

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8001**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment	Type	Technical, Binding	Starting Page #	Starting Line #	Fig/Table#	Section	Gen
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P802.16e/D11 is not fully consistent with P802.16-2004/Cor1/D5. The editorial instructions of both documents are in some cases contradictory and impossible to interpret, if both documents are given equal precedence. If the Cor1 draft is approved first, then the 16e draft, as the more recent one, would have clear precedence. In this case, the interpretation would be unambiguous. However, in this case, some editorial instructions P802.16e/D11 would negate those in P802.16-2004/Cor1/D5, and it is not clear whether this was intentional or accidental.

**Suggested Remedy**

Address my detailed comments.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted**

We have reviewed and responded to the other 39 comments (8002-8040) of Mr. Murias. We have assumed that P802.16-2004/Cor1/D5 will be approved as an IEEE Standard prior to P802.16e, so that P802.16e will be logically applied afterwards.

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

We agree that all amendments and corrigenda must be consistent.

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

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

**Editor's Questions and Concerns**

**Editor's Action Items**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8002**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **44** Starting Line # **37**

Fig/Table#

Section **6.3.2.3.5**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Paragraph was correctly moved to 6.3.2.3.6 in Cor1/D5, but was not moved in 16e/D11 to 6.3.2.3.6.

**Suggested Remedy**

Completely remove the paragraph on page 44 line 37 from 16e (shown here for reference). Because it already exists in the Cor1 document, there is no need to have it in 16e.

~~The RNG-RSP is directed to the SS if it is sent on the Basic CID of the SS or if the RNG-RSP contains the MAC address of the SS, or, in the case of OFDMA, if the RNG-RSP contains CDMA code parameters specifying the code sent by the SS.~~

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted**

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8003**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **72** Starting Line # **4** Fig/Table# Section **6.3.2.3.43.6.1**  
Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Second sentence of first paragraph from Cor1/D5 is not present in 16e/D11 text.

**Suggested Remedy**

Replace the sentence on page 72 line 4 with the following paragraph (note one editorial mark-up to be included in 16e):

The format of Compact\_DL-MAP IE for normal subchannel is presented in Table96. The direction of slot allocation for downlink is along with the subchannel index first and then the symbol index. The direction of data mapping shall be according to 8.4.3.4.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted**

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8004**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **73** Starting Line # **26** Fig/Table# Section **6.3.2.3.43.6.2**  
Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

First sentence of first paragraph from Cor1/D5 is not present in 16e/D11 text.

**Suggested Remedy**

Replace the sentence on page 73 line 26 with the following paragraph (note one editorial mark-up to be included in 16e):

Slots for downlink AMC zone are allocated along the subchannel index first within a band. The direction of data mapping for downlink AMC zone slots shall be frequency first (across bands when multiple bands are allocated). The format of Compact\_DL-MAP IE for Band AMC Subchannel is presented in Table 97.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted**

**Reason for 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/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8005**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment	Type	Technical, Binding	Starting Page #	160	Starting Line #	46	Fig/Table#	Section	6.3.4.3.4
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Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Third sentence in first paragraph from Cor1/D5 is not present in 16e/D11 text.

**Suggested Remedy**

Replace the paragraph on page 160 line 46 with the following (editorial mark-up included):

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. On connections that use both HARQ and ARQ, 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. An ARQ block is unacknowledged if it has been transmitted but no acknowledgment has been received.

<b>Proposed Resolution</b>	<b>Recommendation:</b>	<b>Recommendation by</b>
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**Reason for Recommendation**

<b>Resolution of Group</b>	<b>Decision of Group: Accepted-Modified</b>
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Replace the paragraph on page 160 line 46 with the following :

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. On connections that use both HARQ and ARQ, 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. An ARQ block is unacknowledged if it has been transmitted but no acknowledgment has been received.

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

The proposed text is appropriate, but nothing should be underlined.

**Group's Notes**

**Group's Action Items**

<b>Editor's Notes</b>	<b>Editor's Actions</b> k) done
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**Editor's Questions and Concerns**

Document under Review: **P802.16e/D11**Ballot Number: **0001081**

Comment Date

Comment # **8006**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding**Starting Page # **168**Starting Line # **54**

Fig/Table#

Section **6.3.18.2**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Use of 'five' in this sentence appears to undo change made in Cor1/D5, page 77, line 52. Note that same change was not made in Cor1/D5, page 77, line 64. Major problem going to cause re-write of subclause.

**Suggested Remedy**

Rewrite 6.3.18 to properly segregate SS &amp; MS

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

Accept Remedies 3, 3a, 3b, and 3c of IEEE C802.16e-05/404r2.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8007**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **218** Starting Line # Fig/Table# Section **7.2.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Renumbering of sections not clear in 16e. Section 7.2 becomes 7.2.1 in 16e. Then new sections are inserted in 16e: 7.2.1.1, 7.2.1.2, 7.2.1.3

Structural reorganization needed.

**Suggested Remedy**

Clean up the structure in Clause 7.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Adopt the text in IEEE C802-6e-05/402r2 as the full text of Clause 7.

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

The subclause numbering of Clause 7 in P802.16e/D11 does not align with IEEE Std 802.16-2004, as modified by P802.16-2004/Cor1/D5. As a result, many editorial instructions are ambiguous. IEEE C802.16e-05/402r1 restructures Clause 7, renumbering and relocating subclauses and taking care that all text in Clause 7 includes an unambiguous editorial directive.

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

**Editor's Actions** k) done

**Editor's Questions and Concerns**

**Editor's Action Items**

2005/10/14

IEEE 802.16-05/072r2

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Comment Date

Comment # **8008**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **220** Starting Line # Fig/Table# Section **7.2.1.6**  
Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Not clear where section 7.2.1.6.1 is really to be inserted under the Authorization state machine section; before states or after actions?

Structural reorganization needed.

**Suggested Remedy**

Clean up the structure in Clause 7.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Superseded**

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

This comment is addressed by the remedy of Comment 8007.

