remedy
Change

"The AK will be derived by the authenticator and the MS from the PMK (from EAP exchange) and the PAK (from RSA exchange)."

to

"The AK will be derived by the authenticator and the MS from the PMK (from EAP exchange) and/or the PAK (from RSA exchange)."

Proposed Resolution Recommendation: **Accepted**
Change

Recommendation by

"The AK will be derived by the authenticator and the MS from the PMK (from EAP exchange) and the PAK (from RSA exchange)."

to

"The AK will be derived by the authenticator and the MS from the PMK (from EAP exchange) and/or the PAK (from RSA exchange)."

Reason for Recommendation

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

Change

"The AK will be derived by the authenticator and the MS from the PMK (from EAP exchange) and the PAK (from RSA exchange)."

to

"The AK will be derived by the authenticator and the MS from the PMK (from EAP exchange) and/or the PAK (from RSA exchange)."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4167**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **191** Starting Line # **36**

Fig/Table# Section **7.2.2.2.3**

[Submitted as Technical, Binding but with an Approve vote.]
The AK generation function is wrong

Suggested Remedy

Change

"AK <= Dot16KDF (PMK, SSID | BSID | PAK | "AK", 160)"

to

"AK <= Dot16KDF (PMK (XOR)PAK, SSID | BSID | "AK", 160)"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change

"AK <= Dot16KDF (PMK, SSID | BSID | PAK | "AK", 160)"

to

"AK <= Dot16KDF (PMK (XOR) PAK, SSID | BSID | "AK", 160)"

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 11-13

Reason: the original equation is correct

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4168**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **191** Starting Line # **43**

Fig/Table# Section **7.2.2.2.3**

[Submitted as Technical, Binding but with an Approve vote.]
The AK generation function is wrong

Suggested Remedy

Change

"AK <= Dot16KDF (0, SSID | BSID | PAK | "AK", 160)"

to

"AK <= Dot16KDF (PAK, SSID | BSID | "AK", 160)"

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Reason: the original equation is correct

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4169**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **192** Starting Line # **19**

Fig/Table# Section **7.2.2.2.7**

Grammer error

Suggested Remedy

Change

"between"

to

"among"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"between"

to

"among"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"between"

to

"among"

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/D7	Ballot Number:	0001037	Comment Date	
Comment #	4170	Comment submitted by:	tian	Other	2005/04/28
Comment	Type Technical, Non-binding	Starting Page #	194	Starting Line #	25
		Fig/Table#	fig	Section	7.2.2.2.10

There are two issues:

- 1.EIK should not be used to derive AK
- 2.AK derive formula wrong

Suggested Remedy

change

" Dot16KDF(PMK , SSID|BSID|"AK" , 160) "

to

" Dot16KDF(PMK , SSID|BSID|**PAK**"|"AK" , 160)"

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

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

Reason for Group's Decision/Resolution

Vote: 4-6

The PAK should not be part of the equation.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4171**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **194** Starting Line # **26**

Fig/Table# **132** Section **7.2.2.2.10**

[Submitted as Technical, Binding but with an Approve vote.]
The function is wrong

Suggested Remedy
Replace line 26 with

"Dot16KDF (PMK PAK, SSID | BSID | "AK", 160)"

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

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

Reason for Group's Decision/Resolution
Proposed change in the formula is incorrect.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4172**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment

Type **Editorial**

Starting Page # **196**

Starting Line # **20**

Fig/Table#

Section

7.2.2.3.2

Suggested Remedy
Change

"that"

to

"than"

Proposed Resolution
Change

Recommendation: **Accepted**

Recommendation by

"that"

to

"than"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"that"

to

"than"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4173**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **196** Starting Line # **23** Fig/Table# Section **7.2.2.4.1**

The PMK ID and the AK ID are derived from the EAP-session ID. This value is out of scope and wrong-selected. Therefore, a new field, the AK sequence number, to identify the Authorization Key needs to be defined.

Suggested Remedy

Adopt the contribution [C802.16e-05/227](#).

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Adopt the contribution [C802.16e-05/227r3](#).

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Adopt the contribution [C802.16e-05/227r3](#).

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4174**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **196**

Starting Line # **37**

Fig/Table#

Section **7.2.2.3.3**

grammer error

Suggested Remedy

Change

"between"

to

"among"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"between"

to

"among"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"between"

to

"among"

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4175**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **196** Starting Line # **48**

Fig/Table# Section **7.2.2.3.3**

[Submitted as Technical, Binding but with an Approve vote.]
Inconsistent with section 7.2.2.2.8

Suggested Remedy

Change

"The MTK, MBS Traffic Key,"

to

"The MTK, MBS Transport Key,"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change

"The MTK, MBS Traffic Key,"

to

"The MTK (MBS Traffic Key)"

Change title of section 7.2.2.2.8 to "MBS Traffic Key (MTK)"

Change pg 192 line 34 to "The MTK is used to protect MBS data ~~transport data~~....."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change

"The MTK, MBS Traffic Key,"

to

"The MTK (MBS Traffic Key)"

Change title of section 7.2.2.2.8 to "MBS Traffic Key (MTK)"

Change pg 192 line 34 to "The MTK is used to protect MBS data ~~transport data~~....."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4176**

Comment submitted by: **Tian**

Feng

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **197** Starting Line # **8**

Fig/Table#

Section **7.2.2.4.1**

Re : comment #2136

there is something wrong with "doing the whole EAP and/or PAK"

Suggested Remedy

change

" EAP and/or PAK "

to

"EAP and/or RSA authentication"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

change

" EAP and/or PAK "

to

"EAP and/or RSA authentication"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

change

" EAP and/or PAK "

to

"EAP and/or RSA authentication"

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/D7	Ballot Number:	0001037	Comment Date	
Comment #	4177	Comment submitted by:	Haixiang He	Member	2005/04/28
Comment	Type Technical, Non-binding	Starting Page #	198	Starting Line #	9
		Fig/Table#	133	Section	7.2.2.4.1
[Submitted as Technical, Binding but with an Approve vote.]					
PMKID computation should be simple					

Suggested Remedy

Replace

"PMKID <= Dot16KDF (PMK, SSID | BSID | "PMKID", 64)"

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**[See comment 4173](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4178**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **198** Starting Line # **14**

Fig/Table# **133** Section **7.2.2.4.1**

[Submitted as Technical, Binding but with an Approve vote.]
AKID computation should be simple.

Suggested Remedy

Replace with

"AKID <= Dot16KDF (AK, SSID | BSID | "AKID", 64)"

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4173

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4179**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
---------	------	-----------------	-----------------	------------	---------

Since the consensus was made in last meeting, we decided that PKMv2 is used for newly added feature. However in section 7.5.4 (page 207) of D7 text, there exists explanation for calculating OMAC Digest which is not supposed to be used in PKMv1.

Suggested Remedy

Removal of following sentence:

"In the PKM version 1 protocol, the 4 least significant bits of the OMAC sequence number in the OMAC tuple shall be equal to the 4-bit AK sequence number and the 44 most significant bits shall be equal to 0. "

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Removal of following sentence:

"In the PKM version 1 protocol, the 4 least significant bits of the OMAC sequence number in the OMAC tuple shall be equal to the 4-bit AK sequence number and the 44 most significant bits shall be equal to 0. "

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

Removal of following sentence:

"In the PKM version 1 protocol, the 4 least significant bits of the OMAC sequence number in the OMAC tuple shall be equal to the 4-bit AK sequence number and the 44 most significant bits shall be equal to 0. "

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

Editor's Actions |) none needed

Text changed/removed by a contribution.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4180**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **207** Starting Line # **15** Fig/Table# Section **7.5.3**

[Submitted as Technical, Binding but with an Approve vote.]
In PKMv2, there is no AK sequence number.

Suggested Remedy
Change

"The HMAC sequence number in the HMAC tuple or Short-HMAC tuple shall be equal to the AK sequence number of the AK from which the HMAC_KEY_x was derived."

to

"he HMAC sequence number in the HMAC tuple or Short-HMAC tuple shall be equal to the AK sequence number or the last 4 bits of the AKID of the AK from which the HMAC_KEY_x was derived."

Proposed Resolution Recommendation: **Rejected-Duplicate** Recommendation by
See comment 4173

Reason for Recommendation

Resolution of Group Decision of Group: **Superceded**
See comment 4173

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4181**Comment submitted by: **Seokheon****Cho**

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **207** Starting Line # **21** Fig/Table# Section **7.5.4**

The OMAC-Digest and OMAC-Tuple cause confusion. In addition, the OMAC-Tuple needs an identifier to distinguish two OMAC_KEY. It needs to correct the OMAC-Digest and the OMAC-Tuple.

Suggested Remedy

Adopt the contribution [C802.16e-05/224](#).

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt the contribution [C802.16e-05/224r4](#).

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

Adopt the contribution [C802.16e-05/224r4](#).

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4182**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **207** Starting Line # **35**

Fig/Table# Section **7.5.4**

Need to be more specific about the OMAC sequence number

Suggested Remedy

Change

"The OMAC sequence number in the OMAC tuple..."

to

"The OMAC sequence number used to calculate the digest in the OMAC tuple..."

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4181

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4183**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **207** Starting Line # **36** Fig/Table# Section **7.5.4**

[Submitted as Technical, Binding but with an Approve vote.]
Should be 60 bits instead of 44 bits.

Suggested Remedy

Change

"In the PKM version 1 protocol, the 4 least significant bits of the OMAC sequence number in the OMAC tuple shall be equal to the 4-bit AK sequence number and the 44 most significant bits shall be equal to 0."

to

"In the PKM version 1 protocol, the 4 least significant bits of the 64-bit OMAC sequence number used to calculate the digest in the OMAC tuple shall be equal to the 4-bit AK sequence number and the 60 most significant bits shall be equal to 0."

Proposed ResolutionRecommendation: **Superseded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superseded**[See comment 4179](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4184**Comment submitted by: **Haixiang****He**

Member

2005/04/28

Comment Type **Editorial** Starting Page # **208** Starting Line # **1**Fig/Table# Section **7.5.4**

Digest is better than message in this sentence

Suggested Remedy

Change

"message"

to

"digest"

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

Change sentence as follows:

If the digest is included in an MPDU that has no CID, e.g. a RNG-RSP message, the CID used shall take the value of the basic CID.

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

Change sentence as follows:

If the digest is included in an MPDU that has no CID, e.g. a RNG-RSP message, the CID used shall take the value of the basic CID.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4185**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **208** Starting Line # **57**

Fig/Table# Section **7.5.5.5.1**

[Submitted as Technical, Binding but with an Approve vote.]
D[] is a decryption function.

Suggested Remedy
change

"D [] = 56-bit DES ECB mode encryption"

to

"D [] = 56-bit DES ECB mode decryption"

Proposed Resolution Recommendation: **Accepted**
change

Recommendation by

"D [] = 56-bit DES ECB mode encryption"

to

"D [] = 56-bit DES ECB mode decryption"

Reason for Recommendation

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

"D [] = 56-bit DES ECB mode encryption"

to

"D [] = 56-bit DES ECB mode decryption"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4186**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **209** Starting Line # **25**

Fig/Table# Section **7.5.5.5.3**

[Submitted as Technical, Binding but with an Approve vote.]
D[] is a decryption function

Suggested Remedy

Change

"D [] = 128-bit AES ECB mode encryption"

to

"D [] = 128-bit AES ECB mode decryption"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"D [] = 128-bit AES ECB mode encryption"

to

"D [] = 128-bit AES ECB mode decryption"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"D [] = 128-bit AES ECB mode encryption"

to

"D [] = 128-bit AES ECB mode decryption"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4187**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **6**Fig/Table# Section **7.8.1**

Description is not clear.

Suggested Remedy

Change

"During network re-entry or handover, the BS begins the 3-way-handshake by appending the SaChallenge TLV to the RNG-RSP."

to

"If HO Process Optimization bit #1 is set to zero indicating that PKM Authentication phase is required during network re-entry or handover, the BS begins the 3-way-handshake by appending the SaChallenge TLV to the RNG-RSP."

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Change

"During network re-entry or handover, the BS begins the 3-way-handshake by appending the SaChallenge TLV to the RNG-RSP."

to

"If HO Process Optimization bit #1 is set indicating that PKM Authentication phase is omitted during network re-entry or handover, the BS begins the 3-way-handshake by appending the SA Challenge Tuple TLV to the RNG-RSP."

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

Change

"During network re-entry or handover, the BS begins the 3-way-handshake by appending the SaChallenge TLV to the RNG-RSP."

to

"If HO Process Optimization bit #1 is set indicating that PKM Authentication phase is omitted during network re-entry or handover, the BS begins the 3-way-handshake by appending the SA Challenge Tuple TLV to the RNG-RSP."

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4188**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **12** Fig/Table# Section **7.8.1**
Redundant description.

Suggested Remedy

[Delete](#)

"The message shall include RandomBS, NonceSS, AKID, SS's Security Capabilities and OMAC/HMAC."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[Delete](#)

"The message shall include RandomBS, NonceSS, AKID, SS's Security Capabilities and OMAC/HMAC."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**[Delete](#)

"The message shall include RandomBS, NonceSS, AKID, SS's Security Capabilities and OMAC/HMAC."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

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

Text change was found on line 17; I assume that's correct.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4189**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **23** Fig/Table# Section **7.8.1**

[Submitted as Technical, Binding but with an Approve vote.]

If the AKID received from SA-TEK-Request is different from the AKID used in SA-Challenge, then the AK identified by the AKID received from SA-TEK-Request should be used for further message exchanges.

Suggested Remedy

Add after "If the AKID is unrecognized, the BS shall ignore the message."

"If the AKID is recognized but different from the AKID used in SA-Challenge message, then the AK identified by the AKID received from the SA-TEK-Request should be used for further message exchanges."

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

Vote: 9-7
Reason: Changing the AK ID makes the 3-way handshake into a 2-way handshake, eliminating the security advantages..

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4190**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **24** Fig/Table# Section **7.8.1**

RandomBS should also be checked.

Suggested Remedy

Add at the end of the paragraph

"The BS shall verify that the RandomBS in the SA TEK Request matches the value provided by the BS in the SA Challenge message. If the RandomBS value does not match, the BS shall ignore the message"

Proposed Resolution Recommendation: Accepted**Recommendation by**

Add at the end of the paragraph

"The BS shall verify that the RandomBS in the SA TEK Request matches the value provided by the BS in the SA Challenge message. If the RandomBS value does not match, the BS shall ignore the message"

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

Add at the end of the paragraph

"The BS shall verify that the RandomBS in the SA TEK Request matches the value provided by the BS in the SA Challenge message. If the RandomBS value does not match, the BS shall ignore the message"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4191**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **63**

Fig/Table# Section **7.8.1**

[Submitted as Technical, Binding but with an Approve vote.]
Inconsistent usage of OMAC/HMAC.

Suggested Remedy

In this paragraph

change all

"OMAC"

to

"OMAC/HMAC"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

In this paragraph

change all

"OMAC"

to

"OMAC/HMAC"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

In this paragraph

change all

"OMAC"

to

"OMAC/HMAC"

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

Group's Notes

Group's Action Items

Editor's Notes

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

[There is still a hanging reference in this paragraph.](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4192**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Editorial**Starting Page # **212** Starting Line # **63**

Fig/Table#

Section **7.8.1**

Bad sentence.

Suggested Remedy

Change

"Upon receipt of SA-TEK-Response, an MS shall verify the OMAC and ensure the presence of correct NonceSS. If the OMAC or NonceSS is invalid, the MS shall ignore the message."

to

"Upon receipt of SA-TEK-Response, an MS shall verify the OMAC. If the OMAC is invalid, the MS shall ignore the message. The MS shall verify that the NonceSS in the SA TEK Response matches the value provided by the MS in the SA TEK Request message. If the NonceSS value does not match, the MS shall ignore the message".

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change

"Upon receipt of SA-TEK-Response, an MS shall verify the OMAC and ensure the presence of correct NonceSS. If the OMAC or NonceSS is invalid, the MS shall ignore the message."

to

"Upon receipt of SA-TEK-Response, an MS shall verify the OMAC. If the OMAC is invalid, the MS shall ignore the message. The MS shall verify that the NonceSS in the SA TEK Response matches the value provided by the MS in the SA TEK Request message. If the NonceSS value does not match, the MS shall ignore the message".

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

Change

"Upon receipt of SA-TEK-Response, an MS shall verify the OMAC and ensure the presence of correct NonceSS. If the OMAC or NonceSS is invalid, the MS shall ignore the message."

to

"Upon receipt of SA-TEK-Response, an MS shall verify the OMAC. If the OMAC is invalid, the MS shall ignore the message. The MS shall verify that the NonceSS in the SA TEK Response matches the value provided by the MS in the SA TEK Request message. If the NonceSS value does not match, the MS shall ignore the message".

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4193** Comment submitted by: Yong Chang Member 2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **213** Starting Line # Fig/Table# **370** Section **7.8.2**

For PAK clarification In table 370 of page 541, PAK should be changed to pre-PAK according to D7 text in line 56 of page 213 (section 7.8.2).

Suggested Remedy

PAK should be changed to pre-PAK

Proposed Resolution Recommendation: **Accepted**

Recommendation by

PAK should be changed to pre-PAK

Reason for Recommendation

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

PAK should be changed to pre-PAK

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

This comment is not clear. I assumed the commenter wanted to change "Type 35: PAK" in Table 370 to "Type 35: pre-PAK", and that's what I did.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4194**Comment submitted by: [tian](#)[feng](#)

Other

2005/04/28

Comment	Type Technical, Non-binding	Starting Page # 213	Starting Line # 2	Fig/Table#	Section 7.8.1
---------	------------------------------------	----------------------------	--------------------------	------------	----------------------

Re : comment #2136

There is no SA-TEK-Confirm message in 802.16e, but it is mentioned in some sentence.

Suggested Remedy

remove the sentence

~~" If RandomBS was present in SA-TEKResponse, the MS shall send SA-TEK-Confirm to the BS and an OMAC/HMAC digest."~~

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

remove the sentence

~~" If RandomBS was present in SA-TEKResponse, the MS shall send SA-TEK-Confirm to the BS and an OMAC/HMAC digest."~~

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

remove the sentence

~~" If RandomBS was present in SA-TEKResponse, the MS shall send SA-TEK-Confirm to the BS and an OMAC/HMAC digest."~~

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4195**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **213** Starting Line # **2**

Fig/Table# Section **7.8.1**

[Submitted as Technical, Binding but with an Approve vote.]
Message SA-TEK-Confirm does not exist.

Suggested Remedy

Delete

"If RandomBS was present in SA-TEKResponse, the MS shall send SA-TEK-Confirm to the BS and an OMAC/HMAC digest."

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4194.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4196**

Comment submitted by: Haixiang He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **213** Starting Line # **6**

Fig/Table# Section **7.8.2**

The section title should be more specific to reflect the content to the section

Suggested Remedy

Change

"7.8.2 BS and MS mutual authentication and AK exchange overview"

to

"7.8.2 BS and MS RSA mutual authentication and AK exchange overview"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"7.8.2 BS and MS mutual authentication and AK exchange overview"

to

"7.8.2 BS and MS RSA mutual authentication and AK exchange overview"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"7.8.2 BS and MS mutual authentication and AK exchange overview"

to

"7.8.2 BS and MS RSA mutual authentication and AK exchange overview"

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4197**

Comment submitted by: Li

Rui

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	213	Starting Line #	21	Fig/Table#	Section	7.8.2
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	-------

I object to the implementation of Comment #3260 in the 802.16e-05/012r3 because the modification in the comment is not sufficient. The MS or BS may run optional authenticated EAP messages for additional authentication after mutual authentication in PKMv2. So we suggest to add some supplements about additional authentication in this section.

Suggested Remedy

In section 7.8.2 change

MS mutual authorization, controlled by the PKMv2 Authorization state machine, is the process of

- a) The BS authenticating a client MS's identity
- b) The MS authenticating the BS's identity
- c) The BS providing the authenticated MS with an AK, from which a key encryption key (KEK) and message authentication keys are derived
- d) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically seeks reauthorization with the BS; reauthorization is also managed by the MS's PKMv2 Authorization state machine. An MS must maintain its authorization status with the BS in order to be able to refresh aging TEKs and GTEKs. TEK state machines manage the refreshing of TEKs.

The MS sends an Authorization Request message to its BS immediately after sending the Authentication Information message. This is a request for an AK, as well as for the SAIDs identifying any Static Security SAs the MS is authorized to participate in. The Authorization Request includes (see 6.3.2.3.9.19)

- a) A manufacturer-issued X.509 certificate.
- b) A description of the cryptographic algorithms the requesting MS supports; an MS's cryptographic capabilities are presented to the BS as a list of cryptographic suite identifiers, each indicating a particular pairing of packet data encryption and packet data authentication algorithms the MS supports.
- c) The MS's Basic CID. The Basic CID is the first static CID the BS assigns to an MS during initial ranging-the primary SAID is equal to the Basic CID.
- d) A 64-bit random number generated in the MS.

In response to an Authorization Request message, a BS validates the requesting MS's identity, determines the encryption algorithm and protocol support it shares with the MS, activates an AK for the MS, encrypts it with the MS's public key, and sends it back to the MS in an Authorization Reply message. Random numbers are included in the exchange to ensure liveness. The Authorization Reply includes (see 6.3.2.3.9.20)

- a) The BS's X.509 certificate, used to verify the BS's identity.
- b) A pre-PAK encrypted with the MS's public key.
- c) A 64-bit PAK sequence number, used to distinguish between successive generations of AKs.
- d) A PAK lifetime.
- e) The identities (i.e., the SAIDs) and properties of the single primary and zero or more static SAs the MS is authorized to obtain keying information for.
- f) The 64-bit random number generated in the MS.
- g) A 64-bit random number generated in the BS, used to ensure key of liveness along with the random number of MS.
- h) The RSA signature over all the other attributes in the auth-reply message by BS, used to assure the reality of two PKMv2 authorization messages.

An MS shall periodically refresh its AK by reissuing an Authorization Request to the BS. Reauthorization is identical to authorization. To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MSMS's AKs (see 7.4), ensures that the MS can refresh TEK keying information without interruption over the course of the MS's reauthorization periods.

to

MS mutual authorization, controlled by the PKMv2 Authorization state machine, is the process of

- a) The BS authenticating a client MS's identity
- b) The MS authenticating the BS's identity
- c) The BS providing the authenticated MS with an AK, from which a key encryption key (KEK), EAP Integrity Key (EIK) and message authentication keys are derived
- d) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically seeks reauthorization with the BS; reauthorization is also managed by the MS's PKMv2 Authorization state machine. An MS must maintain its authorization status with the BS in order to be able to refresh aging TEKs and GTEKs. TEK state machines manage the refreshing of TEKs. The MS or BS may run optional authenticated EAP messages for additional authentication.

The MS sends an Authorization Request message to its BS immediately after sending the Authentication Information message. This is a request for an AK, as well as for the SAIDs identifying any Static Security SAs the MS is authorized to participate in. The Authorization Request includes (see 6.3.2.3.9.19)

- a) A manufacturer-issued X.509 certificate.
- b) A description of the cryptographic algorithms the requesting MS supports; an MS's cryptographic capabilities are presented to the BS as a list of cryptographic suite identifiers, each indicating a particular pairing of packet data encryption and packet data authentication algorithms the MS supports.
- c) The MS's Basic CID. The Basic CID is the first static CID the BS assigns to an MS during initial ranging-the primary SAID is equal to the Basic CID.
- d) A 64-bit random number generated in the MS.

In response to an Authorization Request message, a BS validates the requesting MS's identity, determines the encryption algorithm and protocol support it shares with the MS, activates an AK for the MS, encrypts it with the MS's public key, and sends it back to the MS in an Authorization Reply message. Random numbers are included in the exchange to ensure liveness. The Authorization Reply includes (see 6.3.2.3.9.20)

- a) The BS's X.509 certificate, used to verify the BS's identity.
- b) A pre-PAK encrypted with the MS's public key.
- c) A 64-bit PAK sequence number, used to distinguish between successive generations of AKs.
- d) A PAK lifetime.
- e) The identities (i.e., the SAIDs) and properties of the single primary and zero or more static SAs the MS is authorized to obtain keying information for.
- f) The 64-bit random number generated in the MS.
- g) A 64-bit random number generated in the BS, used to ensure key of liveness along with the random number of MS.

h) The RSA signature over all the other attributes in the auth-reply message by BS, used to assure the reality of two PKMv2 authorization messages.

An MS shall periodically refresh its AK by reissuing an Authorization Request to the BS. Reauthorization is identical to authorization. To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously

active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MSMS's AKs (see 7.4), ensures that the MS can refresh TEK keying information without interruption over the course of the MS's reauthorization periods.

After successful RSA based authorization if the MS or BS wants to run additional EAP authentication, the authenticated EAP messages shall carry EAP message. It shall cryptographically bind RSA and further EAP authentication.

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

In section 7.8.2 change

MS mutual authorization, controlled by the PKMv2 Authorization state machine, is the process of

- a) The BS authenticating a client MS's identity
- b) The MS authenticating the BS's identity
- c) The BS providing the authenticated MS with an AK, from which a key encryption key (KEK) and message authentication keys are derived
- d) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically seeks reauthorization with the BS; reauthorization is also managed by the MS's PKMv2 Authorization state machine. An MS must maintain its authorization status with the BS in order to be able to refresh aging TEKs and GTEKs. TEK state machines manage the refreshing of TEKs.

The MS sends an Authorization Request message to its BS immediately after sending the Authentication Information message. This is a request for an AK, as well as for the SAIDs identifying any Static Security SAs the MS is authorized to participate in. The Authorization Request includes (see 6.3.2.3.9.19)

- a) A manufacturer-issued X.509 certificate.
- b) A description of the cryptographic algorithms the requesting MS supports; an MS's cryptographic capabilities are presented to the BS as a list of cryptographic suite identifiers, each indicating a particular pairing of packet data encryption and packet data authentication algorithms the MS supports.
- c) The MS's Basic CID. The Basic CID is the first static CID the BS assigns to an MS during initial ranging-the primary SAID is equal to the Basic CID.
- d) A 64-bit random number generated in the MS.

In response to an Authorization Request message, a BS validates the requesting MS's identity, determines the encryption algorithm and protocol support it shares with the MS, activates an AK for the MS, encrypts it with the MS's public key, and sends it back to the MS in an Authorization Reply message. Random numbers are included in the exchange to ensure liveness. The Authorization Reply includes (see 6.3.2.3.9.20)

- a) The BS's X.509 certificate, used to verify the BS's identity.
- b) A pre-PAK encrypted with the MS's public key.
- c) A 64-bit PAK sequence number, used to distinguish between successive generations of AKs.
- d) A PAK lifetime.
- e) The identities (i.e., the SAIDs) and properties of the single primary and zero or more static SAs the MS is authorized to obtain keying information for.
- f) The 64-bit random number generated in the MS.
- g) A 64-bit random number generated in the BS, used to ensure key of liveness along with the random number of MS.
- h) The RSA signature over all the other attributes in the auth-reply message by BS, used to assure the reality of two PKMv2 authorization messages.

An MS shall periodically refresh its AK by reissuing an Authorization Request to the BS. Reauthorization is

identical to authorization. To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MSMS's AKs (see 7.4), ensures that the MS can refresh TEK keying information without interruption over the course of the MS's reauthorization periods.

to MS mutual authorization, controlled by the PKMv2 Authorization state machine, is the process of

- a) The BS authenticating a client MS's identity
- b) The MS authenticating the BS's identity
- c) The BS providing the authenticated MS with an AK, from which a key encryption key (KEK), EAP Integrity Key (EIK) and message authentication keys are derived
- d) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically seeks reauthorization with the BS; reauthorization is also managed by the MS's PKMv2 Authorization state machine. An MS must maintain its authorization status with the BS in order to be able to refresh aging TEKs and GTEKs. TEK state machines manage the refreshing of TEKs. The MS or BS may run optional authenticated EAP messages for additional authentication.

The MS sends an Authorization Request message to its BS immediately after sending the Authentication Information message. This is a request for an AK, as well as for the SAIDs identifying any Static Security SAs the MS is authorized to participate in. The Authorization Request includes (see 6.3.2.3.9.19)

- a) A manufacturer-issued X.509 certificate.
- b) A description of the cryptographic algorithms the requesting MS supports; an MS's cryptographic capabilities are presented to the BS as a list of cryptographic suite identifiers, each indicating a particular pairing of packet data encryption and packet data authentication algorithms the MS supports.
- c) The MS's Basic CID. The Basic CID is the first static CID the BS assigns to an MS during initial ranging-the primary SAID is equal to the Basic CID.
- d) A 64-bit random number generated in the MS.

In response to an Authorization Request message, a BS validates the requesting MS's identity, determines the encryption algorithm and protocol support it shares with the MS, activates an AK for the MS, encrypts it with the MS's public key, and sends it back to the MS in an Authorization Reply message. Random numbers are included in the exchange to ensure liveness. The Authorization Reply includes (see 6.3.2.3.9.20)

- a) The BS's X.509 certificate, used to verify the BS's identity.
- b) A pre-PAK encrypted with the MS's public key.
- c) A 64-bit PAK sequence number, used to distinguish between successive generations of AKs.
- d) A PAK lifetime.
- e) The identities (i.e., the SAIDs) and properties of the single primary and zero or more static SAs the MS is authorized to obtain keying information for.
- f) The 64-bit random number generated in the MS.
- g) A 64-bit random number generated in the BS, used to ensure key of liveness along with the random number of MS.
- h) The RSA signature over all the other attributes in the auth-reply message by BS, used to assure the reality of two PKMv2 authorization messages.

An MS shall periodically refresh its AK by reissuing an Authorization Request to the BS. Reauthorization is identical to authorization. To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MSMS's

request scheduling algorithm, combined with the BS's regimen for updating and using a client's previous AKs (see 7.4), ensures that the MS can refresh TEK keying information without interruption over the course of the MS's reauthorization periods.

~~After successful RSA-based authorization, if the MS or BS wants to run additional EAP authentication, the authenticated EAP messages shall carry~~

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

In section 7.8.2 change

MS mutual authorization, controlled by the PKMv2 Authorization state machine, is the process of

- a) The BS authenticating a client MS's identity
- b) The MS authenticating the BS's identity
- c) The BS providing the authenticated MS with an AK, from which a key encryption key (KEK) and message authentication keys are derived
- d) The BS providing the authenticated MS with the identities (i.e., the SAIDs) and properties of primary and static SAs the MS is authorized to obtain keying information for.

After achieving initial authorization, an MS periodically seeks reauthorization with the BS; reauthorization is also managed by the MS's PKMv2 Authorization state machine. An MS must maintain its authorization status with the BS in order to be able to refresh aging TEKs and GTEKs. TEK state machines manage the refreshing of TEKs.

The MS sends an Authorization Request message to its BS immediately after sending the Authentication Information message. This is a request for an AK, as well as for the SAIDs identifying any Static Security SAs the MS is authorized to participate in. The Authorization Request includes (see 6.3.2.3.9.19)

- a) A manufacturer-issued X.509 certificate.
- b) A description of the cryptographic algorithms the requesting MS supports; an MS's cryptographic capabilities are presented to the BS as a list of cryptographic suite identifiers, each indicating a particular pairing of packet data encryption and packet data authentication algorithms the MS supports.
- c) The MS's Basic CID. The Basic CID is the first static CID the BS assigns to an MS during initial ranging-the primary SAID is equal to the Basic CID.
- d) A 64-bit random number generated in the MS.

In response to an Authorization Request message, a BS validates the requesting MS's identity, determines the encryption algorithm and protocol support it shares with the MS, activates an AK for the MS, encrypts it with the MS's public key, and sends it back to the MS in an Authorization Reply message. Random numbers are included in the exchange to ensure liveness. The Authorization Reply includes (see 6.3.2.3.9.20)

- a) The BS's X.509 certificate, used to verify the BS's identity.
- b) A pre-PAK encrypted with the MS's public key.
- c) A 64-bit PAK sequence number, used to distinguish between successive generations of AKs.
- d) A PAK lifetime.
- e) The identities (i.e., the SAIDs) and properties of the single primary and zero or more static SAs the MS is authorized to obtain keying information for.
- f) The 64-bit random number generated in the MS.
- g) A 64-bit random number generated in the BS, used to ensure key of liveness along with the random number of MS.
- h) The RSA signature over all the other attributes in the auth-reply message by BS, used to assure the reality of two PKMv2 authorization messages.

An MS shall periodically refresh its AK by reissuing an Authorization Request to the BS. Reauthorization is identical to authorization. To avoid service interruptions during reauthorization, successive generations of the MS's AKs have overlapping lifetimes. Both MS and BS shall be able to support up to two simultaneously

active AKs during these transition periods. The operation of the Authorization state machine's Authorization Request scheduling algorithm, combined with the BS's regimen for updating and using a client MSMS's AKs (see 7.4). ensures that the MS can refresh TEK keying information without interruption over the course

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

Only added the red text.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4198**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **215** Starting Line # **1**

Fig/Table# Section **7.8.3.2.3**

Inconsistant with naming.

Suggested Remedy

Change

"7.8.3.2.3 MBS Traffic Key establishment"

to

"7.8.3.2.3 MBS Transport Key establishment"

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4199**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **215** Starting Line # **17**

Fig/Table# Section **7.8.4.1.1**

The section title should be more specific to reflect the content to the section

Suggested Remedy

Change

"7.8.4.1.1 PDU payload format"

to

"7.8.4.1.1 MBS PDU payload format"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change

"7.8.4.1.1 PDU payload format"

to

"7.8.4.1.1 Encrypted MBS PDU payload format"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change

"7.8.4.1.1 PDU payload format"

to

"7.8.4.1.1 Encrypted MBS PDU payload format"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4200**

Comment submitted by: Yigal

Eliaapur

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	215	Starting Line #	20	Fig/Table#	Section	7.8.4.1.1
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	-----------

AES CTR clarifications

Section 7.8.4.1.1 prescribe how AES in CTR should be used and how the NONCE and Initial counter should be constructed. However, the endiannes of the frame-number as embedded in the NONCE and initial counter is Big Endian while in AES in CCM mode most fields are ordered as LSB first (i.e. little endian). This may confuse implementers. We therefore propose to change ordering of frame-number to little endian. We also offer an additional small clarification to the text, and replace the test vector with vectors which include all PDU components for the benefit of implementers, thus allowing the CRC to be an inherent byte order checker. The code in this contribution uses the same encryption engine used in D7 with the necessary additions (with one modification only to the way the counter is constructed - the aforementioned frame-number endianness).

Suggested Remedy

Adopt contribution C80216e-05/253

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C80216e-05/253r3

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Adopt contribution C80216e-05/253r3

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4201**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **215** Starting Line # **33**

Fig/Table# Section **7.8.4.1.1**

[Submitted as Technical, Binding but with an Approve vote.]
No definition of MTEK. Should be MGTEK delivered from BS to MS.

Suggested Remedy

Change

"MTEK"

to

"MGTEK".

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"MTEK"

to

"MGTEK".

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"MTEK"

to

"MGTEK".

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4202**

Comment submitted by: **Haixiang**

He

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **215**

Starting Line # **38**

Fig/Table#

Section **7.8.4.1.1**

Grammer.

Suggested Remedy

Delete

"In other words,"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Delete

"In other words,"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Delete

"In other words,"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4203**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	216	Starting Line #	1
---------	------	------------------------	-----------------	-----	-----------------	---

Fig/Table#	Section	7.8.4.2
------------	---------	---------

[Submitted as Technical, Binding but with an Approve vote.]

This section is out of place and a duplication of a previous paragraph.

Suggested Remedy

Delete section 7.8.4.2 and renumber the remaining sections accordingly.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete section 7.8.4.2 and renumber the remaining sections accordingly.

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

Delete section 7.8.4.2 and renumber the remaining sections accordingly.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4204**

Comment submitted by: Li

Rui

Other

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Editorial	216	1		7.8.4.2

Re: Comment #3266 in the 802.16e-05/012r3.
Section 7.8.4 mainly introduces the cryptographic methods for PKMv2. But section 7.8.4.2 mainly introduces the mutual authorization and AK exchange. The content of section 7.8.4.2 is not relevant to cryptographic methods. In addition the content of this section is same as the content of section 7.8.2. So we suggest to remove the section 7.8.4.2.

Suggested Remedy

remove the section 7.8.4.2.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superceded**[See 4203](#)**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**

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4205**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **216** Starting Line # **1** Fig/Table# Section **7.8.4.2**

I object to the implementation of Comment #3260 because the section 7.8.4.2 is duplicate with 7.8.2

Suggested Remedy

Delete the section 7.8.4.2, line 1 - 48, page 216.

Proposed Resolution

Recommendation: **Superceded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4203.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4206**Comment submitted by: **Sungcheol****Chang**

Other

2005/04/28

Comment Type **Editorial, Non-Binding**Starting Page # **216** Starting Line # **54**

Fig/Table#

Section **7.8.4.3**

The reference is wrong. The AES-CBC mode is described in NIST Special Publication 800-38A.

Suggested RemedyChange "NIST Special Publication 800-38C"
to "NIST Special Publication 800-38A"**Proposed Resolution Recommendation: Accepted****Recommendation by**Change "NIST Special Publication 800-38C"
to "NIST Special Publication 800-38A"**Reason for Recommendation****Resolution of Group Decision of Group: Accepted**Change "NIST Special Publication 800-38C"
to "NIST Special Publication 800-38A"**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4207**Comment submitted by: [Sungcheol](#)[Chang](#)

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **216** Starting Line # **56** Fig/Table# Section **7.8.4.3**

The unit of the length of the MAC PDU payload is byte. When the length is not multiple of the cipher block size, the final block size is less than the cipher block size. There is no description to encrypt and describe the final block in the AES-CBC mode when its size is less than the cipher block size (128bits, 16bytes).

Suggested Remedy[Adopt the contribution C802.16e-05/238](#)**Proposed Resolution**Recommendation: **Accepted-Modified**

Recommendation by

[adopt C802.16e-05/238r1](#)**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted-Modified**[adopt C802.16e-05/238r1](#)**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4208**

Comment submitted by: **Seokheon**

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **218** Starting Line # **1** Fig/Table# Section **7.9**

The MBRA is necessary to efficiently update key for the cell-based multicast service, the broadcast service, and even the MBS.

Suggested Remedy

Adopt the contribution C802.16e-05/232.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Vote: 1-3

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4209**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **220** Starting Line # **1**

Fig/Table# Section **7.9.1.1**

[Submitted as Technical, Binding but with an Approve vote.]
GKEK is protected by KEK not MS's AK

Suggested Remedy

Change

"MS's AK."

to

"MS's KEK."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change

"MS's AK."

to

"MS's KEK."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change

"MS's AK."

to

"MS's KEK."

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/D7	Ballot Number:	0001037	Comment Date
Comment #	4210	Comment submitted by:	Haixiang He	Member
Comment	Type Technical, Non-binding	Starting Page #	220	Starting Line # 36
		Fig/Table#		Section 7.9.2
[Submitted as Technical, Binding but with an Approve vote.]				
Since the GKEK can be used for a longer time and be used to protect multiple GTEK updates, so the lifetime and sequence number of GKEK should not be identical to ones of GTEK.				

Suggested Remedy

[Delete](#)

"The lifetime and sequence number of GKEK are identical to ones of GTEK."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[Delete](#)

"The lifetime and sequence number of GKEK are identical to ones of GTEK."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**[Delete](#)

"The lifetime and sequence number of GKEK are identical to ones of GTEK."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4211**

Comment submitted by: Haixiang

He

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **220** Starting Line # **63**

Fig/Table# Section **7.9.4**

[Submitted as Technical, Binding but with an Approve vote.]

The OMAC_KEY_GD and HMAC_KEY_GD should be updated when a new GKEK is used.

Suggested Remedy

Add at the end of the paragraph

"The OMAC_KEY_GD and HMAC_KEY_GD should be recomputed when a new GKEK is used."

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Add at the end of the paragraph

"The OMAC_KEY_GD and HMAC_KEY_GD should be recomputed when a new GKEK is used."

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Add at the end of the paragraph

"The OMAC_KEY_GD and HMAC_KEY_GD should be recomputed when a new GKEK is used."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4212**

Comment submitted by: **Rainer**

Ullmann

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **231** Starting Line # **3**

Fig/Table# Section **8.3.6.3.1**

Wrong section number

Suggested Remedy

Replace
8.3.6.3.1 UL-MAP dummy IE format
with
8.3.6.3.8 UL-MAP dummy IE format

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Replace
8.3.6.3.1 UL-MAP dummy IE format
with
8.3.6.3.8 UL-MAP dummy IE format

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Replace
8.3.6.3.1 UL-MAP dummy IE format
with
8.3.6.3.8 UL-MAP dummy IE format

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4213**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **232** Starting Line # **24** Fig/Table# Section **8.4.4.3**

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

Comment rejected at the request of the commenter.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4214**

Comment submitted by: **Peiyong**

Zhu

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **240**

Starting Line # **63**

Fig/Table#

Section **8.4.3.1**

The sentence for the slot definition is valid for both FUSC and optional FUSC, therefore, no need to specify the referece section (8.4.6.1.2.2.2) which is specific to DL FUSC.

