Comment by: Michelle Turner Membership Status: Date: 2010-12-09

Comment # D001 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 0 Line 0 Fig/Table# Subclause 0

The title does not match what is on the PAR This is editorial and will be fixed during publication, since it will be fixed to match the title of the base.

Suggested Remedy

GroupResolution Decision of Group: Agree

No action required.

Reason for Group's Decision/Resolution

Group's Notes

Clause 0; General

Comment by: Nancy Bravin Membership Status: Date: 2010-12-12

Comment # D002 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 222 Line 20 Fig/Table# Subclause 16.2.3.47.1

Previous comment 83 points out the importance of

a GLOBAL E-911/ NS/EP. be addressed throughout this Doc.

In that the existence of the this Draft?standard is directly

tied to the ITU, the importance of it there is not shown in kind in the detail of CHart 734 or any other Chart.

I also would like to see the headings changed and

referencing what the ITU, and every other SDO has described the ability to do...in writing and in the chart ref E-911

calls:

authority in emergency emergency to caller

Authority to all..

Suggested Remedy

If it is so important to be in sync with the reason for the existence of this Par, as referred to though out many comments in every recirulation, please change this to implement

the category in the title of both charts refereed to.

and make it singularilyy apply to the importance of this to the ITU and this document. Please implement in both charts, and clarify the difference of E 911 and other calls that are referenced in this document through the charts as I also believe it should be. Follow the ITU's guidance.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Resolved by comment #D018.

Resolution:

Change: For the row labeled "Emergency Indication parameter" in both Tables 734 and 737, add, at the end of the cell in the third column:

0 = not an Emergency flow

1 = Emergency flow

Also, in the row labeled "NS/EP Service Indication parameter" in Table 737, correct a typo by changing "non" to "not".

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

Editor's Notes

Editor's Actions b) none needed

2011/11/27

Chun-Yen Hsu

Membership Status:

Date: 2010-12-15

IEEE 802.16-10/0061r4

Comment # D003

Comment by:

Document under Review: P802.16m/D10

Ballot ID: sb_16m

Comment

Type Editorial

Satisfied Part of Dis

Page 930

<u>Line</u> 41

Fig/Table#

<u>Subclause</u> 16.6.2.9.1.1.1

Typo, remove the line and add a space

Suggested Remedy

Figure 596----<ins> </ins>shows ...

GroupResolution

Decision of Group: Agree

Figure 596----<ins> </ins>shows ...

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Editor's Notes

Editor's Actions a) done

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D004 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 926 Line 6 Fig/Table# Subclause 16.6.2.4

Typo

Suggested Remedy

As shown in Figure 595--,

GroupResolution Decision of Group: Agree

As shown in Figure 595--,

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D005 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 931 Line 22 Fig/Table# Subclause 16.6.2.9.1.1.1

Typo, remove the line and add a space

Suggested Remedy

Figure 597--<ins> </ins>shows ...

GroupResolution Decision of Group: Agree

Figure 597--<ins> </ins>shows ...

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D006 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 934 Line 47 Fig/Table# Subclause 16.6.2.9.1.2.1

Typo, remove the line and add a space

Suggested Remedy

Figure 600--<ins> </ins>shows

GroupResolution Decision of Group: Agree

Figure 600--<ins> </ins>shows

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D007 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 935 Line 47 Fig/Table# Subclause 16.6.2.9.1.2.1

Typo, remove the line and add a space

Suggested Remedy

Figure 600--<ins> </ins>shows

GroupResolution Decision of Group: Agree

Figure 600--<ins> </ins>shows

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D008 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 935 Line 47 Fig/Table# Subclause 16.6.2.9.1.2.1

Typo, remove the line and add a space

Suggested Remedy

Figure 601--<ins> </ins>shows

GroupResolution Decision of Group: Agree

Figure 601--<ins> </ins>shows

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D009 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 603 Line 35 Fig/Table# Subclause 16.3.5.1.2

The SA-Preamble sequence for STR relay is not clear.

Suggested Remedy

SA-Preamble sequences are partitioned and each partition is dedicated to specific base station type like macrocell ABS, Macro Hotzone ABS, Femto ABS, TTR Relay ABS. <ins> STR Relay ABS can be included in either macro ABS partition or Macro Hotzone partition based on deployment.</ins>

GroupResolution Decision of Group: Principle

<< Adopt the following text:>>

SA-Preamble sequences are partitioned and each partition is dedicated to specific base station type like macrocell ABS, Macro Hotzone ABS, Femto ABS, TTR Relay ABS. <ins> STR Relay ABS is included in either macro ABS partition or Macro Hotzone ABS partition based on deployment.</in>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D010 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 15 Line 39 Fig/Table# Subclause 5.2.3.2

Typo, remove the line and add a space

Suggested Remedy

Figure 13--<ins> </ins>shows

GroupResolution Decision of Group: Agree

Figure 13--<ins> </ins>shows

Reason for Group's Decision/Resolution

Group's Notes

Clause 5; MAC CS

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-15

Comment # D011 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 45 Line 37 Fig/Table# Subclause 8.4.8.3.1.2.1

Figure 274a is absent, please make up it. Otherwise, please remove Figure 274a and all related text.

Suggested Remedy

[adopt the text modification on p.45, line 13]

[Modify the second paragraph in section 8.4.8.3.1.2.1 as follows and insert Figure 274a:]

[adopt the text modification on p.45, line 19]

This implies that subchannels are allocated on slot by slot basis as indicated in Figure 274a.

[adopt the text modification on p.45, line 37]

Ed: Figure provided in C802.16m-09/3011 is unclear and needs to be re-drawn, re-submitted.

[adopt the text modification on p.45, line 43]

Figure 274a--Illustration of data mapping rule

GroupResolution Decision of Group: Agree

[adopt the text modification on p.45, line 13]

[Modify the second paragraph in section 8.4.8.3.1.2.1 as follows and insert Figure 274a:]

[adopt the text modification on p.45, line 19]

This implies that subchannels are allocated on slot by slot basis as indicated in Figure 274a.

[adopt the text modification on p.45, line 37]

Ed: Figure provided in C802.16m-09/3011 is unclear and needs to be re-drawn, re-submitted.

[adopt the text modification on p.45, line 43]

Figure 274a--Illustration of data mapping rule

Reason for Group's Decision/Resolution

Group's Notes

Clause 8; MAINTENANCE

<u>Editor's Notes</u> a) done

Comment by: Michael Gundlach Membership Status: Date: 2010-12-16

Comment # D012 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 38 Line 39 Fig/Table# Subclause 6.3.27

Typing error in "[Change the text in 6.3.27 Emegency Service as indicated:]"

Suggested Remedy

Change to "[Change the text in 6.3.27 Emergency Service as indicated:]".

GroupResolution Decision of Group: Agree

Change to "[Change the text in 6.3.27 Emergency Service as indicated:]".

Reason for Group's Decision/Resolution

Group's Notes

Clause 6; MAINTENANCE

Comment by: Michael Gundlach Membership Status: Date: 2010-12-16

Comment # D013 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 952 Line 17 Fig/Table# Subclause 16.7.2

The "/Femto" makes no sense in the sentence "Self configuration is the process executed by ABS/Femto at initialization, as well as during normal operation, whereby the ABS sets and modifies certain configurable parameters."

Suggested Remedy

Delete "/Femto".

GroupResolution Decision of Group: Agree

pp. 952 line 17.

Delete "/Femto".

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.7; Other SON

Comment by: Michael Gundlach Membership Status: Date: 2010-12-16

Comment # D014 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 12 Line 1 Fig/Table# Subclause 5

Section 5 (Service Specific CS) is confusing, not implementable, defective. Backward-compatibility is not ensured. The differentiation between SS, MS and AMS is irreproducible.

Suggested Remedy

A complete re-design is needed.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Lack of specific remedy

Group's Notes

Clause 5; MAC CS

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Phillip Barber <u>Membership Status:</u> 2010-12-16

Comment # D015 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 222 Line 52 Fig/Table# Subclause 16.2.3.47.1

In Table 734 correct the spelling error

Should be 'Uplink/Downlink indicator', not 'Unlink'

Suggested Remedy

I: Un<ins>p</ins>link/Downlink indicator

GroupResolution Decision of Group: Agree

I: Un<ins>p</ins>link/Downlink indicator

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Phillip Barber <u>Membership Status:</u> <u>Date:</u> 2010-12-16

Comment # D016 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 229 Line 26 Fig/Table# Subclause 16.2.3.47.1

Note b in the table Value/Description entry for 'CS Specification parameter' contains an artifact that was corrected in this document on page 89, line 36. The same correction applies here

Suggested Remedy

In P802.16m/D10, page 263, line 26, modify the text as:

(b: SDUs for service flows of this CS type may carry either IPv4 or IPv6 in the header-compressed payload)

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

In P802.16m/D10, page 229, line 26, modify the text as:

(b: SDUs for service flows of this CS type may carry either IPv4 or IPv6 in the header-compressed payload) page 120, line 31

(b: SDUs for service flows of this CS type may carry either IPv4 or IPv6 in the header-compressed payload) page 123, line 50

(b: SDUs for service flows of this CS type may carry either IPv4 or IPv6 in the header-compressed payload)

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

<u>Editor's Notes</u> a) done

Comment by: Chun-Yen Hsu Membership Status: Date: 2010-12-16

Comment # D017 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 16 Line 4 Fig/Table# Subclause 5.2.3.2

The Figure 13 in IEEE 802.16m D10 contains certain meaningless, confusing vertical lines. It is recommended to clean it up.

Suggested Remedy

Adopt the text proposal in C80216m-10 1425.doc or its latest version.

GroupResolution Decision of Group: Agree

Adopt the text proposal in C80216m-10_1425

Note to editor that there is nothing actually wrong with the figure, just problems with redline overwrite in sections 5 to 6.3.2.3 of D10 draft.

Reason for Group's Decision/Resolution

Group's Notes

Clause 5; MAC CS

Editor's Notes Editor's Actions a) done

Comment by: Nancy Bravin Membership Status: Date: 2010-12-17

Comment # D018 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 232 Line 24 Fig/Table# Subclause 16.2.3.47.1

My Comment #2 addressed a concern with the resolution of Comment #83 from the prior recirculation. Upon further review, I see that, while the response was "Disagree," action was in fact taken on the issue. In particular, in both Tables 734 and 737, the row labeled "Emergency Indication parameter" was split into two rows, labeled "Emergency Indication parameter" and "NS/EP Service Indication parameter." This does seem to address the comment. Therefore, I withdraw my Comment #2. However, in both cases, the Emergency Indication parameter" usage is not specified. This needs to be corrected.

Suggested Remedy

Proposed Change: For the row labeled "Emergency Indication parameter" in both Tables 734 and 737, add, at the end of the cell in the third column:

0 = not an Emergency flow

1 = Emergency flow

Also, in the row labeled "NS/EP Service Indication parameter" in Table 737, correct a typo by changing "non" to "not".

GroupResolution Decision of Group: Agree

Resolved by comment #D002

Change: For the row labeled "Emergency Indication parameter" in both Tables 734 and 737, add, at the end of the cell in the third column:

0 = not an Emergency flow

1 = Emergency flow

Also, in the row labeled "NS/EP Service Indication parameter" in Table 737, correct a typo by changing "non" to "not".

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

Comment by: Junghoon Jee Membership Status: Date: 2010-12-17

Comment # D019 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 208 Line 25 Fig/Table# Subclause 16.2.3.46

This is a follow-up comment to the C084 or IEEE 802.16m SB recirc #3. Also, it's the subject of providing Inter-RAT handover over 802.16m networks like the previous C084 of IEEE 802.16m SB recirc #3. The current IEEE 802.16m/D10 is incomplete due to the lack of MIH descriptions in AAI-PKM-REQ and AAI-SII-ADV.

Suggested Remedy

Please make it complete by applying the amendement proposed in C80216m-10 1415.

<u>GroupResolution</u> <u>Decision of Group:</u> Disagree

Reason for Group's Decision/Resolution

The benifits of MIH operation during network entry is not clear.

Group's Notes

Clause 16.2.3; MAC Control Messages; PKM-REQ

<u>Editor's Notes</u> b) none needed

Comment by: Yan Zheng Membership Status: Date: 2010-12-17

Comment # D020 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 557 Line 1 Fig/Table# Subclause 16.3.3.7

The configuration can not support 1/16 CP co-existence

Suggested Remedy

Please see the detial in C80216m-10_1444.doc or later version

GroupResolution Decision of Group: Principle

Adopt the remedy proposed in C80216m-10_1444r3.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.3; PHY Frame Structure

Comment by: Chiu-Wen Chen Membership Status: Date: 2010-12-17

Comment # D021 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 191 Line 46 Fig/Table# Subclause 16.2.3.31

The E-MBS scheduling interval (MSI) can be 4, 8, 16 and 32 superframes long. The indication for the length of the MSI is transmitted in the AAI-SCD message. However, the context of MSI in AAI-SCD message is not consistent with the descriptions in Section 16.9.3.3. In this contribution, the AAI-SCD message fields are modified to ensure consistency.

Suggested Remedy

Adopt the text proposal in C802.16m-10/1431 or its latest version.

GroupResolution Decision of Group: Principle

Resolved by comment #D10028.

Resolution:

adopt the text proposal in IEEE C802.16m-10/1424r4

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SCD

Editor's Notes b) none needed

Comment by: Chiu-Wen Chen Membership Status: Date: 2010-12-17

Comment # D022 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 233 Line 31 Fig/Table# Subclause 16.2.3.47

The unicast available interval bitmap is a string of N bits b0,b1,b2,...,bN-1, and the value of N depends on the E-MBS scheduling interval (MSI). However, the context of MSI in AAI-DSA-REQ/RSP, AAI-DSC-REQ, AAI-E-MBS-RSP messages are not consistent with the descriptions in Section 16.9.3.3. In this contribution, the AAI-DSA-REQ/RSP, AAI-DSC-REQ, AAI-E-MBS-RSP message fields are modified to ensure consistency.

Suggested Remedy

Adopt the text proposal in C802.16m-10/1432 or its latest version.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Resolved by comment #D10028.

Resolution:

adopt the text proposal in IEEE C802.16m-10/1424r4

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Lei Wang <u>Membership Status:</u> <u>Date:</u> 2010-12-17

Comment # D023 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 378 Line 60 Fig/Table# Subclause 16.2.7

Clarifications are needed to the changes accepted in Session #70 in the contribution, C802.16m-10/1319r4, as resolutions to comments, #C059, #C10072, and #C10110, particularly regarding UL PA allocation with intended flow information by using the HARQ channel mapping scheme.