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

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

**Editor's Questions and Concerns**

**Editor's Action Items**



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Comment Date

Comment # **8009**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **280** Starting Line # Fig/Table# **219** Section **8.4.4.2**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Cor1/D5 replaces Figure 219, but so does 16e/D11. The figures are very similar but do contain differences. It is not clear if the intent was to "change the changes" in Cor1, so this issue needs to be examined closely to confirm that the new Figure 219 in 16e/D11 is correct.

**Suggested Remedy**

Check Figure 219 in 16e/D11 against Figure 219 in Cor1/D5. If Cor1 contains the correct figure, remove Figure 219 from 16e. If 16e contains the correct figure, clearly state that it is to replace previous versions of Figure 219. If neither figure is completely correct, then re-draw Figure 219 in 16e to accurately reflect changes to 802.16-2004 as modified by Cor1.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedies 4, 4a, and 4b of IEEE C802.16e-05/404r2.

**Reason for 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**

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IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8010**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **281** Starting Line #

Fig/Table# **268** Section **8.4.4.3**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

In Table 268. Cor1/D5 lists Coding\_Indication of 0b100 indicates CC, while in 16e/D11, Table 268 lists Coding\_Indication value 0b100 indicates LDPC. Which is correct?

**Suggested Remedy**

Change 16e Coding\_Indication as follows:

0b100: CC encoding with optional interleaver

0b101: LDPC encoding used on DL-MAP

~~0b101~~ 0b110 to 0b111 - *Reserved*

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

On Page 268 Lines 34-35, in Table 268, change last two lines of cell labeled "Coding\_Indication" to:

0b100: CC encoding with optional interleaver

0b101: LDPC encoding used on DL-MAP

~~0b101~~ 0b110 to 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**

Document under Review: **P802.16e/D11**Ballot Number: **0001081**

Comment Date

Comment # **8011**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **284** Starting Line # **11** Fig/Table# Section **8.4.4.5**  
Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Page 284 lines 11 differs from Cor1/D5 Page 112 line 25; UL-MAP\_IE vs. UL allocation; mini-subchannel

**Suggested Remedy**

Resolve the SS/MS issue, re-write the paragraph on page 284 line 11 to include text in Cor1.

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

Accept Remedy 5 of IEEE C802.16e-05/404r2.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8012**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding**

Starting Page # **286** Starting Line # **1**

Fig/Table#

Section **8.4.5.3**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Description of boosting field is different.  
Could add second sentence to Corrigenda (but that is not possible in this ballot).

**Suggested Remedy**

Remove the first sentence in the "Boosting" description. Mark up the text in 16e/D11 to accurately reflect changes to Cor1/D5.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedy 6 of IEEE C802.16e-05/404r2.

**Reason for 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**

**2005/10/14**

**IEEE 802.16-05/072r2**

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8013**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **289** Starting Line # **50**

Fig/Table#

Section **8.4.5.3.4**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Subclause title is different

**Suggested Remedy**

Change subclause title as indicated:

Space-Time Coding (STC)/DL Zone switch IE format

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

One Page 289 Line 50, change title of subclause 8.4.5.3.4 to:

Space-Time Coding (STC)/DL Zone switch 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8014**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **289** Starting Line # **55**

Fig/Table#

Section **8.4.5.3.4**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Page 289 lines 55-59 vs. Cor1/D5 Page 125 lines 1-10

**Suggested Remedy**

First sentence should follow 16e/D11. The rest of the paragraph should follow Cor1/D5.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedy 7 of IEEE C802.16e-05/404r2.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8015**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **291** Starting Line # **60** Fig/Table# Section **8.4.5.3.4**  
Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Page 291 lines 60 to Page 292 line 13 vs. Cor1/D5 Page 126 lines 1-18

**Suggested Remedy**

Change the paragraph on page 289 line 55 to properly reflect changes to text in 802.16-2004 + Cor1.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedies 8, 8a, and 8b of IEEE C802.16e-05/404r2.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8016**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **293** Starting Line #

Fig/Table# **281** Section **8.4.5.3.6**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Table 281 Used subchannels description.

**Suggested Remedy**

16e/D11 is correct, but the stricken text is incorrect. Update the strike-out text to reflect the text in Cor1.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedy 15 of IEEE C802.16e-05/404r2.

**Reason for 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**



2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8017**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **294** Starting Line #

Fig/Table# **283** Section **8.4.5.3.8**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Table 283 Matrix\_indicator descriptions are different

**Suggested Remedy**

~~STC matrix (see 8.4.8)~~

~~STC mode indicated in the latest STC\_DL\_ZONE\_IE():~~

~~if (STC == 0b01) {~~

~~—00 = Matrix A~~

~~—01 = Matrix B~~

~~—10 —11 = Reserved~~

~~} elseif (STC == 0b10)~~

~~—00 = Matrix A~~

~~—01 = Matrix B~~

~~—10 = Matrix C~~

~~—11 = Reserved~~

~~}~~

See matrix indicator defined in STC\_DL\_ZONE\_IE.

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted-Modified**

1. Change the "Matrix Indicator" notes in Table 279 as shown:

~~Antenna STC/FHDC matrix (see 8.4.8)~~

~~0b00 = Matrix A~~

~~0b01 = Matrix B~~

~~0b10 = Matrix C (applicable to 4 antennas)~~

STC matrix (see 8.4.8.1.4) (applicable to terminals only)-  
~~0b11 = Reserved~~  
 STC matrix (see 8.4.8.1.4)  
 if (STC == 0b01 or STC == 0b10)  
 {  
 0b00 = Matrix A  
 0b01 = Matrix B  
 0b10 = Matrix C  
 0b11 = Reserved  
 }  
 else if (STC == 0b11)  
 {  
 0b00 = Matrix A  
 0b01 = Matrix B  
 0b10-11 = Reserved  
 }

2. Change related to "Matrix indicator" notes specified in Table 283 as shown:

~~STC matrix (see 8.4.8)~~  
~~STC = STC mode indicated in the latest STC\_DL\_Zone\_IE().~~  
 if (STC == 0b01)  
 {  
 00 = Matrix A  
 01 = Matrix B  
 10-11 = Reserved  
 }  
 else if (STC == 0b10)  
 {  
 00 = Matrix A  
 01 = Matrix B  
 10 = Matrix C  
 11 = Reserved