Suggested Remedy

Change the text in line 63 to the following

.... (defined in 8.4.6.1.2.2 and ~~8.4.6.1.2.2.2~~), one slot....

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change the text in line 63 to the following

.... (defined in 8.4.6.1.2.2 and ~~8.4.6.1.2.2.2~~), one slot....

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change the text in line 63 to the following

.... (defined in 8.4.6.1.2.2 and ~~8.4.6.1.2.2.2~~), one slot....

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4215**

Comment submitted by: Peiyong

Zhu

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **241** Starting Line # Fig/Table# **219** Section **8.4.4.2**

1. Figure 219 should be updated to include TUSC1 and TUSC2 zones
2. On line 29, "The maximum number of downlink zone is 8 " is not specific, should be changed to "The maximum number of downlink zone is 8 in one downlink subframe"

Suggested Remedy

1. Add a box in the diagram to indicate TUSC zone
2. Change the sentence in line 29 to

The maximum number of downlink zone is 8 in one downlink subframe.

Proposed Resolution Recommendation: Accepted

Recommendation by

1. Add a box in the diagram to indicate TUSC zone
2. Change the sentence in line 29 to

The maximum number of downlink zone is 8 in one downlink subframe.

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

1. Add a box in the diagram to indicate TUSC zone
2. Change the sentence in line 29 to

The maximum number of downlink zone is 8 in one downlink subframe.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4216**

Comment submitted by: Peiying

Zhu

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	241	Starting Line #	241	Fig/Table#	Section	8.4.4.2
---------	------	------------------------	-----------------	-----	-----------------	-----	------------	---------	---------

Is it possible to use some subchannels for optional FUSC? If not, then we should change the sentence "optional FUSC with all subchannels" to "optional FUSC".

Suggested Remedy

Change the following text

The OFDMA frame may include multiple zones (such as PUSC, FUSC, PUSC with all subchannels, optional FUSC, AMC, and optional FUSC ~~with all subchannels~~, TUSC1, and TUSC2), the transition

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

Change the following text

The OFDMA frame may include multiple zones (such as PUSC, FUSC, PUSC with all subchannels, optional FUSC, AMC, and ~~optional FUSC with all subchannels~~, TUSC1, and TUSC2), the transition

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change the following text

The OFDMA frame may include multiple zones (such as PUSC, FUSC, PUSC with all subchannels, optional FUSC, AMC, and ~~optional FUSC with all subchannels~~, TUSC1, and TUSC2), the transition

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4217**Comment submitted by: **Peiyong****Zhu**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **244** Starting Line # **49**Fig/Table# Section **8.4.4.4**

Why the repetition coding of 4 is changed to 2? It seems to me that 4 is correct number.

Suggested Remedy

These slots contain 48 bits modulated by QPSK with coding rate 1/2 and repetition coding of ~~2~~-4.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

These slots contain 48 bits modulated by QPSK with coding rate 1/2 and repetition coding of ~~2~~-4.

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

These slots contain 48 bits modulated by QPSK with coding rate 1/2 and repetition coding of ~~2~~-4.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4218**

Comment submitted by: **Dave**

Pechner

Other

2005/04/28

Comment Type **Technical, non-binding** Starting Page # **244** Starting Line # **62**

Fig/Table# Section **8.4.4.5**

Incorrect slot defintion for adjacent subcarrier permutation.

Suggested Remedy

Delete the last sentence on page 244

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Delete the last sentence on page 244

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Delete the last sentence on page 244

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4219**Comment submitted by: **Peiyong****Zhu**

Member

2005/04/28

Comment Type **Editorial** Starting Page # **245** Starting Line # **14**

Fig/Table# Section **8.4.4.5**

typo

Suggested Remedy

The BS shall not allocate more ~~then~~ **than** three ranging allocation IE (UIUC 12) per frame,

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

The BS shall not allocate more ~~then~~ **than** three ranging allocation IE (UIUC 12) per frame,

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

The BS shall not allocate more ~~then~~ **than** three ranging allocation IE (UIUC 12) per frame,

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4220**Comment submitted by: **Peiyong****Zhu**

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	245	Starting Line #	28	Fig/Table#	Section	8.4.4.6.1
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	-----------

1. The sentence is very confusing:

In the AMC permutation, the 4th and (N-4)th subchannels of the total N subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone for all permutations (FUSC/PUSC and AMC).

Which permutation does it refer to, AMC permutation or all permutation?

Suggested Remedy

[Clarify the sentence](#)

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See comment 4459 \(from joint session\)](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4221**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	246	Starting Line #	Fig/Table#	Section	8.4.5.3
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	---------

In OFDMA, the DL subframe is comprised of multiple zones, each signaled using a zone-switch IE. Currently, the text does not address the possibility to specify multiple zone switch IEs that define zones that overlap, or partially overlap, in time.

Allowing overlapping zones is an attractive scheme for certain deployments utilizing SDMA, for the following reasons:

- 1) Such a scheme does not require special MSS demodulation capabilities or multiple antennas at the MSS; the SS is only required to demodulate the one zone in which its burst is located, and spatial processing at the BS ensures separation.
- 2) Each of the overlapping zones uses different zone IDcell values, leading to averaging of interference caused from imperfect spatial separation between transmission of overlapping zones. Interference averaging is achieved both through permutation and through different pilot scrambling (subcarrier randomization) sequences.

Additional restrictions are put on the definition to simplify MSS implementation:

- Zones shall not partially overlap.
- At most three zones may overlap another zone.
- All DL-MAP IEs describing bursts in overlapping zones shall include a CID.
- In any given frame, the BS shall not allocate bursts for any specific SS in more than one of the overlapping zones. This includes both unicasts and multicasts.

Suggested Remedy

Add new section 8.4.5.3.xx

8.4.5.3.xx Enhanced STC/Zone switch IE format for DL

The Enhanced STC/zone switch IE may be used to define zones that overlap an existing downlink zone defined using STC/zone switch IE (see section 8.4.5.3.4). Enhanced STC/Zone switch IEs shall be specified in the DL-MAP immediately following the STC/zone switch IE that refers to the zone over which they overlap.

Enhanced DL zones may overlap a DL zone under the following restrictions:

- At most three enhanced zones may be defined to overlap any single DL zone.
- All DL-MAP IEs describing bursts in overlapping zones shall include a CID.
- Zones shall not partially overlap.
- In any given frame, the BS shall not allocate bursts for any specific SS in more than one of the overlapping zones. This includes both unicast and multicast allocations.

The format of the Enhanced STC/Zone switch IE is the same as the format of the STC/zone switch IE defined in table 279, with the first two fields replaced by the following fields:

Extended-2 DIUC
Length

4
8

Enhanced STC Zone Switch = 0x0B

Modify the table in section 11.8.3.7.5, page 532, as follows:

...
...
Bit #4: TUSC2 support
Bit #5: Support for Enhanced DL zones
Bit #~~5~~ 6-7: Reserved, shall be set to zero
...
...

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

The comment is only applicable to the AAS case, which is already addressed by another comment (see 4226).

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4222**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Editorial** Starting Page # **246** Starting Line # **42** Fig/Table# **275** Section **8.4.5.3**
 [Editorial]

In the last sponsor ballot recirc the comment #3296 which was accepted was improperly implemented by the editor.

Suggested Remedy

1. Make the following text change in line 42 page 246

" Extended DIUC 2 dependent IE

} Else if (DIUC == 15) {"

2. IN section 8.4.5.4 table 287 page 289 line 61 change text to

"CDMA_Allocation_IE() 32

if (UIUC == 11) {

Extended UIUC 2 dependent IE

} Else if (UIUC == 15) {"

Proposed Resolution Recommendation: Accepted

Recommendation by

1. Make the following text change in line 42 page 246

" Extended DIUC 2 dependent IE

} Else if (DIUC == 15) {"

2. IN section 8.4.5.4 table 287 page 289 line 61 change text to

"CDMA_Allocation_IE() 32

if (UIUC == 11) {

Extended UIUC 2 dependent IE

} Else if (UIUC == 15) {"

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

1. Make the following text change in line 42 page 246

" Extended DIUC 2 dependent IE

} Else if (DIUC == 15) {"

2. IN section 8.4.5.4 table 287 page 289 line 61 change text to

```
"CDMA_Allocation_IE()          32  
if (UIUC == 11) {  
    Extended UIUC 2 dependent IE  
} Else if (UIUC == 15) {"
```

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4223**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **247** Starting Line # Fig/Table# **278** Section **8.4.5.3.3**

AAS mode:
SDMA in AAS mode with pilot separation between users is defined for AMC and TUSC permutations, but is not defined for the PUSC permutation. In PUSC, pilots are not part of the burst but rather part of a major group; therefore the number of SDMA layers, which controls the pilot patterns used, should be configured in the AAS IE.

Suggested Remedy

[Modify the downlink AAS IE, table 278, as follows:]

...

...

```

    Num SDMA layers      2      Number of SDMA layers minus 1. Applicable only to PUSC permutation, ignored otherwise.
    Reserved             3 5
}
}

```

[Add the following text after table 278:]

Num SDMA layers

This field specifies the number of SDMA layers (or 'users') defined in the AAS zone. SDMA layer n uses the pilot pattern defined for antenna n in section 8.4.8. Allocation of bursts to layers is performed either using HARQ DL MAP and Dedicated DL control IE, or using AAS_SDMA_DL_IE. Only applicable to PUSC permutation.

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

The comment is only applicable to the AAS case, which is already addressed by another comment (see 4226).

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

Editor's Actions |) [none needed](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4224L**

Comment submitted by: Roland

Muenzner

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **248** Starting Line # **14**Fig/Table# **278** Section **8.4.5.3.3**

AAS_DL_IE() has been changed in Cor1 D2, Table 278 has to be adapted in 16e

Suggested Remedy

modify text at line14:

Length	4 bits	Length = 0x03 or 0x04
--------	--------	-----------------------

insert text at line25:

DL_PermBase	6 bits	
-------------	--------	--

modify text after line26:

Preamble indication Downlink_preamble_config	2 bits	0b00 - No preamble 0b01 - Preamble used 0b10-0b11 - Reserved 0b00 - 0 symbols 0b01 - 1 symbols 0b10 - 2 symbols 0b11 - 3 symbols
First bin index	6 bits	When Permutation=0b10, this indicates the index of the first band allocated to this AMC segment
Last bin index	6 bits	When Permutation=0b10, this indicates the index of the last band allocated to this AMC segment
reserved	6 bits	Shall be set to zero
If (length = 0x04) {	--	--
Other permutation select	2 bits	0b00 = AMC 0b01 = TUSC1 0b10 = TUSC2 0b11 = Reserved Applicable when Permutation = 0b11
Preamble type	1 bit	0 - Frequency shifted preamble is used in this AAS zone 1 - Time shifted preamble is used in this AAS zone
Reserved	5 bit	--
}	--	--
}	--	--

Proposed Resolution

Recommendation: [Withdrawn](#)

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4225**Comment submitted by: **Peiyong****Zhu**

Member

2005/04/28

Comment Type **Editorial** Starting Page # **248** Starting Line # **38**Fig/Table# **278** Section **8.4.5.3.3**

If (length = 0x03) is not compatible with the general style, should be

If (length == 0x03)

There are other places with similar mistakes, for examples, in Table 279 on page 250, line 20

if length = 0x03 { should be if (length == 0x03) {

Table 285 line 22

If(Macro diversity enhanced = 1){

line 32

if (DIUC change indication = 1) {

if (SLC 3_indication = 0) {

Suggested Remedy

Change all If (a=b) to if (a==b)

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Change all If (a=b) to if (a==b)

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

Change all If (a=b) to if (a==b)

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

I assumed you meant for this table only. A global change should be explicitly stated. If this is to be a global change, it needs to be examined very carefully; there are many cases where "a=b" is appropriate.

Editor's Questions and Concerns

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4226**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	249	Starting Line #	Fig/Table#	Section	8.4.5.3.4
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	-----------

SDMA operation using 'SDMA Control Info':

The separation of pilots to SDMA layers is defined per rectangular allocation (i.e. per HARQ MAP DL IE). This means that an MSS may receive one IE with 2 layers followed by another IE (in the same zone) with 1 layer. For the first IE, the pilots are SDMA pilots with pattern according to STC pilot mapping; for the second IE, the pilot pattern is the regular non-STC one. This leads to several problems:

- 1) With PUSC permutation: In PUSC the pilots are not specific to the rectangular allocation, but rather specific to a major group. Allowing two IEs to describe allocations in the same major group will break consistency.
- 2) AMC: pilot pattern for SDMA follows the STC definition and spans over 6 symbols; however an AMC slot may span only 3 symbol in time. If each of the above IEs describes a 3 symbol rectangular allocation and the two are consecutive in time - again pilot definition consistency is broken.
- 3) From MSS implementation point of view, it is important to know the pilot patterns before hand, i.e. from zone switch IE, and not from the burst IEs themselves. This is already the case in regular STC mode.

The proposed solution is as follows.

The number of layers should be defined in the zone switch IE and kept constant throughout the zone. This can be achieved by adding a new bit to the zone switch IE that turns on 'SDMA mode'. The number of layers can be obtained directly from the field that specifies the # of antennas. Note that this does n-o-t imply that all layers must be transmitted in all rectangular allocations.

Suggested Remedy

1. Modify table 279 as follows:

if length = 0x03 {			
Dedicated Pilots	1		0 = Pilot symbols are broadcast 1 = Pilot symbols are dedicated. An MS should use only pilots specific to its burst for channel estimation
SDMA mode		1	
Syntax padding	Variable		Pad to byte boundary
}			

2. Add the following text to page 251, line 7

SDMA mode

If set to '1', the zone operates in SDMA mode and the 'STC' field is interpreted as the number of SDMA layers rather than the number of antennas. The matrix indicator field is ignored. SDMA layer n uses the pilot pattern defined for antenna n in section 8.4.8. Allocation of bursts to layers is performed using HARQ DL MAP IE and Dedicated DL control IE. This mode shall only be used with the 'Dedicated Pilots' bit set to '1'.

3. Remove the following lines from table 285j:

```


If( SDMA Control Info Bit == 1){
    Num SDMA layers          2 bits-          Number of SDMA layers minus 1
}


```

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

[Add the following paragraph to section 8.4.5.3.21, page 269, line 53:]

For allocations specified in an AAS zone with PUSC permutation, the 'Num SDMA layers' value shall be identical in all Dedicated_DL_control_IEs that describe allocations in the same major group.

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

[Add the following paragraph to section 8.4.5.3.21, page 269, line 53:]

For allocations specified in an AAS zone with PUSC permutation, the 'Num SDMA layers' value shall be identical in all Dedicated_DL_control_IEs that describe allocations in the same major group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4227**

Comment submitted by: Peiyong

Zhu

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	249	Starting Line #	1	Fig/Table#	Section	8.4.5.3.4
---------	------	-----------	-----------------	-----	-----------------	---	------------	---------	-----------

1. The following sentence is not very clear.

In the DL-MAP, a BS may transmit DIUC=15 with the STCTD_ZONE_IE() to indicate that the subsequent allocations shall use a specific permutation, or be STCtransmit diversity encoded. The downlink frame shall start in PUSC mode with IDcell=0 and no transmit diversity. Allocations subsequent to this IE shall use the permutation and transmit diversity mode it instructs.

2. In table 279, on line 38, column Syntax for matrix indicator, there is no need to define values in this column, they are specified in Notes column. In addition, the definition is incompatible with the one defined in Notes column. Remove these definitions.

3. In line 30, STC mode explanation is not very clear , add some editorial change to make it clear.

Suggested Remedy

1.

In the DL-MAP, a BS may transmit ~~DIUC=15 with the~~ STCTD_ZONE_IE() to indicate that the subsequent allocations shall use a specific permutation, ~~and/or be STCtransmit diversity encoded~~ **use a specific transmit diversity mode**. The downlink frame shall start in PUSC mode with IDcell=0 and no transmit diversity. Allocations subsequent to this IE shall use the permutation and transmit diversity mode it instructs.

2. In table 279, on line 38,

Matrix indicator

~~Antenna STC/FHDC matrix (see 8.4.8)~~

~~0b00 = Matrix A~~

~~0b01 = Matrix B~~

~~0b10 = Matrix C (applicable to 4 antennas only)~~

~~0b11 = Reserved~~

3. In Table 279 line 30, change the first column

~~STCTransmit Diversity mode~~

On page 250, line 45, change the text

~~STC mode Transmit Diversity~~

~~Indicates the STCTransmit Diversity mode that shall be used by the transmitter for allocations following this IE (see 8.4.8). All allocations without STCTransmit Diversity for STC mode 0b00 shall be transmitted only from one antenna (antenna 0). All allocations with STCTransmit Diversity the BS shall transmit from both its antennas.~~

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

1.

In the DL-MAP, a BS may transmit ~~DIUC=15 with the~~ STCTD_ZONE_IE() to indicate that the subsequent allocations shall use a specific permutation, ~~and/or be STC transmit diversity encoded~~ use a specific transmit diversity mode. The downlink frame shall start in PUSC mode with IDcell=0 and no transmit diversity. Allocations subsequent to this IE shall use the permutation and transmit diversity mode it instructs.

2. In table 279, on line 38,

Matrix indicator

~~Antenna STC/FHDC matrix (see 8.4.8)~~

~~0b00 = Matrix A~~

~~0b01 = Matrix B~~

~~0b10 = Matrix C (applicable to 4 antennas only)~~

0b11 = Reserved

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

1.

In the DL-MAP, a BS may transmit ~~DIUC=15 with the~~ STCTD_ZONE_IE() to indicate that the subsequent allocations shall use a specific permutation, ~~and/or be STC transmit diversity encoded~~ use a specific transmit diversity mode. The downlink frame shall start in PUSC mode with IDcell=0 and no transmit diversity. Allocations subsequent to this IE shall use the permutation and transmit diversity mode it instructs.

2. In table 279, on line 38,

Matrix indicator

~~Antenna STC/FHDC matrix (see 8.4.8)~~

~~0b00 = Matrix A~~

~~0b01 = Matrix B~~

~~0b10 = Matrix C (applicable to 4 antennas only)~~

0b11 = Reserved

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4228L**

Comment submitted by: Roland

Muenzner

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **249** Starting Line # **21** Fig/Table# **279** Section **8.4.5.3.4**
 OFDMA downlink STC_DL_ZONE IE format was modified in Cor1 D2 and has to be adapted for 16e

Suggested Remedy

add text at line 20:

```
-----
length          |    4          | Length = 0x03 or 0x04 or 0x05
-----
```

insert at line 21:

```
-----
OFDMA symbol offset |    8          | Denotes the start of the zone (counting from
                   |               | the frame preamble and starting from 0)
-----
```

modify at page 250 according to:

```
-----
IDcell DL_PermBase | 6 5          |
-----
```

```
PRBS_ID          |    2          | Refer to 8.4.9.4.1
-----
```

```
AMC type         |    2          | Indicates the AMC type in case permutation
                   |               | type = 0b11, otherwise shall be set to 0.
                   |               |
                   |               | AMC type (NxM = N bins by M symbols):
                   |               | 0b00 - 1x6
                   |               | 0b01 - 2x3
                   |               | 0b10 - 3x2
                   |               | 0b11 - reserved
-----
```

```
reserved       |    8          | Shall be set to zero
-----
```

```
-----
if length = 0x04 or
length = 0x05 { |    --         | --
-----
```

```
Midamble presence |    1          | 0 = not present
                   |               | 1 = present at the first symbol in STC zone
-----
```

```
Midamble boosting |    1          | 0 = no boost
                   |               | 1 = Boosting (3 dB)
-----
```

```
2/3 antennas select |    1          | 0 = STC using 2 antennas
                   |               | 1 = STC using 3 antennas
                   |               | Selects 2/3 antennas when STC = 0b01
-----
```

```
reserved         |    5          | Shall be set to zero
-----
```

```
if length = 0x0305 { |    --         | --
-----
```

```
Dedicated Pilots |    1          | 0 = Pilot symbols are broadcast
                   |               | 1 = Pilot symbols are dedicated. An MS should use only
                   |               | pilots specific to its burst for channel estimation
-----
```

```
Syntax padding   | Variable     | Pad to byte boundary
-----
```

```
-----
}                |    --         | --
-----
```

} | -- | --

Proposed Resolution **Recommendation: [Superceded](#)** **Recommendation by**
[See comment 4478](#)

Reason for Recommendation

Resolution of Group **Decision of Group: [Superceded](#)**
[See comment 4478](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4229**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	250	Starting Line #	60	Fig/Table#	Section	8.4.5.3.4
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	-----------

In 'dedicated pilots mode' with PUSC permutation, pilots are beamformed together with a major group rather than a single burst. The text should clarify that beamforming of a major group is consistent throughout the zone so that the SS can utilize pilots over time for improving channel estimation performance.

Suggested Remedy

Modify the text on page 250, lines 60-61:

For the PUSC permutation, the pilot symbols belonging to a major group must be precoded / beamformed along with all of the data allocations made within the major group and in the same way throughout the zone duration.

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

The added restriction is not necessary therefore imposes unnecessary constraints on a scheduler.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4230**

Comment submitted by: Peiyong

Zhu

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **250** Starting Line # **63** Fig/Table# Section **8.4.5.3.4**

It is not clear to me what does burst boundaries mean? Each burst consists of one or more logical channels, there is no physical boundaries which identify the belonging of pilots to subchannel in FUSC mode unless all subchannels in one OFDM symbols are allocated to a single burst.

Suggested Remedy

Clarify

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Change text as indicated:

"For the FUSC or Optional FUSC permutation, all of the pilot symbols and data subcarriers within an OFDMA symbol shall ~~are assumed to be precoded / beamformed in the same way as the data allocations.~~"

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

Change text as indicated:

"For the FUSC or Optional FUSC permutation, all of the pilot symbols and data subcarriers within an OFDMA symbol shall ~~are assumed to be precoded / beamformed in the same way as the data allocations.~~"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4231L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **251** Starting Line # **7** Fig/Table# Section **8.4.5.3.4**
 clarification for the pilot pattern of beamformed spatial channel is needed.

Suggested Remedy

[added the following sentences in line 7 on page 251 (within the description for Dedicated Pilots)]

When the data allocations are transmitted over m beamformed spatial channels (i.e., spatial rate m) and the Dedicated Pilots bit is set to 1, the pattern for dedicated pilots of m beamformed spatial channels shall be identical to the pilot pattern for m transmit antennas in Section 8.4.8.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4232L**

Comment submitted by: Roland

Muenzner

Other

2005/04/28

Comment	Type	Editorial	Starting Page #	254	Starting Line #	31	Fig/Table#	Section	8.4.5.3.10
---------	------	-----------	-----------------	-----	-----------------	----	------------	---------	------------

Chapter 8.4.5.3.10 is called 'H-ARQ MAP Pointer IE' but containing also information for Sub-MAP pointer IE
The wording of chapter header misses information.

Suggested Remedy

rename to
8.4.5.3.10 H-ARQ and Sub-MAP Pointer IE

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

rename to
8.4.5.3.10 H-ARQ and Sub-MAP Pointer IE

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

rename to
8.4.5.3.10 H-ARQ and Sub-MAP Pointer 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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4233**Comment submitted by: **Panyuh****Joo**

Member

2005/04/28

Comment Type **Editorial** Starting Page # **254** Starting Line # **51** Fig/Table# **285** Section

There is some editrial errors in Table 285 H-ARQ MAP or Sub-MAP Porinter IE format.

Suggested Remedy

Fix the errors in Talbe 285 as follows

In Line 51, Page 254 ::

Length	4	Length = 0x02
--------	---	--------------------------

In Line 11, Page 255 ::

MAP Version	2	0b00 - HARQ MAPv1 0b01 - Sub-MAP 0b 10 02 - Sub-MAP with included 0b10 0b11 - reserved
-------------	---	--

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Fix the errors in Talbe 285 as follows

In Line 51, Page 254 ::

Length	4	Length = 0x02
--------	---	--------------------------

In Line 11, Page 255 ::

MAP Version	2	0b00 - HARQ MAPv1 0b01 - Sub-MAP 0b 10 02 - Sub-MAP with included 0b10 0b11 - reserved
-------------	---	--

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Fix the errors in Talbe 285 as follows

In Line 51, Page 254 ::

Length	4	Length = 0x02
--------	---	--------------------------

In Line 11, Page 255 ::

MAP Version	2	0b00 - HARQ MAPv1 0b01 - Sub-MAP 0b 1002 - Sub-MAP with included 0b10 -0b11 - reserved
-------------	---	---

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4234**Comment submitted by: **Dave****Pechner****Other****2005/04/28****Comment** **Type** **Technical, non-binding** **Starting Page #** **255** **Starting Line #** **58** **Fig/Table#** **Section** **8.4.5.3.11**

SDMA pilots have been defined in the specification, however, there is no mechanism to use these pilots with regular maps or submaps.

Suggested Remedy

Incorporate changes defined in C80216e-05/215

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

Incorporate changes defined in C80216e-05/215

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

Incorporate changes defined in C80216e-05/215

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4235**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **256** Starting Line # **1** Fig/Table# **285a** Section **8.4.5.3.12**

MBS_MAP_IE PRBS Issue

Session 36 clarifies the use of Multi MAP MBS, for macro diversity . in this case the MBS_MAP must be transmitted with same RF signal from all BS transmitting it. For the common transmission the PRBS pattern should be common for all transmitters. Currently the 2 PRBS_id bits are absent from the MBS_MAP_IE.

Suggested Remedy

Adopt contribution C80216e-05/202

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

Resolution is an empty contribution.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4236**

Comment submitted by: **Aditya**

Agrawal

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	261			8.4.9.2.3.1

I object to the resolution of comment 1593 because the performance of the CTC can be greatly improved.

Suggested Remedy

Adopt an expanded block set for the CTC code as described in the contribution C80216e-05_159r3.doc.

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Adopt Contribution C80216e-05_159r3.

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 10-18

Reason: System implications are unclear, such as how much gain it gives at a system level versus complexity.

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions |) none needed

Editor's Questions and Concerns

Editor's Action Items

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4237**

Comment submitted by: **Mo-Han**

Fong

Member

2005/04/28

Comment Type **Technical, Satisfied (was** Starting Page # **265** Starting Line # **53** Fig/Table# **285** Section **8.4.5.3**
Contribution IEEE C802.16e-05/156r2 was adopted in Atlanta meeting, it requires further clean up.

Suggested Remedy

Adopt contribution C80216e-05_259.doc

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Commenter asked to have the comment rejected.

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions **) none needed**

Editor's Questions and Concerns

Editor's Action Items

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4238**

Comment submitted by: **Wen**

Tong

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **265**

Starting Line # **53**

Fig/Table# **285**

Section **8.4.5.3**

Contribution IEEE C802.16e-05/156r2 was adopted in Atlanta meeting, it requires further clean up.

Suggested Remedy

[Adopt contribution C80216e-05_259.doc](#)

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

[Committer asked to have the comment rejected.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4239**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **265** Starting Line # **63** Fig/Table# Section **8.4.5.3.19**

It is not defined when no UL noise and interference level IE is present in the current frame. It is reasonable to use the latest UL NI level for the case.

Suggested Remedy

[Add the following text at the end of the first paragraph of 8.4.5.3.19]

The UL interference and noise level that is indicated in the latest IE shall be used if necessary. MS shall not transmit any UL burst in openloop power control mode until it receives any UL noise and interference level IE.

Proposed Resolution Recommendation: Accepted**Recommendation by**

[Add the following text at the end of the first paragraph of 8.4.5.3.19]

The UL interference and noise level that is indicated in the latest IE shall be used if necessary. MS shall not transmit any UL burst in openloop power control mode until it receives any UL noise and interference level IE.

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

[Add the following text at the end of the first paragraph of 8.4.5.3.19]

The UL interference and noise level that is indicated in the latest IE shall be used if necessary. MS shall not transmit any UL burst in openloop power control mode until it receives any UL noise and interference level 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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4240**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **266** Starting Line # **17** Fig/Table# **Tabl** Section **8.4.5.3.19**

I object to the resolution of the comment# 3470 because it chages the original intention of the UL noise and interference level IE usage.

Originally, the usage bitmap bit #0 indicates the Noise and interfececne level for ACK/CQI/Periodic ranging region. It is reasonable to assuem that there can be change to allocate the three region within a same zone.

However, the current text enforces to indicate the ACK/CQI and Periodic ranging region separately.

Rather, it is reasonable to keep the original intention and enable the periodic region NI level field overrides the NI level for the region if necessary.

Suggested Remedy

[Change the notes column for bitmap row as follows in table 285h in section 8.4.5.3.19]

LSB indicates the there exists a 'CQI/ACK/Periodic Ranging region NI' field (1). Otherwise, it is 0.

[Add the following text at the end of the last sentence in notes column of Periodic ranging region NI rwo in table 285h in 8.4.5.3.19 pp 257 line 23]

Estimated average power level (dBm) per a subcarrier in Periodic ranging region. The interference and noise level shall be estimated before the beam forming. When this field is present, the value for the periodic ranging region indicated in CQI/ACK/Preodic Ranging region NI shall be ignored. Instead, the value of this field shall be used for NI level of the periodic ranging region.

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

[Change the notes column for bitmap row as follows in table 285h in section 8.4.5.3.19]

LSB indicates the there exists a 'CQI/ACK/Periodic Ranging region NI' field (1). Otherwise, it is 0.

[Add the following text at the end of the last sentence in notes column of Periodic ranging region NI rwo in table 285h in 8.4.5.3.19 pp 257 line 23]

Estimated average power level (dBm) per a subcarrier in Periodic ranging region. The interference and noise level shall be estimated before the beam forming. When this field is present, the value for the periodic ranging region indicated in CQI/ACK/Preodic Ranging region NI shall be ignored. Instead, the value of this field shall be used for NI level of the periodic ranging region.

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

[Change the notes column for bitmap row as follows in table 285h in section 8.4.5.3.19]

LSB indicates the there exists a 'CQI/ACK/Periodic Ranging region NI' field (1). Otherwise, it is 0.

[Add the following text at the end of the last sentence in notes column of Periodic ranging region NI rwo in table 285h in 8.4.5.3.19 pp 257 line 23]

Estimated average power level (dBm) per a subcarrier in Periodic ranging region. The interference and noise level shall be estimated before the beam forming. When this field is present, the value for the periodic ranging region indicated in CQI/ACK/Preodic Ranging region NI shall be ignored. Instead, the value of this field shall be used for NI level of the periodic ranging region.

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

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4241**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	268	Starting Line #	Fig/Table#	Section	8.4.5.3.20
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	------------

Fast Feedback Polling IE can be used to allocate a UL bandwidth for Fast feedback header periodically. It is not clear where does the UL allocation start when it's allocating for a future frame.

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/222r0 or the latest version.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt the resolution text in contribution IEEE C802.16e-05/222r1.

In the contribution, The table labeled 302s -- Feedback polling IE format has the following change:

Replace "A value of value of zero0/1 indicates the subsequent frame."

with:

"The start value of frame offset shall be 1."

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

Adopt the resolution text in contribution IEEE C802.16e-05/222r1.

In the contribution, The table labeled 302s -- Feedback polling IE format has the following change:

Replace "A value of value of zero0/1 indicates the subsequent frame."

with:

"The start value of frame offset shall be 1."

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4242**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type Technical, Binding	Starting Page # 268	Starting Line #	Fig/Table#	Section 8.4.5.3.20
---------	--------------------------------	----------------------------	-----------------	------------	---------------------------

1. The start offset of the persistent feedback allocation specified through Feedback Polling IE is undefined.
2. In which UL zone is it transmitted?
3. The duration field does not really need 10 bits, which allows up to 1024 slots, or 6KB worth of feedback info at rate QPSK 1/2. 5 bits should suffice.

Suggested Remedy[Correct the feedback Polling IE.](#)**Proposed Resolution****Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: [Superseded](#)**[See comment 4241.](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4243**Comment submitted by: **Mo-Han****Fong**

Member

2005/04/28

Comment Type **Technical, Satisfied (was** Starting Page # **268** Starting Line # **3** Fig/Table# **285i** Section **8.4.5.3.20**

I object to the text incorporation of comment #3297 because the Feedback Polling IE is still belong to wrong section (DL-MAP IE). It should belong to the UL-MAP IE section. In addition, some correction on the Feedback Polling IE is required.

Suggested Remedy

Adopted the proposed text in contribution IEEE C802.16e-05/252.

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

[See comment 4241.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4244**

Comment submitted by: Yerang

Hur

Other

2005/04/28

Comment Type **Editorial** Starting Page # **268** Starting Line # **3** Fig/Table# **Tabl** Section **8.4.5.3.20**
 Feedback polling IE contains information on dedicated UL resource, so it is a UL-MAP IE and it should be defined in 8.4.5.4 not in 8.4.5.3.

Suggested Remedy

1. [Add a new section 8.4.5.4.29, after Table 302r, page 376 and copy the contents of section 8.4.5.3.20 Feedback polling IE to 8.4.5.4.29.]
2. [Change Table name from 285i to 302s.]
3. [Delete section 8.4.5.3.20 Feedback polling IE]

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superceded******See comment 4241.****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**

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4245**

Comment submitted by: **Peiyong**

Zhu

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **268** Starting Line # **20**

Fig/Table# **285i** Section **8.4.5.3.20**

Extended UIUC number is missing

Suggested Remedy

Assign a unused number

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See comment 4241.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4246**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **269** Starting Line # **20** Fig/Table# **285j** Section **8.4.5.3.21**

The contribution 115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 115r3 was not fully reflected on IEEE802.16e/D7.

'Dedicated DL control IE' in 115r3 was not fully reflected.

Suggested Remedy

Incorporate the modification of "Table 285j Dedicated DL control IE" of 115r3 into IEEE802.16e/D7.

Table 285j -- Dedicated DL control IE format

Syntax	Size(bits)	Notes
Dedicated DL Control IE {		
...
Num SDMA layers	2	Number of SDMA layers minus 1 This value plus one indicates the total number of SDMA layers associated with the HARQ DL MAP IE
}		
Padding bits	variable	
}		

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Incorporate the modification of "Table 285j Dedicated DL control IE" of 115r3 into IEEE802.16e/D7.

Table 285j -- Dedicated DL control IE

format

Syntax | Size(bits) | Notes

Dedicated DL Control IE {

...	...
Num SDMA layers minus 1	2 Number of SDMA layers
<u>value plus one indicates the total number of layers associated with the HARQ DL MAP IE</u>	
}	
Padding bits	variable
}	

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Incorporate the modification of "Table 285j Dedicated DL control IE" of 115r3 into IEEE802.16e/D7.

Table 285j -- Dedicated DL control IE

format

Syntax

Dedicated DL Control IE {

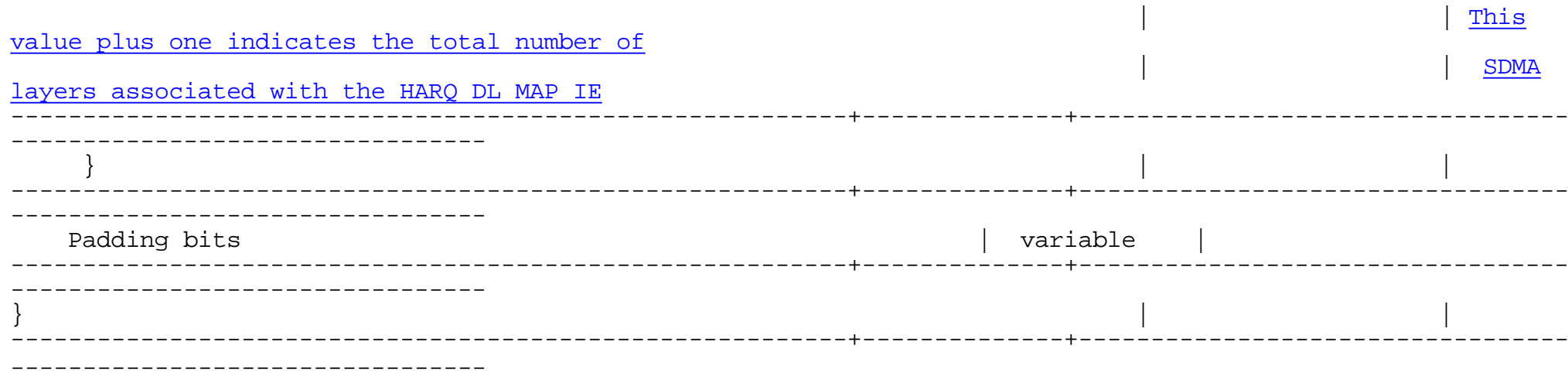
...

Num SDMA layers
~~minus 1~~

2

~~Number of SDMA layers~~

Size(bits) | Notes



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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4247**Comment submitted by: **Panyuh****Joo**

Member

2005/04/28

Comment Type **Editorial** Starting Page # **271** Starting Line # **1**Fig/Table# **209** Section **8.4.5.3.21.1****Editorial Change.**

Figure 209 is located in wrong position.
It is located between table 285k and explanation of its parameters.

Suggested Remedy**Move Figure 209 to Line 43, Page 271****Proposed Resolution Recommendation: Accepted****Recommendation by****Move Figure 209 to Line 43, Page 271****Reason for Recommendation****Resolution of Group****Decision of Group: Accepted****Move Figure 209 to Line 43, Page 271****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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4248**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **273** Starting Line # **30** Fig/Table# **285** Section **8.4.5.3.22**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

 Table 285m HARQ DL MAP IE format is not completely reflected

Suggested Remedy

Reflect the following change on Table 285m in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285m -- HARQ DL MAP IE format

Syntax	Size(bits)	Notes
HARQ DL MAP IE {		
Extended-2 DIUC	4	HARQ_DL_MAP_IE() = 0x07
Length	8	Length in bytes
RCID_Type	2	0b00 = Normal CID 0b01 = RCID11 0b10 = RCID7 0b11 = RCID3
Reserved	2	
While (data remains) {		
Region_ID use indicator	1	0: not use Region_ID 1: use Region_ID
If (Region_ID use indicator == 0) {		
OFDMA symbol offset	8	Offset from the start symbol of DL sub-frame
Subchannel offset	7	
Boosting	7	Refer to Table 273.
Number of OFDMA symbols	7	
Number of subchannels	3 7	

<u>Reserved</u>	3	
} else {		
Downlink allocation		

Proposed Resolution Recommendation: **Accepted** Recommendation by
 Reflect the following change on Table 285m in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285m -- HARQ DL MAP IE format

Syntax	Size(bits)	Notes
HARQ DL MAP IE {		
Extended-2 DIUC	4	HARQ_DL_MAP_IE() = 0x07
Length	8	Length in bytes
RCID_Type	2	0b00 = Normal CID 0b01 = RCID11 0b10 = RCID7 0b11 = RCID3
Reserved	2	
While (data remains) {		
Region_ID use indicator	1	0: not use Region_ID 1: use Region_ID
If (Region_ID use indicator == 0) {		
OFDMA symbol offset	8	Offset from the start symbol of DL sub-frame
Subchannel offset	7	
Boosting	7	Refer to Table 273.
Number of OFDMA symbols	7	
Number of subchannels	3 7	
<u>Reserved</u>	<u>3</u>	

```
} else {
```

```
Downlink allocation
```

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Reflect the following change on Table 285m in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285m -- HARQ DL MAP IE format

Syntax	Size(bits)	Notes
HARQ DL MAP IE {		
Extended-2 DIUC	4	HARQ_DL_MAP_IE() = 0x07
Length	8	Length in bytes
RCID_Type	2	0b00 = Normal CID 0b01 = RCID11 0b10 = RCID7 0b11 = RCID3
Reserved	2	
While (data remains) {		
Region_ID use indicator	1	0: not use Region_ID 1: use Region_ID
If (Region_ID use indicator == 0) {		
OFDMA symbol offset	8	Offset from the start symbol of DL sub-frame
Subchannel offset	7	
Boosting	7	Refer to Table 273.
Number of OFDMA symbols	7	
Number of subchannels	3 7	
<u>Reserved</u>	<u>3</u>	

} else {

Downlink allocation

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4249**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **275** Starting Line # **4** Fig/Table# **285n** Section **8.4.5.3.22**

Each HARQ Map IE and sub-burst IE shall be nibble-aligned. When there is an if-else clause, regardless of whether the 'if' clause or the 'else' clause is executed the resulting Map IE shall be nibble-aligned. When there is a loop, nibblealignment shall be required before the loop starts and inside the loop.