Suggested Remedy

on page 378, change the paragraph in line 58 as follows:

Persistent allocation is a technique used to reduce assignment overhead for connections with periodic traffic pattern and with relatively fixed payload size. To allocate resources persistently to an AMS, the ABS shall transmit the DL Persistent Allocation A-MAP IE for DL allocations and the UL Persistent Allocation AMAP IE for UL allocations. <ins>For an UL persistent allocation, the AMS should give a higher priority for transmitting data of the intended UL flow, if the intended flow information is available, for example, through the HARQ channel mapping scheme as specified in subsection 16.2.12.12.7. </ins> The configuration parameters of the persistently allocated resource shall be maintained by the ABS and AMS until the persistent assignment is de-allocated, changed, or an error event occurs. Persistent scheduling does not include special arrangements for HARQ retransmission of data initially transmitted using persistently allocated resources. Resource for each DL retransmission shall be allocated using a DL Basic Assignment A-MAP IE. Resource for an UL retransmission shall be allocated using a using a UL Basic Assignment A-MAP IE only when control information for the retransmission changes.

GroupResolution Decision of Group: Principle

on page 378, change the paragraph in line 58 as follows:

Persistent allocation is a technique used to reduce assignment overhead for connections with periodic traffic pattern and with relatively fixed payload size. To allocate resources persistently to an AMS, the ABS shall transmit the DL Persistent Allocation A-MAP IE for DL allocations and the UL Persistent Allocation AMAP IE for UL allocations. <ins> For an UL persistent allocation, the AMS should give the the intended service flow higher priority to carry data on the allocated resource, if the necessary flow information is available, e.g., through the HARQ channel mapping scheme as specified in subsection 16.2.12.12.7. </ins> The configuration parameters of the persistently allocated resource shall be maintained by the ABS and AMS until the persistent assignment is de-allocated, changed, or an error event occurs. Persistent scheduling does not include special arrangements for HARQ retransmission of data initially transmitted using persistently allocated resources. Resource for each DL retransmission shall be allocated using a DL Basic Assignment A-MAP IE. Resource for an UL retransmission shall be allocated using a using a UL Basic Assignment A-MAP IE only when control information for the retransmission changes.

Group's Notes

Clause 16.2.7; MAC Persistent Scheduling

Editor's Notes Editor's Actions a) done

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Lei Wang <u>Membership Status:</u> <u>Date:</u> 2010-12-17

Comment # D024 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 524 Line 43 Fig/Table# Subclause 16.2.26.1

A clarification is needed to specify how/when the ABS provide the AMS multiple successive UL grants in the coverage detection procedure, when the ABS does not receive UL burst from the AMS in the given UL grant.

Note that the suggested remedy says "provide another UL grant to the AMS within next 4 radio frames", which is just a suggestion, subject to further discussions.

Suggested Remedy

Change the paragraph in line 43 page 524 as follows:

<ins>If the ABS does not receive an UL data burst from the AMS in the UL allocation granted to it due to expiration of the active_ABS_timer, the ABS shall provide another UL grant to the AMS within next 4 radio frames. </ins> If the ABS does not receive an UL burst on a predetermined number of successive UL grants, called number of Coverage Loss Detection UL grants NCLD_UL_Grant, the ABS shall send an unsolicited AAI-RNG-RSP message to request the AMS to perform ranging, as described below.

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

For more reliable AMS' coverage loss detection, successive UL grant should be done based on active_ABS_timer expiration not within several frames.

Vote on approval of remedy as originally proposed:

In Favor: 2 Against: 3 Rejected

Group's Notes

Clause 16.2.26; MAC Coverage Loss Detection and Recovery from Coverage Loss

Comment by: Lei Wang Membership Status: Date: 2010-12-17

Comment # D025 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 525 Line 5 Fig/Table# Subclause 16.2.26.2

Regarding when to stop coverage loss detection procedure in case of HO, the current 16m/D10 spec says "at the frame specified by Disconnect Time in the AAI-HO-CMD". This seems a good logical choice for stopping coverage loss detection timer.

However, there is a practical issue, i.e., the Disconnect Time is different from the HO procedure starting time, then what happens if the coverage loss detection timer (i.e., active_ABS_timer) expires between HO procedure starting time and Disconnect time? Does the ABS need to provide an UL burst for the AMS to transmit for coverage loss detection?

So, practically, the coverage loss detection timer (i.e., active_ABS_timer) needs to be stopped at the time HO procedure starts.

Suggested Remedy

Change the first sentence in the paragraph in line 5 page 525 as follows:

In case of a HO, the ABS shall stop the coverage loss detection procedure <ins> by stopping the active_ABS_timer </ins> for the AMS at the frame <ins> where the AAI-HO-CMD is transmitted for the ABS initiated HO and where the AAI-HO-REQ is received for the AMS initiated HO. </ins> specified by Disconnect Time in the AAI-HO-CMD message .

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The active_ABS_timer can not be expired during HO procedure since it is long enough. HO procedure requires UL MAC control message reception at the serving ABS (i.e. AAI-HO-REQ, or AAI-MSG-ACK), which means UL grant required and the active_ABS_timer restarted during HO procedure. The current text is much more clear.

Vote on approval of remedy as originally proposed:

In Favor: 1 Against: 2 Rejected

Group's Notes

Clause 16.2.26; MAC Coverage Loss Detection and Recovery from Coverage Loss

<u>Editor's Notes</u> b) none needed

Comment by: Lei Wang Membership Status: Date: 2010-12-17

Comment # D026 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 525 Line 30 Fig/Table# Subclause 16.2.26.2

There is another case for AMS to consider it as link loss, i.e., received an AAI-RNG-ACK with status "abort", during the coverage loss detection procedure.

Suggested Remedy

Change the sentence in line 30 page 525 as follows:

Upon <ins>received an AAI-RNG-ACK message with "abort" status or </ins> exhausted HARQ retransmissions of the AAI-RNG-CFM message, the AMS shall regard it as Link Loss from ABS, and the AMS shall perform coverage loss recovery procedure as indicated in Section 16.2.26.3.

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

AAI-RNG-ACK with ranging statuts = abort is related to load balancing. Moreover, AAI-RNG-ACK is transmitted in response to anonymous AMS which sent a ranging code. In case of Initial ranging code, the AMS doesn't finish network entry/re-entry. In that case, the AMS cannot perform coverage loss recovery procedure.

Vote on approval of remedy as originally proposed:

In favor: 1 Against: 2 Abstain: 2 Rejected

Group's Notes

Clause 16.2.26; MAC Coverage Loss Detection and Recovery from Coverage Loss

<u>Editor's Notes</u> b) none needed

Comment by: Lei Wang Membership Status: Date: 2010-12-17

Comment # D027 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 381 Line 0 Fig/Table# Subclause 16.2.8.1

The paragraph on the top of page 381 is corrupted.

Suggested Remedy

Move the paragraph in the header portion of page 381 into the normal portion of the page.

GroupResolution Decision of Group: Agree

Move the paragraph in the header portion of page 381 into the normal portion of the page.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.8; MAC Multicarrier

Comment by: Lei Wang Membership Status: Date: 2010-12-17

Comment # D028 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 385 Line 42 Fig/Table# Subclause 16.2.8.2.8

don't fully agree with the resolution to the comment C130/contribution 1348r1 in 802.16m commentary database 80216-10 0052r3.

Agree with the contribution 1348r1 regarding the discussions and proposal about where/how the MAC level feedback signals, .e.g, extended headers and MAC messages, are sent for the DL-only carriers. However, for the PHY level feedback signals, e.g., HARQ ACK/NAK, fast feedback channel, the contribution 1348r1 deleted the relevant text, which leaves the PHY level feedback for DL-only carrier incomplete.

In addition, the two paragraphs in line 42 on page 385 need some clarifications regarding how the PHY feedback regions for the DL-only carriers is allocated and signaled.

Suggested Remedy

discuss and adopt contribution C80216m-10_1427r1 or its latest version.

GroupResolution Decision of Group: Principle

adopt contribution C80216m-10 1427r3.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.8; MAC Multicarrier

<u>Editor's Notes</u> a) done

Comment by: Lei Wang Membership Status: Date: 2010-12-17

Comment # D029 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 381 Line 16 Fig/Table# Subclause 16.2.8.1

Based on the paragraph in line 16 on page 381, the DL-only Fully configure carrier can only be in FDD mode. Why cannot be TDD? Note that he AAI-CM-CMD message does not limit the DL-only activation or deactivation to FDD only.

Suggested Remedy

Change the paragraph in line 16 page 381 as follows:

In addition to partially configured carriers, the ABS may also configure the DL only part of </ins> a </ins> an FDD fully configured carrier to be paired and supported by the UL feedback channels on the primary carrier of the AMS.

GroupResolution Decision of Group: Principle

Delete the following sentance in line 16~19 page 381.

In addition to partially configured carriers, the ABS may also configure the DL only part of an FDD fully configured carrier to be paired and supported by the UL feedback channels on the primary carrier of the AMS.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.8; MAC Multicarrier

Comment by: Lei Wang Membership Status: Date: 2010-12-17

Comment # D030 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 442 Line 25 Fig/Table# Subclause 16.2.12.12.9

Subsection 16.2.12.12.9 on page 442 line 25 is a duplicate version of subsection 16.2.12.12.7 on page 441 line 25.

Suggested Remedy

Delete subsection 16.2.12.12.9 on page 442 line 25.

GroupResolution Decision of Group: Agree

Delete subsection 16.2.12.12.9 on page 442 line 25.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.12; MAC QoS

<u>Editor's Notes</u> <u>a) done</u>

Comment by: Bin Chen Membership Status: Date: 2010-12-17

Comment # D031 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 524 Line 14 Fig/Table# Subclause 16.2.26

By letting the AMSs report areas without coverage (so called blind areas) after recovering from coverage loss, appropriate measures may be taken by the network functions to improve coverage and capacity in the network

Suggested Remedy

adopt the proposals on contribution C80216m-10 1450 or its latest revision.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The feature can be done in L3 rather than L2

Vote: adopt the proposals on contribution C80216m-10_1450r1

In favor: 1 Against: 3

comment is rejected

Group's Notes

Clause 16.2.26; MAC Coverage Loss Detection and Recovery from Coverage Loss

Editor's Notes b) none needed

Comment by: Maximilian Riegel Membership Status: Date: 2010-12-17

Comment # D032 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 17 Line 25 Fig/Table# Subclause 5.2.6

My comment 57/58 of recirculation #3 was inadequately addressed: "Multiprotocol CS enables efficient usage of FIDs. There is limited set of FIDS, these must be conserved."

- Multiprotocol CS does not support any efficient usage of FIDs, as in its current form it only allows for multiplexing of a single ETH encapsulated payload and a single IP encapsulated payload on the same service flow. As concurrent support of ETH-CS and IP-CS on the same link is precluded by principle by the WiMAX architecture, there is no benefit but introduces a number of severe interoperability issues, which are thoroughly address in RFC4840. RFC4840 titled 'Multiple Encapsulation Methods Considered Harmful' was created by the Internet Architecture Board of the IETF to guide link layer designers for designing appropriate convergence layers. The RFC shows a number of severe issues when using multiple encapsulation protocols on the same link, and the design of the multiprotocol CS contradicts to all guidance provided by the IETF IAB to link layer designs.

As demand for conservation of FIDS is limited to very specific deployment cases where multiple independent hosts behind a AMS have to be connected over a single wireless link to different independent networks behind the ABS (multihost scenario). In such cases, the VLAN functionality of the ETH-CS can be used to logically separate the networks while making use of the same FID. While ETH-CS can support up to 4095 separate IP-networks on a link, it has limitations for the handling of other kind of L2 protocols like MPLS, or the support of Ethernet Provider Bridging (802.1ad) or Provider Backbone Bridging (802.1ah).

Suggested Remedy

As Multiprotocol CS does not provide any benefit for the stated use case and furthermore violates RFC4840, multiprotocol CS SHALL be removed from the specification, i.e.

- remove section 5.2.6 (p.17 l.25 p.18 i.11)
- remove modification of MAC SDU format (p.12 I.28 I.48)
- remove codepoint for multiprotocol flow in Table 782 (p.432 I.30), Table 685 (p.120 I.24), Table 734 (p.229 I.21), Table 686 (p.123 I.43)

Enable conservation of FIDS in multinetwork backbone applications (multihost scenarios) by support of GPCS in 802.16m for backbone transport protocols (PPPoE, MPLS, 802.1ad, 802.1ah) by adding GPCS as codepoint 0 in following tables:

- Table 685 (p.120 l.9) 'Bit #0: GPCS'
- Table 686 (p.123 I.28) 'Bit #0: GPCS'
- Table 734 (p. 229 I.5) '0: GPCS'
- Table 782 (p.432 l.15) '0: GPCS'

GPCS_PROTOCOL_TYPE values have to be extended for 802.1ad and 802.1ah, as these code points are currently missing.

<u>GroupResolution</u> <u>Decision of Group:</u> Disagree

Reason for Group's Decision/Resolution

One of the two solutions is required to ensure functionality for AAI. The remedies proposed to enable GPCS for AAI are insufficient and incomplete. Multiprotocol CS is therefore required by default.

Vote:

In favor: 1 Against: 3

comment rejected

Group's Notes

Clause 5; MAC CS

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

Comment by: Junghoon Jee Membership Status: Date: 2010-12-18

Comment # D033 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 184 Line 18 Fig/Table# Subclause 16.2.3.30

This comment is about the comment #2, #3 and #84 in the previous IEEE 802.16m recirc #3.

I disagree with the resolution of comment #2, #3 and #84, especially with regard to the stated reason of rejection.

The reason of reject says: "ORAT MSG, which is a bearer to carry other RAT's message, may be used in WiMAX NWG, instead of MIH frame."

I would like to point out that there exists 'NO' WiMAX NWG specs which specify the use of ORAT MSG over AAI-L2-XFER for Inter-RAT handover.

Also, I have followings issues about this ORAT L2-XFER approach.

First of all, this approach is an unproven. Each RAT's native messages need to be used and sent over the air. Therefore, each encapsulated RAT MAC type message is different and needs different MAC decoder.

Secondly, I think that the major challenge when following this approach is "how to deliver the other RAT MAC messages to the "16m" networks?". One approach would be based on a very tight "coupling" between IEEE 802.16m systems and other technologies (LTE, WiFi, CDMA2000, etc.). This apparently requires a well-defined interface between an IEEE 802.16m core network entity (e.g. ASN-GW) and that of other RAT (e.g., MME) to deliver the other RAT MAC messages to the AMS. (Example message path:

eNB=>MME=>ASN-GW=>ABS=>AMS) However, such interface does not exist and would be very challenging to accomplish. That's one of the reasons why the current WiMAX NWG is primarily relying on the L3 tunneling between an (A)MS and SFF(Signalling Fowarding Function) to enable the single radio handover with other RATs. This approach does not require opening the interface between the different core network entities (e.g, between the ASN-GW and 3GPP MME).

Another issue is that the current draft 802.16m specification does not provide a detailed description how the ORAT type could be utilized to enable Inter-RAT handover. More specifically, the draft 802.16m specification only defines a couple of sub-type values for different technologies, GERAN, UTRAN, E-UTRAN, TDSCDMA, CDMA2000. There's no detailed description on how those other RAT MAC messages can be utilized to enable Inter-RAT handover of 802.16m AMS by transferring them over the over 802.16m air links. This casts a serious doubt whether the ORAT method can work. It should also be noted that there are no ORAT types defined for WiFi, HRPD and etc.