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes

Editor's Actions k) done

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**IEEE 802.16-05/072r2**

**Editor's Questions and Concerns**

**Editor's Action Items**

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IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8018**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **295** Starting Line #

Fig/Table# **284** Section **8.4.5.3.9**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Table 284 Matrix\_indicator descriptions are different

**Suggested Remedy**

~~STC matrix (see 8.4.8)~~

~~STC mode indicated in the latest STC\_DL\_ZONE\_IE().~~

~~if (STC == 0b01) {~~

~~—00 = Matrix A~~

~~—01 = Matrix B~~

~~—10 —11 = Reserved~~

~~}elseif (STC == 0b10)~~

~~—00 = Matrix A~~

~~—01 = Matrix B~~

~~—10 = Matrix C~~

~~—11 = Reserved~~

~~}~~

See matrix indicator defined in STC\_DL\_ZONE\_IE.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

1. Change the "Matrix Indicator" notes in Table 284 as shown:

~~STC matrix (see 8.4.8)~~

~~STC = STC mode indicated in the latest STC\_DL\_Zone\_IE().~~

~~if (STC == 0b01)~~

~~{~~

~~00 = Matrix A~~

~~01 = Matrix B~~

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```

}
10-11 = Reserved
}
else if (STC == 0b10)
{
00 = Matrix A
01 = Matrix B
10 = Matrix C
11 = Reserved
}
STC matrix (see 8.4.8.1.4)
if (STC == 0b01 or STC == 0b10)
{
0b00 = Matrix A
0b01 = Matrix B
0b10 = Matrix C
0b11 = Reserved
}
else if (STC == 0b11)
{
0b00 = Matrix A
0b01 = Matrix B
0b10-11 = 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**

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IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8019**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **295** Starting Line #

Fig/Table# **285** Section **8.4.5.3.10**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

SS and MS uses a different format of the same IE  
Table 285 is quite different including the length and all.

**Suggested Remedy**

Table 285 in TGe should be renamed as Table 285a. The limitation in number of this IE should apply to both Cor1/D5 and e/D11.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

On Page 295, rename Table 285 as Table 285a.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8020**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **343** Starting Line # **20**

Fig/Table# **287** Section **8.4.5.4**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Table 287 Description of field slot offset are different (AAS vs. AAS or AMC)

**Suggested Remedy**

Change 16e as indicated:

Offset from start of the AAS or AMC zone for this allocation, specified in slots.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

On Page 343 Line 20, change the "Notes" field for "Slot offset" to:

Offset from start of the AAS or AMC zone for this allocation, specified in slots.

**Reason for 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/D11**Ballot Number: **0001081**

Comment Date

Comment # **8021**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**Starting Page # **347** Starting Line #Fig/Table# **230** Section **8.4.5.4.10.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

16e/D11 has Fig.230a and Fig. 230b; Cor1/D5 has Fig.230a which is referred to as 230b in 16e/D11

**Suggested Remedy**

Insert an editorial instruction in 16e to re-name Figure 230a to Figure 230b and also update references from Cor1 appropriately (this is also done in 16e), re-writing paragraphs currently in Cor1 if necessary. For example:

MIMO capable SS shall measure post processing CINR for each individual layers as shown in Figure ~~230a~~ 230b.

Correct reference to Figure 230a in the first paragraph (should be Figure 230b). Correct the reference to equation 106a in the first paragraph (should be 106b).

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

1. Delete the text in 8.4.5.4.10 from line 49, page 346 to line 57, page 347 in 80216e\_D11.
2. Delete the angle brackets('<>') and correct the reference to equation in line 11, page 348 as following ;  

$$\text{Avg\_CINR} = \exp(C(d, \langle y|H \rangle))^{-1} \quad (106\text{ba})$$
3. Insert the exponent of equation in line 20, page 348 as following:  

$$\text{Avg\_CINR} = (\text{product}_{n=1}^N (1 + \text{CINR}_n))^{\frac{1}{N}} - 1$$
4. Replace the character by the subscript in line 26, page 348 as following;  
 , where  $\mathbf{I}_N$  is an N by N identity matrix and R is
5. Delete the figure 230b in page 348 in 80216e\_D11.

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



**2005/10/14**

**IEEE 802.16-05/072r2**

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

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

**Editor's Questions and Concerns**

**Editor's Action Items**

**2005/10/14**

**IEEE 802.16-05/072r2**

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Comment # **8022**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **351** Starting Line #

Fig/Table#

Section **8.4.5.4.10.4**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

New subclause with same subclause number.

**Suggested Remedy**

One should be 8.4.5.4.10.5; Table numbers should be updated accordingly.

All subclause numbers beginning from 8.4.5.4.10.5 should be incremented.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Renumber subclause 8.4.5.4.10.4 as 8.4.5.4.10.5.

Increment subclause numbers beginning with 8.4.5.4.10.5 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**

2005/10/14

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Comment # **8023**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **374** Starting Line #

Fig/Table#

Section **8.4.5.4.15**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

New subclause with same section number.

**Suggested Remedy**

Change subclause number from 8.4.5.4.15 to 8.4.5.4.16 and increment the subclause numbers of those that follow.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Rename subclause 8.4.5.4.15 to : "UL allocation start 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**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8024**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **411** Starting Line #

Fig/Table# **309a** Section **8.4.6**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

In table 309 in D5, instruction says add 0X to the 11th row, and Tables 309a,b,c, and d in D11 do not use 0x at all.

**Suggested Remedy**

In Tables 308a, 308b, 308c, add prefix "0x" to each row under column "Series to modulate (Wk)". In Table 309d, add prefix "0x" to each row in the "Sequence" column. This will make the text match the baseline document as modified by Cor1.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

In Tables 309a, 309b, and 309c, add prefix "0x" before contents of each cell in last column ["Series to modulate"]. In Table 309d, add prefix "0x" before contents of each cell in second column ["Sequence"].

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

Typo in table numbers of suggested remedy.