But Some HARQ MAP IEs do not observe the rule of nibble-alignment.

Suggested Remedy

discuss and adopt the contribution C80216e-05/250.

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C80216e-05/250r1.

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

Adopt contribution C80216e-05/250r1.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4250**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **275**

Starting Line # **48**

Fig/Table# **285n**

Section **8.4.5.3.22**

Correct the length of field.

Suggested Remedy

[Apply the following modification in Table 285n, 285o, 285p]

Dedicated DL Control Indicator	+2	LSB #0 indicates inclusion of CQI control
		LSB #1 indicates inclusion of Dedicated DL Control IE

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See comment 4249.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4251**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **275** Starting Line # **48** Fig/Table# **285n** Section **8.4.5.3.22**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

 Table 285n DL HARQ Chase Sub-burst IE format has several editorial errors.

1. Dedicated DL control Indicator shall be 2-bit long.
2. Duration(d): $2^{(d-1)}$ frames
3. Period(p): every 2^p frames
4. closing parenthesis is omitted

Suggested Remedy

Reflect the following change on Table 285n in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285n -- DL HARQ Chase Sub-Burst IE format

Syntax	Size(bits)	Notes
....
Dedicated DL control indicator	4 <u>2</u>	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for $2^{(d-1)}$ <u>$2^{(d-1)}$</u> frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		
Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2^p <u>2^p</u> frames.
Frame offset	3	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.

}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		
}		

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

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

Reflect the following change on Table 285n in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285n -- DL HARQ Chase Sub-Burst IE format

Syntax	Size(bits)	Notes
....
Dedicated DL control indicator	4 2	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2^(d-1) 2 ^(d-1) frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		

Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2p 2^p frames.
Frame offset	3	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.
}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4252**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **276** Starting Line # **19** Fig/Table# **285** Section **8.4.5.3.22**

There are several CQICH types for transmitting the Feedback CQI channel information. But many IEs don't have the information, therefore, the 'CQICH Type' field shall be inserted in the below IEs.

Suggested Remedy

1. Insert the following field after the 'Frame offset' field in the below Tables.
 - Table 285n - DL HARQ Chase sub-burst IE (in page 276, line 19 in e/D7),
 - Table 285o -DL HARQ IR CTC sub-burst IE (in page 277, line 33 in e/D7),
 - Table 285p - DL HARQ IR CC sub-burst IE (in page 279, line 17 in e/D7),
 - and Table 285u - AAS_SDMA_DL_IE (in page 287, line 46 in e/D7).

<u>CQICH Type</u>	<u>2</u>	<u>0b00 = 6-bit CQI</u> <u>0b01 = DIUC-CQI</u> <u>0b10 = 6 bit CQI (primary)</u> <u>0b11 = 4 bit CQI (secondary)</u> <u>A DIUC-CQI is a CQI channel that uses a modulation and coding level derived from the DIUC.</u>
<u>Reserved</u>	<u>2</u>	

2. Insert the following field after the 'Allocation index' field in Table 285u - Dedicated MIMO DL Control IE. (in page 7, line 47 in 156r2, which was accepted but not applied in the 802.16e/D7)

<u>CQICH Type</u>	<u>3</u>	<u>0b000 = 6-bit CQI</u> <u>0b001 = DIUC-CQI</u> <u>0b010 = 3-bit CQI (even)</u> <u>0b011 = 3-bit CQI (odd)</u> <u>0b100 = 6 bit CQI (primary)</u> <u>0b101 = 4 bit CQI (secondary)</u> <u>0b110-0b111 = reserved</u> <u>A DIUC-CQI is a CQI channel that uses a modulation and coding level derived from the DIUC.</u>
-------------------	----------	--

3. In page 66, line 37 in 802.16e/D7, modify the 'CQICH Usage' field in Table 101b - MIMO Compact_DL-MAP_IE.

<u>CQICH Usage</u>	<u>23</u>	<u>Indicates the usage of this CQICH</u> <u>0b000 = 6-bit CQI</u> <u>0b001 = DIUC-CQI</u>
--------------------	-----------	---

<p>0b010 = 3-bit CQI (even) 0b011 = 3-bit CQI (odd) 0b100 = 6 bit CQI (primary) 0b101 = 4 bit CQI (secondary) 0b110-0b111 = reserved</p>
--

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

On page 66, line 37 in 802.16e/D7, modify the 'CQICH Usage' field in Table 101b - MIMO Compact_DL-MAP_IE.

CQICH Usage	23	Indicates the usage of this CQICH
		<p>0b000 = 6-bit CQI 0b001 = DIUC-CQI 0b010 = 3-bit CQI (even) 0b011 = 3-bit CQI (odd) 0b100 = 6 bit CQI (primary) 0b101 = 4 bit CQI (secondary) 0b110-0b111 = reserved</p>

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

On page 66, line 37 in 802.16e/D7, modify the 'CQICH Usage' field in Table 101b - MIMO Compact_DL-MAP_IE.

CQICH Usage	23	Indicates the usage of this CQICH
		<p>0b000 = 6-bit CQI 0b001 = DIUC-CQI 0b010 = 3-bit CQI (even) 0b011 = 3-bit CQI (odd) 0b100 = 6 bit CQI (primary) 0b101 = 4 bit CQI (secondary) 0b110-0b111 = reserved</p>

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

Also cleaned up table structure and format -- check this one carefully.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4253**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **276** Starting Line # **36** Fig/Table# **285o** Section **8.4.5.3.22**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

 Table 285o DL HARQ IR CTC Sub-burst IE format has several editorial errors.

1. Dedicated DL control Indicator shall be 2-bit long.
2. Duration(d): $2^{(d-1)}$ frames
3. Period(p): every 2^p frames

Suggested Remedy

Reflect the following change on Table 285o in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285o -- DL HARQ IR CTC Sub-Burst IE format

Syntax	Size(bits)	Notes
....
Dedicated DL control indicator	4 ₂	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2^(d-1) _{2^(d-1)} frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		
Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2^p _{2^p} frames.
Frame offset	3	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.

}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		
}		

Proposed Resolution Recommendation: **Accepted** Recommendation by
 Reflect the following change on Table 285o in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285o -- DL HARQ IR CTC Sub-Burst IE format

Syntax	Size(bits)	Notes
....
Dedicated DL control indicator	4 2	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2^(d-1) 2 ^(d-1) frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		
Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2^p 2 ^p frames.

Frame offset	3	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.
}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		
}		

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Reflect the following change on Table 285o in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285o -- DL HARQ IR CTC Sub-Burst IE format

Syntax	Size(bits)	Notes
....
Dedicated DL control indicator	42	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2^(d-1) 2 ^(d-1) frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		

Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2p 2^p frames.
Frame offset	3	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.
}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4254**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **276** Starting Line # **36** Fig/Table# **2850** Section **8.4.5.3.22**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

 Table 285p DL HARQ IR CC Sub-burst IE format has several editorial errors.

1. Sub-burst IE name is wrong.
2. Dedicated DL control Indicator shall be 2-bit long.
3. Duration(d): $2^{(d-1)}$ frames

Suggested Remedy

Reflect the following change on Table 285p in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285p -- DL HARQ IR CC Sub-Burst IE format

Syntax	Size(bits)	Notes
DL HARQ IR GTG CC sub-burst IE () {		
....
Dedicated DL control indicator	4 2	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2^(d-1) 2 ^(d-1) frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		
Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2 ^p frames.

Frame offset	3	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.
}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		
}		

Proposed Resolution Recommendation: **Accepted** Recommendation by
 Reflect the following change on Table 285p in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285p -- DL HARQ IR CC Sub-Burst IE format

Syntax	Size(bits)	Notes
DL HARQ IR CTC CC sub-burst IE () {		
....
Dedicated DL control indicator	4 2	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2(d-1) 2^(d-1) frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
If (Duration != 0b0000){		

Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2 ^p frames.
Frame offset	3	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.
}		
}		
Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	variable	
}		
}		
}		

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Reflect the following change on Table 285p in IEEE802.16e/D7 as harmonized in 05/115r3

Table 285p -- DL HARQ IR CC Sub-Burst IE format

Syntax	Size(bits)	Notes
DL HARQ IR CTC CC sub-burst IE () {		
....
Dedicated DL control indicator	42	LSB #0 indicates inclusion of CQI control LSB #1 indicates inclusion of Dedicated DL Control IE
If(LSB #0 of Dedicated DL Control Indicator == 1){		
Duration (d)	4	A CQI feedback is transmitted on the CQI channels

Duration (u)	4	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for 2^(d-1) 2 ^(d-1) frames. If d is 0b0000, deallocates all CQI feedback when the current ACID is completed successfully. If d is 0b1111, the MSS should report until the BS command for the MSS to stop

If (Duration != 0b0000){		

Allocation Index	6	Index to the channel in a frame the CQI report should be transmitted by the SS

Period (p)	3	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2 ^p frames.

Frame offset	3	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.

}		

}		

Elseif (LSB #1 of Dedicated DL Control Indicator ==1) {		

Dedicated DL Control IE ()	variable	

}		

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4255**

Comment submitted by: Panyuh

Joo

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **278** Starting Line # **50** Fig/Table# **285** Section **8.4.5.3.22**

The contribution 05/115r3 was accepted during the last meeting as the harmonization for HARQ. But, the text change of 05/115r3 was not fully reflected on IEEE802.16e/D7.

Table 285p DL HARQ IR CC Sub-burst IE format has a editorial error.
Dedicated DL control Indicator shall be 2-bit long.

Suggested Remedy

In Table 285p,
Change the size of Dedicated DL Control Indicator in Line 50, Page 278 from '1' to '2' .

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In Table 285p,
Change the size of Dedicated DL Control Indicator in Line 50, Page 278 from '1' to '2' .

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

In Table 285p,
Change the size of Dedicated DL Control Indicator in Line 50, Page 278 from '1' to '2' .

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

Editor's Actions |) none needed

[Done by comment 4254.](#)**Editor's Questions and Concerns****Editor's Action Items**

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4256**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **279** Starting Line # **33** Fig/Table# Section **8.4.5.3.22**

I object to the text incorporation into D7 draft for the resolution of comment #3333, because the proposed text change in IEEE C802.16e-05/156r2 is missing from the D7 draft.

Suggested Remedy

Insert the text change suggested in pages 3 - 8 of C802.16e-05/156r2 into page 279, line 33.

Insert the text change suggested in pages 9-12 of C802.16e-05/156r2 into page 371, line 41.

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

Adopt the contribution C802.16e-05/249r3

Reason for Recommendation

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

Adopt the contribution C802.16e-05/249r3

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

Editor's Notes Editor's Actions k) done

Passed to Jose for translation into FrameMaker format.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4257L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Editorial	279	33		8.4.5.3.22

An accepted contribution was, again, not incorporated into the draft, possibly due to the Section/Page/Table number conflicts.

We are re-introducing the same document with the correct page/Section/Table numbers.

The original contribution is C802.16e-05/156r2 and was accepted by Comment #3333 from Mar. 2005 meeting.

Suggested Remedy

Adopt the contribution C802.16e-05/249

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

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

See comment 4256.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4258**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **280** Starting Line # Fig/Table# **285r** Section **8.4.5.3.24**

The 'Enhanced DL-MAP IE' defines an efficient mechanism for specifying DL allocations through the use of a table of predefined region coordinates. However, this mechanism is not consistent with HARQ DL-MAP IEs and does not seem to support HARQ at all.

Suggested Remedy

Either
add support for HARQ and sub-bursts to the 'Enhanced DL-MAP IE

or

Merge the Enhanced DL-MAP IE capability into the HARQ DL-MAP IEs so that HARQ and sub-bursts are supported with allocations that are specified using predefined region coordinates.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4259**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

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

In the last sponsor ballot recirc the comment #3368 which was accepted was not implemented by the editor. See editors note in comment 3368 in database 802.16e-05 12r4 . "Substantial changes were made to this section, and this comment was inadvertantly not implemented. It is the editor's intent to correct this in the next draft."

Suggested Remedy

Editor should implement the comment as suggested in his editors notes in the database 802.16e-05 12r4

Proposed Resolution Recommendation: Accepted**Recommendation by**

From C80216-05/50r7, adopt remedy 1 (replace tables with text), retain 3 tables as informative examples. This contribution is from Session 36.

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

From C80216-05/50r7, adopt remedy 1 (replace tables with text), retain 3 tables as informative examples. This contribution is from Session 36.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4260**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **281** Starting Line # **42** Fig/Table# **285s** Section **8.4.5.3.25**
 I object to the text change on section 8.4.5.3.25, Table 285s - Closed-loop MIMO DL enhanced IE because some correction is needed on the IE.

Suggested Remedy

[Modify Table 285s -Closed-loop MIMO DL enhanced IE as follows]

Syntax	Size (bits)	Note
CL_MIMO_DL_Enhanced_IE () {		
Extended-2 DIUC	4	CL_MIMO_DL_enhanced_IE() = 0x0A
Length	8	Length in bytes
Num_Region	4	--
for(i=0;i<Num_region;i++) {		--
OFDMA Symbol offset	8	--
Subchannel offset	6	--
Boosting	3	Refer to Table 273.
No. OFDMA Symbols	7	--
No. Subchannels	6	--
Matrix_indicator	2	Indicate transmission matrix (See 8.4.8) 0b00 = Matrix A (Transmission diversity) 0b01= Matrix B (Hybrid Scheme) 0b10= Matrix C (special multiplexing) 0b11= Codebook
if (Matrix_indicator != 10) {		
RCID_IE	Variable	
DIUC	4	---
Repetition_Coding_indication	2	---

```
if (Matrix_indicator==00 or 01){ | | ---
```

Antenna_Grouping_index	3	Indicates the index of the antenna grouping index if (matrix_indicator == 00) 000-010 = 0b101110-0b110000 in Table 298c else if (Matrix_indicator == 01) 000-101 = 0b110001-0b110110 in Table 298c
------------------------	---	--

```
elseif (Matrix_indicator ==10) | |
```

```
AntennaSelection Index | 3 |
```

```
elseif (Matrix_indicator == 11){ | |
```

<u>Num_stream</u>	<u>2</u>	<u>Indicates number of streams</u>
-------------------	----------	------------------------------------

Codebook_Precoding_index	6	Indicates the index of precoding matrix W in the codebook (see 8.4.8.3.6)
--------------------------	---	---

```
} | |
```

```
else { | |
```

<u>Num_MSS</u>	<u>2</u>	<u>Number of MSs who are assigned DL resource when antenna selection is used</u>
----------------	----------	--

```
for (i = 0;i<Num_MSS;i++) { | |
```

<u>RCID_IE</u>	<u>variable</u>	
----------------	-----------------	--

<u>DIUC</u>	<u>4</u>	
-------------	----------	--

<u>Repetition_Coding_indication</u>	<u>2</u>	---
-------------------------------------	----------	-----

<u>Num_stream</u>	<u>2</u>	<u>Indicates the number of streams in Table 316f for 3 Tx antenna and 316g for 4 Tx antenna</u>
-------------------	----------	---

<u>Antenna Selection index</u>	<u>3</u>	<u>Indicates the index of antenna selection</u> <u>See 8.4.8.3.4 and 8.4.8.3.5</u> <u>000~010 = 0b110000~0b110010 in Table 317f</u> <u>000~101 = 0b110000 ~ 0b 110101 in Table 317g</u>
--------------------------------	----------	--

```
} | |
```

```
} | |
```

```

Num_stream                |2|
for (j=0;j<Num_stream;j++) {
    if (INC_CID == 1) {
        CQICH_ID          |Variable|
    }
    stream_index          |2|
    DIUC                  |4|
}
}

```

Proposed Resolution **Recommendation: Accepted** **Recommendation by**
 [Modify Table 285s -Closed-loop MIMO DL enhanced IE as follows]

Syntax	Size (bits)	Note
CL_MIMO_DL_Enhanced_IE () {		
Extended-2 DIUC	4	CL_MIMO_DL_enhanced_IE() = 0x0A
Length	8	Length in bytes
Num_Region	4	--
for(i=0;i<Num_region;i++) {		--
OFDMA Symbol offset	8	--
Subchannel offset	6	--
Boosting	3	Refer to Table 273.
No. OFDMA Symbols	7	--
No. Subchannels	6	--

Matrix_indicator	2	Indicate transmission metrix (See 8.4.8) 0b00 = Matrix A (Transmission diversity) 0b01= Matrix B (Hybrid Scheme) 0b10= Metrix C (special multiplexing) 0b11= Codebook
<u>if (Matrix_indicator != 10) {</u>		
<u>RCID_IE</u>	<u>Variable</u>	
<u>DIUC</u>	<u>4</u>	<u>---</u>
<u>Repetition Coding indication</u>	<u>2</u>	<u>---</u>
<u>if (Matrix_indicator==00 or 01){</u>		<u>---</u>
Antenna_Grouping_index	3	Indicates the index of the antenna grouping index if (matrix_indicator == 00) 000-010 = 0b101110-0b110000 in Table 298c else if (Matrix_indicator == 01) 000-101 = 0b110001-0b110110 in Table 298c
<u>elseif (Matrix_indicator ==10)</u>		
AntennaSelection Index	3	
<u>elseif (Matrix_indicator == 11){</u>		
<u>Num_stream</u>	<u>2</u>	<u>Indicates number of streans</u>
Codebook_Precoding_index	6	Indicates the index of precoding matrix W in the codebook (see 8.4.8.3.6)
<u>}</u>		
<u>else {</u>		
<u>Num_MSS</u>	<u>2</u>	<u>Number of MSSs who are assigned DL resource when antenna selection is used</u>
<u>for (i = 0;i<Num_MSS;i++) {</u>		
<u>RCID_IE</u>	<u>variable</u>	
<u>DIUC</u>	<u>4</u>	

<u>Repetition Coding indication</u>	<u>2</u>	--	
<u>Num_stream</u>	<u>2</u>		<u>Indicates the number of streams in Table 316f for 3 Tx antenna and 316g for 4 Tx antenna</u>
<u>Antenna Selection index</u>	<u>3</u>		<u>Indicates the index of antenna selection</u> <u>See 8.4.8.3.4 and 8.4.8.3.5</u> <u>000~010 = 0b110000~0b110010 in Table 317f</u> <u>000~101 = 0b110000 ~ 0b 110101 in Table 317g</u>
}			
}			
Num_stream	2		
for (i=0; i<Num_stream; i++) {			

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

[Modify Table 285s -Closed-loop MIMO DL enhanced IE as follows]

Syntax	Size (bits)	Note
CL_MIMO_DL_Enhanced_IE () {		
Extended-2 DIUC	4	CL_MIMO_DL_ennhanced_IE() = 0x0A
Length	8	Length in bytes
Num_Region	4	--
for(i=0;i<Num_region;i++) {		--
OFDMA Symbol offset	8	--
Subchannel offset	6	--
Boosting	3	Refer to Table 273.
No. OFDMA Symbols	7	--
No. Subchannels	6	--
Matrix indicator	2	Indicate transmission matrix (See 8.4.8)

Matrix_Indicator	2	Indicate transmission matrix (See 6.4.6) 0b00 = Matrix A (Transmission diversity) 0b01 = Matrix B (Hybrid Scheme) 0b10 = Matrix C (special multiplexing) 0b11 = Codebook
<hr/>		
if (Matrix_indicator != 10) {		
RCID_IE	Variable	
DIUC	4	---
Repetition_Coding_indication	2	---
if (Matrix_indicator==00 or 01){		---
Antenna_Grouping_index	3	Indicates the index of the antenna grouping

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Massive table cleanup here, please re-check to ensure I've inserted braces in the correct places.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4261**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **285** Starting Line #

mislplaced / erroneous text

Fig/Table# **285u** Section **8.4.5.3.27****Suggested Remedy**

delete the following text from table 285u, page 285, line 45:

~~If (AAS UL Preamble Used) {~~

delete the following text from table 285u, page 285, line 50:

~~If (Pilot Pattern Modifier) {~~

delete the following text from table 285u, page 286, line 15:

~~If (Pilot Pattern Modifier) { ~~H-ARQ Conv. Code Incremental Redundancy~~~~**Proposed Resolution**Recommendation: **Accepted**

Recommendation by

delete the following text from table 285u, page 285, line 45:

~~If (AAS UL Preamble Used) {~~

delete the following text from table 285u, page 285, line 50:

~~If (Pilot Pattern Modifier) {~~

delete the following text from table 285u, page 286, line 15:

~~If (Pilot Pattern Modifier) { ~~H-ARQ Conv. Code Incremental Redundancy~~~~**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted**

delete the following text from table 285u, page 285, line 45:

~~If (AAS UL Preamble Used) {~~

delete the following text from table 285u, page 285, line 50:

~~If (Pilot Pattern Modifier) {~~

delete the following text from table 285u, page 286, line 15:

If (Pilot Pattern Modifier) {

~~H-ARQ Conv. Code Incremental Redundancy~~

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4262**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **285** Starting Line #

Fig/Table#

Section

8.4.5.3

wrong references

Suggested Remedy

replace all references to 8.4.6.3.2 in

- table 285u
- table 302r
- table 308a
- table 308b
- page 484, line 14

with reference to 8.4.6.3.3.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

replace all references to 8.4.6.3.2 in

- table 285u
- table 302r
- table 308a
- table 308b
- page 484, line 14

with reference to 8.4.6.3.3.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

replace all references to 8.4.6.3.2 in

- table 285u
- table 302r
- table 308a
- table 308b
- page 484, line 14

with reference to 8.4.6.3.3.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4263**

Comment submitted by: InSeok

Hwang

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **285** Starting Line # **12**
 There has been editorial and technical errors during the implementation of AAS_SDMA_DL_IE in C802.16e-05/084r6, which was the resolution of comment #3294.

Fig/Table# **285u** Section **8.4.5.3.27****Suggested Remedy**

1. At line 12, change "Extended UIUC" into "Extended-2 DIUC"
2. At line 12, assign a proper "Extended-2 DIUC" number
3. At line 14, change the "Length" field from '4' to '8' as like other "Extended-2 DIUC".
4. At line 37 in p286, change the bit of "ACK CH Index" field from '4' to '5'.
5. At line 35 and 39 in p286, delete typo "2", "1"

Proposed Resolution Recommendation: Accepted**Recommendation by**

1. At line 12, change "Extended UIUC" into "Extended-2 DIUC"
2. At line 12, assign a proper "Extended-2 DIUC" number
3. At line 14, change the "Length" field from '4' to '8' as like other "Extended-2 DIUC".
4. At line 37 in p286, change the bit of "ACK CH Index" field from '4' to '5'.
5. At line 35 and 39 in p286, delete typo "2", "1"

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

1. At line 12, change "Extended UIUC" into "Extended-2 DIUC"
2. At line 12, assign a proper "Extended-2 DIUC" number
3. At line 14, change the "Length" field from '4' to '8' as like other "Extended-2 DIUC".
4. At line 37 in p286, change the bit of "ACK CH Index" field from '4' to '5'.
5. At line 35 and 39 in p286, delete typo "2", "1"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4264**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **286** Starting Line # **7** Fig/Table# **285u** Section **8.4.5.3.27**

AAS_SDMA_DL_IE, Reduced AAS private DL-MAP:
clarify 'pilot pattern modifier' for TUSC and PUSC permutations.

Suggested Remedy

1) Modify 'Pilot Pattern Modifier' entry in table 285u as follows:

Pilot Pattern Modifier	1	0: Not Applied 1: Applied <u>Shall be set to 0 if PUSC AAS zone</u>
------------------------	---	---

2) Modify 'Pilot Pattern' entry in table 285u as follows:

Pilot Pattern	2	See sections <u>8.4.6.3.23 (AMC)</u> , <u>8.4.6.1.2.6 (TUSC)</u> 00: Pattern #A , 01: Pattern #B 10: Pattern #C , 11: Pattern #D
---------------	---	--

3) Modify 'Pilot Pattern Modifier' entry in table 308a as follows:

Pilot Pattern Modifier	1	0: Not Applied 1: Applied <u>Shall be set to 0 if PUSC AAS zone</u>
------------------------	---	---

4) Modify 'Pilot Pattern' entry in table 308a as follows:

Pilot Pattern	2	Pilot pattern used for this allocation. (see sections <u>8.4.6.3.23 (AMC)</u> , <u>8.4.6.1.2.6 (TUSC)</u>) 00: Pattern #A , 01: Pattern #B 10: Pattern #C , 11: Pattern #D
---------------	---	--

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

1) Modify 'Pilot Pattern Modifier' entry in table 285u as follows:

Pilot Pattern Modifier	1	0: Not Applied 1: Applied <u>Shall be set to 0 if PUSC AAS zone</u>
------------------------	---	---

2) Modify 'Pilot Pattern' entry in table 285u as follows:

2) Modify 'Pilot Pattern' entry in table 285u as follows:

Pilot Pattern	2	See sections 8.4.6.3.23 (AMC), 8.4.6.1.2.6 (TUSC) 00: Pattern #A , 01: Pattern #B 10: Pattern #C , 11: Pattern #D
---------------	---	---

3) Modify 'Pilot Pattern Modifier' entry in table 308a as follows:

Pilot Pattern Modifier	1	0: Not Applied 1: Applied <u>Shall be set to 0 if PUSC AAS zone</u>
------------------------	---	---

4) Modify 'Pilot Pattern' entry in table 308a as follows:

Pilot Pattern	2	Pilot pattern used for this allocation. (see sections 8.4.6.3.23 (AMC), 8.4.6.1.2.6 (TUSC)) 00: Pattern #A , 01: Pattern #B 10: Pattern #C , 11: Pattern #D
---------------	---	--

5) Add the following text after table 285u:

In an AAS zone with PUSC permutation, all AAS_SDMA_DL_IEs that define allocations in a given major group shall contain the same value for the 'Number of users' field. In AAS zone with PUSC, user #n uses the pilot pattern as defined for antenna #n in section 8.4.8.

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

1) Modify 'Pilot Pattern Modifier' entry in table 285u as follows:

Pilot Pattern Modifier	1	0: Not Applied 1: Applied <u>Shall be set to 0 if PUSC AAS zone</u>
------------------------	---	---

2) Modify 'Pilot Pattern' entry in table 285u as follows:

Pilot Pattern	2	See sections 8.4.6.3.23 (AMC), 8.4.6.1.2.6 (TUSC) 00: Pattern #A , 01: Pattern #B 10: Pattern #C , 11: Pattern #D
---------------	---	---

3) Modify 'Pilot Pattern Modifier' entry in table 308a as follows:

Pilot Pattern Modifier	1	0: Not Applied 1: Applied <u>Shall be set to 0 if PUSC AAS zone</u>
------------------------	---	---

4) Modify 'Pilot Pattern' entry in table 308a as follows:

Pilot Pattern	2	Pilot pattern used for this allocation. (see sections 8.4.6.3.23 (AMC) , 8.4.6.1.2.6 (TUSC)) 00: Pattern #A , 01: Pattern #B 10: Pattern #C , 11: Pattern #D
---------------	---	--

5) Add the following text after table 285u:

In an AAS zone with PUSC permutation, all AAS_SDMA_DL_IEs that define allocations in a given major group shall contain the same value for the 'Number of users' field. In AAS zone with PUSC, user #n uses the pilot pattern as defined for antenna #n in section 8.4.8.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4265**

Comment submitted by: **Rajesh**

Bhalla

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **290** Starting Line # **7**

Fig/Table#

Section

8.4.5.4.1

Extended UIUC 2 IE is missing from the Table 287 -OFDMA UL-MAP IE format.

Suggested Remedy

Insert the following text to Table 287

```

-----+-----+-----
}else if (UIUC == 11) {      | -      | -
-----+-----+-----
Extended UIUC 2 dependent IE | variable | See subclauses
                               |          | following 8.4.5.4.3
-----+-----+-----

```

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Insert the following text to Table 287

```

-----+-----+-----
}else if (UIUC == 11) {      | -      | -
-----+-----+-----
Extended UIUC 2 dependent IE | variable | See subclauses
                               |          | following 8.4.5.4.3
-----+-----+-----

```

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Insert the following text to Table 287

```

-----+-----+-----
}else if (UIUC == 11) {      | -      | -
-----+-----+-----
Extended UIUC 2 dependent IE | variable | See subclauses
                               |          | following 8.4.5.4.3
-----+-----+-----

```

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4266**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment Type **Editorial**Starting Page # **291** Starting Line # **32**

Fig/Table#

Section **8.4.5.4.2**

PAPR Reduction/Safety Zone/Sounding Zone

Suggested Remedy

- 00 - PAPR Reduction
- 01 - Safety
- 10 - Sounding Zone
- 11 - Reserved

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

- 00 - PAPR Reduction
- 01 - Safety
- 10 - Sounding Zone
- 11 - Reserved

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

The Suggested Remedy in this comment actually breaks backward compatibility with RevD devices. In Table 289 of the current D7 spec, RevD devices don't know about the Sounding Zone bit, and revD devices only know to examine the PAPR Reduction/Safety zone bit to determine whether the zone is a Safety zone or a PAPR reduction zone. In the Suggested Remedy, the first bit is zero for both PAPR and Safety, which is contrary to RevD. The Proposed Resolution maintains backward compatibility by preserving the ability of the first bit to indicate PAPR versus Safety Zone.

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

Editor's Actions |) [none needed](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4267L**

Comment submitted by: Roland

Muenzner

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **291** Starting Line # **55**Fig/Table# **293**Section **8.4.5.4.6**

AAS_UL_IE() has been changed in Cor1 D2, Table 293 has to be adapted in 16e

Suggested Remedy

replace Table 293 with:

AAS_UL_IE(){		
Extended UIUC	4 bits	AAS = 0x02
Length	4 bits	Length = 0x03 or 0x04
Permutation	2 bits	0b00 = PUSC permutation 0b01 = Optional PUSC permutation 0b10 = adjacent-subcarrier permutation 0b11 = Reserved
UL_PermBase	7 bits	
OFDMA symbol offset	8 bits	
Uplink_preamble_config	2 bits	0b00 - 0 symbols 0b01 - 1 symbols 0b10 - 2 symbols 0b11 - 3 symbols
reserved	5 bits	Shall be set to zero
If (length = 0x04) {	--	--
Preamble type	1 bit	0 - Frequency shifted preamble is used in this AAS zone 1 - Time shifted preamble is used in this AAS zone
Reserved	7 bit	Shall be set to zero
}	--	--
}	--	--

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4268L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment	Type	Editorial	Starting Page #	295	Starting Line #	66	Fig/Table#	Section	8.4.5.4.10.4
---------	------	-----------	-----------------	-----	-----------------	----	------------	---------	--------------

Two accepted comments were not incorporated into the draft standard.

1. Comment #3359 that was resolved in Mar. 2005 meeting
2. Comment #3363 that was resolved in Mar. 2005 meeting

Suggested Remedy

1. Insert (page 263, line 10 ~ page 264, line 49) in 802.16e/D5a into page 295, line 66(after Table 298b) in 802.16e/D7
2. Delete the first figure of Figure 229b(page 297)

Proposed Resolution Recommendation: Accepted**Recommendation by**

1. Insert (page 263, line 10 ~ page 264, line 49) in 802.16e/D5a into page 295, line 66(after Table 298b) in 802.16e/D7
2. Delete the first figure of Figure 229b(page 297)

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

1. Insert (page 263, line 10 ~ page 264, line 49) in 802.16e/D5a into page 295, line 66(after Table 298b) in 802.16e/D7
2. Delete the first figure of Figure 229b(page 297)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4269**Comment submitted by: **Mo-Han****Fong**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **296** Starting Line # **57** Fig/Table# Section **8.4.5.4.10.5**
I object to the text incorporation into D7 draft for the accepted resolution of comment # 3371 because the text on section 8.4.5.4.10.5, page 296, last paragraph on lines 57-60 should be removed

Suggested Remedy

Remove the last paragraph of section 8.4.5.4.10.5, page 296, lines 57-60.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Remove the last paragraph of section 8.4.5.4.10.5, page 296, lines 57-60.

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

Remove the last paragraph of section 8.4.5.4.10.5, page 296, lines 57-60.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4270**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	302	1		8.4.5.4.10.9

The figure 229c and the text between line 1~ 62 of page 302 and the text between line 1~26 of page 303 are the contents of 8.4.5.4.10.9. Correct the location of the text and the figure.

Suggested Remedy

Move the Figure 229c and the text from line 1of page 302 to line 26 of page 303 at the end of 8.4.5.4.10.9.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Move the Figure 229c and the text from line 1of page 302 to line 26 of page 303 at the end of 8.4.5.4.10.9.

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

Move the Figure 229c and the text from line 1of page 302 to line 26 of page 303 at the end of 8.4.5.4.10.9.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4271**

Comment submitted by: Jose

Puthenkulam

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	306	Starting Line #	Fig/Table#	Section	8.4.5.4.11
---------	------	------------------------	-----------------	-----	-----------------	------------	---------	------------

Comment #3368 has not been implemented in the last editorial woth for D7 as noted in the C80216e-05_12r4 database, hence it need to be addressed.

Suggested Remedy

Make sure the editor does not miss it this time. Implement the accepted changes as part of old comment 3368.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

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

See contribution 4259.

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

The reply comment says the following:

In additon to #3368, there are several other accepted comments in the Atlanta meeting that are not fully reflected in D7. Please make sure the editor incorporatate these following comments this time as well.

1. Comment #3360, contribution 118r3 was accepted but not reflected in D7. The editor was able to find 118r2, not 118r3 due to loss of file. The 118r3 is now on the upload server.

[Response]: The commenter is incorrect. 118r2 was the only document accepted. 118r3 is a new contribution.

2. comment #3448, contribution #175r1 was accepted but not fully reflected in D7. The editor needs more instruction on where to insert the excerpt from accepted 009r1. The additional editorial instructions has been added in the uploaded #175r2.

[Response]: in addition to providing editorial instructions, 175r2 makes new changes over and above 175r1 and the contribution will not be implemented.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4272L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	306	40		8.4.5.4.11

In the current standard, a codebook based CL-MIMO scheme is considered for better link performance. But, this CL-MIMO has a power imbalance problem since some antennas are switched off for special cases (when the number of TX antennas is larger than the number of streams). In this contribution, we propose the modified vector codebooks to solve this problem.

Suggested Remedy

Adopt the changes proposed in C802.16e-05/239 (to be uploaded by April 28)

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4273**

Comment submitted by: Brian

Kiernan

Member

2005/04/28

Comment Type **Editorial** Starting Page # **307** Starting Line #

Fig/Table# **298** Section **8.4.5.4.11**

Comment #3368 was not correctly implemented by the editor

Suggested Remedy

Correctly implement the previously approved remedy, which is copied here for completeness:

Suggested Remedy: Adopt the proposal in contribution C80216-05_50r7.

Adopt remedy 1 (replace tables with text), retain 3 tables as informative examples

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Correctly implement the previously approved remedy, which is copied here for completeness:

Suggested Remedy: Adopt the proposal in contribution C80216-05_50r7.

Adopt remedy 1 (replace tables with text), retain 3 tables as informative examples

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Correctly implement the previously approved remedy, which is copied here for completeness:

Suggested Remedy: Adopt the proposal in contribution C80216-05_50r7.

Adopt remedy 1 (replace tables with text), retain 3 tables as informative examples

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4274**

Comment submitted by: Peiyong

Zhu

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	307	Starting Line #	25	Fig/Table#	Section	8.4.5.4.11
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	------------

R Matrix was removed during the last meeting, however, one sentence related is not removed.

Suggested Remedy

Delete the following sentences

~~Beamforming Weight Matrix = $R w$, where R is the rotation matrix for each 3-bit or 6-bit code book and w is the code word matrix.~~

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete the following sentences

~~Beamforming Weight Matrix = $R w$, where R is the rotation matrix for each 3-bit or 6-bit code book and w is the code word matrix.~~

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

Delete the following sentences

~~Beamforming Weight Matrix = $R w$, where R is the rotation matrix for each 3-bit or 6-bit code book and w is the code word matrix.~~

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

Editor's Actions |) none needed

Fixed by another comment.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4275**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **353** Starting Line # **28**

Fig/Table#

Section

8.4.5.4.15

Clarification and correction for Fast-feedback channels in OFDMA.

Suggested Remedy

Adopt C80216e-05_233r0 "Clarification of Fast-feedback channel in OFDMA"

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

Adopt C80216e-05_233r1 "Clarification of Fast-feedback channel in OFDMA"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Adopt C80216e-05_233r1 "Clarification of Fast-feedback channel in OFDMA"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4276**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **354** Starting Line #Fig/Table# Section **8.4.5.4.15**

CQICH type field was added to CQI Enhanced Allocation IE format.

1) The 4-bit CQI encoding defined in 802.16-2004 is missing from the list of types.

2) It is not clear what DIUC-CQI actually is. To which DIUC does this refer? even if that was known, what is modulated on the 48 subcarriers of the CQI channel and in what order ? None of this seems to be defined.

Suggested Remedy

1) Modify table 302a:

- replace '0b01 = DIUC-CQI' with '0b01 = 4-bit CQI (see section 8.4.5.4.10)'

- delete the last sentence in the 'CQICH Type' entry:

~~A DIUC-CQI is a CQI channel that uses a modulation and coding level derived from the DIUC.~~

2) Remove all references to DIUC-CQI from the standard.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

1) Modify table 302a:

- replace '0b01 = DIUC-CQI' with '0b01 = 4-bit CQI (see section 8.4.5.4.10)'

- delete the last sentence in the 'CQICH Type' entry:

~~A DIUC-CQI is a CQI channel that uses a modulation and coding level derived from the DIUC.~~

2) Remove all references to DIUC-CQI from the standard.

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

DIUC-CQI has technical merit and should not be removed.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4277** Comment submitted by: [Bin-chul](#) [lhm](#) [Other](#) [2005/04/28](#)

Comment Type [Technical, Non-binding](#) Starting Page # [354](#) Starting Line # [25](#) Fig/Table# Section [8.4.5.4.15](#)

[I object to the text change in D7 on section 8.4.5.4.15 because several feedback types are not defined anywhere else in the D7 document](#)

Suggested Remedy

1. Remove as following:

Line 25 : 0b101 = Channel Matrix Information in the Feedback Type.

Line 26 : 0b101 = Per stream power control in the Feedback Type.

2. Change as following:

0b1~~0~~01 ~ 0b111 = Reserved

Proposed Resolution Recommendation: **Withdrawn** Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4278**

Comment submitted by: InSeok

Hwang

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **375** Starting Line # **12** Fig/Table# **302r** Section **8.4.5.4.28**

There has been editorial and technical errors during the implementation of AAS_SDMA_UL_IE in C802.16e-05/084r6, which was the resolution of comment #3294.

Suggested Remedy

1. At line 12, change "Extended UIUC" into "Extended-2 UIUC"
2. At line 12, assign a proper "Extended-2 UIUC" number
3. At line 14, change the "Length" field from '4' to '8' as like other "Extended-2 UIUC"

Proposed Resolution Recommendation: Accepted

Recommendation by

1. At line 12, change "Extended UIUC" into "Extended-2 UIUC"
2. At line 12, assign a proper "Extended-2 UIUC" number
3. At line 14, change the "Length" field from '4' to '8' as like other "Extended-2 UIUC"

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

1. At line 12, change "Extended UIUC" into "Extended-2 UIUC"
2. At line 12, assign a proper "Extended-2 UIUC" number
3. At line 14, change the "Length" field from '4' to '8' as like other "Extended-2 UIUC"

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

Fixed by another comment.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4279**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

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

In the current standard draft, it 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 may 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

Ruled out of scope.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4280**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	376	Starting Line #	61	Fig/Table#	Section	8.4.5.5
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	---------

I object to the implementation in the draft of Comment #1605, #2290 because there is not enough DIUC/UIUC's.

The current specification includes several FEC types such as CC(mandatory), BTC(optional), CTC(optional), ZT CC(optional) and LDPC(optional), and defines 41 burst profiles e.g., QPSK(CC) 1/2, 16QAM(CTC) 2/3 and so on (see Table 361) where each FEC type has about 6~15 burst profiles. BS selects and allocates 13 burst profiles among 41 burst profiles onto DIUC0 through DIUC12 and 10 burst profiles onto UIUC1~UIUC10, and announce it through the DCD/UCD messages. When the cell includes MS's having different FEC types, DIUC0~DIUC12 should support these FEC types and it makes one FEC type get small room of MCS levels. For example, when three MS's within a cell have CC+CTC, CC+LDPC and CC+BTC respectively, each FEC type (CC, CTC, LDPC and BTC) should have only 3~4 DIUC's and 2~3 UIUC's. These numbers of DIUC/UIUC's are too small for fine link adaptation.