The last issue is about overloading the IEEE 802.16 air interface by broadcasting other RAT frames (ORAT MSG) natively over AAI-L2-XFER. There are MAC messages which are broadcast to help network discovery and selection within a certain type of access technology network. Blindly delivering those broadcast frames over the 802.16m air interface would create significant overhead for the 802.16m ABS.

Suggested Remedy

Please apply the changes by referring the contribution, "C80216m-10_1339".

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

ORAT-MSG required when MIH services are not used.

Group's Notes

Clause 16.2.3; MAC Control Messages; L2-XFER

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

2011/11/27 IEEE 802.16-10/0061r4

Comment by: Junghoon Jee Membership Status: Date: 2010-12-18

Comment # D034 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 374 Line 37 Fig/Table# Subclause 16.2.6.5.2.1

This comment is related with the comment #84 of IEEE 802.16m SB recirc #3 in terms of supporting Inter-RAT Handover over IEEE 802.16m networks.

The sentence shall be reworded because the term, "system information broadcast" is not clear.

Suggested Remedy

WirelessMAN-OFDMA Advanced systems provide a mechanism for AMS to obtain information about other access networks in the vicinity of the AMS from an ABS either by making a query or listening to a system information broadcast. <ins>by making a query to ABS or listening to the messages from ABS. <ins>

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

'System information broadcast" refers to SFH as well as AAI-SCD message and hence the use of this term is proper and sufficient.

Group's Notes

Clause 16.2.6; MAC HO procedures

<u>Comment by:</u> Roger Marks <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D035 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 1 Line Fig/Table# Subclause all

I disagree with the resolution of comments A315, B062, and C092. I accept the arguments that the PICS content is not necessary for successful implementation of the specification, that development of such additional material could add substantial delay, and that the content could be developed in a later project. However, the comment resolution fails to recognize one important aspects of A315 that could easily be implemented and would be critical to the success of a future PICS project. Namely, that comment points out the need for each element of the text to be identified within the text as an anchor upon which hook to the PICS tables. The most critical element to providing such an anchor is to ensure that each row and each column of each substantive table in the draft be identified with a number. A later PICS document can then reference each table element by row number and column number.

Suggested Remedy

Add a column to the beginning of each substantive table in the entire draft. Label the column as "Row Number." Use the column to label the rows in sequential order. Also, add a row to the beginning of each substantive table in the entire draft. Use the row to label the columns in sequential order.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

There may be merit in the problem statement, the remedy requested lacks adequate specificity. Which substantive table does the commenter refer to?

However, we will forward this editorial formating request to the IEEE publication staff for consideration.

Group's Notes

Clause 0; General

<u>Editor's Notes</u> b) none needed

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D036 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 57 Line 48 Fig/Table# Subclause 16.1.1

Title of Figure 385 incorrectly refers to "IEEE 802.16m Mobile Station." It should not use the term "802.16m"

Suggested Remedy

In title of Figure 385, change "IEEE 802.16m Mobile Station" to "AMS"

GroupResolution Decision of Group: Agree

In title of Figure 385, change "IEEE 802.16m Mobile Station" to "AMS"

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.1.1; General Operational States

<u>Comment by:</u> Roger Marks <u>Membership Status:</u> 2010-12-18

Comment # D037 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 497 Line 62 Fig/Table# Subclause 16.2.18.2.1

Draft is not permitted to use the terms "16e" or "16m".

Suggested Remedy

Change "16e" to "legacy" (page 497, lines 62-64, two places).

Change "16m" to "WirelessMAN-OFDMA" (page 497, lines 65, and page 498, line 1).

GroupResolution Decision of Group: Principle

Change "16e" to "legacy" (page 497, lines 62-64, two places).

Change "16m" to "WirelessMAN-Advanced air interface" (page 497, lines 65, and page 498, line 1)

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.18; MAC Idle Mode

Editor's Notes Editor's Actions a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D038 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page? Line 39 Fig/Table# Subclause Annex V

Incorrect references to IEEE Std 802.16. Should not self-reference the existing document.

Suggested Remedy

In final columns of Tables V.1 and V.2, change column header to "Subclause"

GroupResolution Decision of Group: Principle

<adopt the following changes:>

Page 1097, line 19, last column header of table V.1: Standard reference (802.16-2009) <ins> Subclause</ins>

Page 1097, line 37, last column header of table V.2: Standard reference (802.16m-2009) <ins> Subclause</ins>

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex V.1; Other Annex

<u>Comment by:</u> Roger Marks <u>Membership Status:</u> 2010-12-18

Comment # D039 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 970 Line 29 Fig/Table# Subclause 16.10.1.1

Inappropriate use of term "16e"

Suggested Remedy

Change "16e/AAI coexistence" to "Legacy/AAI coexistence"

GroupResolution Decision of Group: Agree

pp. 970 line 29,

Change "16e/AAI coexistence" to "Legacy/AAI coexistence"

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.10; Other Support for AAI in Lzone

<u>Comment by:</u> Roger Marks <u>Membership Status:</u> 2010-12-18

Comment # D040 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 1 Line Fig/Table# Subclause

"WirelessMAN-OFDMA" and "WirelessMAN-Advanced" are incorrectly spelled in many places.

Suggested Remedy

Globally, change as follows:

WirelessmanOFDMA => WirelessMAN-OFDMA
Wirelessman OFDMA => WirelessMAN-OFDMA
wirelessManOdfm a=> WirelessMAN-OFDMA
WirelessMAN-AAI => WirelessMAN-Advanced air interface

GroupResolution Decision of Group: Agree

Globally, change as follows:

WirelessmanOFDMA => WirelessMAN-OFDMA
Wirelessman OFDMA => WirelessMAN-OFDMA
wirelessManOdfm a=> WirelessMAN-OFDMA
WirelessMAN-AAI => WirelessMAN-Advanced air interface

Reason for Group's Decision/Resolution

Group's Notes

Clause 0; General

Editor's Notes Editor's Actions a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D041 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 549 Line 24 Fig/Table# Subclause 16.3.3.5.1

Fig 493 includes two labels referencing the undefined "WirelessMAN"

Suggested Remedy

In Fig 493 (lines 24-27), change two "WirelessMAN" labels to "WirelessMAN-OFDMA"

GroupResolution Decision of Group: Agree

In Fig 493 (lines 24-27), change two "WirelessMAN" labels to "WirelessMAN-OFDMA"

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.3; PHY Frame Structure

Editor's Notes Editor's Actions a) done

Note: Comment refers to 2 instances in fig 494 where 'WirelessMAN'needs to be changed to 'WirelessMAN-OFDMA'. Only 1 instance is observed, but the same editorial error appears in Fig 493, which has been corrected.

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D042 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 533 Line 6 Fig/Table# Subclause 16.3.3

Much of 16.3.3 is formatted with extra line spacing that is not used in the rest of the draft.

Suggested Remedy

Eliminate extra line spacing.

GroupResolution Decision of Group: Agree

Eliminate extra line spacing.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.3; PHY Frame Structure

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D043 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 984 Line 34 Fig/Table# Subclause Annex R.2

"P802-16M-MAC" is a poor choice of naming root, since IEEE 802.16m is a temporary document and other naming is available.

Suggested Remedy

Change "P802-16M-MAC" to "802.16-WirelessMAN-Advanced" or, if dots are not allowed, "802-16-WirelessMAN-Advanced".

GroupResolution Decision of Group: Principle

Replace "P802-16M-MAC-CONTROL-MESSAGES" with "WirelessMAN-Advanced-Air-Interface"

Reason for Group's Decision/Resolution

Original remedy:

Change "P802-16M-MAC" to "802.16-WirelessMAN-Advanced". reopen on 1/13/2011 due to incorrect remedy and replace with the new remedy.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Implemented as part of the ASN.1 code alignment.

<u>Comment by:</u> Roger Marks <u>Membership Status:</u> 2010-12-18

Comment # D044 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 0 Line 7 Fig/Table# Subclause Participants

WG officer list needs to be updated.

Suggested Remedy

Change:

Jose Puthenkulam and Rakesh Taori, Vice-Chair Herbert M. Ruck and M. Scott Probasco, Secretary

GroupResolution Decision of Group: Agree

Change:

Jose Puthenkulam and Rakesh Taori, Vice-Chair Herbert M. Ruck and M. Scott Probasco, Secretary

Reason for Group's Decision/Resolution

Group's Notes

Clause 0: General

Comment by: Junghoon Jee Membership Status: Date: 2010-12-18

Comment # D045 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 184 Line 40 Fig/Table# Subclause 16.2.3.30

[Note: This comment is submitted again to point out the correct page and line numbers in IEEEE 802.16m/D10 not based on the delta file] This comment is about the comment #2, #3 and #84 in the previous IEEE 802.16m recirc #3.

I disagree with the resolution of comment #2, #3 and #84, especially with regard to the stated reason of rejection.

The reason of reject says: "ORAT MSG, which is a bearer to carry other RAT's message, may be used in WiMAX NWG, instead of MIH frame."

The detailed issues about this "ORAT L2-XFER" approach are like the followings:

First of all, this approach is unproven. Each RAT's native messages need to be used and sent over the air. Therefore, each encapsulated RAT MAC type message is different and needs different MAC decoder.

Secondly, the major challenge when following this approach is "how to deliver the other RAT MAC messages to the "16m" networks? One approach would be based on a very tight "coupling" between IEEE 802.16m systems and other technologies (LTE, WiFi, CDMA2000, etc.). This apparently requires a well-defined interface between an IEEE 802.16m core network entity (e.g. ASN-GW) and that of other RAT (e.g., MME) to deliver the other RAT MAC messages to the AMS. (Example message path: eNB=>MME=>ASN-GW=>ABS=>AMS) However, such interface does not exist and would be very challenging to accomplish. That's one of the reasons why the current WiMAX NWG is primarily relying on the L3 tunneling between an (A)MS and SFF(Signaling Forwarding Function) to enable the single radio handover with other RATs. This approach does not require opening the interface between the different core network entities (e.g, between the ASN-GW and 3GPP MME).

Another issue is that the current IEEE 802.16m/D10 does not provide a detailed description how the ORAT type could be utilized to enable Inter-RAT handover. More specifically, the IEEE 802.16m/D10 only defines a couple of sub-type values for different technologies, GERAN, UTRAN, E-UTRAN, TDSCDMA, CDMA2000. There's no detailed description on how those other RAT MAC messages can be utilized to enable Inter-RAT handover of 802.16m AMS by transferring them over the IEEE 802.16m air links. This casts a serious doubt whether the ORAT method can work. It should also be noted that there are no ORAT types defined for WiFi, HRPD and etc.

The last issue is about overloading the IEEE 802.16 air interface by broadcasting other RAT frames (ORAT MSG) natively over AAI-L2-XFER. There are MAC messages which are broadcast to help network discovery and selection within a certain type of access technology network. Blindly delivering those broadcast frames over the 802.16m air interface would create significant overhead for the 802.16m ABS.

Moreover, it should be noted that the MIH frame which is standardized by IEEE 802 as "Std. IEEE 802.21-2008" can be delivered as the "Transfer-Type=7" of AAI-L2-XFER. The Std. IEEE 802.21-2008 is the representative standard for supporting Inter-RAT handover in

IEEE 802.

Suggested Remedy

Please apply the changes by referring the contribution, "C80216m-10" 1452".

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

ORAT-MSG required when MIH services are not used.

Group's Notes

Clause 16.2.3; MAC Control Messages; L2-XFER

<u>Editor's Notes</u> b) none needed

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Junghoon Jee <u>Membership Status:</u> 2010-12-18

Comment # D046 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 208 Line 25 Fig/Table# Subclause 16.2.3.43

[Note: This comment is submitted again to point out the correct page and line numbers in IEEE 802.16m/D10 not based on the delta file and the contribution number for the updated remedy] This is a follow-up comment to the C084 of IEEE 802.16m SB recirc #3. Also, it's the subject of providing Inter-RAT handover over 802.16m networks like the previous C084 of IEEE 802.16m SB recirc #3. The current IEEE 802.16m/D10 is incomplete due to the lack of MIH descriptions in AAI-PKM-REQ and AAI-SII-ADV.

Suggested Remedy

Please make it complete by applying the amendement proposed in C80216m-10 1415.

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

The benifits of MIH operation during network entry is not clear.

Group's Notes

Clause 16.2.3; MAC Control Messages; PKM-REQ

Comment by: Junghoon Jee Membership Status: Date: 2010-12-18

Comment # D047 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 374 Line 37 Fig/Table# Subclause 16.2.6.5.2.1

[Note: This comment is submitted again to point out the correct page and line numbers in IEEE 802.16m/D10 not based on the delta file] This comment is related with the comment #84 of IEEE 802.16m SB recirc #3 in terms of supporting Inter-RAT Handover over IEEE 802.16m networks.

The sentence shall be reworded because the term, "system information broadcast" is not clear.

Suggested Remedy

WirelessMAN-OFDMA Advanced systems provide a mechanism for AMS to obtain information about other access networks in the vicinity of the AMS from an ABS either by making a query or listening to a system information broadcast. <ins>by making a query to ABS or listening to the messages from ABS. </ins>

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

'System information broadcast" refers to SFH as well as AAI-SCD message and hence the use of this term is proper and sufficient.

Group's Notes

Clause 16.2.6; MAC HO procedures

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D048 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 7 Line 1 Fig/Table# Subclause 3.145

In both 3.145 (Line 1) and 3.146 (Line 7), the example (for e.g. WiMAX and 3GPP) is grammatically incorrect and too specific. It adds no value.

Suggested Remedy

In both 3.145 (Line 1) and 3.146 (Line 7), delete "(for e.g. WiMAX and 3GPP)".

GroupResolution Decision of Group: Agree

<adopt the following changes:>

In both 3.145 (Line 1) and 3.146 (Line 7), delete "(for e.g. WiMAX and 3GPP)".

Reason for Group's Decision/Resolution

Group's Notes

Clause 3; General

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D049 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 1 Line Fig/Table# Subclause

The undefined and incorrect term "WirelessMAN-OFDMA Advanced" appears in 31 places throughout the draft.

Suggested Remedy

Change "WirelessMAN-OFDMA Advanced" to "WirelessMAN-OFDMA" throughout the draft.

GroupResolution Decision of Group: Principle

Change "WirelessMAN-OFDMA Advanced" to "WirelessMAN-Advanced air interface" throughout the draft.

Reason for Group's Decision/Resolution

Group's Notes

Clause 0; General

Editor's Notes Editor's Actions a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D050 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 377 Line 11 Fig/Table# Subclause 16.2.6.5.2.2.1

The text "which are defined in elsewhere, e.g., 3GPP, 3GPP2" is grammatically incorrect and too specific.

Suggested Remedy

Change "which are defined in elsewhere, e.g., 3GPP, 3GPP2" to "specified in external standards."