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

**Editor's Actions** k) done

**Editor's Questions and Concerns**

**Editor's Action Items**

**2005/10/14**

**IEEE 802.16-05/072r2**

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Comment # **8025**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **426** Starting Line #

Fig/Table# Section **8.4.6.1.2.1.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

This paragraph of 16e/D11 should replace the base + corrigendum

**Suggested Remedy**

Confirm that the entire subclause in the base document as modified by the Cor1 document is to be replaced by the text in 16e.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedies 16, 16a, and 16b of IEEE C802.16e-05/404r2.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8026**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **432** Starting Line #

Fig/Table#

Section **8.4.6.1.2.3.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

the equation number is 112 not 110a..(seems 16e/D11 should override Cor1/D5)

**Suggested Remedy**

change editorial instruction

re-number equation 110a to be 112

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

On Page 432, Line 10, replace the Editorial instruction with:  
'*[Replace the contents of the section with the following text:]*'

On Page 432 Line 24, renumber equation 110a as 112.

On Page 432, Line 24, in the equation, change 'arrier (s,m)' to '**C**arriers(s,m)'

On Page 432, Line 52, change reference to equation from 110a to 112.

On Page 436, Line 35, in the equation, change 'ile(s,n)' to '**T**iles(s,n)'

On Page 439, Line 20, change reference to equation from 115a to 115.

On Page 439, Line 29, renumber equation 115a as 115.

On Page 439, Line 29, in the equation, change 'ile(s,m)' to '**T**iles(s,m)'

On Page 439, Line 56, change reference to equation from 115a to 115.

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

**2005/10/14**

**IEEE 802.16-05/072r2**

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8027**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **435** Starting Line #

Fig/Table#

Section **8.4.6.2**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Editorial instruction "Insert the following tables at the end of 8.4.6.2" is unclear.

Does this mean the end of the top-level "8.4.6.2 Uplink" or the end of the last 8.4.6.2 subclause (8.4.6.2.6)?

**Suggested Remedy**

Change the editorial instruction to read:

[Insert the following tables at the end of 8.4.6.2, immediately before 8.4.6.2.1]

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

On Page 435 Line 4, Change the editorial instruction to read:

[Insert the following tables at the end of 8.4.6.2, immediately before 8.4.6.2.1]

**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**



2005/10/14

IEEE 802.16-05/072r2

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Comment # **8028**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding**

Starting Page # **436**

Starting Line #

Fig/Table#

Section

**8.4.6.2.2**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

repace same section

**Suggested Remedy**

Confirm that the entire subclause is to be replaced with the new text in 16e, and confirm that the group was aware of the changes in Cor1 when the decision to replace the subclause was made.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Adopt the changes specified in IEEE C802.16e-05/400r1.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8029**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **459** Starting Line #

Fig/Table#

Section **8.4.8**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

titles slightly different

**Suggested Remedy**

Change the title of subclause 8.4.8 to: "Space-time coding (optional)". Note that no editorial mark-up is necessary.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

Rename subclause 8.4.8 as "Space-time coding (optional)".

**Reason for 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**

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Comment Date

Comment # **8030**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding** Starting Page # **459** Starting Line # **1** Fig/Table# Section **8.4.7.3**  
 Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

16e/D11 changed text to support mobility feature added--mobility cdma ranging code; slightly diferent than Cor1/D5, but intended and not technically significant omissions.

**Suggested Remedy**

Confirm that the changes in 16e (re-write of the paragraph) is consistent with (contains the essence of ) what was written for Cor1. Clean up the text if necessary.

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

Replace entire content of 8.4.7.3 (Page 459, Lines 1-36) with the following text (including mark-ups):

The number of available codes is 256, numbered 0..255. Each BS uses a subgroup of these codes, where the subgroup is defined by a number S,  $0 \leq S \leq 255$ . The group of codes will be between S and  $((S+O+N+M+L) \bmod 256)$ .

- The first N codes produced are for initial-ranging. Clock the PRBS generator  $144 \times (S \bmod 256)$  times to  $144 \times ((S + N) \bmod 256) - 1$  times.
- The next M codes produced are for periodic-ranging. Clock the PRBS generator  $144 \times ((N + S) \bmod 256)$  times to  $144 \times ((N + M + S) \bmod 256) - 1$  times.
- The next L codes produced are for bandwidth-requests. Clock the PRBS generator  $144 \times ((N + M + S) \bmod 256)$  times to  $144 \times ((N + M + L + S) \bmod 256) - 1$  times.
- The next O codes produced are for handover-ranging. Clock the PRBS generator  $144 \times ((N + M + L + S) \bmod 256)$  times to  $144 \times ((N + M + L + O + S) \bmod 256) - 1$  times.

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

Editor's Notes

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

Document under Review: **P802.16e/D11**

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Comment # **8031**

Comment submitted by: **Ron**

**Murias**

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **460** Starting Line # **32**

Fig/Table#

Section **8.4.8.2**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Subsection title change made in Cor1/D5 undone by 16e/D11.

**Suggested Remedy**

Change the title of 8.4.8.2 to "STC for four antennas". No editorial mark-up required.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

Rename 8.4.8.2 as "STC for four antennas".

**Reason for 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**

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Comment # **8032**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**Starting Page # **502** Starting Line # **6**Fig/Table# **318** Section **8.4.9.2**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Cor1:

Concatenation of a number of subchannelsslots shall be performed in order to make larger blocks of coding where it is possible, with the limitation of not passingexceeding the largest supported block under the samesize for the applied modulation and 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 8.4.9.2.3.3 8.4.9.2.3.1.

16e:

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.

**Suggested Remedy**

Replace the paragraph in 16e/D11 with the following (correct editorial mark-up is included):

Concatenation of a number of slots shall be performed in order to make larger blocks of coding where it is possible, with the limitation of not exceeding the largest supported block size for the applied modulation and coding. 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:****Recommendation by****Reason for Recommendation**

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

Replace the paragraph at Page 502 Line 6 with the following:

Concatenation of a number of slots shall be performed in order to make larger blocks of coding where it is possible, with the limitation of not exceeding the largest supported block size for the applied modulation and coding. 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**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8033**

Comment submitted by: Ron

Murias

Technical Editor

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Comment Type **Editorial**

Starting Page # **503** Starting Line #

Fig/Table#

Section **8.4.9.2.3.5**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Title change in 16e.