Suggested Remedy

Adopt C80216e-05_234r0 "DIUC/UIUC provision for supporting multiple advanced FEC types"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Adopt C80216e-05_234r2

Reason for Recommendation

Resolution of Group

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

Vote: 24-17

This solution is too complicated for this problem. There are other more elegant ways to solve this.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4281**

Comment submitted by: **Dave**

Pechner

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **378**

Starting Line # **15**

Fig/Table#

Section **8.4.5.6.1**

Editorial errors in defintion of compressed map

Suggested Remedy

First five rows of compressed map should be:

compressed map indicator	3 bits = 0b110
UL Map appended	1 bit
compressed map type	1 bit = 0

This replaces the currently defined first 5 rows: reserved line is merged with compressed map indicator. "if (UL_MAP appended == 1) row is removed since it is correctly located later in the compressed map

Proposed Resolution

Recommendation: Superseded

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Superseded

Reason for Group's Decision/Resolution

[See comment 4482](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4282**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	378	Starting Line #	62	Fig/Table#	Section	8.4.5.6.1
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	-----------

UL MAP PDU to be first in burst

Today the DL MAP IE for busrt contains an UL MAP should be first IE in MAP.
We would ike to further define the location of the UL-MAP PDU indide the burst.

Suggested Remedy

[Make the follwoing changes to 6.3.2.3.2 Downlink map (DL-MAP) message]

The UL-MAP message (when present) shall be always transmitted **in the first PDU** on the burst described by the first DLMAP_ IE of the DL-MAP (or, in the case of the OFDM PHY mode, of the DLFP).

[make the follwoing changes to 8.4.5.6.1 Compressed DL-MAP]

In case the UL-MAP is not appended to the DL-MAP, the DL-MAP_IE that describes the PHY burst containing the UL-MAP (if such exists) shall appear first in the DL-MAP. **The first PDU in that burst shall be the UL-MAP.**

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

[Make the follwoing changes to 6.3.2.3.2 Downlink map (DL-MAP) message]

The UL-MAP message (when present) shall be always transmitted **in the first PDU** on the burst described by the first DLMAP_ IE of the DL-MAP (or, in the case of the OFDM PHY mode, of the DLFP).

[make the follwoing changes to 8.4.5.6.1 Compressed DL-MAP]

In case the UL-MAP is not appended to the DL-MAP, the DL-MAP_IE that describes the PHY burst containing the UL-MAP (if such exists) shall appear first in the DL-MAP. **The first PDU in that burst shall be the UL-MAP.**

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

[Make the follwoing changes to 6.3.2.3.2 Downlink map (DL-MAP) message]

The UL-MAP message (when present) shall be always transmitted **in the first PDU** on the burst described by the first DLMAP_ IE of the DL-MAP (or, in the case of the OFDM PHY mode, of the DLFP).

[make the follwoing changes to 8.4.5.6.1 Compressed DL-MAP]

In case the UL-MAP is not appended to the DL-MAP, the DL-MAP_IE that describes the PHY burst containing the UL-MAP (if such exists) shall appear first in the DL-MAP. **The first PDU in that burst shall be the UL-MAP.**

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4283**

Comment submitted by: Dave

Pechner

Other

2005/04/28

Comment	Type	Editorial	Starting Page #	379	Starting Line #	1	Fig/Table#	Section	8.4.5.8
---------	------	-----------	-----------------	-----	-----------------	---	------------	---------	---------

Two contributions related to Reduced Private Maps have not been correctly incorporated into D7. C802.16e-05/071r3 which was accepted at session 35 (comment 2241) and re-accepted at session 36 (comment 3416).
C802.16e-05/096r2 which was accepted at session 36 (comment 3417)

Suggested Remedy

Incorporate changes defined by C802.16e-05/071r3 and C802.16e-05/096r2

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

Incorporate changes defined by C802.16e-05/071r3 and C802.16e-05/096r2

Reason for Recommendation

Resolution of Group	Decision of Group: Accepted
---------------------	------------------------------------

Incorporate changes defined by C802.16e-05/071r3 and C802.16e-05/096r2

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

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

Table 308a no longer looks like the one modified by C802.16e-05/071r3. I did my best, but this table is now almost certainly incorrect. Likewise for the revisions in to Table 308a in C802.16e-05/096r2.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4284**

Comment submitted by: **Dave**

Pechner

Other

2005/04/28

Comment Type **Technical, non-binding**

Starting Page # **379**

Starting Line # **4**

Fig/Table#

Section

8.4.5.8

Small editorial and technical changes to Reduced Private Maps are required

Suggested Remedy

Incorporate changes defined in C80216e-05/216

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Incorporate changes defined in C80216e-05/216r1

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Incorporate changes defined in C80216e-05/216r1

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4285**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Editorial** Starting Page # **396** Starting Line # **9**

Fig/Table# **309** Section **8.4.6.1.1**

Editorial correction in preamble sequence numbers

I object to the resolution of comment 1322 from session 34, since it did a partial correction. This comment changed segment of preamble index #64 in table 309a (for 1K FFT) from 1 to 2 (in 802.16e/D6), the same correction should have been applied to fft size 512 and 128 as well (tables 309b,c - same preamble index same problem...)

Suggested Remedy

[Change segment number from 1 to 2 in table 309b, p. 396, line 9]

| 64 | 0 | **42** | C6325F42597BD48A8914944C7DB973D83E64 |

[Change segment number from 1 to 2 in table 309c, p.398 line 59]

| 26 | 26 | 0 | 31ABBF06D | 64 | 0 | **42** | 3FE158D96 | 102 | 6 | 0 | 82892F4CE |

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[Change segment number from 1 to 2 in table 309b, p. 396, line 9]

| 64 | 0 | **42** | C6325F42597BD48A8914944C7DB973D83E64 |

[Change segment number from 1 to 2 in table 309c, p.398 line 59]

| 26 | 26 | 0 | 31ABBF06D | 64 | 0 | **42** | 3FE158D96 | 102 | 6 | 0 | 82892F4CE |

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

[Change segment number from 1 to 2 in table 309b, p. 396, line 9]

| 64 | 0 | **42** | C6325F42597BD48A8914944C7DB973D83E64 |

[Change segment number from 1 to 2 in table 309c, p.398 line 59]

| 26 | 26 | 0 | 31ABBF06D | 64 | 0 | **42** | 3FE158D96 | 102 | 6 | 0 | 82892F4CE |

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4286**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **403** Starting Line # Fig/Table# **311** Section **8.4.6.1.2.2**

The number of used subcarriers in FUSC for FFT-512 and FFT-128 (tables 311b and 311c respectively) leads to an assymmetric frequency spectrum (Nused including DC subcarrier is even).

Suggested Remedy

1) Table 311b:

[Apply the following changes to existing table entries:]

Number of Guard Subcarriers, Left ~~43~~42

Number of Used Subcarriers (Nused) ~~426~~427

VariabeSet #0 ~~6~~ 18

ConstantSet #0 ~~4~~ 3

VariabeSet #1 ~~6~~ 18 12,36,60,84,108,132,156,180,204,228,252,276, 300,324,348,372,396, 420

ConstantSet #1 ~~4~~ 3

2) Table 311c:

[Apply the following changes to existing table entries:]

Number of Guard Subcarriers, Left ~~44~~10

Number of Used Subcarriers (Nused) ~~406~~107

VariabeSet #0 ~~25~~

VariabeSet #1 ~~24~~

ConstantSet #0 ~~1~~ **N/A**39

ConstantSet #1 ~~40~~ **N/A**

Proposed Resolution

Recommendation: Accepted-Modified

Recommendation by

1) Table 311b:

[Apply the following changes to existing table entries:]

Number of Guard Subcarriers, Right ~~43~~42

Number of Used Subcarriers (Nused) ~~426~~427

VariabeSet #0 ~~6~~ 18

ConstantSet #0 ~~4~~ 3

VariabeSet #1 ~~6~~ 18 12,36,60,84,108,132,156,180,204,228,252,276, 300,324,348,372,396, 420

ConstantSet #1 ~~4~~ 3

2) Table 311c:

[Apply the following changes to existing table entries:]

Number of Guard Subcarriers, Right ~~44~~10

Number of Guard Subcarriers, Right	111 <u>112</u>	
Number of Used Subcarriers (Nused)	406 <u>407</u>	
VariabeSet #0	25 <u>25</u>	
VariabeSet #1	24 <u>24</u>	
ConstantSet #0	1	N/A ³⁹
ConstantSet #1	40 <u>40</u>	N/A

Reason for Recommendation

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

1) Table 311b:
[Apply the following changes to existing table entries:]

Number of Guard Subcarriers, Right	43 <u>42</u>	
Number of Used Subcarriers (Nused)	426 <u>427</u>	
VariabeSet #0	6 <u>18</u>	
ConstantSet #0	4 <u>3</u>	
VariabeSet #1	6 <u>18</u>	12,36,60,84,108,132,156,180,204,228,252,276, 300,324,348,372,396, <u>420</u>
ConstantSet #1	4 <u>3</u>	

2) Table 311c:
[Apply the following changes to existing table entries:]

Number of Guard Subcarriers, Right	44 <u>40</u>	
Number of Used Subcarriers (Nused)	406 <u>407</u>	
VariabeSet #0	25 <u>25</u>	
VariabeSet #1	24 <u>24</u>	
ConstantSet #0	1	N/A ³⁹
ConstantSet #1	40 <u>40</u>	N/A

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4287**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **403** Starting Line # **12** Fig/Table# Section **8.4.6.1.2.1.1**

The 802.16e text (as well as Cor1 text) defines the values of 'IDcell' used for the two equations that define the PUSC permutation (cluster permutation defined in section 8.4.6.1.2.1.1 and 'inner permutation' defined in eq. (111)). For PUSC zones with zone-switch IE indicator 'use all SC=0', the cluster permutation is initialized with IDcell = 0. However for PUSC zones defined with 'use all SC=0', the IDcell value specified in the zone_switch_IE is the same one used for both the inner and cluster permutations. .

The coupling between inner and cluster permutations when 'use all SC=1' adds an unneeded restriction on the system design. For zones with 'use all SC=1', separate values should be used for the inner and cluster permutations of PUSC.

Decoupling these values has merit because PUSC permutation hit-ratio properties highly depend on the IDcell value used; hence better optimization of hit-ratio can be achieved by selecting distinct IDcell values for the different components of the permutation

The proposal is to add a DCD TLV that specifies an independent value for the PUSC cluster permutation, overriding the current definition. Backward compatibility since the default operation is left unchanged, and the BS can make sure not to allocate resources to legacy SSS in zones where the default was overridden.

This does not add any complexity to MSS design since it already needs to support all possible IDcell values for both inner and cluster permutation equations in PUSC

Suggested Remedy

[Add the following field to table 358 (DCD channel encodings):]

<u>DL_ClusterPermBase</u>	<u>XXX</u>	<u>1</u>	<u>Value used in the clustering renumbering formula described in section 8.4.6.1.2.1.1, for PUSC zones for which the indicator 'use all SC' = 1.</u>	<u>OFDMA</u>
---------------------------	------------	----------	--	--------------

[modify text on page 403, lines 12-15]

LogicalCluster = RenumberingSequence((PhysicalCluster+13*~~IDcell~~ DL_ClusterPermBase) mod Nclusters)

In the first PUSC zone of the downlink (first downlink zone), the default used ~~IDcell~~ DL_ClusterPermBase is 0. When the 'Use all SC indicator=0' in the STC_DL_Zone_IE(), DL_ClusterPermBase is replaced with 0. For All other cases DL_ClusterPermBase parameter transmitted in the DCD message shall be used, or, if the parameter was not transmitted in a DCD message, the IDcell parameter in the STC_DL_Zone_IE() shall be used.

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

Apply (inserting an appropriate value for 'XXX'):

[Add the following field to table 358 (DCD channel encodings):]

<u>DL_ClusterPermBase</u>	<u>XXX</u>	<u>1</u>	<u>Value used in the clustering renumbering formula described in section 8.4.6.1.2.1.1 for PUSC zones for which the indicator</u>	<u>OFDMA</u>
---------------------------	------------	----------	---	--------------

Section 9.1.2.1.1, for PUSC zones for which the indicator 'use all SC' = 1.

[modify text on page 403, lines 12-15]

LogicalCluster = RenumberingSequence((PhysicalCluster+13*~~IDcell~~ DL_ClusterPermBase) mod Nclusters)
 In the first PUSC zone of the downlink (first downlink zone), the default used ~~IDcell~~ DL_ClusterPermBase is 0. When the 'Use all SC indicator=0' in the STC_DL_Zone_IE(), DL_ClusterPermBase is replaced with 0. For All other cases DL_ClusterPermBase parameter transmitted in the DCD message shall be used, or, if the parameter was not transmitted in a DCD message, the IDcell parameter in the STC_DL_Zone_IE() shall be used.

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Vote: 1-6

Unnecessary feature, and requires a change in Corr1

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4288**

Comment submitted by: InSeok

Hwang

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **416** Starting Line # **51**Fig/Table# **316a** Section **8.4.6.2.8.1**

For the completeness of sounding command IE, sounding allocation mode compatible with Band AMC operation (See Sec. 6.3.18) is required. This can be done by introducing allocation band bit map.

Suggested Remedy

- 1) Add a allocation mode and use band bit map for sounding allocation in Band AMC mode.
- 2) Move "Souding_Relevance_Flag" for editorial purpose.

```

....
....
Multi-Antenna Flag           | 1 |
Allocation Mode              | 1 | 0: Normal, 1: Band AMC
If (Allocation Mode == 1) {
    Band bit Map              | 12 | See logical band defined in 6.3.18
}
else {
    Starting Frequency Band    | 7 | Out of 96 bands at most
If (Sounding_Relevance_Flag == 1) {
    Sounding_Relevance        | 1 |
}
    Number of Frequency Band   | 7 | Contiguous bands used for sounding
}
If (Sounding_Relevance_Flag == 1) {
    Sounding_Relevance         | 1 |
}
....

```

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

- 1) Add a allocation mode and use band bit map for sounding allocation in Band AMC mode.
- 2) Move "Souding_Relevance_Flag" for editorial purpose.

```

....
....
Multi-Antenna Flag          | 1 |
Allocation Mode            | 1 | 0: Normal, 1: Band AMC

If (Allocation Mode == 1) {
  Band bit Map              | 12 | See logical band defined in 6.3.18
}
else {
  Starting Frequency Band   | 7 | Out of 96 bands at most
If (Sounding_Relevance_Flag == 1) {
  Sounding_Relevance       | 1 |
}
  Number of Frequency Band  | 7 | Contiguous bands used for sounding
}

If (Sounding_Relevance_Flag == 1) {
  Sounding_Relevance        | 1 |
}
....

```

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

- 1) Add a allocation mode and use band bit map for sounding allocation in Band AMC mode.
- 2) Move "Sounding_Relevance_Flag" for editorial purpose.

```

....
....
Multi-Antenna Flag          | 1 |
Allocation Mode            | 1 | 0: Normal, 1: Band AMC

If (Allocation Mode == 1) {
  Band bit Map              | 12 | See logical band defined in 6.3.18
}
else {
  Starting Frequency Band   | 7 | Out of 96 bands at most
If (Sounding_Relevance_Flag == 1) {
  Sounding_Relevance       | 1 |
}
  Number of Frequency Band  | 7 | Contiguous bands used for sounding
}

If (Sounding_Relevance_Flag == 1) {

```

[Sounding_Relevance](#)

↓ 1 ↓

}

....

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4289**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **426** Starting Line # **39** Fig/Table# **317a** Section **8.4.6.3.1**
Correction to AMC pilot pattern

I object to the resolution of comment 1351 from session #34 (contribution C80216e-04_543 (Corrections in OFDMA Subcarrier Allocations)), as it didn't resolve correctly the definition of AMC pilot pattern.

We propose a small change, in order to make the pilot pattern consistent with the tile structure.

Suggested Remedy

Adopt contribution C80216e-05/248

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C80216e-05/248r3

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

Adopt contribution C80216e-05/248r3

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

Editor's Actions k) done

C802.16e-05/248r3 was not uploaded to the server. C802.16e-05/248r2 was adopted.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4290**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding**

Starting Page # **427**

Starting Line #

Fig/Table# **234**

Section

8.4.6.3.3

The content of figure 234 is blank.

Suggested Remedy

The correct figure appears on page 8 of contribution 802.16e-05/084r6, which was (re)accepted in session #36.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

The correct figure appears on page 8 of contribution 802.16e-05/084r6, which was (re)accepted in session #36.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

The correct figure appears on page 8 of contribution 802.16e-05/084r6, which was (re)accepted in session #36.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4291**

Comment submitted by: **Dave**

Pechner

Other

2005/04/28

Comment Type **Editorial** Starting Page # **427** Starting Line # **40**
AMC pilot pattern picture not included from C80216e/084r5 which was accepted at last meeting

Fig/Table# Section **8.4.6.3.3**

Suggested Remedy

[Include Pilot pattern figure from C80216e/084r5](#)

Proposed Resolution Recommendation: Accepted

Recommendation by

[Include Pilot pattern figure from C80216e/084r5](#)

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

[Include Pilot pattern figure from C80216e/084r5](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4292**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	430	Starting Line #	Fig/Table#	Section	8.4.7
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	-------

802.16-2004 defines an initial ranging scheme that is based on transmitting either one or two CDMA codes over 6 subchannels (8 with optional PUSC).

However, these schemes do not work well when the deployment consists of a multiple-antenna BS (a supported configuration of 802.16-2004) and a power limited SS that requires either repetition or mini-subchannels for its operation. In such scenarios, the code misdetection rate can go as high as 25% for a 1% false alarm rate. With a single-antenna BS, detection performance is only marginal.

These results are obtained under optimistic assumptions: time offset is perfectly known, a single code hypothesis, no contention on the ranging slot.

Suggested Remedy

Consider and adopt contribution C802.16e-05/251.

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

Out of scope (new capability).

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4293**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	430			8.4.7

802.16-2004 defines an initial ranging scheme that is based on transmitting either one or two CDMA codes over 6 subchannels (8 with optional PUSC).

However, these schemes do not work well when the deployment consists of a multiple-antenna BS (a supported configuration of 802.16-2004) and a power limited SS that requires either repetition or mini-subchannels for its operation. In such scenarios, the code misdetection rate can go as high as 25% for a 1% false alarm rate. With a single-antenna BS, detection performance is only marginal.

These results are obtained under optimistic assumptions: time offset is perfectly known, a single code hypothesis, no contention on the ranging slot.

Suggested Remedy

Consider and adopt contribution C802.16e-05/251.

Proposed ResolutionRecommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4294**Comment submitted by: **Yerang****Hur****Other****2005/04/28**Comment Type **Technical Non-binding**Starting Page # **430** Starting Line # **18**

Fig/Table#

Section **8.4.7****Incorrect size of HMAC tuple.****Suggested Remedy**

[Change line 18, page 430 as follows:]

... additional ~~23~~ **21** bytes long HMAC Tuple, ...**Proposed Resolution** Recommendation: **Accepted**

Recommendation by

[Change line 18, page 430 as follows:]

... additional ~~23~~ **21** bytes long HMAC Tuple, ...**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted**

[Change line 18, page 430 as follows:]

... additional ~~23~~ **21** bytes long HMAC Tuple, ...**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4295**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment

Type **Technical, Non-binding**Starting Page # **432**Starting Line # **5**Fig/Table# **249a**Section **8.4.8.1.5**

The order of the detail data allocation is needed in the Figure 249. Therefore I recommend to follow the order of Figure 249 in 2004/Cor1/D2.

Suggested Remedy

Insert the text in Figure 249a as Figure 249 in 2004/Cor1/D2.

S1	S2			-S2*	S1*		
S3	S4	S5	S6	-S4*	S3*	-S6*	S5*
	S7	S8			-S8*	S7*	

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Insert the text in Figure 249a as Figure 249 in 2004/Cor1/D2.

S1	S2			-S2*	S1*		
S3	S4	S5	S6	-S4*	S3*	-S6*	S5*
	S7	S8			-S8*	S7*	

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

Insert the text in Figure 249a as Figure 249 in 2004/Cor1/D2.

S1	S2			-S2*	S1*		
S3	S4	S5	S6	-S4*	S3*	-S6*	S5*
	S7	S8			-S8*	S7*	

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

The patterns (shading) are different in Corr1, but the locations are the same. Look at the figure in Corr1 and insert text into 802.16e as written in this comment.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4296**Comment submitted by: **Wen****Tong**

Member

2005/04/28

Comment Type **Editorial** Starting Page # **433** Starting Line # **38** Fig/Table# **251a** Section **8.4.8.3**
Change Illustration to Example (be consistent with 251b,d)

Suggested Remedy

Figure 251a—~~Illustration~~ **Example** of STC for optional zones in DL (Matrix A for 2,3,4 Tx and matrix B for 3,4 Tx)

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Figure 251a—~~Illustration~~ **Example** of STC for optional zones in DL (Matrix A for 2,3,4 Tx and matrix B for 3,4 Tx)

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**Figure 251a—~~Illustration~~ **Example** of STC for optional zones in DL (Matrix A for 2,3,4 Tx and matrix B for 3,4 Tx)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4297**

Comment submitted by: Wen

Tong

Member

2005/04/28

Comment Type **Editorial** Starting Page # **434** Starting Line # **16** Fig/Table# **251** Section **8.4.8.3**
 Consistent among Figure captions for Figure 251a,b,c,d

Suggested RemedyFigure 251b—Example ~~Embedment~~ of Matrix B with Horizontal Encoding for 3 or 4 Tx BS for optional zones in DLFigure 251c—~~Illustration~~ Example of Matrix C with Vertical Encoding for 2,3,4 Tx BS for optional zones in DLFigure 251d—Example ~~Embedment~~ of Matrix C with Horizontal Encoding for 2, 3 or 4 Tx BS for optional zones in DL**Proposed Resolution**Recommendation: **Accepted**

Recommendation by

Figure 251b—Example ~~Embedment~~ of Matrix B with Horizontal Encoding for 3 or 4 Tx BS for optional zones in DLFigure 251c—~~Illustration~~ Example of Matrix C with Vertical Encoding for 2,3,4 Tx BS for optional zones in DLFigure 251d—Example ~~Embedment~~ of Matrix C with Horizontal Encoding for 2, 3 or 4 Tx BS for optional zones in DL**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted**Figure 251b—Example ~~Embedment~~ of Matrix B with Horizontal Encoding for 3 or 4 Tx BS for optional zones in DLFigure 251c—~~Illustration~~ Example of Matrix C with Vertical Encoding for 2,3,4 Tx BS for optional zones in DLFigure 251d—Example ~~Embedment~~ of Matrix C with Horizontal Encoding for 2, 3 or 4 Tx BS for optional zones in DL**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4298L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment Type **Editorial** Starting Page # **436** Starting Line # **42** Fig/Table# **251g** Section **8.4.8.3.1.1**

The editor did not incorporate two previous comment resolutions on Figure 251g.
(Comment #1510 in Nov. 2004 meeting, and Comment #3438 in Mar. 2005 meeting)

Suggested Remedy

[Replace the Figure 251g in page 436 with the Figure ccc in the accepted contribution C802.16e-04/558r2 (Comment #1510) in Nov. 2004 meeting]

Proposed Resolution Recommendation: Accepted**Recommendation by**

[Replace the Figure 251g in page 436 with the Figure ccc in the accepted contribution C802.16e-04/558r2 (Comment #1510) in Nov. 2004 meeting]

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

[Replace the Figure 251g in page 436 with the Figure ccc in the accepted contribution C802.16e-04/558r2 (Comment #1510) in Nov. 2004 meeting]

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4299L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment Type **Editorial**Starting Page # **437** Starting Line # **28**Fig/Table# **251h** Section **8.4.8.3.1.2.1**

Editorial mistakes in Figure 251h, 251i and 251j

Suggested Remedy

1. change all ? (question mark) to - (minus sign) in Figure 251h and 251j
2. In the left figure in Figure 251i, change S58 to S56, and S56 to S58.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

1. change all ? (question mark) to - (minus sign) in Figure 251h and 251j
2. In the left figure in Figure 251i, change S58 to S56, and S56 to S58.

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

1. change all ? (question mark) to - (minus sign) in Figure 251h and 251j
2. In the left figure in Figure 251i, change S58 to S56, and S56 to S58.

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

Editor's Actions k) done

Note that all of these figures have been re-drawn. Carefully examine the new figures to ensure they're correct.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4300**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment **Type** **Technical, Binding** **Starting Page #** **443** **Starting Line #** **9** **Fig/Table#** **Section** **8.4.9.2.5.0**

The resolution of Comment 1605 in 80216-05_010r1.pdf is incomplete. In the current LDPC solution, 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****Recommendation by**

Adopt Contribution IEEE C802.16e-05/126r1

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

Vote: 9-20.

The performance improvement between 3/4 and 5/6 is too small to justify any extra mode.

The resolution of Comment 1605 in 80216-05_010r1.pdf **is** complete. Contribution 802.16-05/010r1 did not include a 5/6 coding rate.

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4301**

Comment submitted by: **Mo-Han**

Fong

Member

2005/04/28

Comment Type **Technical, Satisfied (was** Starting Page # **450** Starting Line # **1**
Original contribution IEEE C802.16e-04/554r4 for table of matrix is correct. The one in D7 is not.

Fig/Table# **317g** Section **8.4.8.3.5.3**

Suggested Remedy

adopt contribution C80216e-05_258.doc

Proposed Resolution Recommendation: Accepted

Recommendation by

adopt contribution C80216e-05_258.doc

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

adopt contribution C80216e-05_258.doc

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

Row 3, column 2, I changed S4 to S3 (that's the correct value, right?)

Editor's Questions and Concerns

Editor's Action Items

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4302**

Comment submitted by: **Wen**

Tong

Member

2005/04/28

Comment Type **Editorial** Starting Page # **450** Starting Line # **1**

Fig/Table# **317g** Section **8.4.8.3.5.3**

Table of matrix, original contribution IEEE C802.16e-04/554r4 is correct,

Suggested Remedy

adopt contribution C80216e-05_258.doc

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See comment 4301.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4303**

Comment submitted by: Aditya

Agrawal

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **453** Starting Line # **25** Fig/Table# **2511** Section **8.4.8.4.1**

[Submitted as Technical, Binding but with an Approve vote.]

UL STC pilots for Band AMC are broken because FEC puncturing is not defined for burst allocated with these pilots.

Suggested Remedy

Replace lines 25-26 and Fig 2511 with:

For the 2-antenna MS and the optional AMC, the STC pilot structure is the same as the DL 2 transmit STC pilot structure for optional AMC.

Proposed ResolutionRecommendation: **Superseded**

Recommendation by

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

See 4304.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4304L**

Comment submitted by: Wonil

Roh

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	453	Starting Line #	25	Fig/Table#	Section	8.4.8.4.1
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	-----------

The 2 Tx pilot pattern for UL optional AMC permutation should be the same as that in the DL.
This way, it does not suffer from puncturing loss and maintains the similar performance in UL as in DL.

Suggested Remedy

[modify the text in page 453 line 25 ~ line 27 as following]

For 2-antenna MS and the optional AMC, pilot allocation pattern shall be identical to that for the downlink optional AMC with 2 antennas described in 8.4.8.3.1.1, all pilots in the even~~1st, 5th~~ symbols shall be allocated for antenna 0 or pattern-A, while pilots in the odd~~2nd and 6th~~ symbols shall be allocated for antenna 1 or pattern-B. This is shown in Figure 251e~~251f~~.

[Delete Figure 251f in page 453]

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

[modify the text in page 453 line 25 ~ line 27 as following]

For 2-antenna MS and the optional AMC, pilot allocation pattern shall be identical to that for the downlink optional AMC with 2 antennas described in 8.4.8.3.1.1, all pilots in the even~~1st, 5th~~ symbols shall be allocated for antenna 0 or pattern-A, while pilots in the odd~~2nd and 6th~~ symbols shall be allocated for antenna 1 or pattern-B. This is shown in Figure 251e~~251f~~.

[Delete Figure 251f in page 453]

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

[modify the text in page 453 line 25 ~ line 27 as following]

For 2-antenna MS and the optional AMC, pilot allocation pattern shall be identical to that for the downlink optional AMC with 2 antennas described in 8.4.8.3.1.1, all pilots in the even~~1st, 5th~~ symbols shall be allocated for antenna 0 or pattern-A, while pilots in the odd~~2nd and 6th~~ symbols shall be allocated for antenna 1 or pattern-B. This is shown in Figure 251e~~251f~~.

[Delete Figure 251f in page 453]

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

Editor's Notes Editor's Actions k) done

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D7 Ballot Number: 0001037 Comment Date

Comment # 4305 Comment submitted by: Wen Tong Member 2005/04/28

Comment Type Editorial Starting Page # 456 Starting Line # 31 Fig/Table# Section 8.4.8.5.2
Text clean up

Suggested Remedy

8.4.8.5.2 Midamble Sequence for FUSC and optional FUSC
The frequency subcarrier locations and corresponding PN code BPSK modulation of subcarriers in a midamble are defined as in the following formula. The DC carrier is nulled

Proposed Resolution Recommendation: Accepted-Modified Recommendation by

8.4.8.5.2 Midamble Sequence for FUSC and optional FUSC
The frequency subcarrier locations and corresponding values PN code BPSK modulation of subcarriers in a midamble are defined as in the following formula. The DC carrier is nulled

Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

8.4.8.5.2 Midamble Sequence for FUSC and optional FUSC
The frequency subcarrier locations and corresponding values PN code BPSK modulation of subcarriers in a midamble are defined as in the following formula. The DC carrier is nulled

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4306**Comment submitted by: **Aditya****Agrawal**

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	458			8.4.5.2.1

[Submitted as Technical, Binding but with an Approve vote.]

The Tables 319c,d,e,g,i,k for Midamble definition have entries for Idcell field in the range: 0 - 126. The standard only defines Idcells in the range 0 - 31.

Suggested Remedy

Change Idcell field in Tables 319c,d,e,g,i,k to reference Preamble Index in the range 0 - 113. Remove rows in Tables 319c,d,e,g,i,k for Idcells greater than 113.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Change Idcell field in Tables 319c,d,e,g,i,k to reference Preamble Index in the range 0 - 113. Remove rows in Tables 319c,d,e,g,i,k for Idcells greater than 113.

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

Change Idcell field in Tables 319c,d,e,g,i,k to reference Preamble Index in the range 0 - 113. Remove rows in Tables 319c,d,e,g,i,k for Idcells greater than 113.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4307**

Comment submitted by: **Rainer**

Ullmann

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **471**

Starting Line # **33**

Fig/Table# **254a**

Section **8.4.9.1**

Wrong editorial instructions:

Should be "Figure" instead of "Table"

Suggested Remedy

Replace:

8.4.9.1 Randomization

[Remove Table 254; insert Table 254a:]

.....
[Insert text below Table 254a:]

with

8.4.9.1 Randomization

[Remove Figure254; insert Figure 254a:]

.....
[Insert text below Figure 254a:]

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Replace:

8.4.9.1 Randomization

[Remove Table 254; insert Table 254a:]

.....
[Insert text below Table 254a:]

with

8.4.9.1 Randomization

[Remove Figure254; insert Figure 254a:]

.....
[Insert text below Figure 254a:]

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Replace:

8.4.9.1 Randomization

[Remove Table 254; insert Table 254a:]

.....
[Insert text below Table 254a:]

with

8.4.9.1 Randomization

[Remove Figure254; insert Figure 254a:]

.....
[Insert text below Figure 254a:]

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4308**

Comment submitted by: Rainer

Ullmann

Member

2005/04/28

Comment Type **Editorial**Starting Page # **471** Starting Line # **60**

Fig/Table#

Section **8.4.9.1**

Redundant "with the" in text

Suggested RemedyRemove text marked in red with ~~strikeout~~:

HARQ requires that the randomizer pattern be identical for each HARQ attempt. For HARQ operation, the randomizer shall be initialized with the ~~with the~~ vector created as shown in Figure 254a.

Proposed Resolution Recommendation: Accepted**Recommendation by**Remove text marked in red with ~~strikeout~~:

HARQ requires that the randomizer pattern be identical for each HARQ attempt. For HARQ operation, the randomizer shall be initialized with the ~~with the~~ vector created as shown in Figure 254a.

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**Remove text marked in red with ~~strikeout~~:

HARQ requires that the randomizer pattern be identical for each HARQ attempt. For HARQ operation, the randomizer shall be initialized with the ~~with the~~ vector created as shown in Figure 254a.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4309**Comment submitted by: **Rainer****Ullmann**

Member

2005/04/28

Comment Type **Editorial**Starting Page # **472** Starting Line # **5**

Fig/Table#

Section **8.4.9.2**[Wrong references in text](#)**Suggested Remedy**[Change text as indicated in red:](#)

Concatenation of a number of subchannels shall be performed in order to make larger blocks of coding where it is possible, with the limitation of not passing the largest block under the same coding rate (the block defined by 64-QAM modulation). Table 318 specifies the concatenation of subchannels for different allocations and modulations. The parameters in Table 317 and Table 318 shall apply to the CC encoding scheme (see 8.4.9.2.1) and the BTC encoding scheme (see 8.4.9.2.2), for the CTC encoding scheme (see 8.4.9.2.3), the concatenation rule is defined in 8.4.9.2.3.1, and for the LDPC encoding scheme (see 8.4.9.2.5) the concatenation rule is defined in 8.4.2.9.5.4.

Proposed Resolution Recommendation: Accepted**Recommendation by**[Change text as indicated in red:](#)

Concatenation of a number of subchannels shall be performed in order to make larger blocks of coding where it is possible, with the limitation of not passing the largest block under the same coding rate (the block defined by 64-QAM modulation). Table 318 specifies the concatenation of subchannels for different allocations and modulations. The parameters in Table 317 and Table 318 shall apply to the CC encoding scheme (see 8.4.9.2.1) and the BTC encoding scheme (see 8.4.9.2.2), for the CTC encoding scheme (see 8.4.9.2.3), the concatenation rule is defined in 8.4.9.2.3.1, and for the LDPC encoding scheme (see 8.4.9.2.5) the concatenation rule is defined in 8.4.2.9.5.4.

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**[Change text as indicated in red:](#)

Concatenation of a number of subchannels shall be performed in order to make larger blocks of coding where it is possible, with the limitation of not passing the largest block under the same coding rate (the block defined by 64-QAM modulation). Table 318 specifies the concatenation of subchannels for different allocations and modulations. The parameters in Table 317 and Table 318 shall apply to the CC encoding scheme (see 8.4.9.2.1) and the BTC encoding scheme (see 8.4.9.2.2), for the CTC encoding scheme (see 8.4.9.2.3), the concatenation rule is defined in 8.4.9.2.3.1, and for the LDPC encoding scheme (see 8.4.9.2.5) the concatenation rule is defined in 8.4.2.9.5.4.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4310L** Comment submitted by: Jiho Jang Other 2005/04/28Comment Type **Technical, Non-binding** Starting Page # **473** Starting Line # **3** Fig/Table# **325a** Section **8.4.9.2.3**

I object to the implementation of the comment #3537, because the implemetation reflects the resolution partially. The comment was accepted modified to incorporate the C802.16e-05/082r2 with changing CTC with LDPC. In the case, the CTC interleaver parameters shall be removed from implementation. Finally, the concatenation parameter shall be incorporated into LDPC block.

Suggested Remedy

*(1) Change the table number and title of 'table 325a' in page 473 line 31 as'
"Table ~~325a~~333b - Encoding Subchannel Concatenation for Different Rates in-CTCLDPC" ,
and Move this table to page 483 line 25 (Section 8.4.9.2.5.4).*

(2) Delete from page 473 line 3 to page 474 line 57.

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

(2) Delete from page 473 line 3 to page 474 line 57.

Reason for Recommendation

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

(2) Delete from page 473 line 3 to page 474 line 57.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4311**Comment submitted by: **Mo-Han****Fong**

Member

2005/04/28

Comment Type **Technical, Satisfied (was** Starting Page # **483** Starting Line # **25** Fig/Table# **333** Section **8.4.9.2.5.4**

The contribution IEEE C802.16e-05/082r2 was adopted during the last meeting with the modification for LDPC. However, the instruction is too general for the editor to make appropriate changes in the text. Therefore, no changes were made in IEEE P802.16e/D7. In this contribution, we made the changes needed for LDPC explicitly.

Suggested Remedy[Adopt contribution IEEE C802.16e-05/260r0](#)**Proposed Resolution Recommendation: Accepted****Recommendation by**[Adopt contribution IEEE C802.16e-05/260r0](#)**Reason for Recommendation****Resolution of Group****Decision of Group: Accepted**[Adopt contribution IEEE C802.16e-05/260r0](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4312**Comment submitted by: **Peiyong****Zhu**

Member

2005/04/28

Comment **Type** **Technical, Non-binding** **Starting Page #** **483** **Starting Line #** **25** **Fig/Table#** **33b** **Section** **8.4.9.2.5.4**

The contribution IEEE C802.16e-05/082r2 was adopted during the last meeting with the modification for LDPC. However, the instruction is too general for the editor to make appropriate changes in the text. Therefore, no changes were made in IEEE P802.16e/D7. In this contribution, we made the changes needed for LDPC explicitly.

Suggested Remedy[see contribution IEEE C802.16e-05/260r0](#)**Proposed Resolution****Recommendation:** **Superceded****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group:** **Superceded**[See 4311](#)**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4313**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **483** Starting Line # **46** Fig/Table# Section **8.4.9.4.2**

The following text is the duplicate of the text in Cor1/D2 on page145, line 1.

8.4.9.4.2 Data modulation

[Insert the following text at the end of subclause 8.4.9.4.2:]

In the downlink, data subcarriers which belong to slots that are not allocated in the DL-MAP shall not be transmitted (i.e. zero energy). Data subcarriers which are part of a gap allocation (DIUC=13) shall be modulated at the BS discretion.

Suggested Remedy

[Delete from pp 483 line 45 - line 50]

~~8.4.9.4.2 Data modulation~~

~~[Insert the following text at the end of subclause 8.4.9.4.2:]~~

~~In the downlink, data subcarriers which belong to slots that are not allocated in the DL-MAP shall not be transmitted (i.e. zero energy). Data subcarriers which are part of a gap allocation (DIUC=13) shall be modulated at the BS discretion.~~

Proposed Resolution

Recommendation: Rejected

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

Having the same text in both places will not hurt us when the documents are consolidated, but if Corr1 deletes the text after we remove it, the text will be missing from both.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4314**

Comment submitted by: **Rainer**

Ullmann

Member

2005/04/28

Comment Type **Editorial** Starting Page # **487** Starting Line #

Fig/Table# **334** Section **8.4.10.3.1**

Wrong table number. Text gets added to existing Table 334

Suggested Remedy

Change Table Title:

Table 334a—Normalized C/N per modulation

to:

Table 334—Normalized C/N per modulation

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change Table Title:

Table 334a—Normalized C/N per modulation

to:

Table 334—Normalized C/N per modulation

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change Table Title:

Table 334a—Normalized C/N per modulation

to:

Table 334—Normalized C/N per modulation

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4315**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	487	Starting Line #	25	Fig/Table#	Section	8.4.10.3.1.1
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	--------------

The section 8.4.10.3.1.1 is describing the UL Tx power report condition for open loop power control.

The section shall be moved to the end of the open loop power control section 8.4.10.3.2 and change the section number accordingly.

Suggested Remedy

[Move text on page 487 from line 25 to line 57 to the end of section 8.4.10.3.2]

[Change the section number 8.4.10.3.1.1 to 8.4.10.3.2.1]

[Change eq. numbers from 138b to 138a in 8.4.10.3.1]

[Change eq. numbers from 138a to 138b in 8.4.10.3.2.1]

Proposed Resolution Recommendation: Accepted**Recommendation by**

[Move text on page 487 from line 25 to line 57 to the end of section 8.4.10.3.2]

[Change the section number 8.4.10.3.1.1 to 8.4.10.3.2.1]

[Change eq. numbers from 138b to 138a in 8.4.10.3.1]

[Change eq. numbers from 138a to 138b in 8.4.10.3.2.1]

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

[Move text on page 487 from line 25 to line 57 to the end of section 8.4.10.3.2]

[Change the section number 8.4.10.3.1.1 to 8.4.10.3.2.1]

[Change eq. numbers from 138b to 138a in 8.4.10.3.1]

[Change eq. numbers from 138a to 138b in 8.4.10.3.2.1]

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4316L**

Comment submitted by: Roland

Muenzner

Other

2005/04/28

Comment	Type Editorial	Starting Page # 487	Starting Line # 27	Fig/Table#	Section 8.4.10.3.1
---------	-----------------------	----------------------------	---------------------------	------------	---------------------------

Typing error in chapter header, dot missing:
 8.4.10.3.1 1 UL Tx power and Headroom transmission condition
 rename by
 8.4.10.3.1.1 UL Tx power and Headroom transmission condition

Suggested Remedy

insert dot:
 8.4.10.3.1.1 UL Tx power and Headroom transmission condition

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

insert dot:
 8.4.10.3.1.1 UL Tx power and Headroom transmission condition

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

insert dot:
 8.4.10.3.1.1 UL Tx power and Headroom transmission condition

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4317**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	488	16		8.4.10.3.2

The propagation loss component 'L' in open-loop power control is erroneously defined to not include Tx or Rx antenna gains. However, the path loss is later defined as the difference between the BS_EIRP, which is the power after Tx antenna gain, and the RSSI which is the power after Rx antenna gain.