GroupResolution Decision of Group: Principle

Change "which are defined in elsewhere, e.g., 3GPP, 3GPP2" to "as specified in external standards."

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.6; MAC HO procedures

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D051 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type General Part of Dis Satisfied Page 377 Line 5 Fig/Table# Subclause 16.2.6.5.2.2

The text "with other access technologies such as IEEE 802.11, 3GPP and 3GPP2" is grammatically nonideal. Also, it should distinguish between specifications and technologies.

Suggested Remedy

Change "with other access technologies such as IEEE 802.11, 3GPP and 3GPP2" to "to systems based on external specifications such as 3GPP, 3GPP2, and IEEE 802.11."

GroupResolution Decision of Group: Agree

Change "with other access technologies such as IEEE 802.11, 3GPP and 3GPP2" to "to systems based on external specifications such as 3GPP, 3GPP2, and IEEE 802.11."

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.6; MAC HO procedures

Editor's Notes Editor's Actions a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D052 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 634 Line 57 Fig/Table# Subclause 16.3.5.3.1.1

The term "CRC-5 ITU" is used without a definition.

Suggested Remedy

Delete "as in CRC-5 ITU" or provide a definition.

GroupResolution Decision of Group: Principle

<<Adopt the following text to provide a definition for CRC-5>>

"The P-SFH IE shall be appended with a 5-bit CRC as in CRC-5 ITU<ins>, per the ITU-T Recommendation G.704 CRC-5 </ins> with initialization to 0b00000 and no bitwise flipping of the polynomial output."

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

<u>Editor's Notes</u> a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D053 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type General Part of Dis Satisfied Page 829 Line 32 Fig/Table# Subclause 16.3.8.2.5

The term "CRC-5 ITU" is used without a definition.

Suggested Remedy

Delete "as in CRC-5 ITU" or provide a definition.

GroupResolution Decision of Group: Principle

<<Adopt the following text to provide a definition for CRC-5>>

"The 16 bit information in the quick access message transmitted in the BR channel shall be used to generate 5 bits CRC as in CRC-5 ITU<ins>, per the ITU-T Recommendation G.704 CRC-5 </ins> with initialization to 0b00000 and no bitwise flipping "

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D054 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 803 Line 28 Fig/Table# Subclause 16.3.8

Editorial issue: from page 803 to page 901, the lines are double-spaced.

Suggested Remedy

Use consistent, single-spaced lines.

GroupResolution Decision of Group: Agree

Use consistent, single-spaced lines.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

<u>Editor's Notes</u> <u>Editor's Actions</u> g) editor disagrees

There are a lot of inline equations in this section, and that can force the text to larger spacing, but I checked the paragraph tags and they're "TText with 18point spacing", which is the tag for regular text used throughout the document.

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D055 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 635 Line 44 Fig/Table# Subclause 16.3.5.3.1.2

There are editorial problems with the phrase "shall be appended with a 16-bit CRC, CRC16-CCITT as defined in ITU-T recommendation X.25 is used."

Suggested Remedy

Change "shall be appended with a 16-bit CRC, CRC16-CCITT as defined in ITU-T recommendation X.25 is used." to:

"shall be appended with a 16-bit CRC, per the CRC16-CCITT specification in Rec. ITU-T X.25."

<u>GroupResolution</u> <u>Decision of Group:</u> Agree

Change ""shall be appended with a 16-bit CRC, CRC16-CCITT as defined in ITU-T recommendation X.25 is used." to:

"shall be appended with a 16-bit CRC, per the CRC16-CCITT specification in Rec. ITU-T X.25."

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

Editor's Notes Editor's Actions a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D056 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 640 Line 52 Fig/Table# Subclause 16.3.5.3.2.4

There are editorial problems with the phrase "A 16-bit CRC, for which CRC16-CCITT as defined in ITU-T recommendation X.25 is used, is generated".

Suggested Remedy

Change "AA 16-bit CRC, for which CRC16-CCITT as defined in ITU-T recommendation X.25 is used, is generated" to:

"A 16-bit CRC, per the CRC16-CCITT specification in Rec. ITU-T X.25, is generated".

GroupResolution Decision of Group: Agree

Change "AA 16-bit CRC, for which CRC16-CCITT as defined in ITU-T recommendation X.25 is used, is generated" to:

"A 16-bit CRC, per the CRC16-CCITT specification in Rec. ITU-T X.25, is generated".

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

Editor's Notes Editor's Actions a) done

Comment by: Roger Marks Membership Status: Date: 2010-12-18

Comment # D057 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Editorial Part of Dis Satisfied Page 876 Line 27 Fig/Table# Subclause 16.3.10.1.1

There are editorial problems with the phrase "A 16-bit burst CRC, for which CRC16-CCITT as defined in ITU-T recommendation X.25 is used, shall be appended".

Suggested Remedy

Change "A 16-bit burst CRC, for which CRC16-CCITT as defined in ITU-T recommendation X.25 is used, shall be appended" to:

"A 16-bit burst CRC, per the CRC16-CCITT specification in Rec. ITU-T X.25, shall be appended".

<u>GroupResolution</u> <u>Decision of Group:</u> Agree

Change "A 16-bit burst CRC, for which CRC16-CCITT as defined in ITU-T recommendation X.25 is used, shall be appended" to:

"A 16-bit burst CRC, per the CRC16-CCITT specification in Rec. ITU-T X.25, shall be appended".

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.10; PHY Channel coding and HARQ

<u>Comment by:</u> Roger Marks <u>Membership Status:</u> 2010-12-18

Comment # D058 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 10 Line 14 Fig/Table# Subclause 4

"NS/EP" is missing from the " Abbreviations and acronyms" lilist.

Suggested Remedy

Add:

NS/EP: National Security/Emergency Preparedness

GroupResolution Decision of Group: Agree

Add:

NS/EP: National Security/Emergency Preparedness

Reason for Group's Decision/Resolution

Group's Notes

Clause 4; General

<u>Comment by:</u> Xiangying Yang <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D059 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 92 Line 48 Fig/Table# Subclause 16.2.3.1

Coverage loss recovery now allow MS to send in previous BSID/STID as agreed in the last meeting. AAI-RNG-REQ does not reflect this change yet.

onange yet.

Suggested Remedy

Adopt text proposal in C802.16m-10/1454 or its latest version

GroupResolution Decision of Group: Principle

Adopt text proposal in C802.16m-10/1454r4

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; RNG-REQ

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> Xiangying Yang <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D060 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 108 Line 36 Fig/Table# Subclause 16.2.3.5

AAI-SCN-Rxx table structure is confusing and contains some errors.

Suggested Remedy

Adopt text proposal in C802.16m-10/1453 or its latest version

GroupResolution Decision of Group: Principle

Adopt text proposal in C802.16m-10/1453r5.doc.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D061 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 17 Line 34 Fig/Table# Subclause 5.2.6

In the 802.16m #69 meeting (St. Petersburg), comment B194 was agreed in principle to adopt contribution C802.16m-10/1229r1, but it was not implemented by the editors into 802.16m/D9 nor into 802.16m/D10.

This contribution provides only new references to D10, and entire context remains exactly the same as the previous approved contribution, i.e. C80216m-10 1229r1.doc.

Suggested Remedy

Use proposed text in IEEE C802.16m-10/1229r4 or its latest revision to correct the editorial error.

GroupResolution Decision of Group: Principle

Resolved by comment #D062.

Resolution:

Adopt the proposed text in IEEE C802.16m-10/1447r2

Editor to change all instances of 'Protocol ID' to 'Type ID' in clause 5 only

On page 17, line 55, change 'protocol type' to 'type'

Reason for Group's Decision/Resolution

Group's Notes

Clause 5; MAC CS

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D062 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 17 Line 34 Fig/Table# Subclause 5.2.6

In the 802.16m/D10, multi-protocol convergence sublayer is used to transport different types of protocols over the same MAC service flow.

In the 802.16m #69 meeting (St. Petersburg), some missing protocols that may be used in multi-protocol convergence sublayer had been agreed to be added to 802.16m draft. This contribution proposes some clean-up text to clarify the operations of the Multiprotocol CS.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1447 or its latest revision

GroupResolution Decision of Group: Principle

Adopt the proposed text in IEEE C802.16m-10/1447r2

Editor to change all instances of 'Protocol ID' to 'Type ID' in clause 5 only

On page 17, line 55, change 'protocol type' to 'type'

Reason for Group's Decision/Resolution

Group's Notes

Clause 5: MAC CS

<u>Editor's Notes</u> a) done

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D063 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 108 Line 33 Fig/Table# Subclause 16.2.3.5

In the 802.16m #70 meeting (Dallas), "Visited NSP ID" & "Visited NSP Realm" were agreed to be added in AAI_SBC-REQ/RSP messages, but were NOT implemented correctly as the original contribution suggested. This contribution proposes some clean-up text for "Visited NSP ID" & "Visited NSP Realm" in AAI_SBC-REQ/RSP messages.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1329r2 or its latest revision

GroupResolution Decision of Group: Principle

Resolved by comment #D10009

Adopt the text changes in contribution IEEE C802.16m-11/1429r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> 2010-12-18

Comment # D064 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 502 Line 54 Fig/Table# Subclause 16.2.19

This contribution proposes some fixes to DCR-related sections.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1389r1 or its latest revision.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Incomplete remedy

Group's Notes

Clause 16.2.19; MAC DCR mode

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D065 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 497 Line 43 Fig/Table# Subclause 16.2.18.2.1

In the 16m legacy mode operation defined in IEEE 802.16m standard, a 16m base station is attached to a legacy 16e network. In this case, the legacy network considers all the terminals as legacy terminals and hence uses the legacy protocols for various operations such as idle mode, paging etc. In legacy networks based on IEEE 802.16e standard, the paging cycles and paging offsets for idle mode MSs are represented in terms of number of frames. On the other hand, in IEEE 802.16m these parameters are represented in terms of number of super-frames. It may be noted that one super-frame consists of four frames. Duration of each frame in IEEE 802.16e and IEEE 802.16m is 5 ms. Thus, the duration of super-frame = 4 * 5 = 20ms. In legacy mode of operation the network entity responsible for idle mode operation of MSs , e.g., Paging Controller, assign the paging cycle and paging offset that are represented in terms of frames. However, the MS is attached to a base station that uses IEEE 802.16m specifications. Thus, the MS is aware about paging cycle and paging offset to be defined in terms of number of super-frames. Therefore there is a need for mechanisms using which the MS can determine its paging operational parameters, i.e., its paging listening interval in IEEE 802.16m legacy mode operation using the IEEE 802.16e paging parameters that it receives from the BS. This comment provides methods for the above problem.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1354 or its latest revision.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Remedy is already incorporated into the document.

Group's Notes

Clause 16.2.18; MAC Idle Mode

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D066 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 498 Line 58 Fig/Table# Subclause 16.2.18.2.2

In IEEE 802.16m based networks, idle mode MSs are identified using the Deregistration Identifier (DID), their paging cycle and paging offsets. Thus, idle mode MSs that belong to same paging group and have same paging cycle and paging offset have unique DID so that they can be identified uniquely. The DIDs are assigned to idle mode MS by the paging controllers (PCs). One or more PCs manage each paging group. Thus, when two different PCs assign the DIDs to different idle mode MSs of the same paging group, there is a possibility that they assign the same DID to two different MSs. This is because the DID assignment of each PC is independent of the other ones. If both the MS that have the same DID also have the same paging cycle and paging offset, then these MSs have the same identification. This leads to false paging message indication as the paging message for one of these MSs also results in unwanted paging indication. This result in unwanted paging operation and unnecessary signaling overhead. This comment proposes methods to resolve this issue.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1359 or its latest revision.

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

DID has been increased to 18 bits to avoid the problem.

Group's Notes

Clause 16.2.18; MAC Idle Mode

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D067 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 482 Line 14 Fig/Table# Subclause 16.2.17

There are several text inconsistencies in the sleep mode section of D10. This comment proposes cleanup text for Sleep mode section in D10.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1363 or its latest revision.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Remedy is already incorporated into the document.

Group's Notes

Clause 16.2.17; MAC Sleep Mode

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D068 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 503 Line 62 Fig/Table# Subclause 16.2.20

There are several text inconsistencies in the CLC section of D10. This comment proposes cleanup text for CLC section in D10.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1353 or its latest revision.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Incomplete remedy

Group's Notes

Clause 16.2.20; MAC Co-Located Coexistence

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> 2010-12-18

Comment # D069 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 502 Line 57 Fig/Table# Subclause 16.2.19

There are several text inconsistencies in the DCR section of D10. This comment proposes cleanup text for DCR section in D10.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1365 or its latest revision.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Incomplete remedy

Group's Notes

Clause 16.2.19; MAC DCR mode

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D070 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 490 Line 8 Fig/Table# Subclause 16.2.18

There are several text inconsistencies in the Idle section of D10. This comment proposes cleanup text for Idle section in D10.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1366 or its latest revision.

GroupResolution Decision of Group: Principle

accept the text changes proposed in C802.16m-10/1456r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.18; MAC Idle Mode

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> <u>Date:</u> 2010-12-18

Comment # D071 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 171 Line 52 Fig/Table# Subclause 16.2.3.25

Currently there is no negotiation in the AAI-SLP-REQ/RSP message exchange that can be used to decide if FFBCH is kept or deallocated during sleep mode.

Suggested Remedy

Add the following text to Table 702 in page 173 line 51 "<column 1>FFBCH_Operation <column 2> 2 <column 3> 00: keep FFBCH allocation 01: deallocate FFBCH allocation, 10-11: reserved."

GroupResolution Decision of Group: Principle

Adopt the proposed text in C802.16m-10/1464

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SLP-REQ

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D072 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 109 Line 8 Fig/Table# Subclause 16.2.3.5

Need to clarify if these CLC features are applicable during initial network entry. We need to decide if we want to limit CLC usage only during connected state as CLC during initial network entry is hard to implement. Remove the "CLC Request" and "CLC Response" from AAI-SBC-REQ and AAI-SBC-RSP messages.

Suggested Remedy

Delete the following row from Table 682 in page 109 and line 8: "<colimn 1> CLC request" and the subsequent columns of the same row. Delete the following row from Table 683 in page 112 and line 51: "<colimn 1> CLC response" and the subsequent columns of the same row.

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

CLC specification is adequate in the document

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

<u>Editor's Notes</u> b) none needed

Comment by: Shao-Cheng Wang Membership Status: Date: 2010-12-18

Comment # D073 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 110 Line 65 Fig/Table# Subclause 16.2.3.5

The option of carrying out inter-RAT HO related protocol exchange using Inter-RAT HO support using other RAT's message using L2 transfer message with Transfer-Type = 5 (ORAT-MSG) is not negotiated in AAI-SBC-REQ message. This negotiation needs to be included in AAI-SBC-REQ/RSP message.