Editorial instruction is incorrect; it says to change the contents as indicated, but no changes to the contents are indicated.

**Suggested Remedy**

Change the editorial instruction and the subclause title to read:

[Change the title of 8.4.9.2.3.5 as indicated:]

~~Optional HARQ support~~ Optional IR HARQ (Incremental redundancy HARQ) support

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

At Page 503 Line 3, change the editorial instruction and the subclause title to read:

[Change the title of 8.4.9.2.3.5 as indicated:]

~~Optional HARQ support~~ Optional IR HARQ (Incremental redundancy HARQ) support

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8034**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding**

Starting Page # **513**

Starting Line #

Fig/Table#

Section

**8.4.12.3**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

8.4.12.3 in 16e/D11 and Cor1/D5 is renumbered as 8.4.12.4 in 16e/D11.

**Suggested Remedy**

Decide whether the text in Cor1/D5 or the text in 16e/D11 comes first, and number the subclauses in 16e accordingly.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

At Page 513 Line 57, Change the instruction and the title as indicated:

[Insert a new 8.4.12.4~~3~~ as follows ~~and renumber the existing 8.4.12.3 to 8.4.12.4:~~

8.4.12.4~~3~~ Transmitter reference timing accuracy

Also, on Page 613 Line 50, insert the following text:

**12.4 WirelessMAN-OFDMA and WirelessHUMAN(-OFDMA) system profiles**

**12.4.3 WirelessMAN-OFDMA and WirelessHUMAN(-OFDMA) System PHY Pprofiles**

**12.4.3.1 Common Ffeatures of PHY Pprofiles**

**12.4.3.1.5 Minimum performance requirements**

Change the relevant entry under "Tx relative constellation error:" in Table 413 as indicated:

| QPSK-3/4

| ≤ ~~-21.2~~-18 dB

| ≤ -18 dB

|



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

The modification to subclause 12.4.3.1.5 is to clean up an error that crept into P802.16-2004/Cor1/D5. There, the minimum requirements table, Table 413, is inconsistent with the normative table, Table 336, regarding the BS EVM requirement for QPSK-3/4. The value in Table 413 is supposed to be -18 dB rather than -16 dB.

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

**Editor's Actions** k) done

**Editor's Questions and Concerns**

**Editor's Action Items**

2005/10/14

IEEE 802.16-05/072r2

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Comment # **8035**

Comment submitted by: Ron

Murias

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2005-09-27

Comment Type **Technical, Binding**

Starting Page # **514** Starting Line #

Fig/Table# **388** Section **8.4.13.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Subclause 8.4.13.1 is renumbered to 8.4.13.1.1 in 16e/D11.

Table 338 is modified in both. Changes in 16e/D11 are also in Cor1/D5, while Cor1/D5 modifies the receiver sensitivity values also.

**Suggested Remedy**

Update 8.4.13.1 text and Table 338 in 16e to reflect text changes in Cor1.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

At Page 514 Line 15, delete the instruction "[Change Table 338 as indicated:]" and delete Table 338.

At Page 514, Lines 8-14, modify the Editorial instructions as follows:

[Change 8.4.13.1 "Receiver sensitivity" to 8.4.13.1 "OFDMA PHY requirements for enhanced handover performance"]

[Change subclause number for 8.4.13.1 Receiver sensitivity to be 8.4.13.1.1 under the new subclause 8.4.13.1]

**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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8036**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **519** Starting Line #

Fig/Table#

Section **9.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Title in Cor1/D5: SIP addressing used on secondary management connection

Title in 16e: SIP addressing

**Suggested Remedy**

Change the title of 9.1 to read:

SS IP addressing used on secondary management connection

(Note that no editorial mark-up is required).

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

Rename 9.1 as "SS IP addressing used on secondary management 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

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Comment Date

Comment # **8037**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment	Type	Technical, Binding	Starting Page #	525	Starting Line #	Fig/Table#	Section	10.4
---------	------	--------------------	-----------------	-----	-----------------	------------	---------	------

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

In Cor1/D5: "A BS supporting AAS shall use this CID when allocating a an ASS Initial Ranging period (using AAS Ranging Allocation IE) for AAS devices."

In 16e/D11 - Incorrect editorial instruction, should be a change - A BS supporting AAS shall use this CID when allocating a Initial Ranging period for AAS devices.

**Suggested Remedy**

The ASS acronym in Cor1/D5 is a typo. Assuming P802.16e/D11 follows (802.16-2004 + Cor1/D5), 16e can fix this error.

Change Table 345 (Page 525, line 22, "Description" column) as indicated:

A BS supporting AAS shall use this CID when allocating a an ~~ASS~~ AAS Initial Ranging period (using AAS Ranging Allocation IE) for AAS devices.

<b>Proposed Resolution</b>	<b>Recommendation:</b>	<b>Recommendation by</b>
----------------------------	------------------------	--------------------------

**Reason for Recommendation**

<b>Resolution of Group</b>	<b>Decision of Group: Accepted-Clarified</b>
----------------------------	----------------------------------------------

At Page 525, Line 22, in Table 345's "Description" column, change as indicated:

A BS supporting AAS shall use this CID when allocating a an ~~ASS~~ AAS Initial Ranging period (using AAS Ranging Allocation IE) for AAS devices.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8038**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **525** Starting Line #

Fig/Table# **345** Section

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Multicast polling CID value column does not accurately reflect a Cor1 change.