To correct the definition, the propagation loss should include Rx antenna gain but not Tx antenna gain.

Suggested Remedy

Change the text on page 488 line 16 as follows:

"L is the estimated average current UL propagation loss, including Rx antenna gain but not including Tx/Rx antenna gains "

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Adopt Contribution C802.16e-05/263.

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Adopt Contribution C802.16e-05/263.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4318**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	488	Starting Line #	35	Fig/Table#	Section	8.4.10.3.2
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	------------

The Offset_BSperSS can be directed to a SS using RNG-RSP(6.3.2.3.6), Fast Power Control(FPC) message (6.3.2.3.34), Power Control IE (8.4.5.4.5) and OFDMA Fast Ranging IE(8.4.5.4.21).

However, RNG-RSP(6.3.2.3.6), OFDMA Fast Ranging IE(8.4.5.4.21) are not mentioned.

Suggested Remedy

[Change the text as follows at pp 488 line 34 in 8.4.10.3.2]

Additionally, the BS controls the Offset_BSperSS using PMC_RSP message (6.3.2.3.58) to override the Offset_BSperSS value, or using [RNG-RSP\(6.3.2.3.6\)](#), Fast Power Control(FPC) message (6.3.2.3.34) **and**, Power Control IE (8.4.5.4.5) **and** [OFDMA Fast Ranging IE\(8.4.5.4.21\)](#) to adjust the Offset_BSperSS value. The accumulated power control value shall be used for Offset_BSperSS

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

[Change the text as follows at pp 488 line 34 in 8.4.10.3.2]

Additionally, the BS controls the Offset_BSperSS using PMC_RSP message (6.3.2.3.58) to override the Offset_BSperSS value, or using [RNG-RSP\(6.3.2.3.6\)](#), Fast Power Control(FPC) message (6.3.2.3.34) **and**, Power Control IE (8.4.5.4.5) **and** [OFDMA Fast Ranging IE\(8.4.5.4.21\)](#) to adjust the Offset_BSperSS value. The accumulated power control value shall be used for Offset_BSperSS

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

[Change the text as follows at pp 488 line 34 in 8.4.10.3.2]

Additionally, the BS controls the Offset_BSperSS using PMC_RSP message (6.3.2.3.58) to override the Offset_BSperSS value, or using [RNG-RSP\(6.3.2.3.6\)](#), Fast Power Control(FPC) message (6.3.2.3.34) **and**, Power Control IE (8.4.5.4.5) **and** [OFDMA Fast Ranging IE\(8.4.5.4.21\)](#) to adjust the Offset_BSperSS value. The accumulated power control value shall be used for Offset_BSperSS

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4319**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **488** Starting Line # **54** Fig/Table# Section **8.4.10.3.2**

Contribution 802.16e-05/137r1 was accepted during session #36, however some of the changes were not implemented.

Suggested Remedy

Implement the following changes that were accepted as part of contribution 802.16e-05/137r1:

1) Complete the sentence on page 488 line 54:

In passive Uplink open loop power control the SS will set `Offset_SSperSS` to zero and modify the TX power value only according to `Offset_BSperSS`.

2) Modify field 'BS EIRP' in table 358, as follows:

Name	Type	Length	Value (variable length)	PHY scope
BS EIRP	2	2	<u>BS equivalent isotropic radiated power.</u> Signed units of 1dbm. <u>For OFDMA PHY, this is measured on the active subcarriers of the frame preamble.</u>	All

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

1) Complete the sentence on page 488 line 54:

In passive Uplink open loop power control the SS will set `Offset_SSperSS` to zero and modify the TX power value using the Eq. (138b)

2) Modify field 'BS EIRP' in table 358, as follows:

Name	Type	Length	Value (variable length)	PHY scope
BS EIRP	2	2	<u>BS equivalent isotropic radiated power.</u> Signed units of 1dbm. <u>For OFDMA PHY, this is measured on the active subcarriers of the frame preamble.</u>	All

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

1) Complete the sentence on page 488 line 54:

In passive Uplink open loop power control the SS will set Offset_SSperSS to zero and modify the TX power value using the Eq. (138b)

2) Modify field 'BS EIRP' in table 358, as follows:

Name	Type	Length	Value (variable length)	PHY scope
BS EIRP	2	2	<u>BS equivalent isotropic radiated power.</u> Signed units of 1dbm. <u>For OFDMA PHY, this is measured on the active subcarriers of the frame preamble.</u>	All

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4320**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	489	30		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-05/141r2 "CINR measurements using the EESM method"

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Adopt contribution 802.16e-05/141r3 "CINR measurements using the EESM method"

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

Vote: 9-16

Reason: Existing methods are sufficient, and this method adds overhead.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4321**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	489	30		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-05/141r2 "CINR measurements using the EESM method"

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

[See comment 4320.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4322**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **497**

Starting Line #

Fig/Table# **342**

Section **10.1**

Table heading is incorrect. We are not inserting an new table after Table 342 (which would be labelled Table 342a), but we are inserting new rows to the existing Table 342.

Suggested Remedy

On page 497, line 28, change

"Table 342a—Parameters and Constants"

to

"Table 342—Parameters and Constants"

Proposed Resolution Recommendation: Accepted

Recommendation by

On page 497, line 28, change

"Table 342a—Parameters and Constants"

to

"Table 342—Parameters and Constants"

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

On page 497, line 28, change

"Table 342a—Parameters and Constants"

to

"Table 342—Parameters and Constants"

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4323**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial** Starting Page # **497** Starting Line # **7**Fig/Table# Section **10.1**

Table reference is incorrect according to the official standard 802.16-2004

Suggested Remedy

On page 497, line 7, change

"[Change Table 340 as indicated: :]"

to

"[Change Table 342 as indicated:]"

and on page 497, line 25, change

"[Insert the following values to table 340:]"

to

"[Insert the following values to table 342:]"

Proposed Resolution Recommendation: **Accepted**

Recommendation by

On page 497, line 7, change

"[Change Table 340 as indicated: :]"

to

"[Change Table 342 as indicated:]"

and on page 497, line 25, change

"[Insert the following values to table 340:]"

to

"[Insert the following values to table 342:]"

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

On page 497, line 7, change

"[Change Table 340 as indicated: :]"

to

"[Change Table 342 as indicated:]"

and on page 497, line 25, change

"[Insert the following values to table 340:]"

to

"[Insert the following values to table 342:]"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4324**

Comment submitted by: Beomjoon

Kim

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	497	Starting Line #	58	Fig/Table#	Section	10
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	----

According to line 5 through 10, page 153,

"Upon completion of a successful MS initial-ranging of a BS, if the RNG-RSP message contains a Service Level Prediction parameter set to 2, the MS may mark the BS as Associated in its MS local Association table of identities, recording elements of the RNG-RSP to the MS local Association table, and **setting an appropriate aging timer** (See Table 340a Parameters and Constants, ASC-AGING-TIMER). Association state in the MS local Association table shall be aged-out after ASC-AGING-TIMER timeout and the Association entry removed."

It is mentioned that MS sets ASC-AGING-TIMER after association. However, in Table 342a (not 340a), ASC-AGING-TIMER is specified as if it is the parameter that only BS keeps.

Suggested Remedy

Remedy 1:

Add MSS to the row of ASC-AGING-TIMER in line 58, page 497,

BS, MSS | ASC-AGING-TIMER| Nominal time for aging of MS association| 0.1s| - |10s|

Remedy 2:

line 8, page 153, change Table 340a to Table 342a to be

See Table 340a342a Parameters and Constants, ASC-AGING-TIMER**Proposed Resolution****Recommendation: Accepted-Modified****Recommendation by**

Remedy 1:

Add MS to the row of ASC-AGING-TIMER in line 58, page 497,

BS, MS | ASC-AGING-TIMER| Nominal time for aging of MS association| 0.1s| - |10s|

Remedy 2:

line 8, page 153, change Table 340a to Table 342a to be

See Table 340a342a Parameters and Constants, ASC-AGING-TIMER**Reason for Recommendation****Resolution of Group****Decision of Group: Accepted-Modified**

Remedy 1:

Add MS to the row of ASC-AGING-TIMER in line 58, page 497,

BS, MS | ASC-AGING-TIMER| Nominal time for aging of MS association| 0.1s| - |10s|

Remedy 2:

line 8, page 153, change Table 340a to Table 342a to be

See Table 340a342a Parameters and Constants, ASC-AGING-TIMER**Reason for Group's Decision/Resolution**

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4325**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **499** Starting Line # **15** Fig/Table# **Tabl** Section **10.1**

1. T34 shall be T33 in the description of T34 variable.
2. The bit width of start frame is change from 7 bits to 6 bits. The default value shall comply with the bit width.

Suggested Remedy

[Change the T34 row as follows on page 499, line 15]

System: BS

Name: T34

Description: PMC_RSP Timer: BS shall send the PMC_RSP before T3~~3~~4 + 1 frames after BS receives PMC_REQ (confirmation = 0) correctly.

Min value: 8 frames

Default value: ~~128~~ 64 frames

Max value: 1024 frames

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

[Change the T34 row as follows on page 499, line 15]

System: BS

Name: T34

Description: PMC_RSP Timer: BS shall send the PMC_RSP before T3~~3~~4 + 1 frames after BS receives PMC_REQ (confirmation = 0) correctly.

Min value: 8 frames

Default value: ~~128~~ 64 frames

Max value: 1024 frames

NOTE: Timer name must be adjusted according to comment 4460

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

NOTE: Timer name must be adjusted according to comment 4460

[Change the T34 row as follows on page 499, line 15]

System: BS

Name: T34

Description: PMC_RSP Timer: BS shall send the PMC_RSP before T3~~3~~4 + 1 frames after BS receives PMC_REQ (confirmation = 0) correctly.

Min value: 8 frames

Default value: ~~128~~ 64 frames

Max value: 1024 frames

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4326**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial** Starting Page # **500** Starting Line # **10** Fig/Table# **345** Section **10.4**

The format of the Value column has been modified compared to the baseline document. Keep the format the same as the baseline text.

Suggested Remedy

In table 345 on p. 500, change the heading of column 2 from

"Value (hexadecimal)"

to

"Value"

In the following rows, format the hexadecimal values to read '0x0000', '0xFEA0-0xFEFE', etc.

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

In table 345 on p. 500, change the heading of column 2 from

"Value (hexadecimal)"

to

"Value"

In the following rows, format the hexadecimal values to read '0x0000', '0xFEA0-0xFEFE', etc.

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

In table 345 on p. 500, change the heading of column 2 from

"Value (hexadecimal)"

to

"Value"

In the following rows, format the hexadecimal values to read '0x0000', '0xFEA0-0xFEFE', etc.

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4327**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial** Starting Page # **500** Starting Line # **17**Fig/Table# **345** Section **10.4**

Editorial change language is not quite clear.

Suggested Remedy

On p. 500, line 17, change the row in table 345 from

Transport CIDs, Secondary Mgt CIDs	2m+1 - FE9F	For the secondary management connection, the same value is assigned to both the DL and UL connection.
--	-------------	---

to

Transport CIDs, Secondary Mgt CIDs	2m+1 - FE9F <u>FE9F</u>	For the secondary management connection, the same value is assigned to both the DL and UL connection.
--	------------------------------------	---

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

On p. 500, line 17, change the row in table 345 from

Transport CIDs, Secondary Mgt CIDs	2m+1 - FE9F	For the secondary management connection, the same value is assigned to both the DL and UL connection.
--	-------------	---

to

Transport CIDs, Secondary Mgt CIDs	2m+1 - FE9F <u>FE9F</u>	For the secondary management connection, the same value is assigned to both the DL and UL connection.
--	------------------------------------	---

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

On p. 500, line 17, change the row in table 345 from

Transport CIDs, Secondary Mgt CIDs	2m+1 - FE9F	For the secondary management connection, the same value is assigned to both the DL and UL connection.
--	-------------	---

to

Transport CIDs, Secondary Mgt CIDs	2m+1 - FE9F <u>FE9F</u>	For the secondary management connection, the same value is assigned to both the DL and UL connection.
--	------------------------------------	---

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4328**Comment submitted by: **Yerang****Hur**

Other

2005/04/28

Comment Type **Technical Non-binding**Starting Page # **500** Starting Line # **26**Fig/Table# **Tabl** Section **10.4**

CID FFFD is for fragmentable broadcast.

Suggested Remedy

[Change the Value field of Table 345 as follows:]

Table 345 - CIDs

CID | Value

...

Multicast polling CIDs | FF00 - FFFA9

Normal mode multicast CID | FFFBA

Sleep mode multicast CID | FFFCB

Idle mode multicast CID | FFFDC

[Fragmentable broadcast CID](#) | FFFD

Padding CID | FEFE

Broadcast CID | FFFF

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: [Superseded](#)**[See comment 4461.](#)**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4329**

Comment submitted by: **Yerang**

Hur

Other

2005/04/28

Comment Type **Technical Non-binding**

Starting Page # **503**

Starting Line # **34**

Fig/Table# **Tabl**

Section **11.1.7**

Clarification of MOB-NBR_ADV

Suggested Remedy

Adopt C80216e-05_246

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Adopt C80216e-05_246

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Adopt C80216e-05_246

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions **k) done**

Adopted C802.16e-05/246r0.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4330**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **505**

Starting Line # **1**

Fig/Table#

Section

11.3.1

The table starting on line 1 is not a new table to be inserted after table 349 in the baseline document, but is table 349 itself.

Suggested Remedy

On p. 505, line 1, change

"Table 349a—UCD channel encodings"

to

"Table 349—UCD channel encodings"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

On p. 505, line 1, change

"Table 349a—UCD channel encodings"

to

"Table 349—UCD channel encodings"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

On p. 505, line 1, change

"Table 349a—UCD channel encodings"

to

"Table 349—UCD channel encodings"

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4331**

Comment submitted by: Kyungjoo

Suh

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **505** Starting Line # **39** Fig/Table# **353a** Section **11.3.1**

The overriding scheme is designed to change the normalized C/N values depending on the system configurations. The current scheme allows changing the normalized C/N values except the value for CDMA code that is also dependent the system configurations. For the open loop power control defined in 16e, the C/N value in the table is used for UL Tx power calculation. In the calculation, the absolute C/N value shall be used. For this end, we propose to allow overriding whole C/N value.

Suggested Remedy

[In pp. 505, line 39, Add the entry for " Normalized C/N override_2" in table 353 and put the value as following :]

name : [Normalized C/N override 2](#)

type (1 byte) : [175](#)

length (1 byte) : [8](#)

value:

[Bit#0~7:](#)

[It shall be interpreted as signed integer in dB. It corresponds to the normalized C/N value in the first line \(counting except for header cell of table\)](#)

[Bit#8~63:](#)

[This is a list of numbers, where each number is encoded by one nibble, and interpreted as a signed integer. The nibbles correspond in order to the list define by Table 334, starting from the second line \(counting except for the header cell of table\), such that the LS nibble of the first byte corresponds to the second line in the table. The number encoded by each nibble represents the difference in normalized C/N relative to the previous line in the table.](#)

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

[In pp. 505, line 39, Add the entry for " Normalized C/N override_2" in table 353 and put the value as following :]

name : [Normalized C/N override 2](#)

type (1 byte) : [175](#)

length (1 byte) : [8](#)

value:

[Bit#0~7:](#)

[It shall be interpreted as signed integer in dB. It corresponds to the normalized C/N value in the first line \(counting except for header cell of table\)](#)

[Bit#8~63:](#)

[This is a list of numbers, where each number is encoded by one nibble, and interpreted as a signed integer. The nibbles correspond in order to the list define by Table 334, starting from the second line \(counting except for the header cell of table\), such that the LS nibble of the first byte](#)

list define by Table 353, starting from the second line (counting except for the header cell of table), such that the LS nibble of the first byte corresponds to the second line in the table. The number encoded by each nibble represents the difference in normalized C/N relative to the previous line in the table.

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

[In pp. 505, line 39, Add the entry for " Normalized C/N override_2" in table 353 and put the value as following :]

name : [Normalized C/N override 2](#)type (1 byte) : [175](#)length (1 byte) : [8](#)

value:

[Bit#0~7:](#)

[It shall be interpreted as signed integer in dB. It corresponds to the normalized C/N value in the first line \(counting except for header cell of table\)](#)

[Bit#8~63:](#)

[This is a list of numbers, where each number is encoded by one nibble, and interpreted as a signed integer. The nibbles correspond in order to the list define by Table 334, starting from the second line \(counting except for the header cell of table\), such that the LS nibble of the first byte corresponds to the second line in the table. The number encoded by each nibble represents the difference in normalized C/N relative to the previous line in the table.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4332**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Binding** Starting Page # **508** Starting Line # Fig/Table# **353a** Section **11.3.1**

Section 8.4.10.3.1 defines a new triggering mechanism for UL Tx power and headroom report by the MSS. The text specifically defines the messages used for automatic transmission of these reports.

The last sentence states:

"In UCD, there are sets of those parameters sets: Depending on the allocation CQICH to SS, the corresponding parameter set shall be used."

Additional references to CQICH appear in table 353a, 'Tx power report' entry.

This is not clear:

- 1) In UCD the parameter themselves are defined, not 'sets of parameter sets'.
- 2) Why and how is this mechanism related to CQICH? no clear specification or explanation is given.

Suggested Remedy

Clarify the text in section 8.4.10.3.1 and in table 353a, type 185 ('Tx power report').

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Lack of specific text.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4333**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **508** Starting Line # **58** Fig/Table# **353a** Section **11.3.1**

I object to the resolution of Comment #3284 because the reduction of broadcast message size is important for the usage of bandwidth more efficiently. If a BS omits UL-MAP IE with UIUC 12 in UL-MAP and MS is informed of allocated ranging region, it can reduce the broadcast message overhead.

Suggested Remedy

Adopt the contribution C80216e-05_240r0 (Ranging region allocation using UCD message).

Proposed Resolution Recommendation: **Accepted-Modified**

Recommendation by

Adopt contribution C80216e-05_240r2.

Reason for Recommendation**Resolution of Group**

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 24-12

Reason: For allocations, we should use MAPs, not other methods.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4334**

Comment submitted by: Tal

Kaitz

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **509** Starting Line # Fig/Table# **357** Section **11.3.1.1**

The entry 'Normalized C/N for Channel Sounding' is erroneously located in table 357. It is not part of burst profile definition.

Suggested Remedy

move the entry 'Normalized C/N for Channel Sounding' from table 357 to table 353.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

move the entry 'Normalized C/N for Channel Sounding' from table 357 to table 353.

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

move the entry 'Normalized C/N for Channel Sounding' from table 357 to table 353.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4335**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **509** Starting Line # **55** Fig/Table# **Tabl** Section **11.3.1.1**

The TLV "Normalized C/N override" is moved to table 353 in Cor1/D2 because the override has nothing to do with OFDMA burst profile encoding.

We propose move the TLV "Normalized C/N for Channel Sounding" to table 353a.

Suggested Remedy

[Move the TLV "Normalized C/N for Channel Sounding" in table 357 on pp 509 to table 353a on pp 508]

Proposed Resolution Recommendation: Accepted**Recommendation by**

[Move the TLV "Normalized C/N for Channel Sounding" in table 357 on pp 509 to table 353a on pp 508]

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

[Move the TLV "Normalized C/N for Channel Sounding" in table 357 on pp 509 to table 353a on pp 508]

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

[See comment 4334.](#)

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4336**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial** Starting Page # **510** Starting Line # **13** Fig/Table# Section **11.4**
Section title is incorrect when matched against 802.16-2004.

Suggested Remedy

On p. 510, line 13, change "11.4 Common encodings" to "11.4 DCD management message encodings"

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

On p. 510, line 13, change "11.4 Common encodings" to "11.4 DCD management message encodings"

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

On p. 510, line 13, change "11.4 Common encodings" to "11.4 DCD management message encodings"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4337**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **510** Starting Line # **16**
 Region ID

Fig/Table# **35** Section **11.4.1**

In session 36 the region ID size was increased from 6 to 8 bits for alinments.
 Doing that the number of Region IDs limited increased to 256 .
 This is too large and too havey to maintain in realtime by the MSS

Suggested Remedy

[Chane "vlaue" in the "DL region definition" field in Table 358a—DCD channel encoding as follows]
 Num_ region (~~8-bits~~ 6 bit for the number of regions, 2 bit reserved)

Proposed Resolution Recommendation: Accepted

Recommendation by

[Chane "vlaue" in the "DL region definition" field in Table 358a—DCD channel encoding as follows]
 Num_ region (~~8-bits~~ 6 bit for the number of regions, 2 bit reserved)

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

[Chane "vlaue" in the "DL region definition" field in Table 358a—DCD channel encoding as follows]
 Num_ region (~~8-bits~~ 6 bit for the number of regions, 2 bit reserved)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4338**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **510** Starting Line # **16**

Fig/Table#

Section **11.4.1**

Type in the section title (not the same as in the 802.16-2004 spec).

Suggested Remedy

On. p. 510, line 16, change "11.4.1 DCD channel encoding" to "11.4.1 DCD channel encodings"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

On. p. 510, line 16, change "11.4.1 DCD channel encoding" to "11.4.1 DCD channel encodings"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

On. p. 510, line 16, change "11.4.1 DCD channel encoding" to "11.4.1 DCD channel encodings"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4339**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **510**

Starting Line # **23**

Fig/Table# **358a**

Section **11.4.1**

The table on page 510, starting on line 23 is not a new table to be inserted after table 358 in the baseline document, but is table 348 itself.

Suggested Remedy

On p. 510, line 23, change

"Table 358a—DCD channel encodings"

to

"Table 358—DCD channel encodings"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

On p. 510, line 23, change

"Table 358a—DCD channel encodings"

to

"Table 358—DCD channel encodings"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

On p. 510, line 23, change

"Table 358a—DCD channel encodings"

to

"Table 358—DCD channel encodings"

Reason for Group's Decision/Resolution

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4340**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **512** Starting Line # **1**Fig/Table# **367a** Section **11.6**[REG-RSP TLV encodings in RNG-RSP message](#)

Optimized HO procedure allows omission of some or all phases of the NW re-entry process. To accommodate for that, the Target BS may send a RNG-RSP message with concatenated, unsolicited REG-RSP and SBC-RSP messages or send REG-RSP and SBC-RSP specific message items as TLVs in the RNG-RSP message. One example of such TLV is CID update (remapping).

Currently, this is described in the standard but not reflected in the message TLV encodings part, and leaves it up to the interpretation of the reader.

Suggested Remedy[Adopt contribution C80216e-05/256](#)**Proposed Resolution Recommendation: Accepted-Modified****Recommendation by**[Adopt contribution C80216e-05/256r1](#)**Reason for Recommendation****Resolution of Group****Decision of Group: Accepted-Modified**[Adopt contribution C80216e-05/256r1](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4341**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **518** Starting Line # **60** Fig/Table# Section **11.7.8.10**
 Max data per frame clarification with HARQ

Suggested Remedy*[Make the following changes to section 11.7.8.10 Maximum MAC data per frame support]*

This parameter defines the maximum amount of MAC level data including MAC headers and HARQ retransmission bursts the MS is capable to process in the DL/UL part of a single MAC frame. A value of 0 indicates such limitation doesn't exist, except the limitation of the physical medium. If those TLVs are absent then the default value (0) should be used.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

[Make the following changes to section 11.7.8.10 Maximum MAC data per frame support]

This parameter defines the maximum amount of MAC level data including MAC headers and HARQ retransmission bursts the MS is capable to process of processing in the DL/UL part of a single MAC frame. A value of 0 indicates such limitation doesn't exist, except the limitation of the physical medium. If those TLVs are absent then the default value (0) should be used.

Reason for Recommendation**Resolution of Group**Decision of Group: **Accepted-Modified***[Make the following changes to section 11.7.8.10 Maximum MAC data per frame support]*

This parameter defines the maximum amount of MAC level data including MAC headers and HARQ retransmission bursts the MS is capable to process of processing in the DL/UL part of a single MAC frame. A value of 0 indicates such limitation doesn't exist, except the limitation of the physical medium. If those TLVs are absent then the default value (0) should be used.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4342**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **513**

Starting Line # **4**

Fig/Table# **361**

Section **11.4.2**

The Table labelled as "Table 361—DCD burst profile encodings - WirelessMAN-OFDMA" is the incorrect Table number (based on P802.16-REVd/D5 table numbers).

Suggested Remedy

On p. 513, line 4 change

"Table 361—DCD burst profile encodings - WirelessMAN-OFDMA"

to

"Table 363—DCD burst profile encodings - WirelessMAN-OFDMA"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

On p. 513, line 4 change

"Table 361—DCD burst profile encodings - WirelessMAN-OFDMA"

to

"Table 363—DCD burst profile encodings - WirelessMAN-OFDMA"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

On p. 513, line 4 change

"Table 361—DCD burst profile encodings - WirelessMAN-OFDMA"

to

"Table 363—DCD burst profile encodings - WirelessMAN-OFDMA"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4343**

Comment submitted by: **Beomjoon**

Kim

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **514** Starting Line # **43**

Fig/Table# **364a** Section **11.5**

No value is assigned to type of Power down indicator TLV.

Suggested Remedy

replace mm with 8

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

replace mm with 8

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

replace mm with 8

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4344**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**Starting Page # **516** Starting Line # **7**Fig/Table# **367a** Section **11.6**

The table on page 516, starting on line 7 is not a new table to be inserted after table 367 in the baseline document, but is table 367 itself.

Suggested Remedy

On p. 516, line 7, change

"Table 367a—RNG-RSP message encodings"

to

"Table 367—RNG-RSP message encodings"

Proposed Resolution Recommendation: Accepted**Recommendation by**

On p. 516, line 7, change

"Table 367a—RNG-RSP message encodings"

to

"Table 367—RNG-RSP message encodings"

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

On p. 516, line 7, change

"Table 367a—RNG-RSP message encodings"

to

"Table 367—RNG-RSP message encodings"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4345**

Comment submitted by: [Jonathan](#)

[Labs](#)

[Member](#)

[2005/04/28](#)

Comment Type [Technical, Non-binding](#) Starting Page # [516](#) Starting Line # [9](#) Fig/Table# [367a](#) Section [11.6](#)

[Looking at the baseline document, Table 367 contains a fifth column which specifies PHY scope. This column is missing in Table 367a.](#)

Suggested Remedy

[In Table 367a, add a fifth column, with the heading "PHY Scope" and insert "All" for all the TLV entries.](#)

Proposed Resolution Recommendation: [Accepted](#)

Recommendation by

[In Table 367a, add a fifth column, with the heading "PHY Scope" and insert "All" for all the TLV entries.](#)

Reason for Recommendation

Resolution of Group

Decision of Group: [Accepted](#)

[In Table 367a, add a fifth column, with the heading "PHY Scope" and insert "All" for all the TLV entries.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4346**

Comment submitted by: **Beomjoon**

Kim

Other

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **517**

Starting Line # **46**

Fig/Table# **367a**

Section **11.6**

No value is assigned to type of Power_Saving_Class_Parameters TLV.

Suggested Remedy

define type of Power_Saving_Class_Parameters as 27

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

define type of Power_Saving_Class_Parameters as 27

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

define type of Power_Saving_Class_Parameters as 27

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4347**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial** Starting Page # **517** Starting Line # **55** Fig/Table# Section **11.6**

On p. 517, line 55, the text reads, "Power Saving Class Parameters Value field is composed from a number of encapsulated TLV fields as specified in Table MMM." I am not sure which table is being referred to.

Suggested Remedy

On p. 517, line 55, specify what is MMM, i.e. give a real Table reference.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Superceded****[See 4348](#)**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4348**

Comment submitted by: **Beomjoon**

Kim

Other

2005/04/28

Comment Type **Editorial**

Starting Page # **517**

Starting Line # **57**

Fig/Table#

Section **11.6**

Editorial.

Suggested Remedy

replace Table MMM with Table 364b

Proposed Resolution

Recommendation: Accepted

Recommendation by

replace Table MMM with Table 364b

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

replace Table MMM with Table 364b

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4349**Comment submitted by: **Beomjoon****Kim****Other****2005/04/28**Comment Type **Technical, Non-binding**Starting Page # **518** Starting Line # **01**

Fig/Table#

Section **11.6**

Clarification of Next Periodic Ranging TLV.

Suggested RemedyRemedy 1:
incorporate Next Periodic Ranging TLV into Table 367a as a row.Remedy 2:
Change the type value 21 to 19**Proposed Resolution**Recommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4350**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	518	1		11.7

Resolution of comment #3497 implemented not correctly
TLV Parameter "Next Periodic Ranging" appears twice: in 11.7 [detailed] and 11.17 [with no details].
The TLV is not relate to the title of 11.7

Suggested Remedy

Move the TLV "Next Periodic Ranging" description from 11.7 to section 11.17 to replace less detailed definition of same TLV

Proposed Resolution Recommendation: Accepted**Recommendation by**

Move the TLV "Next Periodic Ranging" description from 11.7 to section 11.17 to replace less detailed definition of same TLV

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

Move the TLV "Next Periodic Ranging" description from 11.7 to section 11.17 to replace less detailed definition of same TLV

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4351**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **518**

Starting Line # **11**

Fig/Table#

Section

11.7.6

Grammar...

Suggested Remedy

On p. 518, line 11, change

"11.7.6 Number of ~~uplink~~ CID supported"

to

"11.7.6 Number of ~~uplink~~ CID_s supported"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

On p. 518, line 11, change

"11.7.6 Number of ~~uplink~~ CID supported"

to

"11.7.6 Number of ~~uplink~~ CID_s supported"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

On p. 518, line 11, change

"11.7.6 Number of ~~uplink~~ CID supported"

to

"11.7.6 Number of ~~uplink~~ CID_s supported"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4352**

Comment submitted by: Mo-Han

Fong

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	525	Starting Line #	23	Fig/Table#	Section	11.7.17
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	---------

I object to the text incorporation for comment #3500 because there is error in the incorporation.

Suggested Remedy

Modify "bit #0: Mode Selection Feedback Extended Subheader supportedModify "bit #1: ~~Mode Selection~~ Feedback Header ~~S~~supported"

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

See comment 4040.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4353**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

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

The Comment #1851,#1859,#1860,#1861 in 80216-05_010r1.pdf did not provide specific resolution. 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-Modified****Recommendation by**

Table 422d, change Operation mode from "TDD (licensed bands only)" to "TDD/FDD (licensed bands only)"

Under "12.4.2.2 Basic Packet PMP..." add the following:

-- Support for PKM v2

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

Vote: 10-12

Reason: The proposed profile is 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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4354**

Comment submitted by: **Rainer**

Ullmann

Member

2005/04/28

Comment Type **Editorial**

Starting Page # **529**

Starting Line # **6**

Fig/Table#

Section **11.7.24**

Grammaire

"... shall transmits ..."

"Those common value is included in the RSP message and becomes the agreed upon the values sets"

Suggested Remedy

Replace with:

"shall transmit"

"Those common values are included in the RSP message and become the agreed upon value set"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Replace with:

"shall transmit"

"Those common values are included in the RSP message and become the agreed upon value set"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Replace with:

"shall transmit"

"Those common values are included in the RSP message and become the agreed upon value set"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4355**

Comment submitted by: Sungcheol

Chang

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **529** Starting Line # **27** Fig/Table# Section **11.7.25**

All the contents about IP connectivity and allocation are described only on the secondary management connection used by the IP-managed SS in the IEEE 16e document. When the unmanaged SS is to allocate an IP address, there are no fields with the information of both allocation method and version.

Suggested Remedy

Adopt the contribution C802.16e-05/241

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Adopt the contribution C802.16e-05/241

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 15-8

Reason: This change is not needed and it breaks the layer boundaries between MAC and IP.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4356**

Comment submitted by: **tian**

feng

Other

2005/04/28

Comment Type **Technical, Non-binding**

Starting Page # **529**

Starting Line # **42**

Fig/Table#

Section **11.8.2**

In the table, the scope of the field is wrong.

Suggested Remedy

change

" REG-REQ REG-RSP "

to

" SBC-REQ SBC-RSP "

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

change

" REG-REQ REG-RSP "

to

" SBC-REQ SBC-RSP "

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

change

" REG-REQ REG-RSP "

to

" SBC-REQ SBC-RSP "

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4357**

Comment submitted by: Aditya

Agrawal

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	531			11.8.3.7.2

[Submitted as Technical, Binding but with an Approve vote.]

In TLV type 151 bit-7 SPID=0 was used to indicate Chase combining with HARQ CTC. This was incorrectly removed during the last revision and this disables a feature.

Suggested Remedy

Insert "Bit #7: HARQ CTC with SPID = 0 only". Remove "reserved".

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Insert "Bit #7: HARQ CTC with SPID = 0 only". Remove "reserved".

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Insert "Bit #7: HARQ CTC with SPID = 0 only". Remove "reserved".

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4358**

Comment submitted by: Aditya

Agrawal

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	531	Starting Line #	Fig/Table#	Section	11.8.3.7.3
---------	------	------------------------	-----------------	-----	-----------------	------------	---------	------------

[Submitted as Technical, Binding but with an Approve vote.]

In TLV type 152 bit-7 SPID=0 was used to indicate Chase combining with HARQ CTC. This was incorrectly removed during the last revision and this disables a feature.

Suggested Remedy

Insert "Bit #7: HARQ CTC with SPID = 0 only". Remove "reserved".

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Insert "Bit #7: HARQ CTC with SPID = 0 only". Remove "reserved".

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

Insert "Bit #7: HARQ CTC with SPID = 0 only". Remove "reserved".

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4359**

Comment submitted by: Bin-chul

lhm

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **531** Starting Line # **11**Fig/Table# Section **11.8.3.7.2/3**

'OFDMA SS demodulator/modulator' indicates optional 'modulation and coding' methods.
Therefore ZT CC scheme shall be inserted.

Suggested Remedy*Modify 'OFDMA SS demodulator' in page 531, e/D7*

Type	Length	Value
------	--------	-------

151	<u>variable</u>	Bit #0: 64-QAM Bit #1: BTC Bit #2: CTC Bit #3: STC Bit #4: AAS Diversity Map Scan ZT CC Bit #5: AAS Direct Signaling HARQ Chase Bit #6: H-ARQ CTC IR Bit #7: <i>Reserved</i> Bit #8: HARQ CC IR Bit #9: LDPC Bit #10-15: <i>Reserved; shall be set to zero</i>
-----	-----------------	---

Modify 'OFDMA SS demodulator' in page 531, e/D7

Type	Length	Value
------	--------	-------

152	<u>variable</u>	Bit #0: 64-QAM Bit #1: BTC Bit #2: CTC Bit #3: STC Bit #34: AAS Diversity Map Scan ZT CC Bit #45: AAS Direct Signaling HARQ Chase Bit #56: H-ARQ CTC IR Bit #7: <i>Reserved</i> Bit #8: HARQ CC IR Bit #9: LDPC Bit #610-715: <i>Reserved; shall be set to zero</i>
-----	-----------------	--

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4360**

Comment submitted by: Kyungjoo

Suh

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	534	Starting Line #	7	Fig/Table#	Section	11.8.3.7.9
---------	------	------------------------	-----------------	-----	-----------------	---	------------	---------	------------

Under negotiation for SBC fast feedback , SS has to distinguish the use of the enhanced fast feedback channel from that of fast feedback channel. Moreover, under negotiation for UL ACK , SS has to distinguish the use of the enhanced UL ACK channel from that of UL ACK channel.

Suggested Remedy

[In pp. 534 line 7, modify the value as following :]

bit #1 : Enhanced FAST_FEEDBACK

Under negotiation for SBC fast feedback , if enhanced feature is enabled, the SS should use only the enhanced fast feedback channel.

bit #3 : Enhanced UL ACK

Under negotiation for UL ACK , if enhanced feature is enabled, the SS should use only the enhanced UL ACK channel.

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

[In pp. 534 line 7, modify the value as following :]

bit #1 : Enhanced FAST_FEEDBACK

Under negotiation for SBC fast feedback , if enhanced feature is enabled, the SS should use only the enhanced fast feedback channel in the CQICH allocation IE (subclause 8.4.5.4.12).

bit #3 : Enhanced UL ACK

Under negotiation for UL ACK , if enhanced feature is enabled, the SS should use only the enhanced UL ACK channel.

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

[In pp. 534 line 7, modify the value as following :]

bit #1 : Enhanced FAST_FEEDBACK

Under negotiation for SBC fast feedback , if enhanced feature is enabled, the SS should use only the enhanced fast feedback channel in the CQICH allocation IE (subclause 8.4.5.4.12).

bit #3 : Enhanced UL ACK

Under negotiation for UL ACK , if enhanced feature is enabled, the SS should use only the enhanced UL ACK channel.

2005/05/23

IEEE 802.16-05/023r6

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4361**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **534** Starting Line # **19** Fig/Table# Section **11.8.3.7.10**

On p. 534, line 19, we have a section titled "11.8.3.7.10 OFDMA MS demodulator for MIMO support". On p. 535, line 48, we have a section titled "11.8.3.7.13 OFDMA SS Demodulator for MIMO Support".

Suggested Remedy**Proposed Resolution**Recommendation: **Accepted-Modified**

Recommendation by

1. Remove Section 11.8.3.7.10 and Section 11.8.3.7.14

2. Modify Section 11.8.3.7.13 as the following:

11.8.3.7.13 OFDMA SS Demodulator for MIMO support

~~The 'OFDMA SS Demodulator for MIMO Support' field indicates the MIMO capability of OFDMA SS demodulator.~~ This field indicates the different MIMO options supported by a WirelessMAN-OFDMA PHY SS in the downlink. This field is not used for other PHY specifications. A bit value of 0 indicates "not supported" while 1 indicates "supported".

Type	Length	Value	Scope
163	43	Bit #0: Two receive antennas—	SBC-REQ (see 6.3.2.3.23)
156		Bit #1: Three receive antennas—	SBC-RSP (see 6.3.2.3.24)
		Bit #2: Four receive antennas—	
		Bit #3: Capable of transmit diversity	
		Bit #4: Capable of spatial multiplexing	
		Bit #0: 2-antenna STC matrix A	
		Bit #1: 2-antenna STC matrix B, vertical coding	
		Bit #2: 2-antenna STC matrix B, horizontal coding	
		Bit #3: 4-antenna STC matrix A	
		Bit #4: 4-antenna STC matrix B, vertical coding	
		Bit #5: 4-antenna STC matrix B, horizontal coding	
		Bit #6: 4-antenna STC matrix C, vertical coding	
		Bit #7: 4-antenna STC matrix C, horizontal coding	
		Bit #8: 3-antenna STC matrix A	
		Bit #9: 3-antenna STC matrix B	
		Bit #10: 3-antenna STC matrix C, vertical coding	
		Bit #11: 3-antenna STC matrix C, horizontal coding	
		Bit #12: Capable of calculating precoding weight	
		Bit #13: Capable of adaptive rate control	
		Bit #14: Capable of calculating channel matrix	
		Bit #15: Capable of antenna grouping	

	Bit #16: Capable of antenna selection
	Bit #17: Capable of codebook based precoding
	Bit #18: Capable of long term precoding
	Bit #19: Capable of MIMO Midamble
	Bit #20-23: Reserved

3. Modify Section 11.8.3.7.15 as the following:

11.8.3.7.15 OFDMA SS Modulator for MIMO support

~~The 'OFDMA SS Modulator for MIMO Support' field indicates the MIMO capability of OFDMA SS modulator.~~ This field indicates the different MIMO options supported by a WirelessMAN-OFDMA PHY SS in the uplink. This field is not used for other PHY specifications. A bit value of 0 indicates "not supported" while 1 indicates "supported".