Suggested Remedy

Add the following text to Table 682 in page 110 line 65 "<column 1> Inter-RAT using other RAT's message using L2 transfer message with Transfer-Type = 5 (ORAT-MSG) is supported <column 2> 1 <column 3> If bit #0=1, the capability ofInter-RAT using other RAT's message using L2 transfer message with Transfer-Type = 5 (ORAT-MSG) is supported., <column 4> present as needed"

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Incomplete remedy

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

<u>Editor's Notes</u> b) none needed

Comment by: Phillip Barber Membership Status: Date: 2010-12-18

Comment # D074 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 374 Line 30 Fig/Table# Subclause 16.2.6.5.2.1

This comment filed on behalf of Peretz Feder

In connection to Dan Gal's recirculation 3 comment C088, and D10 changes introduced to subclause 16.2.6.5.2.1, the following Inter-RAT paragraph needs to be further clarified and enumerate the Inter-RAT mechanisms available for the MAS when attempting to obtain Inter-RAT information

Suggested Remedy

16.2.6.5.2.1 Network topology acquisition

WirelessMAN-OFDMA Advanced systems advertise <ins> can provide </ins> information about other RATs (such as RAT Type, pre-registration supported, RAN information etc.) to assist the AMS with network discovery and selection. WirelessMAN-OFDMA Advanced systems provide a mechanism for AMS to obtain information about other access networks in the vicinity of the AMS from an ABS either by making a query, <ins> using MIH services, </ins> or listening to a system <ins> other RAT </ins> information broadcast.

This mechanism can be used both before and after AMS authentication.

WirelessMAN-OFDMA Advanced system may obtain the other access network information (such a RAT Type, pre-registration supported, RAN information etc.) from an information server.

The ABSs may also indicate the boundary area of the WirelessMAN-OFDMA Advanced network by providing a network boundary indication encapsulated as payload in an AAI-L2-XFER message. Upon receiving the network boundary indication and/or measured signal quality from S-ABS is below an inter-RAT scanning threshold, the AMS <ins>, by using the MIH Information Server, </ins> may query for RAP (Radio Access Point) information of another RAT and/or perform channel measurement on the other RATs.

The information may be restricted to specific access technologies, based on the AMS's current location and preferences.

<u>GroupResolution</u> <u>Decision of Group:</u> Disagree

Reason for Group's Decision/Resolution

Incomplete remedy

Group's Notes

Comment by: Phillip Barber Membership Status: Date: 2010-12-18

Comment # D075 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 377 Line 37 Fig/Table# Subclause 16.2.6.5.2.2.2

This comment filed on behalf of Peretz Feder

Comment C089 was accepted in 802.16-10/052r3 wtih remedy:

"Upon receiving the bandwidth request, ABS could also grant additional UL resources to AMS for <insert> measurement report. AMSs with a dual receiver can perform measurements on other RATs neighbor cells without tuning away from the AAI network.

In order to assist the AAI ABS, the AMS shall inform the system of its gap-related capabilities. This capability needs to be transferred along with other AMS capabilities. The AMS needs to indicate if it has a dual receiver. In cases that the measurement gaps are not required, the AAI ABS <insert> can </insert> request measurements on cells of other RATs without the need to configure measurement gaps. No DL gap patterns will be required for AMSs which are capable of simultaneous reception on the involved frequency bands. No UL gap patterns will be required for AMSs which are....."

However it appears that there was an editorial error during the application of this remedy. This comment is to correct that Editorial application error.

The Editor changed the word 'request' to 'configure' though that was not part of the approved remedy.

Suggested Remedy

The AMS needs to indicate if it has a dual receiver. In cases that the measurement gaps are not required, the AAI ABS can configure <\del> <ins> request </ins> measurements on cells of other RATs without the need to configure measurement gaps. No DL gap patterns will be required for AMSs which are capable of simultaneous reception on the involved frequency bands. No UL gap patterns will be required for AMSs which are capable of simultaneous transmission in one access and conducting measurements on another access.

GroupResolution Decision of Group: Agree

On page 377, line 37

The AMS needs to indicate if it has a dual receiver. In cases that the measurement gaps are not required, the AAI ABS can configure <\del> <ins> request </ins> measurements on cells of other RATs without the need to configure measurement gaps. No DL gap patterns will be required for AMSs which are capable of simultaneous reception on the involved frequency bands. No UL gap patterns will be required for AMSs which are capable of simultaneous transmission in one access and conducting measurements on another access.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.6; MAC HO procedures

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

2011/11/27 IEEE 802.16-10/0061r4

Comment by: Roshni Srinivasan Membership Status: Date: 2010-12-18

Comment # D076 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 7 Fig/Table# Subclause Annex U

Include radio specifications for Annexes T & U

Suggested Remedy

Adopt the proposed resolution in C802.16m-10/1446 or its latest revision

GroupResolution Decision of Group: Agree

Adopt the proposed resolution in C802.16m-10/1446.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex T; Other Annex

<u>Comment by:</u> Ping-Heng Kuo <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10001 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 9 Line 52 Fig/Table# Subclause 4

The definition of 'ISL' is missing.

Suggested Remedy

Add the following line in abbreviations and acronyms list:

"ISL Interference Sensitivity Level"

GroupResolution Decision of Group: Agree

Add the following line in abbreviations and acronyms list:

"ISL Interference Sensitivity Level"

Reason for Group's Decision/Resolution

Group's Notes

Clause 4; General

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10002 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 329 Line 14 Fig/Table# Subclause 16.2.5.2.3.2

to clarify the meaing of the sentence some details are suggested.

Suggested Remedy

Only <ins> MAC control message of </ins> CMAC_PN that arrives in order <ins> at receiver side </ins> can be accepted. MAC control messages with out-of-order CMAC_PN shall be discarded.

GroupResolution Decision of Group: Agree

Only <ins> MAC control message of </ins> CMAC_PN that arrives in order <ins> at receiver side </ins> can be accepted. MAC control messages with out-of-order CMAC_PN shall be discarded.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.5; MAC Security

Editor's Notes Editor's Actions a) done

Comment by: Chia-Lung Tsai Membership Status: Date: 2010-12-16

Comment # D10003 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 947 Line 36 Fig/Table# 607 Subclause 16.6.3.2.2

Some typos in Section 16.6.3 of IEEE P802.16m/D10 have been identified. A-preamble shall not be allocated in the F3. In this contribution, we provide modifications to correct typos.

Suggested Remedy

Please adopt the contribution IEEE C802.16m-10/1405 to correct the Figure.

GroupResolution Decision of Group: Principle

Resolved by comment #D10097.

Resolution:

Remove SA-preamble in figure 605 and 607 in F3 frame. <Note figure 606 is treated in a seperate comment #10101>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Editor's Notes b) none needed

Comment b	<u>y:</u> Ale	ssandro Triglia			Membership Sta	<u>itus:</u> Nonmembe	er	<u>Date:</u> 2010-12-18
Comment #	10004		Document un	nder Review: P	802.16m/D10	ļ	Ballot ID: sb_16	5m
Comment	Type Technical	Part of Dis	Satisfied	<u>Page</u> 82	Line 32	Fig/Table#	<u>Subclause</u>	16.2.3
We recommend	I that the ASN.	1 specification in	n Annex R be	e made norm	ative.			
Suggested Remedy	<u>'</u>							
1) In subclause	16.2.3, change	e the sentence:						
"Table 677 lists	the MAC conti	rol messages that	at shall be de	efined in the	ASN.1 format a	as shown in An	nex R"	
to:								
	aligned PER er	ncoding of a vali						the air interface nex. MAC control
2) At the beginr (lines 11-14) to:	•	R, change the wo	ord "informat	ive" in the he	eading (line 8) t	to "normative" a	and change the	initial paragraph
		ntrol messages s for transmissio			he Unaligned v	ariant of the Pa	acked Encoding	g Rules shall be used
<u>GroupResolution</u>		<u>Decision o</u>	of Group: Princ	ciple				
1) In subclause	16.2.3, change	e the sentence:						
"Table 677 lists	the MAC contr	rol messages tha	at shall be de	efined in the	ASN.1 format a	as shown in An	nex R"	

to:

"MAC control messages are specified in subclause 16.2.3 and Annex R using ASN.1 notation. MAC control messages are listed in Table 677."

2) At the beginning of Annex R, change the word "informative" in the heading (line 8) to "normative" and change the initial paragraph (lines 11-14) to:

This Appendix defines MAC control messages using ASN.1 notation. The Packed Encoding Rules (PER) with byte unaligned option shall be used to produce compact transfer syntax for MAC control message to be transmitted over the air interface efficiently <\del>.

3) pp. 984 line 31 make the following change: Annex R.2 MAC Control Message Definitions <ins> (Normative) <\ins>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; ASN.1

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10005 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 88 Line 38 Fig/Table# 678 Subclause 16.2.3.1

If we see the MAC control message format table, some attributes' condition columns are not filled so that it is not easy to understand whether those attributes are optional or mandatory. Hence I suggest filling all condition columns for each attributes with their corresponding condition.

In the suggested proposal network entry or security related MAC control messages such as AAI-RNG-REQ/RSP/CFM/ACK, AAI-SBC-REQ/RSP, AAI-REG-REQ/RSP and AAI-PKM-REQ/RSP are handled.

Suggested Remedy

Adopt the contribution IEEE C802.16m-11/1428 or its later revision.

GroupResolution Decision of Group: Principle

Adopt the text proposed in contribution IEEE C802.16m-10/1428r2 except remedy 5

also modify the text as

[Add the following texts on Page 82, Line 41:]

In the AAI message Field Description tables (Tables 678 - 757), if a field's entry in the Condition column is left blank, then:

- 1) If the field occurs inside an if-statement or for-statement, the condition for including the field in the MAC control message is determined by the enclosing if-statements or for-statements
 - 2) Otherwise, the field shall always be present in the MAC control message.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; RNG-REQ

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Hyunjeong Kang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10006 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 103 Line 6 Fig/Table# 679 Subclause 16.2.3.2

According to the resolution of Dallas meeting, SFID to be assigned during zone switching operation is newly included in the AAI-RNG-RSP message. But the corresponding ASN.1 code is missing in 16m/D10.

Suggested Remedy

Discuss and adopt a contribution IEEE 802.16m-10/1441 or later version

GroupResolution Decision of Group: Principle

Resolved by comment #D059.

Resolution:

adopt the text proposed in contribution IEEE 802.16m-10/1454r4

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; RNG-RSP; ASN.1

<u>Editor's Notes</u> b) none needed

Comment	t by:		He	ejeong Cho			Membership S	tatus: Mem	ber		Date: ?
Comment #	D1000)7			<u>Document</u>	under Review:	P802.16m/D10)	<u>Ballot</u>	ID: sb_16	m
However, it w AAI_RNG-AC following two 1. Response	10025 vas refl CK mes purpos of ded ion of I	in co ected ssage ses: icated PHY-I	mmen l at the is bro d rangi evel co	tary databa wrong pos adcasted in ng preamb orrections t	ase 80216-10_0 sition (line 43 in n response to the le code(s);	0052r3 is ac page 104). he detected	ranging preamb	ession #70 flected at thole code(s)	e line 36 i or is trans	mitted to s	16.2.3.3 6. That's because pecific user for the MAC messages.
Suggested Remo	<u>edy</u>										
[Remedy #1:	: Adopt	t the f	ollowir	ng modifica	tion in page 10	4, line 43, s	ection 16.2.3.3]				
Ranging Stat	us	2 			ther ranging pro e limits by ABS		e or UL bu	ırst is	received	within	
[Remedy #2 :	: Adopt	t the f	ollowir	ng modifica	tion in page 10	6, line 36, s	ection 16.2.3.3]				
Ranging Stat	us	2			ther ranging pro e limits by ABS		e <ins><u>or UL bu</u></ins>	<u>ırst</u> is	received	within	
GroupResolution	<u>n</u>			<u>Decis</u>	ion of Group: Ag	ree					
[Remedy #1 :	: Adopt	t the f	ollowir	ng modifica	tion in page 10	4, line 43, s	ection 16.2.3.3]				
Ranging Stat	us	2 	Ind		ther ranging pro e limits by ABS		e or UL bu	ırst is	received	within	
[Remedy #2 :	: Adopt	t the f	ollowir	ng modifica	tion in page 10	6, line 36, s	ection 16.2.3.3]				

Indicate whether ranging preamble code <ins>or UL burst</ins> is received within

Ranging Status | 2 |

6	acceptable l	imits	by .	ABS
---	--------------	-------	------	-----

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; RNG ACK

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Yeongmoon Son <u>Membership Status:</u> Member <u>Date:</u> 2010-12-19

Comment # D10008 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 109 Line 8 Fig/Table# T682 Subclause 16.2.3.5

An AMS negotiates the following CLC parameters with An ABS during not SBC transaction but REG trasaction

- Co-located coexistence capability support in AAI-REG-REQ
- CLC Limit parameters in AAI-REG-RSP

It implies that..

- the AMS cannot know CLC limit of the ABS yet.
- the ABS cannot know in SBC transaction phase which CLC the AMS supports.

Therefore, some CLC parameters negotiation in SBC does not make sense at all. We need to remove them from AAI-SBC-REQ/RSP.

Suggested Remedy

Change #1: [Remove 'CLC Request' parameter in AAI-SBC-REQ on Table 682 (page 109, line 8)] Change #2: [Remove 'CLC Response' parameter in AAI-SBC-REQ on Table 683 (page 112, line 51)]

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

CLC specification is adequate in the document

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

Editor's Notes b) none needed

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10009 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 111 Line 33 Fig/Table# Subclause 16.2.3.5

Some suggested remedies which were accepted in the 09NOV session #70 are wrongly incorporated. I focus on AAI-SBC-REQ and AAI-REG-REQ messages in my suggested remedy.

- For the visit NSP ID delivery by AAI-SBC-REQ, the position of the attribute 'visit NSP ID' is apparently wrong.
- For Fast IP allocation feature in AAI-REG-REQ, the attribute 'Requested-Host-Configurations IE' is used to request for additional configuration if the AMS wants. So it can not be a mandatory item. Its description is not apparently aligned with 'Host-Configuration-Capability-Indicator IE'.

Suggested Remedy

Adopt the contribution IEEE C802.16m-11/1429 or its later revision.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Adopt the text changes in contribution IEEE C802.16m-11/1429r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

<u>Editor's Notes</u> a) done

Comment by: YoungKyo Baek Membership Status: Member Date: 2010-12-17

Comment # D10010 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 120 Line 52 Fig/Table# 685 Subclause 16.2.3.8

Comment C10031 was accepted in the 09NOV session #70 but some resolutions are wrongly incorporated so that additional cleanup is required.

that is, the attribute 'Requested-Host-Configurations IE' in AAI-REG-REQ is used to request for additional configuration if the AMS wants. So it can not be a mandatory attribute in AAI-REG-REQ message. Its description is not apparently aligned with 'Host-Configuration-Capability-Indicator IE', either.

Suggested Remedy

Adopt contribution C802.16m-10/xxxxREG-REQmessage or later version

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Resolved by comment #D10009

Adopt the text changes in contribution IEEE C802.16m-11/1429r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; REG-REQ

<u>Editor's Notes</u> b) none needed

Comment by: Jaehyuk Jang Membership Status: Member Date: 2010-12-16

Comment # D10011 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 129 Line 39 Fig/Table# Tabl Subclause 16.2.3.12

This contribution provides text cleanup on handover messages (no new feature included).