**Suggested Remedy**

In 16e/D11, change the Value column for the Multicast polling CIDs row from 0xFF00 - 0xFFFFD9 to 0xFF00 - 0xFFFFG9

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Clarified**

At Page 525 Line 25, change the Value column for the Multicast polling CIDs row from 0xFF00 - 0xFFFFD9 to 0xFF00 - 0xFFFFG9

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8039**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Editorial**

Starting Page # **525** Starting Line #

Fig/Table# **345** Section

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

In 16e/D11: Fragmentable Broadcast CID entry should not be underlined

**Suggested Remedy**

Remove editorial mark-up from the "Fragmentable Broadcast CID" row in Table 345.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted**

At Page 525 Line 40, remove editorial mark-up from the "Fragmentable Broadcast CID" row in Table 345.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8040**

Comment submitted by: Ron

Murias

Technical Editor

2005-09-27

Comment Type **Technical, Binding**

Starting Page # **535** Starting Line #

Fig/Table# **353a** Section **11.3.1**

Regarding consistency between P802.16e/D11 and P802.16-2004/Cor1/D5:

Table 353a in 16e/D11 has several collisions with Cor1/D5. Also Types 155,156,157,158 have overlapping definitions. Type 171 also has conflicting definitions. Cor1/D5 definitions for all of these need to be picked up

**Suggested Remedy**

Check and correct Types used in UCD PHY-specific channel encodings (Table 353a).

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept Remedies 9, 10, 11, 12, 13, 14, and 14a of IEEE C802.16e-05/404r2.

Editor to replace '0b111' with '0b1111' at each instance in the row for Tx Power Report in Table 353a of Remedy 10 of C802.16e-05/404r2.

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8041**

Comment submitted by: James R.

Frysinger

Other

2005-09-27

Comment	Type	Coordination	Starting Page #	Starting Line #	Fig/Table#	Section
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In D9 I made a comment on "dBm". In D10 I commented that my comment on D9 had apparently not been addressed. The problem was resolved by conversation between Roger Marks and me last month. There, Roger pointed out that actually the corrigendum document in circulation was the appropriate place to make the changes we agreed to.

Though I am personally opposed to the use of "dBm" I was swayed by citation of a supporting document and indications that either a definition of "dBm", a citation to that defining document, or both would appear in P802.16-2004\_Cor1. My acceptance of "dBm" here in P802.16e hinges on that.

On Saturday 27 August 2005 20:14, Roger B. Marks wrote:  
Jim,

Thanks for your response. I've incorporated it into a revised version of the P802.16f/D6 ballot report:  
[http://ieee802.org/16/docs/05/80216-05\\_063r1.pdf](http://ieee802.org/16/docs/05/80216-05_063r1.pdf)

We will also include it in the P802.16e/D10 ballot report.

Regarding the corrigendum in ballot, I will request consideration of your comment regarding citation of Fed-Std-1037C.

Regards,

Roger

**Suggested Remedy**

Please, demonstrate some indication that the action offered on the corrigendum document (P802.16-2004\_Cor1) has been taken. That would clear the issue up on this document (P802.16e).

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted**

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



**2005/10/14**

**IEEE 802.16-05/072r2**

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

We can confirm that a definition of "dBm" is indeed present in the version of P802.16-2004/Cor1 that was submitted to RevCom for approval:  
*dBm    decibels relative to one milliwatt*

Noting that Mr. Frysinger has also been concerned with the term "dBi", we note that P802.16-2004/Cor1 defines that term as well:  
*dBi    decibels of gain relative to the zero dB gain of a free-space isotropic radiator*

Following Mr. Frysinger's suggestion in the final recirc of P802.16-2004/Cor1, a recommendation was made to request that the IEEE-SA editorial staff carry out the following editorial instruction:

*In Annex A [Bibliography], Insert new reference and renumber the remaining references as needed:*

*\*Federal Standard 1037C, Telecommunications: Glossary of Telecommunication Terms, August 1996*

*<<http://ntia.its.bldrdoc.gov/fs-1037/fs-1037c.htm>>*

Finally, we can confirm that this recommendation is acceptable to the IEEE-SA editorial staff:

*It would be okay to identify the source of the definition in the definition clause and add it to the bibliography as an editorial change (you are not changing the definition, just saying where it came from so no technical change was made).*

*Regards,*

*Yvette Ho Sang*

*Manager, Standards Publishing Programs*

*IEEE Standards Activities*

*Ph: +1 732 562 3814*

*Fax: +1 732 562 1571*

*<http://standards.ieee.org>*

**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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8042L**

Comment submitted by: Yingzhe

Wu

Other

2005-09-21

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

Hi All,

There are some errors on TEK key exchange in Figure 134-TEK management in BS and SS, I feel it is necessary to correct them before the standard can be released. If implemented according to the figure, one may get unexpected behavior. I have made a contribution in the following temp directory, your feedback is welcomed.

<[http://dot16.org/CSUpload//upload/temp\\_db/CorrectiontoFigure134TEKkeyexchange.doc](http://dot16.org/CSUpload//upload/temp_db/CorrectiontoFigure134TEKkeyexchange.doc)>

thanks,  
Yingzhe Wu

**Suggested Remedy**

**Proposed Resolution Recommendation: Recommendation by**

**Reason for Recommendation**

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

**Accept changes specified in IEEE C802.16e-05/405.**

**Reason for 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**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8043L**

Comment submitted by: Pieter-Paul

Giesberts

Other

2005-10-06

Comment Type **Technical, Non-binding** Starting Page # **245** Starting Line # Fig/Table# Section **7.5.4.4.1**

I have a question concerning Section 7.5.4.4.1 (page 245) of P802.16e/D11:

This section specifies that the CMAC message digest shall be applied on the following concatenated items:

- \* CMAC Key Sequence Number (4 bits)
- \* CMAC\_PN (32 bits)
- \* CID (16 bits)
- \* Zero padding (16 bits)
- \* MAC\_Management\_Message excluding the CMAC Tuple TLV (multiple of 8 bits)

The text further states that the 16-bit padding is included for the header to align with AES block size. However, the effect of the 16 bit padding is that the MAC\_Management\_Message is prepended with 68 bits before it is digested. When alignment is intended at 128 bits, as is suggested by the reference to AES Block Size, the padding should be 76 bits.

In some earlier contributions there was talk of a 64-bit AK sequence number (the same as the 64-bit AKID). It is possible that the intention has been that the "key sequence number" in the CMAC pre-pended string is a 64-bit value (e.g. the AKID). In that case the 16-bit padding makes sense. But that is contradicted by the text: it explicitly states that the Key Sequence Number is a 4-bit value.