Type	Length	Value	Scope
165 157	1	Bit #0: Two transmit antennas— Bit #1: Capable of transmit diversity Bit #2: Capable of spatial multiplexing Bit #3: Capable of beamforming Bit #4: Capable of adaptive rate control Bit #0: 2-antenna STTD	SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24)
		Bit #1: 2-antenna SM with vertical coding	
		Bit #2: single-antenna cooperative SM	
		Bit #3: Capable of adaptive rate control	
		Bit #4-7: Reserved	

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted-Modified

1. Remove Section 11.8.3.7.10 and Section 11.8.3.7.14

2. Modify Section 11.8.3.7.13 as the following:

11.8.3.7.13 OFDMA SS Demodulator for MIMO support

~~The 'OFDMA SS Demodulator for MIMO Support' field indicates the MIMO capability of OFDMA SS demodulator.~~ This field indicates the different MIMO options supported by a WirelessMAN-OFDMA PHY SS in the downlink. This field is not used for other PHY specifications. A bit value of 0 indicates "not supported" while 1 indicates "supported".

white indicates supported.

Type	Length	Value	Scope
163	4	Bit #0: Two receive antennas—	SBC-REQ (see 6.3.2.3.23)
156		Bit #1: Three receive antennas—	SBC-RSP (see 6.3.2.3.24)
		Bit #2: Four receive antennas—	
		Bit #3: Capable of transmit diversity	
		Bit #4: Capable of spatial multiplexing	
		Bit #0: 2-antenna STC matrix A	
		Bit #1: 2-antenna STC matrix B, vertical coding	
		Bit #2: 2-antenna STC matrix B, horizontal coding	
		Bit #3: 4-antenna STC matrix A	
		Bit #4: 4-antenna STC matrix B, vertical coding	
		Bit #5: 4-antenna STC matrix B, horizontal coding	
		Bit #6: 4-antenna STC matrix C, vertical coding	
		Bit #7: 4-antenna STC matrix C, horizontal coding	
		Bit #8: 3-antenna STC matrix A	
		Bit #9: 3-antenna STC matrix B	
		Bit #10: 3-antenna STC matrix C, vertical coding	
		Bit #11: 3-antenna STC matrix C, horizontal coding	
		Bit #12: Capable of calculating precoding weight	
		Bit #13: Capable of adaptive rate control	
		Bit #14: Capable of calculating channel matrix	
		Bit #15: Capable of antenna grouping	
		Bit #16: Capable of antenna selection	
		Bit #17: Capable of codebook based precoding	
		Bit #18: Capable of long term precoding	
		Bit #19: Capable of MIMO Midamble	
		Bit #20-23: Reserved	

3. Modify Section 11.8.3.7.15 as the following:

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4362**

Comment submitted by: Yigal

Leiba

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **537** Starting Line # **6** Fig/Table# **317e** Section **8.4.6.4.1.1.1**
 PUSC-ASCA allocation IE permutation ID field, mentioned in table 285af, is missing from table 317e

Suggested Remedy

Add to table 317e, a column on the left side titled 'permutation ID'
The column should contain the following values in the following order:

- "12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1"

Proposed Resolution Recommendation: **Accepted**

Recommendation by

Add to table 317e, a column on the left side titled 'permutation ID'
The column should contain the following values in the following order:

- "12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1"

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

Add to table 317e, a column on the left side titled 'permutation ID'
The column should contain the following values in the following order:

"12
11
10
9
8
7
6
5
4
3
2
1"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4363**Comment submitted by: **Rajesh****Bhalla**

Member

2005/04/28

Comment	Type Technical, Binding	Starting Page # 538	Starting Line # 21	Fig/Table#	Section 11.8.4.2
---------	--------------------------------	----------------------------	---------------------------	------------	-------------------------

I object to the resolution of Comment #3136 from session #36 because the modification in the comment is not suitable. The comment #3136 puts forward to negotiate the authorization policies for initial network entry and re-entry between MS and BS in SBC exchange. But the re-authorization policy is not negotiated between MS and BS in current specification. MS and BS need to execute re-authorization procedure during the re-entry network. But re-authorization procedure between MS and BS will be taken place in some other cases besides the re-entry. MS will execute the authorization procedure according to the authorization policy negotiated in SBC exchange when MS is in re-entry network, such as in handover or in the new connection with BS. What is the re-authorization policy and how to execute re-authorization when the AK lifetime is expired or H/OMAC_PN_U is overflowing or H/OMAC_PN_D is overflowing?

Suggested Remedy

Adopt the resolution text in contribution IEEE C802.16e-05/205 or the latest version.

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

Adopt the resolution text in contribution IEEE C802.16e-05/205r2

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

Adopt the resolution text in contribution IEEE C802.16e-05/205r2

Reason for Group's Decision/Resolution

Vote: 31-3

Group's Notes**Group's Action Items****Editor's Notes****Editor's Actions** k) done

Text in table under 11.8.4.2 was not as illustrated in the contribution. "re-entry" already existed, but "HO" was not there. I left the table as-is, because it's not clear to me that "HO" needs to be in there. However, new text was added per the contribution.

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4364**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **539** Starting Line # **51** Fig/Table# Section **11.8.4.3**

Current D7 text of section 11.8.4.3 defines MAC(Message Authentication Code) mode that MS supports. Short-HMAC mode is added in order to shorten the length of Message Authentication Code in case of using HMAC not for OMAC. So we have to clarify that using of short-HMAC is only for HMAC-mode is selected.

Suggested Remedy

Please add next sentence after line 51 of page 539 (section 11.8.4.3):
"Short HMAC can be used only for HMAC is enabled. "

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Please add next sentence after line 51 of page 539 (section 11.8.4.3):
"Short HMAC can be used only for HMAC is enabled. "

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

Please add next sentence after line 51 of page 539 (section 11.8.4.3):
"Short HMAC can be used only for HMAC is enabled. "

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4365**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **542** Starting Line #Fig/Table# Section **11.9.6.1**

In a table of section 11.9.6.1 in page 542, the values of length field are not corrent.

Suggested Remedy

In a table of section 11.9.6.1 in page 542, the value of length field should be variable(8, 10, 12) bytes

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In a table of section 11.9.6.1 in page 542, the value of length field should be variable(8, 10, 12) bytes

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

In a table of section 11.9.6.1 in page 542, the value of length field should be variable(8, 10, 12) bytes

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

[Still need proper references for this table & text.](#)

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

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4366**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **544** Starting Line #Fig/Table# **375** Section

For MBS AES-CTR, text and table mismatch

Suggested Remedy

For MBS AES-CTR clarification, In table 375 of page 544, "CTR-Mode 128bits AES for MBS with 32bits Nonce" should be changed to "CTR-Mode 128 bits AES for MBS with 8 bits ROC"

Proposed Resolution Recommendation: Accepted**Recommendation by**

For MBS AES-CTR clarification, In table 375 of page 544, "CTR-Mode 128bits AES for MBS with 32bits Nonce" should be changed to "CTR-Mode 128 bits AES for MBS with 8 bits ROC"

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

For MBS AES-CTR clarification, In table 375 of page 544, "CTR-Mode 128bits AES for MBS with 32bits Nonce" should be changed to "CTR-Mode 128 bits AES for MBS with 8 bits ROC"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4367**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type Technical, Non-binding	Starting Page # 546	Starting Line #	Fig/Table#	Section 11.9.20
---------	------------------------------------	----------------------------	-----------------	------------	------------------------

In page 546, Section 11.9.20 EAP-Master-Key-Id should be deleted simply because it is not used in any text.

Suggested Remedy

Delete section 11.9.20

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Delete section 11.9.20

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Delete section 11.9.20

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4368**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	547			11.9.23

In page 547, section 11.9.23 AA-Descriptor and section 11.9.24 AA type should be deleted because AA-Descriptor is not used any more and replaced by AK Context

Suggested Remedy

Delete, section 11.9.23 AA-Descriptor and section 11.9.24 AA type

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Delete, section 11.9.23 AA-Descriptor and section 11.9.24 AA type

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

Delete, section 11.9.23 AA-Descriptor and section 11.9.24 AA type

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4369**

Comment submitted by: Yong

Chang

Member

2005/04/28

Comment	Type	Editorial	Starting Page #	549	Starting Line #	Fig/Table#	Section	11.9.27
---------	------	-----------	-----------------	-----	-----------------	------------	---------	---------

In section 11.9.27 PAK in page 549, the name of section should be changed into Pre-PAK because the value contains not PAK but pre-PAK. Also, the description of value "128 byte quantity representing an RSA-encrypted PAK" should be changed into "128 byte quantity representing an RSA-encrypted pre-PAK which generates PAK"

Suggested Remedy

In section 11.9.27 PAK in page 549, the name of section should be changed into Pre-PAK because the value contains not PAK but pre-PAK. Also, the description of value "128 byte quantity representing an RSA-encrypted PAK" should be changed into "128 byte quantity representing an RSA-encrypted pre-PAK which generates PAK"

Proposed Resolution Recommendation: Accepted**Recommendation by**

In section 11.9.27 PAK in page 549, the name of section should be changed into Pre-PAK because the value contains not PAK but pre-PAK. Also, the description of value "128 byte quantity representing an RSA-encrypted PAK" should be changed into "128 byte quantity representing an RSA-encrypted pre-PAK which generates PAK"

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

In section 11.9.27 PAK in page 549, the name of section should be changed into Pre-PAK because the value contains not PAK but pre-PAK. Also, the description of value "128 byte quantity representing an RSA-encrypted PAK" should be changed into "128 byte quantity representing an RSA-encrypted pre-PAK which generates PAK"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4370**

Comment submitted by: Kiseon

Ryu

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **552** Starting Line # **6** Fig/Table# Section **11.9.33**

I object to the resolution of Comment #3116 because more clarification is needed for security section.
In case of GKEK update mode, Key Update Command message should contain GKEK Key-Lifetime not GTEK' Key Sequence-Number.

Suggested Remedy

1. Modify the table , page 552, line 6-7, as follows :

Attribute	GKEK update mode	GTEK update mode
>Key-Lifetime	No <u>Yes</u>	Yes
>Key-Sequence-Number	Yes <u>No</u>	Yes

2. Modify the text, page 552, line 17, as follows.

Some subattributes of TEK-Parameters, GKEK and ~~GTEK's Key-Sequence-Number~~ GKEK Key-Lifetime, should be contained in the Key Update Command message for the GKEK update mode.

Proposed Resolution

Recommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Reason for this change was 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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4371**Comment submitted by: **Jaehee****Cho**

Other

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	553	Starting Line #	6	Fig/Table#	Section	11.11
---------	------	------------------------	-----------------	-----	-----------------	---	------------	---------	-------

The REP-REQ/RSP messages are used to ask SS to report DL channel status and to report DL channel status to BS, respectively.

They have nothing to do with UL channel status.

The sounding channel is only defined for UL not for DL.

So there is no reason for REP-REQ/RSP messages include TLVs to report UL sounding channel.

Suggested Remedy

[Delete text on page 553 from line 6 to line 22]

[Delete the row for Soudning Report (REP-REQ Channel Type Request(binary) = 11) from REP-RSP TLVs on page 553 in 11.12]

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

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

See 4372.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4372**

Comment submitted by: Jaehee

Cho

Other

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **553** Starting Line # **6** Fig/Table# Section **11.11**

1. The REP-REQ/RSP messages are used to ask SS to report DL channel status and to report DL channel status to BS, respectively. They have nothing to do with UL channel status. The sounding channel is only defined for UL not for DL. So there is no reason for REP-REQ/RSP messages include TLVs to report UL sounding channel.
2. In the corrigenda, the definition of the REP-RSP for band AMC is modified for the CINR report correction. It is necessary to modify the 5 band report REP-RSP for band AMC TLV.
3. Other REP-RSP TLV encodings are duplicates in Cor1/D2.

Suggested Remedy[Discuss and adopt C80216e-05_247](#)**Proposed Resolution**Recommendation: **Accepted-Modified**

Recommendation by

[Adopt Remedy 1 from contribution C802.16e-05/247.](#)**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted-Modified**[Adopt Remedy 1 from contribution C802.16e-05/247.](#)**Reason for Group's Decision/Resolution**

Vote: 23-2

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4373**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment	Type Editorial	Starting Page # 556	Starting Line # 7	Fig/Table#	Section 11.13.18.8
[Editorial]					

In the last sponsor ballot recirc the comment #3453 which was accepted was improperly implemented by the editor.

Suggested Remedy

Modify text to
"16, 32, 64, 128, 256, 512 or 1024 ~~or 2048~~"

Proposed Resolution **Recommendation: Accepted**

Recommendation by

Modify text to
"16, 32, 64, 128, 256, 512 or 1024 ~~or 2048~~"

Reason for Recommendation

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

Modify text to
"16, 32, 64, 128, 256, 512 or 1024 ~~or 2048~~"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4374**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **562** Starting Line # **1** Fig/Table# Section **11.13.31**
 HARQ enabled CID clarification

Clarrificatuion of the burst allocation relative to the HARQ connection definitions is required.

Suggested Remedy

[change section 11.13.31 as follows]

11.13.31 HARQ Service Flows

The 'HARQ Service Flows' field specifies whether the connection uses HARQ or not.

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs.

Transport CIDs which has HARQ Connection enabled indication must only be transmitted inside H-ARQ PHY burst type.
 Basic, Primary and secondary CIDs which has HARQ Connection enabled indication can be either transmitted inside H-ARQ or non-HARQ PHY burst type.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

[change section 11.13.31 as follows]

11.13.31 HARQ Service Flows

The 'HARQ Service Flows' field specifies whether the connection uses HARQ or not.

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs.

Transport CIDs which has HARQ Connection enabled indication must only be transmitted inside H-ARQ PHY burst type.
 Basic, Primary and secondary CIDs which has HARQ Connection enabled indication can be either transmitted inside H-ARQ or non-HARQ PHY burst type.

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

[change section 11.13.31 as follows]

11.13.31 HARQ Service Flows

The 'HARQ Service Flows' field specifies whether the connection uses HARQ or not.

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs.

Transport CIDs which has HARQ Connection enabled indication must only be transmitted inside H-ARQ PHY burst type.

Basic, Primary and secondary CIDs which has HARQ Connection enabled indication can be either transmitted inside H-ARQ or non-HARQ PHY burst type.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4375**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	563	Starting Line #	16	Fig/Table#	Section	11.13.34
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	----------

HARQ Channel mapping - REQ/RSP exchange clarification
(a new feature that was added in session 36)

Suggested Remedy[\[Change section 11.13.34\]](#)

11.13.34 HARQ Channel mapping

This TLV is valid only in HARQ enabled connection. It specifies a HARQ channel number that may be used to carry data from this connection. This TLV may specify more than one channel per connection. HARQ channels may share more than one connection.

An absent of this TLV **in any of the REQ or RSP messages of the connecton creation** means all HARQ channels can be used by this connection.

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs.

~~This TLV can only be set by the BS side.~~[\[Change the "length' clumn data in the table as followed\]](#)

4 Variable

Proposed Resolution **Recommendation: Accepted****Recommendation by**[\[Change section 11.13.34\]](#)

11.13.34 HARQ Channel mapping

This TLV is valid only in HARQ enabled connection. It specifies a HARQ channel number that may be used to carry data from this connection. This TLV may specify more than one channel per connection. HARQ channels may share more than one connection.

An absent of this TLV **in any of the REQ or RSP messages of the connecton creation** means all HARQ channels can be used by this connection.

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs.

~~This TLV can only be set by the BS side.~~[\[Change the "length' clumn data in the table as followed\]](#)

4 Variable

Reason for Recommendation**Resolution of Group****Decision of Group: Accepted**[\[Change section 11.13.34\]](#)**11.13.34 HARQ Channel mapping**

This TLV is valid only in HARQ enabled connection. It specifies a HARQ channel number that may be used to carry data from this connection. This TLV may specify more than one channel per connection. HARQ channels may share more than one connection.

An absent of this TLV **in any of the REQ or RSP messages of the connecton creation** means all HARQ channels can be used by this connection.

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs.

~~This TLV can only be set by the BS side.~~

[\[Change the "length' clumn data in the table as followed\]](#)

4 Variable

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4376**

Comment submitted by: Yigal

Eliaspur

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	563	Starting Line #	41	Fig/Table#	Section	11.13.35
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	----------

PDU SN Extended Subheader - REQ/RSP exchange clarification
(a new feature that was added in session 36)

Suggested Remedy

[\[Change section 11.13.35\]](#)

11.13.35 PDU SN Extended Subheader for HARQ reordering

This TLV is valid only in HARQ enabled connection. It specifies whether PDU SN extended subheader should be applied by the transmitter on every PDU on this connection. This SN may be used by the receiver to ensure PDU ordering.

This counter should start at 0 and should be reset after HHO/FBSS operations

The relevance connections of this parameter when appears in REG-REQ/RSP messages are Basic, Primary and Secondary CIDs (each should have its own PDU numbering)

~~This TLV can only be set by the BS side.~~

Value of 0 in either of the messages means the endpoint does not support the PDU SN number for the specific connection. If both end points support PDU SN for the connection the larger SN number should be chosen.

[\[Change the "value' column data in the table as followed\]](#)

- 0 – ~~No PDU SN extended SH~~ No support for PDU SN in this connection (default)
- 1 - PDU SN (short) extended SH
- 2 - PDU SN (long) extended SH
- 3-256—reserved.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

See comment 4040.

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/D7](#)

Ballot Number: [0001037](#)

Comment Date

Comment # [4377](#)

Comment submitted by: [Moo Ryong](#)

[Jeong](#)

Other

[2005/04/28](#)

Comment Type [Editorial](#) Starting Page # [565](#) Starting Line # [24](#)
 Implementation of the comments 1831 and 1832 of IEEE 802.16-04/69r4 was not properly done.

Fig/Table#

Section [11.14](#)

Suggested Remedy

[Accept Remedy 1 of the contribution C80216e-05/204](#)

Proposed Resolution Recommendation: [Superceded](#)

Recommendation by

[See 4079](#)

Reason for Recommendation

Resolution of Group

Decision of Group: [Superceded](#)

[See 4079](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4378**

Comment submitted by: Yigal

Leiba

Member

2005/04/28

Comment	Type Technical, Non-binding	Starting Page # 571	Starting Line # 3	Fig/Table#	Section 11.13.18.8
---------	------------------------------------	----------------------------	--------------------------	------------	---------------------------

The change in the table:

1. Makes little sense
2. Is incompatible with IEEE 802.16-2004

Suggested Remedy

Remove section 11.13.18.8 (which would restore the situation to the definition in IEEE 802.16-2004)

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Remove section 11.13.18.8 (which would restore the situation to the definition in IEEE 802.16-2004)

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Vote: 3-5

Reason: This is needed and is not backwards incompatible.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4379**

Comment submitted by: Brian

Kiernan

Member

2005/04/28

Comment	Type	Technical, Binding	Starting Page #	573	Starting Line #	1	Fig/Table#	Section	12
---------	------	--------------------	-----------------	-----	-----------------	---	------------	---------	----

I object to the resolution of comments #3520 and #3521, both of which dealt with system profiles.

Without adoption of definitive system profiles 802.16e cannot, by any stretch of the imagination, be called a standard. It can't even be called a "cookbook". In reality it is more like a shopping list from which anybody can pick any combination of non-interoperable ingredients.

Definitive system profiles are absolutely required. Despite the shortcomings identified as the reason for their rejection, the system profiles proposed during the last recirc were at least a starting point in defining an interoperable set of parameters.

Suggested Remedy

Adopt contribution C80216e-05_60r2 or any subsequent updates or revisions to it.

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

See comment 4353.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4380**

Comment submitted by: Roger

Marks

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	573	Starting Line #	1	Fig/Table#	Section	12
---------	------	------------------------	-----------------	-----	-----------------	---	------------	---------	----

I object to the resolution of Comment #3520, which proposed to insert system profiles. This also relates to 3008, 3009, 3027, 3034, 3117, 3121, 3137, 3233, 3241, 3269, 3321, 3390, 3474, 3480, and 3534 (and a few others), all of which were resolved by the statement: "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."

The argument over SS, MS, FS, etc. reflect the fact that there are no system profiles. In their absence, people are grasping at the use of these terms to serve as substitute profiles to indicate which features apply to fixed and which to mobile (or fixed/mobile) stations. These terms cannot serve as profiles. Is a system compliant to this standard required to support all of the mobile features, or are there two sorts of compliance: one for fixed systems and one for fixed/mobile systems? The draft needs to answer this question unambiguously, stating which features are mandatory and which optional in each case. I cannot see any way to do this with at least a rudimentary set of system profiles.

Suggested Remedy

Insert a set of system profiles that unambiguously defines which features are mandatory and which optional in both the fixed and fixed/mobile cases.

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

Lack of specific text.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4381**Comment submitted by: **Panyuh****Joo**

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	999	Starting Line #	Fig/Table#	Section
discuss and adopt C802.16e-05/113r1.							

Suggested Remedy

discuss and adopt C802.16e-05/113r1.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Adopt C802.16e-05/113r2 with the following changes:

Ignore the changes to the MOB_SCN-RSP (108i) and the MOB_SCAN-REPORT (108l) Tables.

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

Adopt C802.16e-05/113r2 with the following changes:

Ignore the changes to the MOB_SCN-RSP (108i) and the MOB_SCAN-REPORT (108l) Tables.

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

Editor's Actions k) done

Another comment/contribution removed HMAC tuple from Table 108h, padding was still added per this contribution.

Table 108i appears to have changed significantly as well, couldn't move the padding around.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4382**

Comment submitted by: Vladimir

Yanover

Member

2005/04/28

Comment	Type Editorial	Starting Page # 999	Starting Line #	Fig/Table#	Section
Typo					

Suggested Remedy

[Change all appearances of MOB-_MSHO-REQ to MOB_MSHO-REQ](#)

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

[Change all appearances of MOB-_MSHO-REQ to MOB_MSHO-REQ](#)

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

[Change all appearances of MOB-_MSHO-REQ to MOB_MSHO-REQ](#)

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

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

[None found. This doesn't mean they don't exist, but perhaps the format is different. Tried hyphen and strikethrough-space for the search.](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4383**

Comment submitted by: [Peiyong](#)

[Zhu](#)

Member

[2005/04/28](#)

Comment Type [Technical, Non-binding](#) Starting Page # [999](#) Starting Line #

Fig/Table#

Section

[Submitted as Technical, Binding but with an Approve vote.]
Closed loop MAP_IE clean up

Suggested Remedy

[Adopt contribution](#)

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superceded**

[See comment 4237.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4384**

Comment submitted by: Jonathan

Labs

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Binding	999	1		

I object to the resolutions of comments 3034, 3233, 3269, 3474 and 3480 in IEEE 802.16-05/019 (or database IEEE 802.16-05/12r3). All these comments address the usage of SS versus MS versus FSS. The resolution of the group was: "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".

I feel this is a quick and not very careful attempt at solving a major problem with the ammendment. Here is just one example where this solution does not solve the problem: Look at page 52, line 19, section 6.3.2.3.23 which is titled in 802.16-2004 "SS Basic Capability Request (SBC-REQ) message", but is now titled in 16e/D7 as "MS basic capability request (SBC-REQ) message". To me this is telling me that with the changes from the ammendment, SBC-REQ are now only defined for MS and not fixed SS.

I think it gets worse if one looks at the text changes in 6.3.2.3.26 De/Re-register command (DREG-CMD) message, specifically at Table 55--Action codes and actions. All action codes are now defined for MSs, not SSs. This tells me that there are now no action codes for a fixed SS.

In my mind an SS can be either a mobile SS or a fixed SS. MS is only a mobile SS.

These are just a few examples of the problem. There are many others. I provided an extensive list of modifications in the last ballot to clean this problem up, but I do not believe they were considered by the Ballot resolution committee. I will not provide "specific text" again, only to have it ignored.

This problem will slap you in the face when this ammendment is eventually integrated with 802.16-2004 to form a new revision.

Suggested Remedy

Fix up the usage of MS versus SS, such that the text does not break the operation of fixed systems. I would recommend reviewing again comments 3034, 3233, 3269, 3474 and 3480 in IEEE 802.16-05/019 as a starting guide.

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

Lack of specific text.

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4385**Comment submitted by: **Byoung-Jo****Kim**

Member

2005/04/28

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

My earlier comment was regarding the use of the term MS. I am not satisfied with the resolution of the comment. 802.16e is an amendment to 802.16-2004 and is supposed to support combined fixed/mobile operation. I believe that some of the 802.16e enhancements were meant to apply to both fixed and mobile terminals. The resolution reflected in D7 was to remove FS and change all SS in 16e amendment into MS; this does not address the previous comment and may have made things worse in a sense. The text still seems to indicate that certain attractive features such as advanced security apply only to MS. See for example sections 7.1.2 and 7.2.2. A simple find and replace can create peculiar problems, e.g. section 6.3.9.10 in D7 has a phrase called "fixed MS" which is indeed an ambiguous term. The way MS is defined, it is not clear what relation it has to SS. In 802.16e/D7, the definition of MS (mobile station) is "A station in the mobile service intended to be used while in motion or during halts at unspecified points". The definition of MS is in stark contrast to the 802.16-2004 definition of a subscriber station (SS), which is "A generalized equipment set providing connectivity between subscriber equipment and a base station (BS)". The MS definition is incomplete and also leads to incorrect text the way the term is used. It is not clear what "a station in the mobile service" is. It is not clear if the MS is a variant of SS, or if the SS is a variant of MS, or if there is any connection between the two. The mobile station may even be a moving base station the way the definition is written, although common sense would indicate otherwise. Also, "halts at unspecified points" clearly excludes fixed stations, which creates the problem.

Suggested Remedy

There are couple of acceptable solutions: 1. Change all MS to SS, do not use MS, and amend the definition of SS to allow the SS to be either fixed, stationary or in motion. 2. Amend the definition of MS to be a superset of SS by defining it as "A subscriber station that can be fixed, stationary or in motion". During the discussions of variations of this suggested definitions, please note that the notion of "mobile service" is inconsistent with the spirit of option 2. Also, it is important to cover the case where the MS can be a stationary/fixed terminal. Note that SS cannot be a superset of MS the way the text is written across the document.

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

Lack of specific text.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4386**

Comment submitted by: N. K.

Shankaranarayanan

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	999			

I have the same comment as Byoung-Jo Kim. We both believe the standard has a serious inconsistency in the way MS is defined and used. There is real interest from operators to use the advanced features of 802.16e for fixed applications as well. However, we do not want to hold up this important standard given all the hard work that members have put in. That is why we decided that one of us (myself) has converted a Disapprove vote to Approve. I trust that the working group will address this matter properly.

Suggested Remedy

Accept remedy suggested in Byoung-Jo Kim's comment.

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

See [4385](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4387**Comment submitted by: **Remi****Chayer**

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
---------	------	-----------------	-----------------	------------	---------

I object to the resolution of Comment 3250 in 80216-05_12r3 (which was related to comments #1850, #1859, #1861 and #1864 in 80216-05_010). It is important to include complete profiles in the document. Contribution C80216e-05_60r2 was a start.

Suggested Remedy

The working group should start developing complete profiles based on the input from the participants.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: **Rejected-Duplicate******Reason for Group's Decision/Resolution**[See 4353](#)**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4388**

Comment submitted by: **John**

Scott

Other

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Coordination	Gen			

SCC14 is happy that our recommendations concerning typography etc. have been understood and addressed. Thank you.

Suggested Remedy

Proposed Resolution	Recommendation:	Recommendation by
---------------------	-----------------	-------------------

Reason for Recommendation

Resolution of Group	Decision of Group:
	Accepted

No text changes required.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4389L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **999** Starting Line #

Fig/Table# Section **7.2.2.1**

Suggested Remedy

Move 7.2.2.1 elsewhere as there is nothing in it specific to PKMv2

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4390L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment	Type	Technical, Non-binding	Starting Page #	45	Starting Line #	1	Fig/Table#	Section	6.3.2.3.9
incomplete text									

Suggested Remedy

insert to pg 45, line 1:

The Identifier field in **EAP-Transfer messages, Authenticated EAP messages, and** in Key Update Command messages, which are used to distribute the updated GTEK and traffic keying material, shall be set to zero.

insert to pg 45, line 6:

(the Authorization state machine in the case of Authorization Replies, Authorization Rejects, and Authorization Invalids, **SA-TEK-Challenge, SA-TEK-Request, SA_TEK-Response**; a particular TEK state machine

Proposed Resolution

Recommendation: Accepted

Recommendation by

insert to pg 45, line 1:

The Identifier field in **EAP-Transfer messages, Authenticated EAP messages, and** in Key Update Command messages, which are used to distribute the updated GTEK and traffic keying material, shall be set to zero.

insert to pg 45, line 6:

(the Authorization state machine in the case of Authorization Replies, Authorization Rejects, and Authorization Invalids, **SA-TEK-Challenge, SA-TEK-Request, SA_TEK-Response**; a particular TEK state machine

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

insert to pg 45, line 1:

The Identifier field in **EAP-Transfer messages, Authenticated EAP messages, and** in Key Update Command messages, which are used to distribute the updated GTEK and traffic keying material, shall be set to zero.

insert to pg 45, line 6:

(the Authorization state machine in the case of Authorization Replies, Authorization Rejects, and Authorization Invalids, **SA-TEK-Challenge,**

SA-TEK-Request, SA_TEK-Response; a particular 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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4391L**Comment submitted by: **Jeff****Mandin****Member****2005/04/29**

Comment	Type	Technical, Non-binding	Starting Page #	45	Starting Line #	44	Fig/Table#	26	Section	6.3.2.3.9
---------	------	------------------------	-----------------	----	-----------------	----	------------	----	---------	-----------

Some PKM msgs are not correct

1. pre-auth no longer exists
2. Msg is called SA-TEK-Challenge

Suggested Remedy

1. Delete pg. 45 lines 44-48 and the associated messages.
2. Change every "SA-Challenge" to "SA-TEK-Challenge"

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

1. Delete pg. 45 lines 44-48 and the associated messages.
2. Change every "SA-Challenge" to "SA-TEK-Challenge"; do not modify SA-Challenge tuple in sections and 11.7.23

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

1. Delete pg. 45 lines 44-48 and the associated messages.
2. Change every "SA-Challenge" to "SA-TEK-Challenge"; do not modify SA-Challenge tuple in sections and 11.7.23

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

Note the table was changed by another contribution.

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

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4392L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Editorial** Starting Page # **46** Starting Line # **19** Fig/Table# Section **6.3.2.3.9.5**

The SS should send a Random number in the 3way handshake. The change to a counter was discussed but not agreed upon, and then incorrectly placed into a "consensus" contribution in Sanya.

This is an editorial comment. Nonetheless here are some relevant technical points:

1. Use of a counter does not have the same security properties as a random number. The Bellare-Rogaway proof uses a random numbers.
2. The SS needs to be able to generate random numbers for authentication and other purposes, so relaxing the requirement here doesn't gain anything
3. The change was made with global find and replace and sometimes makes no sense at all (ie. Key Request)

Suggested Remedy

1. Change every instance on "NonceSS" in the document to "RandomSS"
2. Delete the text that says "A number chosen by the MS (once per protocol run). It can be counter or a random number." in table 31, 33, 37g, 108v, 108w. Replace with a "A freshly generated random value".

Proposed Resolution

Recommendation: Accepted

Recommendation by

1. Change every instance on "NonceSS" in the document to "RandomSS"
2. Delete the text that says "A number chosen by the MS (once per protocol run). It can be counter or a random number." in table 31, 33, 37g, 108v, 108w. Replace with a "A freshly generated random value".

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

1. Change every instance on "NonceSS" in the document to "RandomSS"
2. Delete the text that says "A number chosen by the MS (once per protocol run). It can be counter or a random number." in table 31, 33, 37g, 108v, 108w. Replace with a "A freshly generated random value".

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

2005/05/23

IEEE 802.16-05/023r6

No instance of "NonceSS" found by FrameMaker search.
It appears that some of the tables mentioned have been removed.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4393L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding**

Starting Page # **50**

Starting Line # **1**

Fig/Table#

Section

6.3.2.3.9.16

EAP channel binding methods must be supported.

Suggested Remedy

Adopt contribution C80216e-05_217.doc

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4394L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding**

Starting Page # **51**

Starting Line # **11**

Fig/Table# **37h**

Section **6.3.2.3.9.18**

RandomBS is not optional

Suggested Remedy

Delete text "This is optional" from page 51 line 11

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change

"A freshly generated random number of 64-bits. This is optional"

to "The random number included in the SA-TEK-Challenge message or SA-Challenge TLV "

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change

"A freshly generated random number of 64-bits. This is optional"

to "The random number included in the SA-TEK-Challenge message or SA-Challenge TLV "

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4395L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment

Type **Technical, Non-binding**

Starting Page # **51**

Starting Line # **22**

Fig/Table#

Section

6.3.2.3.9.19

Suggested Remedy

1. Change the title of the section to "SA-TEK-Update TLV"
2. Change every instance of "SA-TEK-Update message" to "SA-TEK-Update TLV"
3. Move the entire section to the TLV chapter.

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See comment 4070.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4396L**

Comment submitted by: Jeff

Mandin

Member

2005/04/29

Comment	Type	Technical, Non-binding	Starting Page #	183	Starting Line #	1	Fig/Table#	Section	7.1
---------	------	------------------------	-----------------	-----	-----------------	---	------------	---------	-----

NIST has deprecated the OMAC algorithm and replaced it with an new algorithm called CMAC.

We must update the spec to refer to CMAC, and since CMAC itself may change, we should make clear that 802.16 should use which ever CMAC is approved by NIST.

Additionally there are some other MAC issues to clarify.

Suggested Remedy

Adopt contribution C80216e-05_218.doc

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Reason for Recommendation**Resolution of Group**

Decision of Group: **Accepted-Modified**

Adopt contribution C80216e-05_218r1 with the following modification:

Replace the second sentence in the remedy with:

"The CMAC construction as specified in Draft Special Publication 800-38B - Recommendation for Block Cipher Modes of Operation: the CMAC Mode for Authentication: July 2005 shall be used."

Reason for Group's Decision/Resolution

Original motion to adopt 218r1 failed (Vote: 16-17)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4397L**Comment submitted by: **Jeff****Mandin**

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **183** Starting Line # **39** Fig/Table# Section **7.1.1**
Really it's better to say that PKM is 3 things not 2.

Suggested Remedy

append the following text to the enumerated list:

c) An authentication protocol enabling the BS and MS to securely establish their identities via one of a number of cryptographic credential types.

Proposed ResolutionRecommendation: **Withdrawn**

Recommendation by

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4398L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Editorial**

Starting Page # **184** Starting Line # **8**

Fig/Table#

Section **7.1.1**

Suggested Remedy

Change "All MAC management messages" to "MAC management messages"

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4399L**Comment submitted by: **Jeff****Mandin**

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **24** Fig/Table# Section **7.1.2**

Suggested Remedy

line 24: Change "to perform key exchanges between an MS and BS" to "to transport traffic encryption keys from BS to MS"

line 27: Change "exchanges of TEKs" to "distribution of TEKs"

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superceded**[See comment 4145](#)**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**

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4400L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **26**

Fig/Table# Section **7.1.2**

Suggested Remedy

Change "(ie. an AK)" to "(called an Authorization Key)"

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Change "(ie. an AK)" to ",called an Authorization Key (AK), "

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Change "(ie. an AK)" to ",called an Authorization Key (AK), "

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4401L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **29** Fig/Table# Section **7.1.2**

Suggested Remedy

Change "overhead of computation-intensive public key operations" to "overhead of full authentication"

Proposed Resolution

Recommendation: **Superseded**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Superseded**

[See 4146](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4402L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding**

Starting Page # **184**

Starting Line # **37**

Fig/Table#

Section **7.1.2**

Redundant paragraph

Suggested Remedy

- delete lines 37-40

|

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4403L**Comment submitted by: **Jeff****Mandin****Member****2005/04/29**

Comment Type **Technical, Non-binding** Starting Page # **184** Starting Line # **58** Fig/Table# Section **7.1.3**

Introductory paragraphy text is mostly redundant..

Suggested Remedy

Change :

"An MS uses the PKM protocol to obtain authorization and traffic keying material from the BS, and to support periodic reauthorization and key refresh."

to

"The authentication protocol is applied at initial network entry, for periodic reauthorization, and at handover re-entry if fast handover mechanisms are not available or applicable".

Proposed ResolutionRecommendation: **Withdrawn**

Recommendation by

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4404L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **189** Starting Line # **29** Fig/Table# Section **7.2.2.1**

Suggested Remedy

Change "in the Authorization Reply message" to "in the Authorization Reply or SA-TEK-RSP message"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Change "in the Authorization Reply message" to "in the Authorization Reply or SA-TEK-RSP message"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Change "in the Authorization Reply message" to "in the Authorization Reply or SA-TEK-RSP message"

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4405L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Editorial**

Starting Page # **211**

Starting Line # **53**

Fig/Table#

Section **7.8.1**

Unclear

Suggested Remedy

Modify as follows:

~~Depending on mutual authorization/EAP,~~ The AK can be derived in **one of three different ways depending on the authentication scheme used** as documented in section **7.2.2.2.3 XXX**. Before the 3-way handshake begins, the BS and MS shall both derive a shared ~~AK,~~ KEK and HMAC/OMAC **keys** as per 7.2.2.2.

Proposed Resolution

Recommendation: **Accepted-Modified**

Recommendation by

Modify as follows:

~~Depending on mutual authorization/EAP,~~ The AK can be derived in **one of three different ways depending on the authentication scheme used** as documented in section **7.2.2.2.3 XXX**. Before the 3-way handshake begins, the BS and MS shall both derive a shared AK, KEK and HMAC/OMAC **keys** as per 7.2.2.2.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

Modify as follows:

~~Depending on mutual authorization/EAP,~~ The AK can be derived in **one of three different ways depending on the authentication scheme used** as documented in section **7.2.2.2.3 XXX**. Before the 3-way handshake begins, the BS and MS shall both derive a shared AK, KEK and HMAC/OMAC **keys** as per 7.2.2.2.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4406L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Editorial**

Starting Page # **211**

Starting Line # **60**

Fig/Table#

Section **7.8.1**

unclear text

Suggested Remedy

- Line 60 change: "the BS shall send SA-Challenge" to "the BS shall begin the 3 way handshake by sending SA-Challenge"

- merge item 2) into 1) as a separate paragraph

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4407L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **13** Fig/Table# Section **7.8.1**

[Missing details](#)

Suggested Remedy

[Modify:](#)

"

Upon receipt of SA-Challenge a MS shall confirm that the supplied AKID refers to an AK that it has available. If the AKID is unrecognized, the SS shall ignore the message. The MS shall verify the OMAC/HMAC. If the OMAC/HMAC is invalid, the MS shall ignore the message.

Upon successful validation of the SA-Challenge, The MS shall send SA-TEK-Request after protecting it with the OMAC/HMAC. If the MS does not receive SA-TEK-Response from the BS within SATEKTimer, it shall resend the request. The MS may resend the SA-TEK-Request up to SATEKRequestMaxResends times. If the MS reaches its maximum number of resends, it shall discard the AK and may ~~de~~ restart ranging for the purpose of performing full re-authentication or decide to connect to another BS or take some other action. ~~The message shall include RandomBS, NonceSS, AKID, SS's Security Capabilities and OMAC/HMAC~~

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

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

Reason for Group's Decision/Resolution

Vote: 4-13
Reason: prevents the operation of soft handoff

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4408L**Comment submitted by: **Jeff****Mandin****Member****2005/04/29**

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **21** Fig/Table# Section **7.8.1**
 unclear details

Suggested Remedy

-> Modify:

Upon receipt of SA-TEK-Request, a BS shall confirm that the supplied AKID and BSNonce match those that were provided in the SA-Challenge refers to an AK that it has available. If the AKID is unrecognized, **If these do not match**, the BS shall ignore the message. The BS shall verify the OMAC/HMAC. If the OMAC/HMAC is invalid, the BS shall ignore the message.

-> Make 5) a second paragraph in list item 4)

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

Vote: 5-15

Reason: prevents the operation of soft handoff

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4409L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **212** Starting Line # **40** Fig/Table# Section **7.8.1**

This section describes the handshake algorithm.

But lines 40-61 concern themselves with the structure of the handshake messages, which is detailed in the message structures section.

Suggested Remedy

Delete lines 40-61

Proposed Resolution

Recommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4410L**Comment submitted by: **Jeff****Mandin****Member****2005/04/29****Comment** **Type** **Technical, Non-binding** **Starting Page #** **212** **Starting Line #** **57** **Fig/Table#** **Section** **7.8.1**

The sentence "If any of the Security Associations parameters change, then those Security Associations parameters encoding TLVs that have changed will be added." does not make any sense

Suggested Remedy

Either clarify, or else delete the sentence.