Here is the list of changes in the contribution.

- AAI-HO-CMD
- Legacy BS 'Preamble Index' to support HO to legacy target BS added
- 'FA index' is replaced with 'Center Frequency' which is used in the AAI-Global-Cfg message, and 'Center Frequency' can be applied both for legacy and 16m BSs.
- AAI-NBR-ADV
- 'A-PREAMBLE transmit power' removed (no use in the specification)
- 'R1 BS Physical Carrier Index' is changed to 'R1 BS Center Frequency'
- 'IDCell range start/end' parameters should be placed IN the for-loop.
- AAI-SCN-REQ
- Legacy BS information to scan legacy BSs added
- The size of SA Preamble Index is changed from 6 to 10
- 'Center Frequency' for SA-Preamble index scanning part added
- AAI-SCN-RSP
- 'N Recommended ABS Full indication' is changed to 'N Recommended ABS Full'
- Condition column corrected (seems typo): 'only this message' is changed to 'if this message'
- Legacy BS information to scan legacy BSs added
- SA-Preamble index scanning part added (seems to be missed; copied from AAI-SCN-REQ)
- The location of 'end of if(Scan Duration > 0)' corrected
- AAI-SCN-REP
- Legacy BS information to scan legacy BSs added
- 'Center Frequency Index' for SA-Preamble index scanning part added

Suggested Remedy

Adopt the proposed text in C802.16m-10/1417 or its later version.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

<adopt the proposed text in C802.16m-10/1417r7.doc except replace remedy #15 with the following:> CenterFreq ::= INTEGER (0..4294967295) -- Unit = Hz

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; HO-CMD

Editor's Notes Editor's Actions a) done

Comment by: Giwon Park Membership Status: Member Date: 2010-12-17

Comment # D10012 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 97 Line 51 Fig/Table# 679 Subclause 16.2.3.2

The condition of paging parameter update is not correctly explained in AAI-RNG-RSP message.

Thus, clarification is required.

Suggested Remedy

Adopt the following modification

[page 131, line 51]

Shall be included when the Paging parameters are Paging Group ID is changed.

[page 131, line 58]

Shall be included when the Paging parameters are Paging Offset is changed.

[page 132, line 05]

Shall be included when the new Paging parameters are Paging Cycle is assigned.

[page 132, line 09]

Shall be included when the new Paging parameters are Paging Group ID is assigned.

[page 132, line 13]

Shall be included when the new Paging parameters are Paging Offset is assigned.

GroupResolution

Decision of Group: Principle

[page 97, line 51]

Shall be included when the Paging parameters are Paging Group ID is changed.

[page 97, line 58]

Shall be included when the Paging parameters are Paging Offset is changed.

[page 98, line 05]

Shall be included when the new Paging parameters are Paging Cycle is assigned.

[page 98, line 09]

Shall be included when the new Paging parameters are Paging Group ID is assigned.

[page 98, line 13]

Shall be included when the new Paging parameters are Paging Offset is assigned.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; RNG-RSP

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Jaehyuk Jang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10013 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 133 Line 10 Fig/Table# Tabl Subclause 16.2.3.12

Not satisfied with the resolution to the comment #10093 in commentary database 80216-10 0052r4.

Based on D10, there are two ways to obtain information of neighbor legacy BSs

- 1. To obtain the DCD/UCD messages from LZone of the serving ABS
- 2. To obtain essential information (i.e., preamble index, FA index) from the AAI-NBR-ADV message.

As I commented in the previous session, the 1st option requires for an AMS to perform EBB operation to receive the information from LZone. (The NBR-ADV message in LZone may be transmitted when an AMS is not in unavailable interval. So, the AMS should have an EBB capability to support the 1st option in any case)

If an AMS has no capability to perform EBB operation, the AMS can only use the 2nd option. In the 2nd option, the AMS needs to wait until receiving DCD/UCD message in the target legacy BS before performing network reentry to the target legacy BS, and the handover latency cannot meet the SRD (5.1 Legacy Support).

To solve the problem, DCD/UCD information should be optionally included in the AAI-HO-CMD message. In typical case, the overhead is 84 bytes (24 for DCD, 60 for UCD) per BS, and normally one or a few BS will be included in the HO-CMD message.

Suggested Remedy

Adopt the proposed text in C802.16m-10/1418 or its later version.

<u>GroupResolution</u> <u>Decision of Group:</u> Disagree

Reason for Group's Decision/Resolution

The proposal requires too much overhead in the critical HO control messaging.

vote: Adopt the proposed text in C802.16m-10/1418r3

In favor: 7 Against: 3 Abstain: 1 Not approved

also discussed Adopt the proposed text in C802.16m-10/1463r1; no action taken on this contribution

Group's Notes

Clause 16.2.3; MAC Control Messages; NBR-ADV

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Joey Chou <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10014 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 134 Line 5 Fig/Table# Subclause 16.2.3.

Clarift and correct errors in AAI-NBR-ADV and AAI-SCN-XXX messages

Suggested Remedy

Adopt contribution C80216m-10_1443.doc or later version

GroupResolution Decision of Group: Principle

Adopt the text changes proposed in Remedy 1 of contribution C802.16m-10/1443

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; NBR-ADV

<u>Editor's Notes</u> <u>a) done</u>

Youngbin Chang Membership Status: Member Comment by: **Date:** 2010-12-17 Comment # D10015 Ballot ID: sb_16m Document under Review: P802.16m/D10 Type Technical Part of Dis Satisfied Page 135 Line 32 Fig/Table# 690 Subclause 16.2.3.13 Comment Relay cell type is only for TTR relay. **Suggested Remedy** Cell type in this message 0b000: macro 0b001: micro 0b010: macro hotzone 0b011: femto 0b100: TTR relay 0b101: R1 BS or LZone of ABS 0b110-0b111: reserved **GroupResolution Decision of Group:** Principle Cell type in this message 0b000: macro 0b001: micro 0b010: macro hotzone 0b011: femto 0b100: TTR relay 0b101: R1 BS or LZone of ABS 0b110-0b111: reserved make the following change to the ASN.1: page 1045, line 8 AAI-NBR-ADV ::= SEQUENCE { ENUMERATED { cellType macro, micro. macro-hotzone, femto.

 relay,

```
<ins> ttrRelay, </ins>
r1-lzone,
spare2,
spare1
},
```

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; AAI-SCD

Editor's Notes

Editor's Actions a) done

<u>Comment by:</u> Jeongho Park <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10016 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 108 Line 15 Fig/Table# 682 Subclause 16.2.3.5

[Clarification]

This comment is trying to correct and add 'wrong/missing items for capacity negotiation'.

Capability negotiation is very necessary because inter-operability could fail without knowledge of capability between ABS and AMS. In this sense, every optional feature in SPEC should be included in negotiation procedure so that ABS can make AMS operate well and prevent situations of AMS's from mal-function.

For an example of insufficient description, current D10 has 'UL sounding' field for negotiation but does not differentiate the methods for multiplexing (there are two kinds of methods – CDM based and FDM based). If ABS commands to report CDM based sounding to AMS who is not capable of sending CDM sounding sequence, the operation regarding sounding would be corrupted. (Please be noted that capacity negotiation in IEEE spec has nothing to do with WiMAX Forum's profile results.)

And for another example, there is not any negotiation field about open loop region even though it is not 'mandatory' feature. There is no way for ABS to figure out the ability of AMS to enjoy this feature. Therefore, ABS might not use this feature at all. We need to newly add features which are absent in current negotiation procedure.

For some optional features, however, ABS can intrinsically recognize the ability of AMS, for example during initial network entry, or other procedure defined like AAI-MC-REQ/RSP.

During initial network netry, ABS can figure out whether or not AMS can support the following features: Tone dropping, legacy support on UL TDM/FDM, Long TTG frame configuration, Async. Ranging format. Also, ABS can figure out the following features during AAI-MC-REQ/RSP procedure: Use of guard subcarrier.

Consequently, in this contribution, we are trying to clarify the following features

- Sounding sequence multiplexing : CDM / FDM
- OL Region type 0, 1, 2
- Long-term/Short-term reporting in MFM
- DL/UL pilot pattern for MU-MIMO

As for the last item of 'DL/UL pilot pattern for MU MIMO operation', it is necessary to put this because ABS can assign 3rd or/and 4th stream index (SI) to AMS who has only 2Tx antennas. That is to say, the maximum stream number of UL SU-MIMO cannot cover the pilot pattern and this item needs to be included in capacity negotiation procedure.

Adopt the proposed remedies of contribution C80216m-10/1411 or its latest version.

GroupResolution Decision of Group: Principle

Adopt the proposed remedies of contribution C80216m-10/1411r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SBC-REQ

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10017 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 145 Fig/Table# 692 Subclause 16.2.3.15 Line 47 Comment Inconsistency between AAI-SCN-RSP message table and ASN.1 code AAI-SCN-RSP message table has the end bracket of if (scan duration) at Page 145, Line 47 }//end of if(Scan Duration > 0) The recommendABSIndexList, recommendSABSCarriers, and scanningCarrierIndex are not included in if(Scan Duration > 0). But, the ASB.1 code below shows recommendABSFullList, recommendABSIndexList, recommendSABSCarriers, and scanningCarrierIndex are included in if(Scan Duration > 0) ScanInfo ::= SEQUENCE { scanDuration INTEGER (1..255), startSuperFrame SuperframeNumberLSB, startFrame INTEGER (0..3), interleavingInterval INTEGER (0..255), scanIteration INTEGER (0..63), recommendABSFullList SEQUENCE (SIZE (0..63)) OF RecommendABSFullInfo, recommendABSIndexList SEQUENCE (SIZE (0..63)) OF RecommendABSIndexInfo. recommendSABSCarriers SEQUENCE (SIZE (0..63)) OF PhyCarrierIndex, scanningCarrierIndex PhyCarrierIndex OPTIONAL **Suggested Remedy** Fix the inconsistency. **GroupResolution Decision of Group: Principle** <resolved by comment #60> Adopt text proposal in C802.16m-10/1453r5.doc. Reason for Group's Decision/Resolution **Group's Notes**

Clause 16.2.3; MAC Control Messages; SCN-RSP

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10018 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 148 Line 40 Fig/Table# 693 Subclause 16.2.3.16 Comment The bracket is in the wrong place, since S-ABS RTD should be inside For(i=0; i<N-Carriers-SABS; i++) { **Suggested Remedy** Change as the following S-ABS RTD 8 The S-ABS RTD parameter indicates the round trip delay (RTD) measured Present if by the AMS from the S-ABS. RTD can be given by the latest time AMS is asked advance taken by MS. The value shall be interpreted as an unsigned byte to report RTD with units of 1/Fs.

Reason for Group's Decision/Resolution

RTD only measurable for carriers active to the AMS. RTD should not be different among carriers that belong to the same ABS. There's no need to report RTD for all the carriers that belong the same ABS.

Decision of Group: Disagree

Group's Notes

GroupResolution

Clause 16.2.3; MAC Control Messages; SCN-REP

Comment by: Hyunjeong Kang Membership Status: Member Date: 2010-12-17

Comment # D10019 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 162 Line 7 Fig/Table# 698 Subclause 16.2.3.21

A condition field in each MAC control message indicates whether a corresponding parameter is mandatory or optional or when the parameter, if it is optional, presents in the message. However the condition fields for some parameters are missing in MAC control messages. This comment is to clarify the table of Idle mode MAC control messages.

Suggested Remedy

Discuss and adopt a contribution IEEE 802.16m-10/1440 or later version

GroupResolution Decision of Group: Principle

adopt the text proposed in contribution IEEE 802.16m-10/1440r3

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DREG-REQ

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Hyunjeong Kang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10020 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 166 Line 25 Fig/Table# 699 Subclause 16.2.3.22

The entity who handles AAI-DREG-RSP message is AMS not MS.

Suggested Remedy

- (1) Page 166, line 25: the AMS's idle mode
- (2) Page 166, line 34: the AMS in idle mode
- (3) Page 169, line 35: the AMS to be paged (Deregistration Identifier and
- (4) Page 169, line 39: used to identify the AMS to be paged

GroupResolution Decision of Group: Agree

- (1) Page 166, line 25: the AMS's idle mode
- (2) Page 166, line 34: the AMS in idle mode
- (3) Page 169, line 35: the AMS to be paged (Deregistration Identifier and
- (4) Page 169, line 39: used to identify the AMS to be paged

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DREG RSP

<u>Editor's Notes</u> a) done

Date: 2010-12-17

Joey Chou Membership Status: Member Comment by: Ballot ID: sb_16m Comment # D10021 Document under Review: P802.16m/D10 Type Technical Part of Dis Satisfied Page 169 Line 27 Fig/Table# 700 Subclause 16.2.3.23 Comment Num AMSs is not needed Indicate the number of paged AMSs in a Num AMSs 5 corresponding paging group 1..32 **Suggested Remedy** Change as the following Num AMSs Indicate the number of paged AMSs in a corresponding paging group 1..32 Indicate the number of paged AMSs in a For (j=0; j<Num AMSs; corresponding paging group 1..32 j++) { **GroupResolution Decision of Group:** Principle Resolved by comment #D10019. Resolution: adopt the text proposed in contribution IEEE 802.16m-10/1440r3 Reason for Group's Decision/Resolution **Group's Notes** Clause 16.2.3; MAC Control Messages; PAG-ADV

Editor's Actions b) none needed

Editor's Notes

<u>Comment by:</u> Hyunjeong Kang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10022 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 170 Line 38 Fig/Table# 701 Subclause 16.2.3.24

The paging carrier indication bitmap in PGID-Info message is not clear to determine a value N which is the number of paging carrier.

Thus this comment is to clarify the description of paging carrier indication bitmap.

Suggested Remedy

Discuss and adopt a contribution IEEE 802.16m-10/1437 or later version

GroupResolution Decision of Group: Principle

adopt the text changes in contribution IEEE 802.16m-10/1437r1 except remedy 3

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; PGID-Info

Editor's Notes Editor's Actions a) done

Comment by: Joey Chou Membership Status: Member Date: 2010-12-17

Comment # D10023 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 170 Line 41 Fig/Table# 701 Subclause 16.2.3.24

The conditions of multiple carrier operation support and if all PGs have same paging indication bitmap or not are very complicated.

Also, Num PGIDs is not needed

Num_PGIDs 2 Indicate the number of PGID included in PGID-Info message 1..4

This contribution proposes changes to message table and ASN.1 code to clarify AAI-PGID-INFO conditions.

Suggested Remedy

Adopt contribution C80216m-10_1409.doc or later version

GroupResolution Decision of Group: Principle

Adopt the text changes proposed in contribution C80216m-10 1409r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; PGID-Info

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Yeongmoon Son <u>Membership Status:</u> Member <u>Date:</u> 2010-12-19

Comment # D10024 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 181 Line 28 Fig/Table# T704 Subclause 16.2.3.27

SLPID update is described below table 704 and ASN.1 code. However, SLPID update is missing in the table 704. It should be included in the table 704.