When indeed the 4-bit CMAC key sequence number is intended, it is more convenient to define this as an 8-bit value, filled with 4-bits 0 similar as in the CMAC Tuple definition (Section 11.1.2.2, page 527). This avoids shift operations on the other fields in the pre-pended string. In this case, the padding should be 72 bits.

Is my understanding correct and should padding be changed from 16 to 76 bits or, preferably, should the sequence number be prepended with 4 '0' bits and the padding be changed from 16 to 72 bits?

Kind regards,

Pieter-Paul Giesberts

**Suggested Remedy**

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**2005/10/14**

**IEEE 802.16-05/072r2**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

Accept changes specified in IEEE C802.16e-05/403r2.

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

The switch from AK to the 4 bit sequence number is an error that breaks both the identified padding size issue and the replay strength of the CMAC. Switching the 4 bit index back to the 64 bit AKID fixes both.

**Group's Notes**

**Group's Action Items**

**Editor's Notes**

**Editor's Actions** k) done

**Editor's Questions and Concerns**

**Editor's Action Items**

Document under Review: **P802.16e/D11**Ballot Number: **0001081**

Comment Date

Comment # **8044L**

Comment submitted by: Phil

Barber

Member

2005-10-06

Comment	Type	Technical, Non-binding	Starting Page #	Starting Line #	Fig/Table#	Section
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There are two ACKs for HARQ, one in the UL, and one in the DL.

According to 8.4.5.3.22 DL HARQ ACK IE, page 331, line 42, '...HARQ\_ACK\_Delay\_for UL Burst field in the DCD message.' The DL ACK is on a uplink burst, but the HARQ\_ACK\_Delay\_for UL Burst is specified in the DCD. The correct entry for HARQ ACK Delay for UL Burst exists in Table 358-DCD channel encodings in Cor1/D5.

And according to 8.4.5.4.25 HARQ ACK Region Allocation IE, page 397, line 3, '...HARQ ACK Delay for DL Burst field in the UCD message.' The UL ACK is on a downlink burst, but the HARQ\_ACK\_Delay\_for DL Burst is specified in the UCD. The correct entry for HARQ ACK Delay for DL Burst exists in Table 353-UCD channel encodings in Cor1/D5. Unnecessarily and incorrectly duplicated in Table 353a in 16e/D11.

Language and usage in the 163/D11, page 168, lines 30-38 is imprecise and could use some clarification.

Language and usage in 6.3.17.1 Subpacket generation, page 168, line 33-34, is inconsistent with language in 8.4.5.4.25.

**Suggested Remedy**

Remove duplicate, incorrect instance of HARQ ACK Delay for DL Burst from Table 353a.

Fix language in 6.3.17.1 to be consistent with 8.4.5.4.22 & 8.4.5.4.25 in 16e/D11, and with Cor1/D5, 6.3.17 MAC support for H-ARQ, page 75, lines 24-25.

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

Accept Remedies 1 and 2 of IEEE C802.16e-05/404r2.

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

**2005/10/14**

**IEEE 802.16-05/072r2**

**Editor's Notes**

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

**Editor's Questions and Concerns**

**Editor's Action Items**

Document under Review: **P802.16e/D11**Ballot Number: **0001081**

Comment Date

Comment # **8045LL**

Comment submitted by: Pieter-Paul

Giesberts

2005-10-11

Comment Type Editorial

Starting Page # 48

Starting Line # 52

Fig/Table#

Section 6.3.2.3.7

Comment 148L (80216-05\_064r4.USR) was accepted but not completely implemented in D11. This comment contains the missing resolutions.

Rationale: In most MAC Management Messages covered in 802.16eD11 the original references to the presence of an HMAC Tuple have been modified into references to an HMAC/CMAC Tuple. The intention is that in those messages either an HMAC Tuple is inserted or a CMAC Tuple, dependent on the agreed Message Authentication Code Mode. This MAC Mode is negotiated during basic capabilities negotiation (SBC-REQ / SBC-RSP).

However, the 802.16 2004 standard contains a series of messages with an HMAC Tuple that were not included in 802.16e because these messages did not have any changes in format or content (as they are not specifically related to mobility). These messages may still be used in mobile systems, and should therefore be allowed to use CMAC instead of HMAC tuples. Therefore this comments suggests to replace the HMAC reference in these messages with a similar HMAC/CMAC reference as is used throughout 16e.

#### Suggested Remedy

Fix the following existing sections of 802.16e, which do not mention a change to the HMAC Tuple to include the text that changes HMAC to HMAC/CMAC.

On page 48, line 52, Section 6.3.2.3.7 insert:

*"[Change the third paragraph below Table 21 as follows:]*

The REG-REQ shall contain the following TLVs:

**Hashed Message Authentication Code (HMAC)/CMAC Tuple"**

Shall be final attribute in the message's TLV attribute list (11.1.2).

In Mesh Mode, message digest is calculated using HMAC\_KEY\_U."

On page 49, line 13, Section 6.3.2.3.8 insert:

*"[Change the first paragraph below Table 22 as follows:]*

The REG-RSP shall contain the following TLVs:

**SS management support (11.7.2)**

Response to REG-REQ indicating the mode of SS management operation.

**Secondary Management CID (11.7.5)**

Present only if the SS has indicated in the REG-REQ that it is a managed SS.

**HMAC/CMAC Tuple (11.1.2)**

The HMAC/CMAC Tuple attribute shall be the final attribute in the message's TLV attribute list.

In Mesh Mode, message digest is calculated using HMAC\_KEY\_D."

On page 66, line 38 Section 6.3.2.3.26 insert:

*"[Change the first paragraph below Table 26 as follows:]*

*[Change the first paragraph below Table 55 as follows:]*

The DREG-CMD shall include the following parameters encoded as TLV tuples:

**HMAC/CMAC Tuple** (see 11.1.2)"

The HMAC/CMAC Tuple shall be the last attribute in the message."

Insert on page 65, line 13 (after Section 6.3.2.3.9.28, before Section 6.3.2.3.23) the following text:

**6.3.2.3.10 DSA-REQ message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.11 DSA-RSP message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.12 DSA-ACK message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.13 DSC Request (DSC-REQ) message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.14 DSC Response (DSC-RSP) message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.15 DSC Acknowledge (DSC-ACK) message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.