Proposed Resolution**Recommendation: Withdrawn****Recommendation by****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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4411L**Comment submitted by: **Jeff****Mandin**

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **213** Starting Line # **2** Fig/Table# Section **7.8.1**
Old / nonsensical text

Suggested Remedy

Delete text "Verification of OMAC is done as per section XXX. If RandomBS was present in SA-TEKResponse, the MS shall send SA-TEK-Confirm to the BS and an OMAC/HMAC digest."

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superceded**[See comment 4194](#)**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4412L**

Comment submitted by: Jaehwan

Chang

Other

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **256** Starting Line # **39**

Fig/Table# **285a** Section **8.4.5.3.12**

There is a byte alignment error in MBS MAP IE.

Suggested Remedy

Change the size of 'Reserved' field from 1 to 3 as follows:

Syntax : Size(bits)
Reserved : 4 **3**

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4413L**

Comment submitted by: **Jeff**

Mandin

Member

2005/04/29

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	528	37		

The SA-TEK msgs must carry only one kind of MAC

Suggested Remedy

- Change "HMAC/OMAC" in "Short HMAC" table 37f,g,h

- Add a "Short HMAC" TLV to the SA Challenge compound TLV in section 11.7.23

Proposed Resolution Recommendation: **Withdrawn** Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4414**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
---------	------	-----------------	-----------------	------------	---------

The EC filed indicate encryption only if the header type (TH) is equal to zero. If the HT is equal to one, the MAC PDU is never encrypted and the EC filed is used to distinguish between MAC PDU with 6 bytes type field and MAC PDU 3 bytes type filed.

Suggested Remedy

Add text:

Headers with HT=1 shall not be encrypted. Thus the EC field is used to distinguish between Feedback MAC header (UL) / Compress MAP (DL), and all other type headers.

Proposed Resolution Recommendation: **Superceded**

Recommendation by

See 4011.

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

See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4415**

Comment submitted by: Lei

Wang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Non-binding	17	17		

BR is 11 bit field allowing for only 2k bytes aggregate BW request. This is not enough. We should change the bandwidth request to incremental Bandwidth request.

the same comment applies to tables 7b,

Suggested Remedy

1. Change the description for BR field in Table 7a as follows:

Bandwidth Request: The number of bytes of uplink bandwidth requested by the MS. The bandwidth request is for the CID. The request shall not include any PHY overhead. It is ~~aggregate~~ **incremental** BW request. In case of the Extended rtPS, if the MSB is 1, the BS changes its polling size into the size specified in the LSBs of the this field.

2. change the description of the BR field in Table 7b as follows:

Bandwidth Request: The number of bytes of uplink bandwidth requested by the MS. The bandwidth request is for the CID. The request shall not include any PHY overhead. It is ~~aggregate~~ **incremental** BW request.

Proposed ResolutionRecommendation: **Superseded**

Recommendation by

See 4011.

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

See 4011.

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/D7](#)Ballot Number: [0001037](#)

Comment Date

Comment # [4416](#)Comment submitted by: [Lei](#)[Wang](#)

Member

[2005/04/28](#)

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
grammar	Technical, Non-binding	20	59		

Suggested Remedy

[change the last sentence in the description box for the UL-HEADROOM field in Table 7d to:](#)

[The minimum value for the burst shall be reported](#)

Proposed Resolution

Recommendation: [Superceded](#)

Recommendation by

[See 4011.](#)

Reason for Recommendation

Resolution of Group

Decision of Group: [Superceded](#)[See 4011.](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4417**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	21	Starting Line #	27	Fig/Table#	Tabl	Section
---------	------	------------------------	-----------------	----	-----------------	----	------------	------	---------

The unit of 256 bytes for the BR field does not provide the required granularity for bandwidth requests. For a 11-bit BR field, the BR shall be incremental in unit of byte.

Suggested Remedy

change the notes box for the BR field in Table 7e as follows:

~~Total transmission demand at the MS in units of 256 bytes~~

Bandwidth Request: The number of bytes of uplink bandwidth requested by the MS. The bandwidth request is for the CID. The request shall not include any PHY overhead. It is incremental BW request.

Proposed Resolution **Recommendation: Superseded**

Recommendation by

See 4011.

Reason for Recommendation

Resolution of Group

Decision of Group: Superseded

See 4011.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4418**

Comment submitted by: **Lei**

Wang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
Should the EC field in the table be EC=0?	Technical, Non-binding	22	22		

Suggested Remedy
change to EC=0

Proposed Resolution Recommendation: **Superceded** Recommendation by
See 4011.

Reason for Recommendation

Resolution of Group Decision of Group: **Superceded**
See 4011.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4419**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **39** Starting Line # **23** Fig/Table# Section **6.3.2.3.4**

For the OFDMA PHY, the UL-MAP location needs further clarification, because the first DL IE may allocate a DL transmission close to the end of the DL subframe, which may not provide the SS's enough time to process it and get the UL transmission ready in the TDD systems.

Suggested Remedy

Insert the following:

6.3.2.3.4.Uplink Map (UL-MAP) message

insert the following paragraph at the end of the section:

For SC, SCa and OFDMA PHYs, the UL-MAP message (if such exists) shall always be transmitted on the burst decrebied by the first DL_MAP_IE (and following the H-ARQ_MAP_Pointer_IE, if such exists in the OFDMA PHY) of the DL-MAP message. For the OFDMA PHY, the DL burst containing the UL-MAP shall be allocated to slots occupying the lowest possible numbered OFDMA symbols in the DL sub-frame after the DL-MAP. If there are multiple PDUs in the burst decrebied by the first DL_MAP_IE, the UL-MAP message shall be the first one.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Insert the following:

6.3.2.3.4.Uplink Map (UL-MAP) message

insert the following paragraph at the end of the section:

For SC, SCa and OFDMA PHYs, the UL-MAP message (if such exists) shall always be transmitted on the burst decrebied by the first DL_MAP_IE (and following the H-ARQ_MAP_Pointer_IE, if such exists in the OFDMA PHY) of the DL-MAP message. If there are multiple PDUs in the burst decrebied by the first DL_MAP_IE, the UL-MAP message shall be the first one.

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

Insert the following:

6.3.2.3.4.Uplink Map (UL-MAP) message

insert the following paragraph at the end of the section:

For SC, SCa and OFDMA PHYs, the UL-MAP message (if such exists) shall always be transmitted on the burst decrebied by the first DL_MAP_IE (and following the H-ARQ_MAP_Pointer_IE, if such exists in the OFDMA PHY) of the DL-MAP message. If there are multiple PDUs in the burst decrebied by the first DL_MAP_IE, the UL-MAP message shall be the first one.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4420L**

Comment submitted by: Mark

Cudak

Member

2005/04/29

Comment	Type	Technical, Binding	Starting Page #	40	Starting Line #	53	Fig/Table#	Section	6.3.2.3.5
---------	------	--------------------	-----------------	----	-----------------	----	------------	---------	-----------

Object to using the AAA key derived using EAP as master key unless there is a cryptographic separation between the master key (longer term keys) and HMAC, OMAC, KEK(short term key) and a freshness guarantee. It is insecure to use the longer term key in deriving the other short term keys that are used much more frequently for securing message transmission and can lead to domino effect and replay attacks. This is explicitly required as is stated in RFC 4017, so called Housely criteria used by IETF EAP working group as a method to gauge the appropriateness

Suggested Remedy

Adoption of the contribution C80216e-05_220

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

vote 1-6

The MAC keys have the same lifetime as the AK, and there appears to be no need to refresh them independently.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4421**

Comment submitted by: Lei

Wang

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **140** Starting Line # **45** Fig/Table# Section **6.3.17**

The HARQ is applicable to both DL and UL, Well, the current spec for the HARQ operation only describes the DL case, i.e, BS as the transmitter.

Suggested Remedy

change line 45 to line 52 on page 140 as follows:

For IR, each HARQ attempt may have a uniquely encoded subpacket. The rule of subpacket transmission is as follows:

- 1) At the first transmission, ~~BS~~ **the transimission side** shall send the subpacket labeled 0b00.
- 2) ~~BS~~ **the transimission side** shall wait for NAK before sending" one "subpacket" among subpackets labeled 0b00, 0b01, 0b10, or 0b11 in any order.
- 3) ~~BS~~ **the transimission side** can send more than one copy of any subpacket, and can omit any subpacket except the subpacket labeled 0b00.

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

change line 45 to line 52 on page 140 as follows:

For IR, each HARQ attempt may have a uniquely encoded subpacket. The rule of subpacket transmission is as follows:

- 1) At the first transmission, ~~BS~~ **the transmitting side** shall send the subpacket labeled 0b00.
- 2) ~~BS~~ **the transmitting side** shall wait for a NAK before sending one subpacket among subpackets labeled 0b00, 0b01, 0b10, or 0b11 in any order.
- 3) ~~BS~~ **the transmitting side** can send more than one copy of any subpacket, and can omit any subpacket except the subpacket labeled 0b00.

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

change line 45 to line 52 on page 140 as follows:

For IR, each HARQ attempt may have a uniquely encoded subpacket. The rule of subpacket transmission is as follows:

- 1) At the first transmission, ~~BS~~ **the transmitting side** shall send the subpacket labeled 0b00.
- 2) ~~BS~~ **the transmitting side** shall wait for a NAK before sending one subpacket among subpackets labeled 0b00, 0b01, 0b10, or 0b11 in any order.
- 3) ~~BS~~ **the transmitting side** can send more than one copy of any subpacket, and can omit any subpacket except the subpacket labeled 0b00.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4422**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **140** Starting Line # **61** Fig/Table# Section **6.3.17**
HARQ stop-and-wait protocol needs a clarification.

Suggested Remedy

in line 61 page 140, change the first sentence as follows:

The HARQ scheme is basically a stop-and-wait protocol where the retransmissions are only sent after receiving a NACK signal for the previous transmission.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

in line 61 page 140, change the first sentence as follows:

The HARQ scheme is basically a stop-and-wait protocol where the retransmissions are only sent after receiving a NACK signal for the previous transmission or the ACK has not been received within the duration defined by "HARQ ACK Delay for UL burst" for UL HARQ or in "HARQ ACK delay for DL burst" for DL HARQ.

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

in line 61 page 140, change the first sentence as follows:

The HARQ scheme is basically a stop-and-wait protocol where the retransmissions are only sent after receiving a NACK signal for the previous transmission or the ACK has not been received within the duration defined by "HARQ ACK Delay for UL burst" for UL HARQ or in "HARQ ACK delay for DL burst" for DL HARQ.

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

Deferred to consider other cases.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4423L**

Comment submitted by: Mark

Cudak

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **141** Starting Line # **16** Fig/Table# Section **6.3.17**

Standard refers to section 6.3.17.6 which does not exist. Also, it mandates the use of ARQ for HARQ, which is no longer necessary because of the SN extended subheader for reordering.

Suggested Remedy

Change text as follows:

"HARQ is enabled on a CID basis. ~~An HARQ enabled CID must have ARQ enabled as well for this CID. See 6.3.17.6.~~"

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4424**

Comment submitted by: Lei

Wang

Member

2005/04/28

Comment	Type	Technical, Non-binding	Starting Page #	141	Starting Line #	16	Fig/Table#	Section	6.3.17
---------	------	------------------------	-----------------	-----	-----------------	----	------------	---------	--------

There are multiple problems with the paragraph in line 16 page 141:

1. wrong reference to 6.3.16.7, no such a section in 16e/D7 or 802.16-2004.
2. the first sentence is not consistent with the first sentence in line 43 page 139 of 16e/D7. One says HARQ can be enabled on a CID basis; the other says HARQ can be enabled on a per terminal basis.
3. the second sentence does not make sense.

Suggested Remedy

make the following changes"

1. delete the paragraph in line 16 page 141;
2. change the paragraph in line 44 page 139 as follows:

Hybrid automatic repeat request (~~H-ARQ~~HARQ) scheme is an optional part of the MAC ~~and can be enabled on a per terminal basis~~. ~~H-ARQ~~ HARQ may be supported only for the OFDMA PHY. ~~As a MS capability, the per-terminal HARQ and associated parameters shall be specified and negotiated using SBC-REQ/RSP messages during initialization procedure. The utilization of HARQ is on a per-connection basis, that is, it can be enabled on a per CID basis by using the DSA/DSC messages.~~ A burst cannot have a mixture of ~~H-ARQ~~HARQ and non-~~H-ARQ~~HARQ traffic.

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

make the following changes"

1. delete the paragraph in line 16 page 141;
2. change the paragraph in line 44 page 139 as follows:

Hybrid automatic repeat request (~~H-ARQ~~HARQ) scheme is an optional part of the MAC ~~and can be enabled on a per terminal basis~~. ~~H-ARQ~~ HARQ may be supported only for the OFDMA PHY. ~~As a MS capability, the per-terminal HARQ and associated parameters shall be specified and negotiated using SBC-REQ/RSP messages during initialization procedure. The utilization of HARQ is on a per-connection basis, that is, it can be enabled on a per CID basis by using the DSA/DSC messages.~~ A burst cannot have a mixture of ~~H-ARQ~~HARQ and non-~~H-ARQ~~HARQ traffic.

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

make the following changes"

1. delete the paragraph in line 16 page 141;

2. change the paragraph in line 44 page 139 as follows:

Hybrid automatic repeat request (~~H-ARQ~~HARQ) scheme is an optional part of the MAC ~~and can be enabled on a per terminal basis~~. ~~H-ARQ~~ HARQ may be supported only for the OFDMA PHY. ~~As a MS capability,~~ ~~the per-terminal HARQ and associated parameters shall be specified and negotiated using SBC-REQ/RSP messages during initialization procedure.~~ ~~The utilization of HARQ is on a per-connection basis, that is, it can be enabled on a per CID basis by using the DSA/DSC messages.~~ A burst cannot have a mixture of ~~H-ARQ~~HARQ and non-~~H-ARQ~~HARQ traffic.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4425**

Comment submitted by: Lei

Wang

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **244** Starting Line # **50** Fig/Table# Section **8.4.4.3**

The basic subchannel sets for the segments 0, 1, and 2 are currently for 2k FFT only. The spec shall be changed to be applicable for other FFT sizes.

Suggested Remedy

in line 50 page 244, change the last sentence of the paragraph as follows:

The basic allocated subchannel sets for Segments 0, 1, and 2 are **Subchannel Group #0, #2, #4** ~~Subchannels 0-11, 20-31, and 40-51~~ respectively.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

in line 50 page 244, change the last sentence of the paragraph as follows:

The basic allocated subchannel sets for Segments 0, 1, and 2 are **Subchannel Group #0, #2, #4** ~~Subchannels 0-11, 20-31, and 40-51~~ respectively.

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

in line 50 page 244, change the last sentence of the paragraph as follows:

The basic allocated subchannel sets for Segments 0, 1, and 2 are **Subchannel Group #0, #2, #4** ~~Subchannels 0-11, 20-31, and 40-51~~ respectively.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4426**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **245** Starting Line # **27** Fig/Table# Section **8.4.4.6.1**

The sentence "In the AMC permutation" is ambiguous. Does this mean AMC only, or jointly FUSC/PUSC and AMC?

Suggested Remedy

Adopt Corrigendum resolution:

In the AMC permutation, the ~~fourth and (N-4)th subchannels of the total N subchannels~~ **first and last subchannels of the DL frame** ~~AAS DL Zone~~ may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone.

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superceded**[See comment 4459.](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4427**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **247** Starting Line # **50** Fig/Table# Section **8.4.5.3**

Based on commentary database 80216-05_012r3, the comment #3316 and its associated contribution 80216e-05_160r1 was accepted in session #36. However, the suggested changes have not been implemented in 16e/D7.

Suggested Remedy

implement the changes as suggested in contribution 80216e-05_160r1 (changes are described based on 16e/D6).

Proposed ResolutionRecommendation: **Superceded**

Recommendation by

Reason for Recommendation**Resolution of Group**Decision of Group: **Superceded**[See comment 4430.](#)**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4428L**Comment submitted by: **Mark****Cudak****Member****2005/04/29**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Technical, Satisfied (was	269	1		8.4.5.3.21.1

I object to the resolution of comment 3325. The draft standard contains a new HARQ DL MAP IE. 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_132r2.doc

Proposed ResolutionRecommendation: **Withdrawn**

Recommendation by

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4429L**

Comment submitted by: Mark

Cudak

Member

2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **272** Starting Line # **42** Fig/Table# Section **8.4.5.3.22**

The description of the HARQ DL/UL IEs states that they may also be used to indicate a non-H-ARQ transmission. This is currently not the case (at least it is not clear how), nor does it seem to have any value.

Suggested Remedy

In Section 8.4.5.3.22, page 272: Remove line 42:

~~"The IE may also be used to indicate a non-HARQ transmission."~~

Also, in Section 8.4.5.4.24, page 367: Remove line 16:

~~"The IE may also be used to indicate also a non-HARQ transmission."~~

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4430**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
---------	------	-----------------	-----------------	------------	---------

In commentary database 80216-05_012r3, comment #3403 was determined as superceded by comment #3316. I don't agree with this decsion, because those two comments and their associated contributions are different from each other, one is for DL, and the other is for UL. we still think it is necessary to add extended UIUC code assignment tables.

Suggested Remedy

make the changes as suggested in the contribution C80216e-05_209 or its most recent reversion.

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

Adopt Contribution C802.16e-05/209r2

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

Adopt Contribution C802.16e-05/209r2.PDF

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

Note that the .doc version may be corrupted; use the .pdf version of this contribution

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4431L**

Comment submitted by: **Mark**

Cudak

Member

2005/04/29

Comment Type **Editorial**

Starting Page # **292**

Starting Line # **62**

Fig/Table#

Section

8.4.5.4.10.4

Incorrect crossreference.

Suggested Remedy

Change the text as follows:

"through the CQICH_Enhanced_Alloc_IE() (see ~~8.4.5.4.12.18.4.5.4.15~~)"

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4432L**

Comment submitted by: Mark

Cudak

Member

2005/04/29

Comment	Type	Technical, Satisfied (was	Starting Page #	303	Starting Line #	54	Fig/Table#	Section	8.4.5.4.10
---------	------	---------------------------	-----------------	-----	-----------------	----	------------	---------	------------

I object to the resolution of comment 3372. The concept of feeding back per-stream power weights for MIMO was adopted into the standard as part of the Closed-Loop MIMO framework (Contribution 04/552r7). Table 302a of the D7 draft provides the ability to feed back per-stream power control values (Feedback type = 101). However, the standard contains no specification text for how to encode a set of per-stream power levels onto the CQI payload bits. As a result, there is no specification for how the BS can interpret the CQI payload when the feedback type is per-stream power weights. The standard is incomplete without such a specification.

Suggested Remedy

Adopt Contribution IEEE C802.16e-05/142r1

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

Rejected at the request of the commenter.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4433L**

Comment submitted by: **Mark**

Cudak

Member

2005/04/29

Comment Type **Editorial**

Starting Page # **363** Starting Line # **26**

Fig/Table#

Section **8.4.5.4.21**

Text is misplaced

Suggested Remedy

Change text as follows:

"CID

Basic CID of MSS to which ranging opportunity is allocated. ~~In case UIUC = 12 allocation shall be used for CDMA code transmission as specified in 8.4.7~~

UIUC

UIUC used for the burst. In case UIUC = 12 allocation shall be used for CDMA code transmission as specified in 8.4.7."

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4434L**Comment submitted by: **Mark****Cudak**

Member

2005/04/29

Comment	Type	Editorial	Starting Page #	367	Starting Line #	1	Fig/Table#	Section	8.4.5.4.24
---------	------	-----------	-----------------	-----	-----------------	---	------------	---------	------------

The editorial instruction above Section 8.4.5.4.24 is wrong.
Same goes for editorial instructions several section following this one.

Suggested Remedy

Modify editorial instruction on page 367, line 1 as follows:

"[Insert new subclause 8.4.5.4.2~~54~~.:]"

Modify editorial instruction on page 371, line 42 as follows:

"[Insert new subclause 8.4.5.4.2~~54~~.1:]"

Modify editorial instruction on page 372, line 59 as follows:

"[Insert new subclause 8.4.5.4.2~~65~~.:]"

Modify editorial instruction on page 374, line 50 as follows:

"[Insert new subclause 8.4.5.4.2~~87~~.:]"

Modify editorial instruction on page 374, line 50 as follows:

"[Insert new subclause 8.4.5.4.2~~98~~.:]"

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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**

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4435**

Comment submitted by: **Lei**

Wang

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **368** Starting Line # **41**

Fig/Table# Section **8.4.5.4.24**

The IEs listed in line 41 to line 52 on page 368 are not defined in 16e or 802.16-2004.

Suggested Remedy

delete line 41 to line 53 on page 368 or add the definitions for those IEs.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Rejected

Reason for Group's Decision/Resolution

An editorial error resulted in D7 missing the definitions. This has been corrected for the D8 draft, and the definitions will be restored.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4436L**

Comment submitted by: **Mark**

Cudak

Member

2005/04/29

Comment Type **Editorial**

Starting Page # **373**

Starting Line # **4**

Fig/Table#

Section

8.4.5.4.25

Section refers to wrong Table.

Suggested Remedy

Change reference as follows:

"in Table ~~306w~~302p."

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4437**Comment submitted by: **Lei****Wang**

Member

2005/04/28

Comment Type **Technical, Non-binding** Starting Page # **374** Starting Line # **20**Fig/Table# Section **8.4.5.4.26**

There is no spec about how/when to use the UL allocation start IE. Well, why is it needed?

Suggested Remedy

delete section 8.4.5.4.26 or add text to define its usage.

Proposed ResolutionRecommendation: **Accepted-Modified**

Recommendation by

Under the table, add the following text:

This IE shall not be used in UL-MAP; it may be used in SUB-DL-UL-MAP.This MAP IE can be used to indicate the start position UL burst in SUB-DL-UL-MAP.**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted-Modified**

Under the table, add the following text:

This IE shall not be used in UL-MAP; it may be used in SUB-DL-UL-MAP.This MAP IE can be used to indicate the start position UL burst in SUB-DL-UL-MAP.**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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4438**

Comment submitted by: **Lei**

Wang

Member

2005/04/28

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
1. page 427, line 7, Reference to Figure XXX	Editorial	427	7		
2. page 427 line 11, reference to Section 11.8.3.7.X					
3. page 427 line 43, Figure 234 is missing					

1. page 427, line 7, Reference to Figure XXX
2. page 427 line 11, reference to Section 11.8.3.7.X
3. page 427 line 43, Figure 234 is missing

Suggested Remedy

make the following chnages:

- Line 7, reference to figure 234
- Line 11, reference to section 11.8.3.7.16
- line 30, Add diagram.

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

Diagram fix is handled by another comment.
make the following chnages:

- Line 7, reference to figure 234
- Line 11, reference to section 11.8.3.7.16

Reason for Recommendation

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

Diagram fix is handled by another comment.
make the following chnages:

- Line 7, reference to figure 234
- Line 11, reference to section 11.8.3.7.16

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Notes Editor's Actions [\(1\) done](#)

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7** Ballot Number: **0001037** Comment Date

Comment # **4439L** Comment submitted by: **Mark Cudak** Member 2005/04/29

Comment Type **Technical, Non-binding** Starting Page # **473** Starting Line # **1** Fig/Table# Section **8.4.9.2.3.1**
I object to the resolution comment 1593 because the performance of the CTC requires improvement for larger packet sizes at allocations of 10e-4 or lower.

Suggested Remedy

[Adopt contribution C80216e-05_159r3](#)

Proposed Resolution Recommendation: **Superceded** Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Superceded**

[See comment 4236.](#)

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

2005/05/23

IEEE 802.16-05/023r6

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4440L**

Comment submitted by: **Mark**

Cudak

Member

2005/04/29

Comment Type **Editorial** Starting Page # **473** Starting Line # **21** Fig/Table# **324** Section **8.4.9.2.3.1**

The reference to Table 323 in Table 324 is erroneous. I believe it should be referencing table 324 of 802.16-2004.

Suggested Remedy

Replace "Table 323" with "Table 324 of 802.16-2004"

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4441L**Comment submitted by: **Mark****Cudak**

Member

2005/04/29

Comment Type **Editorial** Starting Page # **473** Starting Line # **31** Fig/Table# **325a** Section **8.4.9.2.3.1**

As much as I like to see the larger block sizes enabled within the 802.16 standard, the addition of Tables 325a, 326a and 326b is inconsistent with the resolution of comment 3537. The text of contribution IEEE C802.16e-05/082r2 should have been revised to replace all references to "CTC" with "LDPC". Therefore the Tables 325a, 326a and 326b should be removed and retargeted to LDPC

Suggested Remedy

Delete Tables 325a, 326a and 326b. Re-apply IEEE C802.16e-05/082r2 after replaces all reference for CTC with LDPC.

Proposed Resolution**Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4442L**

Comment submitted by: **Mark**

Cudak

Member

2005/04/29

Comment Type **Editorial** Starting Page # **475** Starting Line # **1**

Fig/Table# Section **8.4.9.2.5.1**

An equation in the LDPC section has been misplaced when added to D7

Suggested Remedy

In IEEE P802.16e/D7, April 2005, Section 8.4.9.2.5.1 Code Description: move the equations in Page 476, line 1 to line 20, to Page 475, line 53,
* after the paragraph ending with "...and 0 elsewhere:"
* before the paragraph starting with "The base matrix has ..."

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4443L**

Comment submitted by: Mark

Cudak

Member

2005/04/29

Comment Type **Technical, Binding** Starting Page # **490** Starting Line # **45** Fig/Table# Section **8.4.13.1.3**

I object to the resolution approved in P802.16e/D7 in response to Comment #3473 which identified deficiencies in PHY performance requirement related to mobile handoffs. The prior resolution did not address requirements for measurement and trigger mechanisms needed to support mobile handoffs and did not provide required fields within the appropriate MAC messages for these procedures. The prior resolution also neglected to establish requirements for scanning of specific BS candidates to which handoff would be preferred within the complete neighbor BS set.

Suggested Remedy

Adopt C80216e-05/219 which specifies measurements and triggers obtained from the PHY during neighbor BS scanning mechanisms, and modifies existing messages of the MAC, to define appropriate requirements in support of mobile handoff procedures.

Proposed ResolutionRecommendation: **Rejected**

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Rejected**

Reason for Group's Decision/Resolution

Commenter asked to have the comment rejected.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4444L**

Comment submitted by: **Mark**

Cudak

Member

2005/04/29

Comment Type **Editorial** Starting Page # **518** Starting Line # **1** Fig/Table# Section **11.7**

Next Periodic Ranging description was not properly removed by a previous change. The definition does not belong in this section; it should be (and is) in the sleep section 11.17.2

Suggested Remedy

Remove the whole entry as shown:

"

~~-----~~

Name	Type	Length	Value
Next Periodic Ranging	21	2	This value indicates offset of the frame in which the periodic ranging will be performed with respect to the frame where MOB_SLP_RSP is transmitted. If MS receives MOB_SLP_RSP message with 'Next Periodic Ranging' = 0, it shall deactivate all active Power Saving Classes and return to Normal Operation."

"

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4445L**

Comment submitted by: Nico

van Waes

Member

2005/04/29

Comment	Type	Technical, Non-binding	Starting Page #	999	Starting Line #	Fig/Table#	Section
---------	------	------------------------	-----------------	-----	-----------------	------------	---------

I'm still not satisfied with the resolution of comments 3457, 3464, 3465 and 3493.

The reasons are fairly trivial:

On 3457: Standards don't need lists of implementation IPR concealed as informative text in the flow of normative specifications.

On 3464: The group response is nonsense. Specification requires implementation of all codes and capability of decoding all codes at maximum requirements. If one code is deemed less complex in implementation, it still requires full implementation for the other code. It hence only adds complexity. If the group claims one code to be less complex in implementation, one would of course wonder why the group maintains a duplicate code with equal performance but more complexity.

On 3465: The group response dodges the issue. The issue is that the performance between the two duplicated codes is so small in relevant PER regions (less than .1 dB) that no practical advantage exists in having both. There is no practical way a transmitter can on the fly decide which of the two to use and hence always use one. The forced implementation of both hence adds nothing but cost to the design.

On 3493: The group response dodges the issue. Implementation of these duplicates codes is not implementation dependent. The limited simultaneously active burstprofiles makes having both A and B versions simultaneously active absurd. That the selection is implementation dependent is true, but the availability of the selection is not, and therefor the implementation burden is not selective.

Suggested Remedy

Re-address 3457, 3464, 3465 and 3493 in a serious manner.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4446L**

Comment submitted by: **David**

Castelow

Member

2005/05/02

Comment Type **Editorial**

Starting Page # **98**

Starting Line # **39**

Fig/Table# **108j**

Section **6.3.2.3.50**

Given the ordering of the message types, section 6.3.2.3.50 should be moved to page 117, line 45 (before section MOB_PAG-ADV).

Suggested Remedy

Move sections 6.3.2.3.50 to page 117, line 45.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4447L**

Comment submitted by: **David**

Castelow

Member

2005/05/02

Comment Type **Technical, Non-binding** Starting Page # **98** Starting Line # **41**

Fig/Table# **108j** Section **6.3.2.3.50**

MOB_SCAN-REPORT is not aligned to bytes or nibbles.
Given the size of the message, this is not an effective use of resources.

Suggested Remedy

Include a reserved field at page 98, line 42:
Reserved | 6 bits |

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: Not Addressed

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4448L**Comment submitted by: **David****Castelow****Member****2005/05/02**Comment Type **Technical, Non-binding** Starting Page # **100** Starting Line # **20**Fig/Table# **108k** Section **6.3.2.3.51**

The MOB_BSHO-REQ is not byte or nibble aligned: excessive processing for little gain.

Suggested Remedy

Add at page 100, line 61:

Reserved | 7 bits |

Add at page 101, line 61:

Reserved | 1 bit |

(Or if byte alignment ok)

Add at page 101, line 61:

Reserved | 5 bits |

At at page 102, line 5:

Reserved | 1 bit |

(Or if byte alignment ok)

At at page 102, line 5:

Reserved | 5 bits |**Proposed Resolution****Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4449L**

Comment submitted by: David

Castelow

Member

2005/05/02

Comment Type **Editorial** Starting Page # **126** Starting Line # **22**Fig/Table# Section **6.3.2.3.59**

GSA Key Request Message does not look like it is in the correct section.
It does not belong in 6.3.2. because it does not contain a Management Message Type.

Suggested Remedy

Move 6.3.2.3.59 and 6.3.2.3.60 to a more appropriate location (chapter 7?)

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

Delete sections 6.3.2.3.59 and 6.3.2.3.60.

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

Delete sections 6.3.2.3.59 and 6.3.2.3.60.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4450L**

Comment submitted by: David

Castelow

Member

2005/05/02

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
	Editorial	128			

Text (page 128, line 52) states "setting the two most" is inconsistent with table 108x.

Strictly the statement "an invalid combination for a generic MAC header" is incorrect, as in the UL, 111 is used for feedback.

Suggested Remedy

Page 128, line 52

setting the ~~two~~three most"

Page 128, line 53,

an invalid combination for a generic MAC header in the DL**Proposed Resolution****Recommendation:****Recommendation by****Reason for Recommendation****Resolution of Group****Decision of Group: Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4451L**

Comment submitted by: David

Castelow

Member

2005/05/02

Comment Type **Editorial** Starting Page # **129** Starting Line # **10** Fig/Table# **108x** Section **6.3.2.3.61**

Page 130, line 36:
A CCITT CRC 16 value is appended to the end of the burst. The CRC is computed across all bytes of the SUB-DL-UL-MAP message.
This needs to be included in the message description.
It is not added at the end of the burst, but at the end of the message.

Suggested Remedy

Add at page 129, line 56
CRC16 | 16 bits | CCITT CRC-16 |
Page 130, line 36.
A CCITT CRC 16 value is ~~appended to~~ included at the end of the burst message. The CRC is computed across all bytes of the SUB-DL-UL-MAP message not including the CRC-16 itself.

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: **Not Addressed**

Due to time constraints, this late comment was not addressed by the group.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4452**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1 ad hoc clarification text.	Coordination	2	36	1	

Suggested Remedy

In 16e/D7, Table 1, page 2, line 36 change

"AAS (6.3.7.6)

ARQ (6.3.4)

STC (8.4.8)

mobile"

to

"AAS (6.3.7.6, 8.4.4.6)

ARQ (6.3.4),

H-ARQ (6.3.17)

STC (8.4.8)

mobile"

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

In 16e/D7, Table 1, page 2, line 36 change

"AAS (6.3.7.6)

ARQ (6.3.4)

STC (8.4.8)

mobile"

to

"AAS (6.3.7.6, 8.4.4.6)

ARQ (6.3.4),

H-ARQ (6.3.17)

STC (8.4.8)

mobile"

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

In 16e/D7, Table 1, page 2, line 36 change

"AAS (6.3.7.6)

ARQ (6.3.4)

STC (8.4.8)

mobile"

to

"AAS (6.3.7.6, [8.4.4.6](#))
ARQ (6.3.4),
[H-ARQ \(6.3.17\)](#)
STC (8.4.8)
mobile"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4453**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.	7	1		

Suggested RemedyIn 16e/D7, change section title from "Normative References" back to "References"**Proposed Resolution**Recommendation: **Accepted**

Recommendation by

In 16e/D7, change section title from "Normative References" back to "References"**Reason for Recommendation****Resolution of Group**Decision of Group: **Accepted**In 16e/D7, change section title from "Normative References" back to "References"**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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4454**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.	36	53		

Suggested Remedy

In the P802.16e/D7 page 36, lines 53-55, change the value under "Connection" column from "Broadcast" to "Fragmentable Broadcast" for the UCD and DCD messages.

Proposed Resolution Recommendation: Accepted**Recommendation by**

In the P802.16e/D7 page 36, lines 53-55, change the value under "Connection" column from "Broadcast" to "Fragmentable Broadcast" for the UCD and DCD messages.

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

In the P802.16e/D7 page 36, lines 53-55, change the value under "Connection" column from "Broadcast" to "Fragmentable Broadcast" for the UCD and DCD messages.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4455**

Comment submitted by: Ron

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.	52			

Suggested Remedy

In 16e/D7, p. 52, line 24, change the reference "11.8.4" to "11.8.7"

In 16e/D7, p. 52, line 31, change the reference "11.8.4" to "11.8.7"

In 16e/D7, p. 52, line 19, change "MS basic capability request (SBC-REQ) message" to "SS Basic Capability Request (SBC-REQ) message"

In 16e/D7, p. 52, line 26, change "MS basic capability response (SBC-RSP) message" to "SS Basic Capability Response (SBC-RSP) message"

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

In 16e/D7, p. 52, line 24, change the reference "11.8.4" to "11.8.7"

In 16e/D7, p. 52, line 31, change the reference "11.8.4" to "11.8.7"

In 16e/D7, p. 52, line 19, change "MS basic capability request (SBC-REQ) message" to "SS Basic Capability Request (SBC-REQ) message"

In 16e/D7, p. 52, line 26, change "MS basic capability response (SBC-RSP) message" to "SS Basic Capability Response (SBC-RSP) message"

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

In 16e/D7, p. 52, line 24, change the reference "11.8.4" to "11.8.7"

In 16e/D7, p. 52, line 31, change the reference "11.8.4" to "11.8.7"

In 16e/D7, p. 52, line 19, change "MS basic capability request (SBC-REQ) message" to "SS Basic Capability Request (SBC-REQ) message"

In 16e/D7, p. 52, line 26, change "MS basic capability response (SBC-RSP) message" to "SS Basic Capability Response (SBC-RSP) message"

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Notes

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4456**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In 802.16e/D7, page 77, line 1 delete "[Change 6.3.2.3.43.7.6 as indicated:]".

On page 77, lines 6-7, change
 "The CQI region information is delivered through the Compact_UL-MAP_IE as shown in Table 105. MSS sends CQI report in CQI region."
 to
 "[In 6.3.2.3.43.7.6, insert the following text after the first paragraph:]"

Proposed Resolution Recommendation: Accepted Recommendation by

In 802.16e/D7, page 77, line 1 delete "[Change 6.3.2.3.43.7.6 as indicated:]".

On page 77, lines 6-7, change
 "The CQI region information is delivered through the Compact_UL-MAP_IE as shown in Table 105. MSS sends CQI report in CQI region."
 to
 "[In 6.3.2.3.43.7.6, insert the following text after the first paragraph:]"

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

In 802.16e/D7, page 77, line 1 delete "[Change 6.3.2.3.43.7.6 as indicated:]".

On page 77, lines 6-7, change
 "The CQI region information is delivered through the Compact_UL-MAP_IE as shown in Table 105. MSS sends CQI report in CQI region."
 to
 "[In 6.3.2.3.43.7.6, insert the following text after the first paragraph:]"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4457**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.	224			

Suggested Remedy

In 16e/D7, page 224, line 18, delete "[unless the symbol is in the DL Subchannelization Zone \(refer to 8.3.5.1.1\).](#)"

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

In 16e/D7, page 224, line 18, delete "[unless the symbol is in the DL Subchannelization Zone \(refer to 8.3.5.1.1\).](#)"

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**In 16e/D7, page 224, line 18, delete "[unless the symbol is in the DL Subchannelization Zone \(refer to 8.3.5.1.1\).](#)"

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4458**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

Remove FCH-STC in P802.16e (delete the text from page 224, line 33 to page 225, line 25).

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Remove FCH-STC in P802.16e (delete the text from page 224, line 33 to page 225, line 25).

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

Remove FCH-STC in P802.16e (delete the text from page 224, line 33 to page 225, line 25).

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4459**

Comment submitted by: Ron

Murias

Comment	Type	Coordination	Starting Page #	245	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc	clarification text.					

Suggested Remedy

In 16e/D7, p. 245, line 23, remove

"[Change the text in 8.4.4.6.1 as indicated:]

The two highest numbered subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone in PUSC, FUSC and optional FUSC permutation when NFFT is greater than or equal to 512. In the AMC permutation, the 4th and (N-4)th subchannels of the total N subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone for all permutations (FUSC/PUSC and AMC). For AMC permutation, each subchannel for the AAS diversity MAP consists of 3 bins by 2 symbols. When these subchannels are used for this purpose, they shall not be allocated in the normal DL-MAP message and shall be used only on the AAS portion of the DL sub-frame. These sub-channels will be used to transmit the AAS-DLFP() whose physical construction is shown in Figure 223. In the PUSC-ASCA and AMC permutation zone, the allocation's pilot subcarriers shall be beamformed in a way that is consistent with the transmission of the allocation's data subcarriers."

and instead insert:

"[After the first paragraph of section 8.4.4.6.1, insert:]

The AAS Diversity-Map Zone shall only be used with FFT sizes greater than or equal to 512."

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

In 16e/D7, p. 245, line 23, remove

"[Change the text in 8.4.4.6.1 as indicated:]

The two highest numbered subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone in PUSC, FUSC and optional FUSC permutation when NFFT is greater than or equal to 512. In the AMC permutation, the 4th and (N-4)th subchannels of the total N subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone for all permutations (FUSC/PUSC and AMC). For AMC permutation, each subchannel for the AAS diversity MAP consists of 3 bins by 2 symbols. When these subchannels are used for this purpose, they shall not be allocated in the normal DL-MAP message and shall be used only on the AAS portion of the DL sub-frame. These sub-channels will be used to transmit the AAS-DLFP() whose physical construction is shown in Figure 223. In the PUSC-ASCA and AMC permutation zone, the allocation's pilot subcarriers shall be beamformed in a way that is consistent with the transmission of the allocation's data subcarriers."

and instead insert:

"[After the first paragraph of section 8.4.4.6.1, insert:]

The AAS Diversity-Map Zone shall only be used with FFT sizes greater than or equal to 512."

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

In 16e/D7, p. 245, line 23, remove

"[Change the text in 8.4.4.6.1 as indicated:]

The two highest numbered subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone in PUSC, FUSC and optional FUSC permutation when NFFT is greater than or equal to 512. In the AMC permutation, the 4th and (N-4)th subchannels of the total N subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone for all permutations (FUSC/PUSC and AMC). For AMC permutation, each subchannel for the AAS diversity MAP consists of 3 bins by 2 symbols. When these subchannels are used for this purpose, they shall not be allocated in the normal DL-MAP message and shall be used only on the AAS portion of the DL sub-frame. These sub-channels will be used to transmit the AAS-DLFP() whose physical construction is shown in Figure 223. In the PUSC-ASCA and AMC permutation zone, the allocation's pilot subcarriers shall be beamformed in a way that is consistent with the transmission of the allocation's data subcarriers."

and instead insert:

"[After the first paragraph of section 8.4.4.6.1, insert:]

The AAS Diversity-Map Zone shall only be used with FFT sizes greater than or equal to 512."