Suggested Remedy

[Discuss and adopt C80216m-10/1455 or later version]

GroupResolution Decision of Group: Principle

adopt the text proposed in contribution C80216m-10/1455r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; TRF-IND

Editor's Notes Editor's Actions a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10025 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 182 Line 20 Subclause 16.2.3.27 Fig/Table# Comment SLPID Update is described in the text in section 16.2.3.27, and in the ASN.1 code, but not in the Table 704□—AAI-TRF-IND **Suggested Remedy** Add SLPID Update to the table at page 181, line 29 Field: SLPID Update Size: Variable Value/Description: The SLPID Update provides a shorthand method for changing the SLPID used by the AMS in sleep mode operation. The SLPID Update specifies a new SLPID that replaces an old SLPID. The SLPID Update may contain multiple pairs of Old and New SLPID values for the AMSs. Those SLPID update will be applied from next Listening Window. Condition: present if needed **GroupResolution Decision of Group:** Principle Resolved by comment #D10024. Resolution: adopt the text proposed in contribution C80216m-10/1455r2 Reason for Group's Decision/Resolution **Group's Notes**

Clause 16.2.3; MAC Control Messages; TRF-IND

Editor's Notes <u>Editor's Actions</u> b) none needed

2011/11/27 IEEE 802.16-10/0061r4

Comment by: Joey Chou Membership Status: Member Date: 2010-12-17

Comment # D10026 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 183 Line 55 Fig/Table# 705 Subclause 16.2.3.28

Control Message Type is not needed

Suggested Remedy

Delete the Control Message Type row

Control Message Type 8 This indicates type of control message s AAI-TRF-IND-REQ message

GroupResolution Decision of Group: Principle

Delete the Control Message Type row

Control Message Type 8 This indicates type of control message
i s AAI-TRF-IND-REQ message

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; TRF-IND-REQ

Date: 2010-12-16

Comment by: Jaehyuk Jang Membership Status: Member Comment # D10027 **Document under Review:** P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 184 Line 40 Fig/Table# Tabl <u>Subclause</u> 16.2.3.30 Comment Using the AAI-L2-XFER message, ORAT messages can be transmitted both in downlink (DL) and uplink (UL), but 'UL' part is missing in the AAI-L2-XFER message. **Suggested Remedy** [Update the 'Value/Description' column for 'L2-Xfer Type' field in Table 707 as follows:] Transfer-Type = 5; ORAT-MSG (DL<ins>/UL</ins>) **GroupResolution Decision of Group:** Agree [Update the 'Value/Description' column for 'L2-Xfer Type' field in Table 707 as follows:] Transfer-Type = 5; ORAT-MSG (DL<ins>/<u>UL</u></ins>) Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; L2-XFER

<u>Comment by:</u> Eunkyung Kim <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10028 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 191 Line 38 Fig/Table# Subclause 16.2.3.31

MSI length supporting E-MBS is 4, 8, 16, and 32 superframes length.

Thus, for consistency, all parameter related to MSI in following part should be refixed correctly.

- AAI SCD
- AAI DSA-REQ/RSP
- AAI E-MBS-RSP
- Annex R.2 MAC Control Message Definitions

Suggested Remedy

Please adopt the text proposal in IEEE C802.16m-10/1424 or its lastest revision.

GroupResolution Decision of Group: Principle

adopt the text proposal in IEEE C802.16m-10/1424r4

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; SCD

<u>Editor's Notes</u> a) done

Comment by: Jin Lee Membership Status: Member Date: ?

Comment # D10029 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 208 Line 23 Fig/Table# 720 Subclause 16.2.3.43

I disagree with the resolution of comment #10205L in 80216-10_0052r3. The comment shall be accepted for consistency of the draft. In IEEE 802.16-2009, MIHF related codes in PKM message are defined to support other RAT discovery using IEEE 802.21 MIHF protocol. In 16m/D9, the operation of active other RAT discovery with MIHF is also defined using AAI-PKM-REQ/RSP message, but MIH related codes are not defined in AAI-PKM message table. This inconsistency should be fixed.

Suggested Remedy

Discuss and adopt C80216m-10 1415.docx or its latest version.

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

The benifits of MIH operation during network entry is not clear.

Group's Notes

Clause 16.2.3; MAC Control Messages; PKM-REQ

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10030 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 213 Line 20 Fig/Table# Subclause 16.2.3.43.3

replace NONCE_MS and NONCE_BS with NONCE_AMS and NONCE_ABS.

Suggested Remedy

[remedy#1 : line20, page 213]

It identifies an AK to be used, and includes a random number challenge (i.e., NONCE_BS <ins>NONCE_ABS</ins>) to be returned by the AMS in the PKMv3 Key_Agreement-MSG#2 message.

[remedy#2 : line14, page 323]

□• AMS generates random NONCE_MS <ins>NONCE_AMS</ins> on calculating AMSID*. AMS derives new AK, and its CMAC key and TEK based on the AMSID*.

GroupResolution Decision of Group: Agree

[remedy#1 : line20, page 213]

It identifies an AK to be used, and includes a random number challenge (i.e., NONCE_BS <ins>NONCE_ABS</ins>) to be returned by the AMS in the PKMv3 Key_Agreement-MSG#2 message.

[remedy#2 : line14, page 323]

□ • AMS generates random NONCE_MS <ins>NONCE_AMS</ins> on calculating AMSID*. AMS derives new AK, and its CMAC key and TEK based on the AMSID*.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; PKM-REQ

<u>Editor's Notes</u> a) done

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10031 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 216 Line 40 Fig/Table# Subclause 16.2.3.43.7

typo

Suggested Remedy

 1

GroupResolution Decision of Group: Agree

 1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; PKM-REQ

Comment by: Hyunjeong Kang Membership Status: Member Date: 2010-12-17

Comment # D10032 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 222 Line 34 Fig/Table# 734 Subclause 16.2.3.47.1

A condition field in each MAC control message indicates whether a corresponding parameter is mandatory or optional or when the parameter, if it is optional, presents in the message. However the condition fields for some parameters are missing in MAC control messages. This comment is to clarify the table and ASN.1 of AAI-DSx messages.

Suggested Remedy

Discuss and adopt a contribution IEEE 802.16m-10/1438 or later version

GroupResolution Decision of Group: Principle

adopt the text changes proposed in contribution IEEE 802.16m-10/1438r3

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

<u>Comment by:</u> Jeongho Park <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10033 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 193 Line 57 Fig/Table# Subclause 16.2.3.32

[Clarification]

16m power control does not use terminology of 'open loop' for UL power control to avoid confusion (because it has been used in '16e')

Suggested Remedy

Remedy 1:

Change line 57 in page 227(193) as follows:

"For the open-loop power control, UL noise and interference level shall be broadcast to AMSs in the given"

Remedy 2:

Change line 52 in page 933(899) as follows:

"preamble for UL OL power control. From a succession of these measurements, the AMS shall derive and"

GroupResolution Decision of Group: Agree

Remedy 1:

Change line 57 in page 227(193) as follows:

"For the open-loop power control, UL noise and interference level shall be broadcast to AMSs in the given"

Remedy 2:

Change line 52 in page 933(899) as follows:

"preamble for UL OL power control. From a succession of these measurements, the AMS shall derive and"

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; ULPC-NI

<u>Editor's Notes</u> a) done

<u>Comment by:</u> Jeongki Kim <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10034 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 288 Line 35 Fig/Table# Subclause 16.2.3.59

Some texts for E-MBS service need to be clarified. For example, an ABS will not allocate the carrier switching start time when an AMS stops carrier switching mode.

Suggested Remedy

Adopt the Text proposals in C802.16m-10/1422 or the latest revision of the contribution.

GroupResolution Decision of Group: Principle

Adopt the Text proposals in C802.16m-10/1422r1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; E-MBS-REP

Comment by: Joey Chou Membership Status: Member Date: 2010-12-17

Comment # D10035 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 231 Line 25 Fig/Table# 734 Subclause 16.2.3.47.1

The following parameters are in the AAI-DSA-REQ table, but not in the ASN.1 code

inner source IP inner destination IP inner protocol field inner TOS (Type of Service) inner IPv6 Flow Label

These attributes should be optional.

Suggested Remedy

Make the following changes

1. Adopt contribution C80216m-10_1340.doc or later version for missing ASN.1 code

2.Add "Present as needed" in the conditions column for the following attributes in Table 734 (AAI-DSA-REQ)

inner source IP

inner destination IP

inner protocol field

inner TOS (Type of Service)

inner IPv6 Flow Label

3.Add "Present as needed" in the conditions column for the following attributes in Table 737 (AAI-DSC-REQ)

inner source IP

inner destination IP

inner protocol field

inner TOS (Type of Service)

inner IPv6 Flow Label

GroupResolution Decision of Group: Principle

Adopt the text changes proposed in contribution C80216m-10_1340r1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

Editor's Notes Editor's Actions a) done

Implemented as part of the ASN.1 code alignment.

Comment by: Jeongki Kim Membership Status: Member Date: 2010-12-17

Comment # D10036 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 233 Line 23 Fig/Table# 734 Subclause 16.2.3.47

The "Carrier Switching Mode" field indicates the carrier switching method of an AMS.

The related descriptions in DSx messages need to be clarified

Suggested Remedy

[Remedy #1: Modify the related texts in Section 16.2.3.47.1 as follows, on page 221, line 53] — Carrier Switching Mode: Indicates the carrier switching mode based on between unicast available interval and <ins>E-MBS connection</ins>available interval report.

[Remedy #2: Modify the related texts in table 734 as follows, on page 233, line 23]

0b0: carrier switching <ins>method</ins> based on Unicast Available Interval in the AAI-DSA

message

0b1: carrier switching <ins>method</ins>parameters using AAI-E-MBS-REP<ins>/RSP</ins> message

[Remedy #3: Modify the related texts in Section 16.2.3.47.2 as follows, on page 239, line 29] — Carrier Switching Mode: Indicates the carrier switching mode based on between unicast available interval and <ins>E-MBS connection</ins>available interval report.

[Remedy #4: Modify the related texts in table 735 as follows, on page 240, line 55]

0b0: carrier switching <ins>method</ins> based on Unicast Available Interval in the AAI-DSA message

0b1: carrier switching <ins>method</ins>parameters using AAI-E-MBS-REP<ins>/RSP</ins> message

[Remedy #5: Modify the related texts in Section 16.2.3.47.4 as follows, on page 245, line 7] — Carrier Switching Mode: Indicates the carrier switching mode based on between unicast available interval and <ins>E-MBS connection</ins>available interval report.

[Remedy #6: Modify the related texts in table 737 as follows, on page 252, line 29]

0b0: carrier switching <ins>method</ins> based on Unicast Available Interval in the AAI-DSC

message

0b1: carrier switching <ins>method</ins>parameters using AAI-E-MBS-REP<ins>/RSP</ins> message

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Carrier Switching Mode: Indicates <ins> if </ins> the carrier switching mode <ins> is </ins> based on between unicast available

interval and <ins> in AAI_DSx message or </ins> <ins>E-MBS connection</ins> available interval report <ins> in AAI-E-MBS-REP message </ins>

[Remedy #2: Modify the related texts in table 734 as follows, on page 233, line 23]

0b0: carrier switching <ins>method</ins> based on Unicast Available Interval in the AAI-DSA

message

0b1: carrier switching <ins>method</ins>parameters using AAI-E-MBS-REP<ins>/RSP</ins> message

[Remedy #3: Modify the related texts in Section 16.2.3.47.2 as follows, on page 239, line 29]

Carrier Switching Mode: Indicates <ins> if </ins> the carrier switching mode <ins> is </ins> based on between unicast available

interval and <ins> in AAI_DSx message or </ins> <ins>E-MBS connection</ins> available interval report <ins> in AAI-E-MBS-REP message </ins>

[Remedy #4: Modify the related texts in table 735 as follows, on page 240, line 55]

0b0: carrier switching <ins>method</ins> based on Unicast Available Interval in the AAI-DSA

message

0b1: carrier switching <ins>method</ins>parameters using AAI-E-MBS-REP<ins>/RSP</ins> message

[Remedy #5: Modify the related texts in Section 16.2.3.47.4 as follows, on page 245, line 7]

Carrier Switching Mode: Indicates <ins> if </ins> the carrier switching mode <ins> is </ins> based on between unicast available

interval and <ins> in AAI_DSx message or </ins> <ins>E-MBS connection</ins> available interval report <ins> in AAI-E-MBS-REP message </ins>

[Remedy #6: Modify the related texts in table 737 as follows, on page 252, line 29]

0b0: carrier switching <ins>method</ins> based on Unicast Available Interval in the AAI-DSC

message

0b1: carrier switching <ins>method</ins>parameters using AAI-E-MBS-REP<ins>/RSP</ins> message

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; DSA-REQ

Membership Status: Member Comment by: Joey Chou **Date:** 2010-12-17 **Document under Review:** P802.16m/D10 Comment # D10037 Ballot ID: sb_16m Fig/Table# 737 Subclause 16.2.3.47.4 **Type** Technical Part of Dis <u>Satisfied</u> Page 249 Line 37 Comment Missing a closing bracket to match with If (PHS DSC Action field == Add PHS Rule || Set PHS Rule) { **Suggested Remedy** Change as the following Else if (PHS DSC Action field = Delete PHS Rule) { **GroupResolution Decision of Group:** Principle Resolved by comment #D10032. Resolution: adopt the text changes proposed in contribution IEEE 802.16m-10/1438r3 Reason for Group's Decision/Resolution **Group's Notes** Clause 16.2.3; MAC Control Messages; DSC-REQ

Editor's Actions b) none needed

Editor's Notes

<u>Comment by:</u> Hyunjeong Kang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10038 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 278 Line 31 Fig/Table# 749 Subclause 16.2.3.55

A condition field in each MAC control message indicates whether a corresponding parameter is mandatory or optional or when the parameter, if it is optional, presents in the message. However the condition fields for some parameters are missing in MAC control messages. This comment is to clarify the table of multicarrier MAC control messages.