The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

#### 6.3.2.3.16 DSD-REQ message

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

#### 6.3.2.3.17 DSD-RSP message

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

#### 6.3.2.3.22 Reset Command (RES-CMD) message

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple shall be the last attribute in the message."

Insert on page 67, line 45 (after Section 6.3.2.3.26, before Section 6.3.2.3.41) the following text:

#### "6.3.2.3.28 Config File TFTP Complete (TFTP-CPLT) message

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple shall be the last attribute in the message."

Proposed Resolution      Recommendation:      Recommendation by

Reason for Recommendation

Resolution of Group      Decision of Group: Accepted-Modified

On page 48, line 52, Section 6.3.2.3.7 insert the following text, including Editorial markup, and insert Editorial instruction:

*"[Change the third paragraph below Table 21 as follows:]*

**Hashed Message Authentication Code (HMAC)/CMAC Tuple"**

Shall be final attribute in the message's TLV attribute list (11.1.2).

In Mesh Mode, message digest is calculated using HMAC\_KEY\_U."

On page 49, line 13, Section 6.3.2.3.8 insert the following text, including Editorial markup, and insert Editorial instruction:

*"[Change the first paragraph below Table 22 as follows:]*

**HMAC/CMAC Tuple (11.1.2)**

The HMAC/CMAC Tuple attribute shall be the final attribute in the message's TLV attribute list.

In Mesh Mode, message digest is calculated using HMAC\_KEY\_D."

Insert on page 65, line 13 (after Section 6.3.2.3.9.28, before Section 6.3.2.3.23) insert the following text, including Editorial markup, and insert Editorial instruction:

**6.3.2.3.10 DSA-REQ message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The

HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.11 DSA-RSP message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The

HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.12 DSA-ACK message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The

HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

**6.3.2.3.13 DSC Request (DSC-REQ) message**

*[Change Section as indicated:]*

**HMAC/CMAC Tuple** (see 11.1.2)

The HMAC/CMAC Tuple attribute contains a keyed message digest (to authenticate the sender). The

HMAC Tuple attribute shall be the final attribute in the DSx message's attribute list.

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

Comment 148L (from 802.16-05/064r4) was accepted but not completely implemented in D11. The comment is correct, but the proposed remedy contained some imprecise editorial instructions.

**Group's Notes**

**Group's Action Items**

**2005/10/14**

**IEEE 802.16-05/072r2**

**Editor's Notes**

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

**Editor's Questions and Concerns**

**Editor's Action Items**

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8046LL**

Comment submitted by: Pieter-Paul

Giesberts

2005-10-11

Comment Type **Editorial**

Starting Page # **152** Starting Line # **28**

Fig/Table#

Section **6.3.2.3.58**

802.16eD11 has several conflicting references to management message types:

Section 6.3.2.3.58 (Power Control Mode change request), in Table 108w: the syntax column says "Management Message Type = 64", while the note column says "Type = 63". I guess the syntax column should also read 63, this value is also in Table 14.

Section 6.3.2.3.59 (Power Control Mode change response), Table 108x specifies type=64 to be used for PMC\_RSP (this is conforming to Table 14).

Section 6.3.2.3.61 (MIMO precoding setup/tear-down), in Tble 108z, the syntax column says "Management message type = 64", while the not column says nothing. I guess this needs to be type = 65, this value is also in Table 14.

#### Suggested Remedy

Change Table 108w, page 153, line 12, Syntax column as follows:

"Management Message Type = 6~~4~~3"

Change Table 108z, page 160, line 24, Syntax column as follows:

"Management message type = 6~~4~~5"

Proposed Resolution

Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group

Decision of Group: **Accepted**

Reason for 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

2005/10/14

IEEE 802.16-05/072r2

Document under Review: **P802.16e/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8047LLL**

Comment submitted by: **Aeri**

**Lim**

**Other**

2005-10-13

Comment	Type	Technical, Non-binding	Starting Page #	Starting Line #	Fig/Table#	Section
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There is an unnecessary 'reserved' field in MOB\_NBR-ADV.  
Moreover, the field harms byte alignment.

**Suggested Remedy**

Remove the 'reserved' field in line 48, page 105, 802.11e/D11.

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

**Reason for Recommendation**

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

At page 105 Line 48, delete the entire row of Table 108g labeled "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/D11**

Ballot Number: **0001081**

Comment Date

Comment # **8048LLL**

Comment submitted by: Jing

Wang

Other

2005-10-13

Comment Type **Technical, Non-binding** Starting Page # **262** Starting Line # **42** Fig/Table# **225** Section **8.3.5.1**

It is necessary for the 16e standard to clarify and indicate the times when the Mobile Station can get a BSID and when it can use the BSID for DLFP checking. According to current standard, this may prevent a MS from performing network entry properly. For instance, when MS travel to cells covered by other BSs with different Base\_Station\_IDs.

**Suggested Remedy**

[Add the following text and table to the end of section 8.3.5.1]

*Change Base\_Station\_ID field description in Table 225 as indicated:*

Table 225—OFDM downlink frame prefix format

Syntax	Size	Notes
Base_Station_ID	4 bits	(see below description)

4 LSBs of BS ID. Prior to completion of network entry, the SS shall ignore this field and decode all bursts specified by the DLFP. Upon completion of network entry, the SS shall validate these bits with those of the BS on which it is registered. The burst specified by the DFLP shall not be decoded if these bits do not match those of the BS on which it is registered.

**Proposed Resolution**

**Recommendation:**

**Recommendation by**

**Reason for Recommendation**

**Resolution of Group**

**Decision of Group: Accepted-Modified**

[Add the following Editorial instruction and table to the end of subclause 8.3.5.1]

[Change Table 225 as indicated:]

Table 225—OFDM downlink frame prefix format

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Base\_Station\_ID | 4 bits | 4 LSBs of BS ID. Prior to completion of network entry, the SS shall ignore this field and decode all bursts specified by the DLFP. Upon completion of network entry, the SS shall validate these bits with those of the BS on which it is registered. The burst specified by the DLFP shall not be decoded if these bits do not match those of the BS on which it is registered.

**Reason for 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**