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4460**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In P802.16e/D7, p 498, starting on line 3, change the number of the timers according to:

T28 -> T41

T29 -> T42

T30 -> T43

T31 -> T44

T32 -> T45

T33 -> T46

T34 -> T47

Search throughout the 16e/D7 draft and make the same substitutions.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In P802.16e/D7, p 498, starting on line 3, change the number of the timers according to:

T28 -> T41

T29 -> T42

T30 -> T43

T31 -> T44

T32 -> T45

T33 -> T46

T34 -> T47

Search throughout the 16e/D7 draft and make the same substitutions.

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

In P802.16e/D7, p 498, starting on line 3, change the number of the timers according to:

T28 -> T41

T29 -> T42

T30 -> T43

T31 -> T44

T32 -> T45

T33 -> T46

T34 -> T47

Search throughout the 16e/D7 draft and make the same substitutions.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4461**

Comment submitted by: Ron

Murias

Comment	Type	Coordination	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc	clarification text.	500			

Suggested Remedy

In 16e/D7, p. 500, line 26, Table 345, change "FF00 - FFFD~~A~~" to "FF00 - FFFD~~9~~"
 p. 500, line 30, Table 345, change "FFFB" to "FFFA"
 p. 500, line 33, Table 345, change "FFFC" to "FFFB"
 p. 500, line 35, Table 345, change "FFFD" to "FFFC"
 p. 500, line 37, insert a new row:

<u>Fragmentable Broadcast CID</u>	<u>FFFD</u>	<u>Used by the BS for transmission of management broadcast information with fragmentation. The fragment sub header shall use 3-bit long FSN on this connection.</u>
-----------------------------------	-------------	---

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

In 16e/D7, p. 500, line 26, Table 345, change "FF00 - FFFD~~A~~" to "FF00 - FFFD~~9~~"
 p. 500, line 30, Table 345, change "FFFB" to "FFFA"
 p. 500, line 33, Table 345, change "FFFC" to "FFFB"
 p. 500, line 35, Table 345, change "FFFD" to "FFFC"
 p. 500, line 37, insert a new row:

<u>Fragmentable Broadcast CID</u>	<u>FFFD</u>	<u>Used by the BS for transmission of management broadcast information with fragmentation. The fragment sub header shall use 3-bit long FSN on this connection.</u>
-----------------------------------	-------------	---

Reason for Recommendation

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

In 16e/D7, p. 500, line 26, Table 345, change "FF00 - FFFD~~A~~" to "FF00 - FFFD~~9~~"
 p. 500, line 30, Table 345, change "FFFB" to "FFFA"
 p. 500, line 33, Table 345, change "FFFC" to "FFFB"
 p. 500, line 35, Table 345, change "FFFD" to "FFFC"
 p. 500, line 37, insert a new row:

Fragmentable Broadcast CID | FFFD | Used by the BS for transmission of management broadcast information with fragmentation. The fragment sub header shall use 3-bit long FSN on this connection.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4462**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

Throughout 16e/D7, replace UL_IDcell with UL_Permbase (7 instances).

In 16e/D7, page 507, line 48, make the following substitution for the following TLV types:

173 -> 185

174 -> 186

175 -> 187

etc.

Proposed Resolution Recommendation: Accepted

Recommendation by

Throughout 16e/D7, replace UL_IDcell with UL_Permbase (7 instances).

In 16e/D7, page 507, line 48, make the following substitution for the following TLV types:

173 -> 185

174 -> 186

175 -> 187

etc.

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

Throughout 16e/D7, replace UL_IDcell with UL_Permbase (7 instances).

In 16e/D7, page 507, line 48, make the following substitution for the following TLV types:

173 -> 185

174 -> 186

175 -> 187

etc.

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**

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**Ballot Number: **0001037**

Comment Date

Comment # **4463**Comment submitted by: **Ron****Murias**

Comment	Type	Coordination	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc	clarification text.	509			

Suggested Remedy

In 16e/D7, line 19, change "7 = QPSK (BTC) 2/3" to "7 = QPSK (BTC) 2/3/4"

In 16e/D7, line 39, change

"26 = QPSK (LDPC) 1/2
 27 = QPSK (LDPC) 2/3 A code
 28 = QPSK (LDPC) 3/4 A code
 29 = 16-QAM (LDPC) 1/2
 30 = 16-QAM (LDPC) 2/3 A code
 31 = 16-QAM (LDPC) 3/4 A code
 32 = 64-QAM (LDPC) 1/2
 33 = 64-QAM (LDPC) 2/3 A code
 34 = 64-QAM (LDPC) 3/4 A code
 35 = QPSK (LDPC) 2/3 B code
 36 = QPSK (LDPC) 3/4 B code
 37 = 16-QAM (LDPC) 2/3 B code
 38 = 16-QAM (LDPC) 3/4 B code
 39 = 64-QAM (LDPC) 2/3 B code
 40 = 64-QAM (LDPC) 3/4 B code
 41..255 = Reserved"

to

"26= 64-QAM (CC) 1/2
 27= 64-QAM (CTC) 1/2
 28= 64-QAM (ZT CC) 1/2
 29 = QPSK (LDPC) 1/2
 30 = QPSK (LDPC) 2/3 A code
 31 = QPSK (LDPC) 3/4 A code
 32 = 16-QAM (LDPC) 1/2
 33 = 16-QAM (LDPC) 2/3 A code
 34 = 16-QAM (LDPC) 3/4 A code
 35 = 64-QAM (LDPC) 1/2
 36 = 64-QAM (LDPC) 2/3 A code
 37 = 64-QAM (LDPC) 3/4 A code
 38 = QPSK (LDPC) 2/3 B code
 39 = QPSK (LDPC) 3/4 B code
 40 = 16-QAM (LDPC) 2/3 B code"

[41 = 16-QAM \(LDPC\) 3/4 B code](#)
[42 = 64-QAM \(LDPC\) 2/3 B code](#)
[43 = 64-QAM \(LDPC\) 3/4 B code](#)
[44..255 = Reserved"](#)

Proposed Resolution **Recommendation: Accepted-Modified**

Recommendation by

In 16e/D7, replace the text in the value column with:

["0 = QPSK \(CC\) 1/2](#)
[1 = QPSK \(CC\) 3/4](#)
[2 = 16-QAM \(CC\) 1/2](#)
[3 = 16-QAM \(CC\) 3/4](#)
[4 = 64-QAM \(CC\) 1/2](#)
[5 = 64-QAM \(CC\) 2/3](#)
[6 = 64-QAM \(CC\) 3/4](#)
[7 = QPSK \(BTC\) 1/2](#)
[8 = QPSK \(BTC\) 3/4](#)
[9 = 16-QAM \(BTC\) 3/5](#)
[10 = 16-QAM \(BTC\) 4/5](#)
[11 = 64-QAM \(BTC\) 5/8](#)
[12 = 64-QAM \(BTC\) 4/5](#)
[13 = QPSK \(CTC\) 1/2](#)
[14 = QPSK \(CTC\) 2/3](#)
[15 = QPSK \(CTC\) 3/4](#)
[16 = 16-QAM \(CTC\) 1/2](#)
[17 = 16-QAM \(CTC\) 3/4](#)
[18 = 64-QAM \(CTC\) 1/2](#)
[19 = 64-QAM \(CTC\) 2/3](#)
[20 = 64-QAM \(CTC\) 3/4](#)
[21 = 64-QAM \(CTC\) 5/6](#)
[22 = QPSK \(ZT CC\) 1/2](#)
[23 = QPSK \(ZT CC\) 3/4](#)
[24= 16-QAM \(ZT CC\) 1/2](#)
[25= 16-QAM \(ZT CC\) 3/4](#)
[26= 64-QAM \(ZT CC\) 1/2](#)
[27= 64-QAM \(ZT CC\) 2/3](#)
[28= 64-QAM \(ZT CC\) 3/4](#)
[29 = QPSK \(LDPC\) 1/2](#)
[30 = QPSK \(LDPC\) 2/3 A code](#)
[31 = QPSK \(LDPC\) 3/4 A code](#)
[32 = 16-QAM \(LDPC\) 1/2](#)
[33 = 16-QAM \(LDPC\) 2/3 A code](#)
[34 = 16-QAM \(LDPC\) 3/4 A code](#)
[35 = 64-QAM \(LDPC\) 1/2](#)
[36 = 64-QAM \(LDPC\) 2/3 A code](#)
[37 = 64-QAM \(LDPC\) 3/4 A code](#)

[38 = QPSK \(LDPC\) 2/3 B code](#)
[39 = QPSK \(LDPC\) 3/4 B code](#)
[40 = 16-QAM \(LDPC\) 2/3 B code](#)
[41 = 16-QAM \(LDPC\) 3/4 B code](#)
[42 = 64-QAM \(LDPC\) 2/3 B code](#)
[43 = 64-QAM \(LDPC\) 3/4 B code](#)
[44..255 = Reserved"](#)

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

In 16e/D7, replace the text in the value column with:

["0 = QPSK \(CC\) 1/2](#)
[1 = QPSK \(CC\) 3/4](#)
[2 = 16-QAM \(CC\) 1/2](#)
[3 = 16-QAM \(CC\) 3/4](#)
[4 = 64-QAM \(CC\) 1/2](#)
[5 = 64-QAM \(CC\) 2/3](#)
[6 = 64-QAM \(CC\) 3/4](#)
[7 = QPSK \(BTC\) 1/2](#)
[8 = QPSK \(BTC\) 3/4](#)
[9 = 16-QAM \(BTC\) 3/5](#)
[10 = 16-QAM \(BTC\) 4/5](#)
[11 = 64-QAM \(BTC\) 5/8](#)
[12 = 64-QAM \(BTC\) 4/5](#)
[13 = QPSK \(CTC\) 1/2](#)
[14 = QPSK \(CTC\) 2/3](#)
[15 = QPSK \(CTC\) 3/4](#)
[16 = 16-QAM \(CTC\) 1/2](#)
[17 = 16-QAM \(CTC\) 3/4](#)
[18 = 64-QAM \(CTC\) 1/2](#)
[19 = 64-QAM \(CTC\) 2/3](#)
[20 = 64-QAM \(CTC\) 3/4](#)
[21 = 64-QAM \(CTC\) 5/6](#)
[22 = QPSK \(ZT CC\) 1/2](#)
[23 = QPSK \(ZT CC\) 3/4](#)
[24= 16-QAM \(ZT CC\) 1/2](#)
[25= 16-QAM \(ZT CC\) 3/4](#)
[26= 64-QAM \(ZT CC\) 1/2](#)
[27= 64-QAM \(ZT CC\) 2/3](#)
[28= 64-QAM \(ZT CC\) 3/4](#)
[29 = QPSK \(LDPC\) 1/2](#)
[30 = QPSK \(LDPC\) 2/3 A code](#)
[31 = QPSK \(LDPC\) 3/4 A code](#)
[32 = 16-QAM \(LDPC\) 1/2](#)

- [32 = 16-QAM \(LDPC\) 1/2](#)
- [33 = 16-QAM \(LDPC\) 2/3 A code](#)
- [34 = 16-QAM \(LDPC\) 3/4 A code](#)
- [35 = 64-QAM \(LDPC\) 1/2](#)
- [36 = 64-QAM \(LDPC\) 2/3 A code](#)
- [37 = 64-QAM \(LDPC\) 3/4 A code](#)
- [38 = QPSK \(LDPC\) 2/3 B code](#)
- [39 = QPSK \(LDPC\) 3/4 B code](#)
- [40 = 16-QAM \(LDPC\) 2/3 B code](#)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4464**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In 16e/D7, page 510, line 43, Table 358a, change the TLV types as follows:

18 -> 30

19 -> 31

20 -> 32

etc.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In 16e/D7, page 510, line 43, Table 358a, change the TLV types as follows:

18 -> 30

19 -> 31

20 -> 32

etc.

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

In 16e/D7, page 510, line 43, Table 358a, change the TLV types as follows:

18 -> 30

19 -> 31

20 -> 32

etc.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4465**Comment submitted by: **Ron****Murias**

Comment	Type	Coordination	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc	clarification text.	513			

Suggested Remedy

In 16e/D7, on p. 513, line 37, change.

"26 = QPSK (LDPC) 1/2
 27 = QPSK (LDPC) 2/3 A code
 28 = QPSK (LDPC) 3/4 A code
 29 = 16-QAM (LDPC) 1/2
 30 = 16-QAM (LDPC) 2/3 A code
 31 = 16-QAM (LDPC) 3/4 A code
 32 = 64-QAM (LDPC) 1/2
 33 = 64-QAM (LDPC) 2/3 A code
 34 = 64-QAM (LDPC) 3/4 A code
 35 = QPSK (LDPC) 2/3 B code
 36 = QPSK (LDPC) 3/4 B code
 37 = 16-QAM (LDPC) 2/3 B code
 38 = 16-QAM (LDPC) 3/4 B code
 39 = 64-QAM (LDPC) 2/3 B code
 40 = 64-QAM (LDPC) 3/4 B code
 41..255 = Reserved".

.

to.

"26= 64-QAM (CC) 1/2
 27= 64-QAM (CTC) 1/2
 28= 64-QAM (ZT CC) 1/2
 29 = QPSK (LDPC) 1/2
 30 = QPSK (LDPC) 2/3 A code
 31 = QPSK (LDPC) 3/4 A code
 32 = 16-QAM (LDPC) 1/2
 33 = 16-QAM (LDPC) 2/3 A code
 34 = 16-QAM (LDPC) 3/4 A code
 35 = 64-QAM (LDPC) 1/2
 36 = 64-QAM (LDPC) 2/3 A code
 37 = 64-QAM (LDPC) 3/4 A code
 38 = QPSK (LDPC) 2/3 B code
 39 = QPSK (LDPC) 3/4 B code
 40 = 16-QAM (LDPC) 2/3 B code
 41 = 16-QAM (LDPC) 3/4 B code
 42 = 64-QAM (LDPC) 2/3 B code

43 = 64-QAM (LDPC) 3/4 B code
44..255 = Reserved".

Proposed Resolution **Recommendation: Accepted-Modified** **Recommendation by**
In 16e/D7, on p. 513, line 37, replace the text in the value column with:

0 = QPSK (CC) 1/2
1 = QPSK (CC) 3/4
2 = 16-QAM (CC) 1/2
3 = 16-QAM (CC) 3/4
4 = 64-QAM (CC) 1/2
5 = 64-QAM (CC) 2/3
6 = 64-QAM (CC) 3/4
7 = QPSK (BTC) 1/2
8 = QPSK (BTC) 3/4 or 2/3
9 = 16-QAM (BTC) 3/5
10 = 16-QAM (BTC) 4/5
11 = 64-QAM (BTC) 2/3 or 5/8
12 = 64-QAM (BTC) 5/6 or 4/5
13 = QPSK (CTC) 1/2
14 = QPSK (CTC) 2/3
15 = QPSK (CTC) 3/4
16 = 16-QAM (CTC) 1/2
17 = 16-QAM (CTC) 3/4
18 = 64-QAM (CTC) 1/2
19 = 64-QAM (CTC) 2/3
20 = 64-QAM (CTC) 3/4
21 = 64-QAM (CTC) 5/6
22 = QPSK (ZT CC) 1/2
23 = QPSK (ZT CC) 3/4
24= 16-QAM (ZT CC) 1/2
25= 16-QAM (ZT CC) 3/4
26= 64-QAM (ZT CC) 1/2
27= 64-QAM (ZT CC) 2/3
28= 64-QAM (ZT CC) 3/4
29 = QPSK (LDPC) 1/2
30 = QPSK (LDPC) 2/3 A code
31 = QPSK (LDPC) 3/4 A code
32 = 16-QAM (LDPC) 1/2
33 = 16-QAM (LDPC) 2/3 A code
34 = 16-QAM (LDPC) 3/4 A code
35 = 64-QAM (LDPC) 1/2
36 = 64-QAM (LDPC) 2/3 A code
37 = 64-QAM (LDPC) 3/4 A code
38 = QPSK (LDPC) 2/3 B code
39 = QPSK (LDPC) 3/4 B code
40 = 16-QAM (LDPC) 2/3 B code

41 = 16-QAM (LDPC) 3/4 B code
42 = 64-QAM (LDPC) 2/3 B code
43 = 64-QAM (LDPC) 3/4 B code
44..255 = Reserved".

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

In 16e/D7, on p. 513, line 37, replace the text in the value column with:

0 = QPSK (CC) 1/2
1 = QPSK (CC) 3/4
2 = 16-QAM (CC) 1/2
3 = 16-QAM (CC) 3/4
4 = 64-QAM (CC) 1/2
5 = 64-QAM (CC) 2/3
6 = 64-QAM (CC) 3/4
7 = QPSK (BTC) 1/2
8 = QPSK (BTC) 3/4 or 2/3
9 = 16-QAM (BTC) 3/5
10 = 16-QAM (BTC) 4/5
11 = 64-QAM (BTC) 2/3 or 5/8
12 = 64-QAM (BTC) 5/6 or 4/5
13 = QPSK (CTC) 1/2
14 = QPSK (CTC) 2/3
15 = QPSK (CTC) 3/4
16 = 16-QAM (CTC) 1/2
17 = 16-QAM (CTC) 3/4
18 = 64-QAM (CTC) 1/2
19 = 64-QAM (CTC) 2/3
20 = 64-QAM (CTC) 3/4
21 = 64-QAM (CTC) 5/6
22 = QPSK (ZT CC) 1/2
23 = QPSK (ZT CC) 3/4
24= 16-QAM (ZT CC) 1/2
25= 16-QAM (ZT CC) 3/4
26= 64-QAM (ZT CC) 1/2
27= 64-QAM (ZT CC) 2/3
28= 64-QAM (ZT CC) 3/4
29 = QPSK (LDPC) 1/2
30 = QPSK (LDPC) 2/3 A code
31 = QPSK (LDPC) 3/4 A code
32 = 16-QAM (LDPC) 1/2
33 = 16-QAM (LDPC) 2/3 A code
34 = 16-QAM (LDPC) 3/4 A code
35 = 64-QAM (LDPC) 1/2
36 = 64-QAM (LDPC) 2/3 A code

36 = 64-QAM (LDPC) 2/3 A code
37 = 64-QAM (LDPC) 3/4 A code
38 = QPSK (LDPC) 2/3 B code
39 = QPSK (LDPC) 3/4 B code
40 = 16-QAM (LDPC) 2/3 B code

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4466**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In 16e/D7, p. 516, line 1, change "RNG-RSP TLVs for re-establishment of service flows" to "[RNG-RSP management message encodings TLVs for re-establishment of service flows](#)".

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

In 16e/D7, p. 516, line 1, change "RNG-RSP TLVs for re-establishment of service flows" to "[RNG-RSP management message encodings TLVs for re-establishment of service flows](#)".

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

In 16e/D7, p. 516, line 1, change "RNG-RSP TLVs for re-establishment of service flows" to "[RNG-RSP management message encodings TLVs for re-establishment of service flows](#)".

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4467**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In 16e/D7, p. 518, delete lines 11 through 30 (section 11.7.6).

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In 16e/D7, p. 518, delete lines 11 through 30 (section 11.7.6).

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

In 16e/D7, p. 518, delete lines 11 through 30 (section 11.7.6).

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4468**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In 16e/D7, p. 529, line 40, change the scope from
"REG-REQ
REG-RSP"

to
"SBC-REQ (see 6.3.2.3.23)
SBC-RSP (see 6.3.2.3.24)"

Proposed Resolution Recommendation: Accepted

Recommendation by

In 16e/D7, p. 529, line 40, change the scope from
"REG-REQ
REG-RSP"

to
"SBC-REQ (see 6.3.2.3.23)
SBC-RSP (see 6.3.2.3.24)"

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

In 16e/D7, p. 529, line 40, change the scope from
"REG-REQ
REG-RSP"

to
"SBC-REQ (see 6.3.2.3.23)
SBC-RSP (see 6.3.2.3.24)"

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

2005/05/23

IEEE 802.16-05/023r6

Editor's Action Items

Document under Review: **P802.16e/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4469**

Comment submitted by: Ron

Murias

Comment	Type	Coordination	Starting Page #	531	Starting Line #	Fig/Table#	Section
---------	------	--------------	-----------------	-----	-----------------	------------	---------

802.16e/Corr1 ad hoc clarification text.

Suggested Remedy

All the new bit definitions could be accomodated in one byte between the changes in Cor1 and 16e. In 16e/D7, 531, line 39, change the Length of TLV 152 from "variable" back to 1. Change the bits as follows. Change

"Bit #0: 64-QAM
 Bit #1: BTC
 Bit #2: CTC
 Bit #3: STC
 Bit #34: AAS Diversity Map Scan
 Bit #45: AAS Direct SignalingHARQ Chase
 Bit #56: HARQ CTC IR
 Bit #7: Reserved
 Bit #8: HARQ CC IR
 Bit #9: LDPC
 Bits #610-715: Reserved; shall be set to zero."

to

"Bit# 0: 64-QAM
 Bit# 1: BTC
 Bit# 2: CTC
 Bit #3: AAS Diversity Map ScanSTC;
 Bit# 4: AAS Direct SignalingHARQ Chase
 Bit# 5: H-ARQ CTC_IR
 Bit# 6: H-ARQ CC_IR
 Bit# 7: LDPC
 Bits# 6-7: Reserved; shall be set to zero"

Next, on p. 531, line 51, change

"| 153 | 1 | The number of HARQ ACK Channel | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |"

to

"| 153 | 1 | The number of HARQ ACK Channel | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |"

-----+

This field specifies the number of H-ARQ channels (n) the SS supports, where n = 1..16. The value of the TLV shall be set to (n-1).

Type	Length	Value	Scope
153	1	The number of HARQ Channel	SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24)

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

All the new bit definitions could be accomodated in one byte between the changes in Cor1 and 16e. In 16e/D7, 531, line 39, change the Length of TLV 152 from "variable" back to 1. Change the bits as follows. Change

"Bit #0: 64-QAM
 Bit #1: BTC
 Bit #2: CTC
 Bit #3: STC
 Bit #34: AAS Diversity Map Scan
 Bit #45: AAS Direct SignalingHARQ Chase
 Bit #56: HARQ CTC IR
 Bit #7: Reserved
 Bit #8: HARQ CC IR
 Bit #9: LDPC
 Bits #610-715: Reserved; shall be set to zero."

to

"Bit# 0: 64-QAM
 Bit# 1: BTC
 Bit# 2: CTC
 Bit #3: AAS Diversity Map ScanSTC;
 Bit# 4: AAS Direct SignalingHARQ Chase
 Bit# 5: H-ARQ CTC_IR
 Bit# 6: H-ARQ CC_IR
 Bit# 7: LDPC
 Bits# 6-7: Reserved; shall be set to zero"

Next, on p. 531, line 51, change

"| 153 | 1 | The number of HARQ ACK Channel | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |"

to

"| 153 | 1 | The number of HARQ ACK Channel | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |"

This field specifies the number of H-ARQ channels (n) the SS supports, where n = 1..16. The value of the TLV shall be set to (n-1).

Type	Length	Value	Scope
153	1	The number of HARQ Channel	SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24)

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

All the new bit definitions could be accomodated in one byte between the changes in Cor1 and 16e. In 16e/D7, 531, line 39, change the Length of TLV 152 from "variable" back to 1. Change the bits as follows. Change

"Bit #0: 64-QAM

Bit #1: BTC

Bit #2: CTC

Bit #3: STC

Bit #34: AAS Diversity Map Scan

Bit #45: AAS Direct Signaling HARQ Chase

Bit #56: HARQ CTC IR

Bit #7: Reserved

Bit #8: HARQ CC IR

Bit #9: LDPC

Bits #610-715: Reserved; shall be set to zero."

to

"Bit# 0: 64-QAM

Bit# 1: BTC

Bit# 2: CTC

Bit #3: AAS Diversity Map ScanSTC;

Bit# 4: AAS Direct Signaling HARQ Chase

Bit# 5: H-ARQ CTC_IR

Bit# 6: H-ARQ CC_IR

Bit# 7: LDPC

Bits# 6-7: Reserved; shall be set to zero"

Next, on p. 531, line 51, change

"| 153 | 1 | The number of HARQ ACK Channel | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |"

to

"| 153 | 1 | The number of HARQ ACK Channel | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |"

This field specifies the number of H-ARQ channels (n) the SS supports, where n = 1..16. The value of the TLV shall be set to (n-1).

Type	Length	Value	Scope
153	1	The number of HARQ Channel	SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24)

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4470**

Comment submitted by: Ron

Murias

Comment	Type	Coordination	Starting Page #	531	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc	clarification text.					

Suggested Remedy

In 16e/D7, to avoid conflicts of defined bits, p. 531, line 6, change

"Bit# 2: AMC support
 Bit# 3: TUSC1 support
 Bit# 4: TUSC2 support
 Bits# 35–7: Reserved, shall be set to zero"

to

"Bit# 2: AMC 1x6 support
 Bit# 3: AMC 2x3 support
 Bit# 4: AMC 3x2 support
 Bit# 5: AMC support with H-ARQ map
 Bit# 6: TUSC1 support
 Bit# 7: TUSC2 support
 Bits# 3–7: Reserved, shall be set to zero"

On p. 531, line 11 insert the following text:

"Note: AMC support (bits #2-4) refers to support of AMC subchannelization using DL-MAP_IE or ULMAP_IE. When AMC support using H-ARQ map (bit #5) is indicated, all AMC types indicated in format configuration IE (6.3.2.3.43.2) are supported when using AMC with H-ARQ map."

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

In 16e/D7, to avoid conflicts of defined bits, p. 531, line 6, change

"Bit# 2: AMC support
 Bit# 3: TUSC1 support
 Bit# 4: TUSC2 support
 Bits# 35–7: Reserved, shall be set to zero"

to

"Bit# 2: AMC 1x6 support
 Bit# 3: AMC 2x3 support
 Bit# 4: AMC 3x2 support
 Bit# 5: AMC support with H-ARQ map
 Bit# 6: TUSC1 support"

Bit# 7: TUSC2 support

Bits# 3–7: Reserved, shall be set to zero"

On p. 531, line 11 insert the following text:

"Note: AMC support (bits #2-4) refers to support of AMC subchannelization using DL-MAP_IE or ULMAP_IE. When AMC support using H-ARQ map (bit #5) is indicated, all AMC types indicated in format configuration IE (6.3.2.3.43.2) are supported when using AMC with H-ARQ map."

"Note: AMC support (bits #2-4) refers to support of AMC subchannelization using DL-MAP_IE or ULMAP_IE. When AMC support using H-ARQ map (bit #5) is indicated, all AMC types indicated in format configuration IE (6.3.2.3.43.2) are supported when using AMC with H-ARQ map."

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

In 16e/D7, to avoid conflicts of defined bits, p. 531, line 6, change

"Bit# 2: AMC support

Bit# 3: TUSC1 support

Bit# 4: TUSC2 support

Bits# 35–7: Reserved, shall be set to zero"

to

"Bit# 2: AMC 1x6 support

Bit# 3: AMC 2x3 support

Bit# 4: AMC 3x2 support

Bit# 5: AMC support with H-ARQ map

Bit# 6: TUSC1 support

Bit# 7: TUSC2 support

Bits# 3–7: Reserved, shall be set to zero"

On p. 531, line 11 insert the following text:

"Note: AMC support (bits #2-4) refers to support of AMC subchannelization using DL-MAP_IE or ULMAP_IE. When AMC support using H-ARQ map (bit #5) is indicated, all AMC types indicated in format configuration IE (6.3.2.3.43.2) are supported when using AMC with H-ARQ map."

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4471**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	Coordination	ad hoc	clarification text.		

Suggested Remedy

In 16e/D7, resolution of MIMO TLV's are address by comment 4361 in 80216-05_23r3.USR.

In 16e/D7, starting on p. 533, line 4, renumber TLV's 156 through 165 (plus TLV YYY on page 536, line 9) as TLV's 170 through 180.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

In 16e/D7, resolution of MIMO TLV's are address by comment 4361 in 80216-05_23r3.USR.

In 16e/D7, starting on p. 533, line 4, renumber TLV's 156 through 165 (plus TLV YYY on page 536, line 9) as TLV's 170 through 180.

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

In 16e/D7, resolution of MIMO TLV's are address by comment 4361 in 80216-05_23r3.USR.

In 16e/D7, starting on p. 533, line 4, renumber TLV's 156 through 165 (plus TLV YYY on page 536, line 9) as TLV's 170 through 180.

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4472**

Comment submitted by: Ron

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.	532			

Suggested Remedy

In 16e/D7, on p. 532, line 24, renumber TLV 155 as TLV 158.

Move the text on p. 532 from lines 40 through 49 to line 20, before the table as it is done in Cor1.

On p. 532, line 17, change "The 'OFDMA AAS private map support' field..." to "This field..."

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

In 16e/D7, on p. 532, line 24, renumber TLV 155 as TLV 158.

Move the text on p. 532 from lines 40 through 49 to line 20, before the table as it is done in Cor1.

On p. 532, line 17, change "The 'OFDMA AAS private map support' field..." to "This field..."

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

In 16e/D7, on p. 532, line 24, renumber TLV 155 as TLV 158.

Move the text on p. 532 from lines 40 through 49 to line 20, before the table as it is done in Cor1.

On p. 532, line 17, change "The 'OFDMA AAS private map support' field..." to "This field..."

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4473**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				11.9.3

Suggested Remedy

In 16e/D7, align table in 11.9.3 according to the table in Cor1/D2 (p. 171, line 9), i.e.:

Type	Length	Value(string)
8	8	Encrypted TEK for DES
	16	Encrypted TEK for AES
	24	Encrypted TEK for AES Key Wrap

Proposed Resolution

Recommendation: Accepted

Recommendation by

In 16e/D7, align table in 11.9.3 according to the table in Cor1/D2 (p. 171, line 9), i.e.:

Type	Length	Value(string)
8	8	Encrypted TEK for DES
	16	Encrypted TEK for AES
	24	Encrypted TEK for AES Key Wrap

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

In 16e/D7, align table in 11.9.3 according to the table in Cor1/D2 (p. 171, line 9), i.e.:

Type	Length	Value(string)
8	8	Encrypted TEK for DES
	16	Encrypted TEK for AES
	24	Encrypted TEK for AES Key Wrap

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4474**

Comment submitted by: Ron

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1 ad hoc clarification text.	Coordination				8.3

Suggested Remedy

in section 8.3.5.1.1 P802.16e/D7 p.228 after table 224d add:

Start Time

This field indicates the start time in units of symbol duration, relative to the beginning of the subsequent DL subchannelized zone (including preamble)

in section 8.3.6.2 P802.16e/D7 p.228 l.44 change second sentence according to:

If transmitted in a private map (for compressed private map see 8.3.6.6, for reduced private map see 8.3.6.7) within an AAS zone, this field indicates the start time, in units of symbol duration, relative to the beginning of the subsequent AAS zone (including preamble).

in section 8.3.6.6 P802.16e/D7 p.232 l.16 add after second bullet

* Private maps shall only be used in the AAS portion of the sub-frame or within the DL subchannelization zone.

add at the end of section 8.3.6.6 P802.16e/D7:

If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.

add at the end of section 8.3.6.7 P802.16e/D7:

If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

in section 8.3.5.1.1 P802.16e/D7 p.228 after table 224d add:

Start Time

This field indicates the start time in units of symbol duration, relative to the beginning of the subsequent DL subchannelized zone (including preamble)

in section 8.3.6.2 P802.16e/D7 p.228 l.44 change second sentence according to:

If transmitted in a private map (for compressed private map see 8.3.6.6, for reduced private map see 8.3.6.7) within an AAS zone, this field indicates the start time, in units of symbol duration, relative to the beginning of the subsequent AAS zone (including preamble).

in section 8.3.6.6 P802.16e/D7 p.232 I.16 add after second bullet

* Private maps shall only be used in the AAS portion of the sub-frame or within the DL subchannelization zone.

add at the end of section 8.3.6.6 P802.16e/D7:

If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.

add at the end of section 8.3.6.7 P802.16e/D7:

If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

in section 8.3.5.1.1 P802.16e/D7 p.228 after table 224d add:

Start Time

This field indicates the start time in units of symbol duration, relative to the beginning of the subsequent DL subchannelized zone (including preamble)

in section 8.3.6.2 P802.16e/D7 p.228 I.44 change second sentence according to:

If transmitted in a private map (for compressed private map see 8.3.6.6, for reduced private map see 8.3.6.7) within an AAS zone, this field indicates the start time, in units of symbol duration, relative to the beginning of the subsequent AAS zone (including preamble).

in section 8.3.6.6 P802.16e/D7 p.232 I.16 add after second bullet

* Private maps shall only be used in the AAS portion of the sub-frame or within the DL subchannelization zone.

add at the end of section 8.3.6.6 P802.16e/D7:

If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.

add at the end of section 8.3.6.7 P802.16e/D7:

If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4475**

Comment submitted by: [Ron](#)

[Murias](#)

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
---------	------	-----------------	-----------------	------------	---------

Comment 3448	contribution	175r1	was not correctly implemented.		
--------------	--------------	-------	--------------------------------	--	--

Suggested Remedy

[Adopt C802.16e-05/175r3.](#)

Proposed Resolution Recommendation: **Accepted**

Recommendation by

[Adopt C802.16e-05/175r3.](#)

Reason for Recommendation

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

[Adopt C802.16e-05/175r3.](#)

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4476**

Comment submitted by: **Ron**

Murias

Comment Type **Coordination** Starting Page # **561** Starting Line # **3**

Fig/Table#

Section

Subclauses 11.13.28 and 11.13.29 are identical between Corr1 and 802.16e

Suggested Remedy

Remove subclauses 11.13.28, 11.13.29 from 802.16e D7

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Remove subclauses 11.13.28, 11.13.29 from 802.16e D7

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Remove subclauses 11.13.28, 11.13.29 from 802.16e D7

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4477**Comment submitted by: **Ron****Murias**

Comment	Type	Coordination	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc	clarification text.			278	

Suggested Remedy

Copy corrected table 278 from corrigenda into 16e.

Change the notes in Permutation row of Table 278 in 16e to:

0b000 = PUSC
 0b001 = FUSC
 0b010 = Optional FUSC
 0b011 = AMC
 0b100 = TUSC1
 0b101 = TUSC2
 0b110 = reserved
 0b111 = reserved .

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

Copy corrected table 278 from corrigenda into 16e.

Change the notes in Permutation row of Table 278 in 16e to:

0b000 = PUSC
 0b001 = FUSC
 0b010 = Optional FUSC
 0b011 = AMC
 0b100 = TUSC1
 0b101 = TUSC2
 0b110 = reserved
 0b111 = reserved .

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

Copy corrected table 278 from corrigenda into 16e.

Change the notes in Permutation row of Table 278 in 16e to:

0b000 = PUSC
 0b001 = FUSC
 0b010 = Optional FUSC
 0b011 = AMC
 0b100 = TUSC1

0b101 = TUSC2
0b110 = reserved
0b111 = reserved .

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4478**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

In 802.16e, make the following changes:

Page 249:

At line 10:

Change STC_Zone IE into STC_DL_Zone IE

At line 16:

Change STC_ZONE_IE() into STC_DL_ZONE_IE()

change text at line 20:

```
-----
length      | 4 | Length = 0x04
-----
```

insert at line 21:

```
-----
OFDMA symbol offset | 8 | Denotes the start of the zone (counting from
                    |   | the frame preamble and starting from 0)
-----
```

at page 250 at line 1

Change STC_Zone IE into STC_DL_Zone IE

modify at page 250 starting at line 7 according to:

```
-----
DL_PermBase    | 5 |
-----
```

```
-----
PRBS_ID        | 2 | Refer to 8.4.9.4.1
-----
```

```
-----
AMC type       | 2 | Indicates the AMC type in case permutation
              |   | type = 0b11, otherwise shall be set to 0.
-----
```

| | AMC type (NxM = N bins by M symbols):

| | 0b00 - 1x6

| | 0b01 - 2x3

| | 0b10 - 3x2

| | 0b11 - reserved

Midamble presence		1		0 = not present
				1 = present at the first symbol in STC zone

Midamble boosting		1		0 = no boost
				1 = Boosting (3 dB)

2/3 antennas select		1		0 = STC using 2 antennas
				1 = STC using 3 antennas
				Selects 2/3 antennas when STC = 0b01

Dedicated Pilots		1		0 = Pilot symbols are broadcast
				1 = Pilot symbols are dedicated. An MS should use only
				pilots specific to its burst for channel estimation

reserved		4		Shall be set to zero
----------	--	---	--	----------------------

}		--		--
---	--	----	--	----

Proposed Resolution **Recommendation: Accepted**

Recommendation by

In 802.16e, make the following changes:

Page 249:

At line 10:

Change STC_Zone IE into STC_DL_Zone IE

At line 16:

Change STC_ZONE_IE() into STC_DL_ZONE_IE()

change text at line 20:

length		4		Length = 0x04
--------	--	---	--	---------------

insert at line 21:

OFDMA symbol offset		8		Denotes the start of the zone (counting from
				the frame preamble and starting from 0)

at page 250 at line 1

Change STC_Zone IE into STC_DL_Zone IE

modify at page 250 starting at line 7 according to:

modify at page 200 starting at line 7 according to:

DL_PermBase	5	
PRBS_ID	2	Refer to 8.4.9.4.1
AMC type	2	Indicates the AMC type in case permutation type = 0b11, otherwise shall be set to 0.
		AMC type (NxM = N bins by M symbols):
		0b00 - 1x6
		0b01 - 2x3
		0b10 - 3x2
		0b11 - reserved
Midamble presence	1	0 = not present 1 = present at the first symbol in STC zone
Midamble boosting	1	0 = no boost 1 = Boosting (3 dB)
2/3 antennas select	1	0 = STC using 2 antennas 1 = STC using 3 antennas Selects 2/3 antennas when STC = 0b01
Dedicated Pilots	1	0 = Pilot symbols are broadcast 1 = Pilot symbols are dedicated. An MS should use only pilots specific to its burst for channel estimation
reserved	4	Shall be set to zero
}	--	--

Reason for Recommendation

Resolution of Group

Decision of Group: Accepted

In 802.16e, make the following changes:

Page 249:

At line 10:

Change STC_Zone IE into STC_DL_Zone IE

At line 16:

Change STC_ZONE_IE() into STC_DL_ZONE_IE()

change text at line 20:

length		4		Length = 0x04
--------	--	---	--	---------------

insert at line 21:

OFDMA symbol offset		8		Denotes the start of the zone (counting from the frame preamble and starting from 0)
---------------------	--	---	--	--

at page 250 at line 1

Change STC_Zone IE into STC_DL_Zone IE

modify at page 250 starting at line 7 according to:

DL_PermBase		5		
-------------	--	---	--	--

PRBS_ID		2		Refer to 8.4.9.4.1
---------	--	---	--	--------------------

AMC type		2		Indicates the AMC type in case permutation type = 0b11, otherwise shall be set to 0.
----------	--	---	--	--

				AMC type (NxM = N bins by M symbols):
				0b00 - 1x6
				0b01 - 2x3
				0b10 - 3x2
				0b11 - reserved

Midamble presence		1		0 = not present
				1 = present at the first symbol in STC zone

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/D7**Ballot Number: **0001037**

Comment Date

Comment # **4479**Comment submitted by: **Ron****Murias**

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

Replace table 281 in 16e with the one in corrigenda, however keep the row "Used subchannels" in 16e as is.

Proposed ResolutionRecommendation: **Accepted**

Recommendation by

Replace table 281 in 16e with the one in corrigenda, however keep the row "Used subchannels" in 16e as is.

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

Replace table 281 in 16e with the one in corrigenda, however keep the row "Used subchannels" in 16e as is.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4480**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

Remove entire section 8.4.5.4.6 in 16e

Proposed Resolution Recommendation: Accepted

Recommendation by

Remove entire section 8.4.5.4.6 in 16e

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

Remove entire section 8.4.5.4.6 in 16e

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4481**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

Remove entire section 8.4.5.6 from 16e.

Proposed Resolution

Recommendation: **Accepted**

Recommendation by

Remove entire section 8.4.5.6 from 16e.

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Remove entire section 8.4.5.6 from 16e.

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/D7**

Ballot Number: **0001037**

Comment Date

Comment # **4482**

Comment submitted by: **Ron**

Murias

Comment	Type	Starting Page #	Starting Line #	Fig/Table#	Section
802.16e/Corr1	ad hoc clarification text.				

Suggested Remedy

Remove entire section 8.4.5.6.1 from 16e.

Proposed Resolution Recommendation: Accepted

Recommendation by

Remove entire section 8.4.5.6.1 from 16e.

Reason for Recommendation

Resolution of Group Decision of Group: Accepted

Remove entire section 8.4.5.6.1 from 16e.

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