Suggested Remedy

Discuss and adopt a contribution IEEE 802.16m-10/1439 or later version

GroupResolution Decision of Group: Principle

adopt the text proposed in contribution IEEE 802.16m-10/1439r2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; MC-ADV

Membership Status: Member

Line 9

Fig/Table# 752

Date: 2010-12-17

Ballot ID: sb_16m

Subclause

Comment by: Youngbin Chang Comment # D10039 Document under Review: P802.16m/D10 Type Technical Part of Dis Satisfied Page 288 Comment SFH description in table 752 shall be aligned with PHY section SFH table 832. **Suggested Remedy** [Modify the text in table 752 as below:] [Page 288, line 9-14:] Includes S-SFH SP1 IE in Table 8323 The size of S-SFH SP1 IE depends on FFT size. For 2048 FFT, SizeSP1 = SP1size, 2048 FFTSizeSp1, Default = 96 For 1024 FFT, SizeSP1 = SP1size, 2048 FFT - 6Size_{SP1 default} = 90 For 512 FFT, SizeSP1 = SP1size, 2048 FFT -12 Size SP1 default = 84 [Page 288, line 20-24:] Includes S-SFH SP2 IE in Table 8334. The size of S-SFH SP2 IE depends on FFT size. For 2048 FFT, SizeSP2 = SP2size, 2048 FFTSizeSP2, default = 96 For 1024 FFT, SizeSP2 = SP2size, 2048 FFT - 6Size_{SP2 default} = 90 For 512 FFT, SizeSP2 = SP2size, 2048 FFT -12Size_{SP2 default} = 86 [Page 288, line 31:] Includes S-SFH SP3 IE in Table 8345. Size_{SP3. default} = 77 **GroupResolution Decision of Group:** Agree [Modify the text in table 752 as below:] [Page 288, line 9-14:] Includes S-SFH SP1 IE in Table 8323 The size of S-SFH SP1 IE depends on FFT size. For 2048 FFT, SizeSP1 = SP1size, 2048 FFTSizeSp1 Default = 96

```
For 1024 FFT, \frac{\text{SizeSP1} = \text{SP1size}}{\text{SizeSP1} = \text{SP1size}}, \frac{2048 \text{ FFT} - 6 \text{Size}}{\text{SizeSP1}}, \frac{1}{\text{default}} = \frac{90}{\text{SizeSP1}}
```

[Page 288, line 20-24:]

Includes S-SFH SP2 IE in Table 83 $\frac{3}{4}$.

The size of S-SFH SP2 IE depends on FFT size.

For 2048 FFT, SizeSP2 = SP2size, 2048 FFTSize_{SP2, default}= 96

For 1024 FFT, SizeSP2 = SP2size, 2048 FFT - 6Size_{SP2, default}= 90

For 512 FFT, SizeSP2 = SP2size, 2048 FFT - 12Size_{SP2, default}= 86

[Page 288, line 31:] Includes S-SFH SP3 IE in Table 8345. Size_{SP3, default}= 77

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; ARS-ESI

<u>Editor's Notes</u> a) done

Comment by: Lei Zhou Membership Status: Member Date: 2010-12-17

Comment # D10040 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 296 Line 49 Fig/Table# Subclause 16.2.3.63

This contribution proposes to clarify the mandatory and optional condition for all of parameters in AAI-LBS-IND message and conrresponding ASN.1 code in order to make message table more clear and readily and conrresponding ASN.1 code consistent with AAI-LBS-IND message.

Suggested Remedy

Adopt contribution C80216m-10 NNN.doc or its latest revision

GroupResolution Decision of Group: Principle

accept the text changes in contribution C802.16m-10/1419r4

Editor to change instances of 'Presented when Action code == 0x1' to 'Present when Action code == 0x1' in the approved text changes.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.3; MAC Control Messages; LBS-IND; ASN.1

<u>Comment by:</u> Anil Agiwal <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10041 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 307 Line 44 Fig/Table# Subclause 16.2.4.8

As per the current text in P802.16m D10 draft only MAC control message content is fragmentable. This is not correct as MAC control message together with CMAC tuple is a single unit for the fragmentation function. The CMAC protected MAC control message including the CMAP tuple can be fragmented at any byte boundary.

Suggested Remedy

Adopt the proposed remedy in contribution C802.16m-10 1410

GroupResolution Decision of Group: Agree

Adopt the proposed remedy in contribution C802.16m-10_1410

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.4; MAC PDU Construction; Security

Comment by: YoungKyo Baek Membership Status: Member **Date:** 2010-12-17 <u>Comment # D10042</u> **Document under Review:** P802.16m/D10 Ballot ID: sb_16m **Subclause** 16.2.5.1 Type Editorial Part of Dis Satisfied Page 309 Line 29 Fig/Table# Comment To be aligned with the other description, 'integrity protection' is better than 'integrity'. **Suggested Remedy** Within AMS and ABS the security architecture is divided into two logical entities: □ • Security management entity □ • Encryption and integrity <ins> protection </ins> entity **GroupResolution Decision of Group:** Agree Within AMS and ABS the security architecture is divided into two logical entities: □ • Security management entity □ • Encryption and integrity <ins> protection </ins> entity Reason for Group's Decision/Resolution

reacon for Group's Bedicioninto

Group's Notes

Clause 16.2.5; MAC Security

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10043 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 314 Line 61 Fig/Table# Subclause 16.2521124

Several terms 'legacy ASN support mode', 'WirelessMAN-OFDMA network configuration' and 'legacy network mode' are used mixedly to indicate the situation that ABS is attached to the legacy ASN-GW. I suggest unifying them as 'legacy network mode'.

Suggested Remedy

[remedy#1 : line 61-65, page 314]

AK_COUNTB is interchangeable with CMAC_KEY_COUNTB at ABS, when ABS is operating in mixed mode or when ABS is in legacy ASN support mode <ins>legacy network mode</ins>. In particular, inlegacy ASN support mode <ins>legacy network mode</ins>,

CMAC_KEY_COUNTB (AK_COUNTB) and CMAC_KEY_COUNTN are maintained in the network as defined in WirelessMAN OFDMA reference system.

[remedy#2 : line 61, page 497]

In legacy ASN support mode <ins>legacy network mode</ins> operation, the ABS receives the 16e paging parameters (paging cycle and paging

offset) for an idle mode AMS from paging controller.

[remedy#3 : line 56, page 498]

If the ABS is attached to the legacy network <ins> elements</ins>, the AMS MAC Address Hash as used in the legacy network shall be used for paging the AMS.

[remedy#4 : line 5-8, table 834, page 650]

Indicates configuration of the ABS network <ins> elements to which ABS is attached </ins>

0b0: <ins>Advanced network mode; i.e. advanced network element to support Wireless MAN OFDMA advanced system and advanced features</ins> AAI network configuration

0b1: <ins>legacy network mode </ins> WirelessMAN-OFDMA network configuration

GroupResolution Decision of Group: Principle

accept the text proposed in contribution C802.16m-10/1457r2

Reason for Group's Decision/Resolution

Group's Notes

<u>Editor's Notes</u> <u>a) done</u>

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10044 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 317 Line 37 Fig/Table# Subclause 16.2.5.2.1.4

typo.

replace the underbar '_' with the dash '-' in AAI-PKM_RSP.

Suggested Remedy

The ABS sends a AAI-PKM_<ins>-</ins>RSP message (Key Agreement MSG#1) protected with CMAC to

GroupResolution Decision of Group: Agree

The ABS sends a AAI-PKM <ins>-</ins>RSP message (Key Agreement MSG#1) protected with CMAC to

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.5; MAC Security

Comment by: YoungKyo Baek Membership Status: Member **Date:** 2010-12-17 Comment # D10045 Document under Review: P802.16m/D10 Ballot ID: sb 16m Type Editorial Part of Dis Satisfied Page 327 Line 8 Fig/Table# 761 Subclause 16.2.5.2.3.1.1 Comment In the table 761, some byte numbers are omitted due to lack of room. but it may lead misunderstanding. Remove the partition about byte number for each each field like the suggested remedy. (i.e. b/w 0 and 1, b/w 2 and 3, b/w 4 and 9, b/w 10 and 12) **Suggested Remedy** [remove the partition b/w 0 and 1, b/w 2 and 3, b/w 4 and 9, b/w 10 and 12] |Byte Number | 0 + 1 | 2 + 3 | 4 + 9 | 10 + 12 | **GroupResolution Decision of Group:** Agree [remove the partition b/w 0 and 1, b/w 2 and 3, b/w 4 and 9, b/w 10 and 12] |Byte Number | 0 + 1 | 2 + 3 | 4 + 9 | 10 + 12 | Reason for Group's Decision/Resolution **Group's Notes**

Clause 16.2.5; MAC Security

Editor's Actions a) done

Editor's Notes

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10046 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 328 Line 54 Fig/Table# Subclause 16.2.5.2.3.2

When calculating CMAC value for some MAC control messages, if STID or TSTID is not assigned yet to the AMS the STID field **'SHALL'** be fed up with zeros, but not 'should'.

Suggested Remedy

If STID <ins>or TSTID</ins> is not assigned yet then <ins>the STID field shall be fed up with zeros</ins> STID '0000000000000' should be used. The CMAC_PN_* is part of the AK context and shall be unique for each MAC control message with the CMAC tuple or digest.

GroupResolution Decision of Group: Principle

If STID <ins>or TSTID</ins> is not assigned yet then <ins>the STID field shall be stuffed with zeroes</ins> STID '000000000000' should be used. The CMAC_PN_* is part of the AK context and shall be unique for each MAC control message with the CMAC tuple or digest.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.5; MAC Security

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10047 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 329 Line 1 Fig/Table# Subclause 16.2.5.2.3.2

To clarify the value of the sentence "The LSB 64-bit of the value shall be used for CMAC value", I suggest replacing 'the value' with 'the outcome of AES-CMAC calculation'

Suggested Remedy

The LSB 64-bit of the value <ins> outcome of AES-CMAC calculation</ins> shall be used for CMAC value.

GroupResolution Decision of Group: Agree

The LSB 64-bit of the value <ins> outcome of AES-CMAC calculation</ins> shall be used for CMAC value.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.5; MAC Security

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> YoungKyo Baek <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10048 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 346 Line 48 Fig/Table# Subclause 16.2.5.3.3

wrong reference

Suggested Remedy

AAI supports the confidentiality protection as well as integrity protection over MAC control messages. Specifically, encryption is selectively applied to the control messages whenever confidentiality protection is required, as defined in Table 679<ins>677</ins>.

GroupResolution Decision of Group: Agree

AAI supports the confidentiality protection as well as integrity protection over MAC control messages. Specifically, encryption is selectively applied to the control messages whenever confidentiality protection is required, as defined in Table 679<ins>677</ins>.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.5; MAC Security

Comment by: Inuk Jung Membership Status: Member Date: 2010-12-16

Comment # D10049 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 368 Line 41 Fig/Table# Subclause 16.2.6.4.1.2.1

In current draft, there are two duplicative description regarding Zone Switch mode 0. The locations are on page 368 line 42 and page 371 line 10. For clarification that both of them are regarding to zone switch mode 0, additional description should be provided.

Zone switch during network entry should be clarified that the AMS shall ignore the setting of the HO optimization flags. Hence, AMS will not perform any further network entry procedures (e.g. SBC/REG/Security update procedures), but shall disconnect from LZone right away.

Suggested Remedy

Adopt the proposed text in contribution IEEE C802.16m-10/1421 or its latest version

GroupResolution Decision of Group: Principle

Adopt the proposed text in contribution IEEE C802.16m-10/1421r1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.6; MAC HO procedures

<u>Comment by:</u> Inuk Jung <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10050 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 371 Line 5 Fig/Table# Subclause 16.2.6.4.1.2.1

Even for zone switch mode 0, the AMS should indicate if it is capable of such feature. Hence, such description needs to be added in the standard to allow the ABS to coordinate Zone Switch for the AMS accordingly.

Suggested Remedy

Adopt the proposed text in contribution IEEE C802.16m-10/1420 or its latest version

GroupResolution Decision of Group: Principle

Adopt the proposed text in contribution IEEE C802.16m-10/1460r1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.6; MAC HO procedures

<u>Comment by:</u> Heejeong Cho <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10051 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 408 Line 38 Fig/Table# Subclause 16.2.11.1.1

Editorial comment

Suggested Remedy

[Remedy #1 : Adopt the following modification in page 408, line 38, section 16.2.11.1.1]

The AMS shall start a BR timer if the AMS receives a BR-ACK A-MAP IE indicating a successful reception of the BR preamble sequence but the AMS does not receives any UL grant before or in the frame that the BR-ACK A-MAP IE is received.

[Remedy #2 : Adopt the following modification in page 481, line 36, section 16.2.16]

The ABS shall respond with an broadcast AAI-RNG-ACK message (i.e., transmitted in a broadcast DL allocation) in a DL frame that is in a predefine period, if the ABS detects at least one periodic preamble code in the previous periodic ranging region.

GroupResolution Decision of Group: Agree

[Remedy #1 : Adopt the following modification in page 408, line 38, section 16.2.11.1.1]

The AMS shall start a BR timer if the AMS receives a BR-ACK A-MAP IE indicating a successful reception of the BR preamble sequence but the AMS does not receives any UL grant before or in the frame that the BR-ACK A-MAP IE is received.

[Remedy #2 : Adopt the following modification in page 481, line 36, section 16.2.16]

The ABS shall respond with an broadcast AAI-RNG-ACK message (i.e., transmitted in a broadcast DL allocation) in a DL frame that is in a predefine period, if the ABS detects at least one periodic preamble code in the previous periodic ranging region.

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2011/11/27 IEEE 802.16-10/0061r4

Comment by: Anil Agiwal Membership Status: Member Date: ?

Comment # D10052 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 441 Line Fig/Table# Subclause 16.2.12.12.7

Section 16.2.12.12.7 and 16.2.12.12.9 have same content

Suggested Remedy

Delete section 16.2.12.12.9

GroupResolution Decision of Group: Principle

Delete subsection 16.2.12.12.9 on page 442 line 25.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.12; MAC QoS

Comment by: Hyunkyu Yu Membership Status: Member Date: 2010-12-17

Comment # D10053 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 469 Line 18 Fig/Table# Subclause 16.2142223

Regarding HARQ timing in the frame structure supporting WirelessMAN-OFDMA system, UL AAI subframe index 'm' for UL HARQ subpacket transmission is not clear in some cases. For example, if we consider the DL/UL AAI subframe ratio of D:U=1:3 (D':U'=5:3) for default TTI case, 'm' is calculated as {0,1} or {1,2} according to Table 789 in D10. 'm' should be {0,1,2} as suggested in remedy below.

Suggested Remedy

[Remedy-1: Change the following text, in page 469, line 18, subclause 16.2.14.2.2.2.3, as]

m is the reference to the UL subframe dedicated to the Advanced Air Interface operation in frame, starting from 0 for the first $\frac{\text{downlink}}{\text{del}} <$ ins> $\frac{\text{uplink}}{\text{ins}} <$ subframe and numbering up to U-1, where HARQ subpacket begins its transmission. <ins> $\frac{\text{Note}}{\text{that if }D=1}$ and $\frac{\text{D}}{\text{U}} < \frac{\text{UL AAI}}{\text{UL AAI}} = \frac{\text{UL HARQ subpacket transmission shall be } m = {0,...,U-1} for default <math>\frac{\text{UL TI.}}{\text{Ins}} < \frac{\text{UL HARQ subpacket transmission shall be } m = {0,...,U-1} for default <math>\frac{\text{UL TI.}}{\text{UL TI.}} < \frac{\text{UL TI.}}$

[Remedy-2: Change the following text, in page 469, line 28, subclause 16.2.14.2.2.2.3, as]

m' is the reference to the UL subframe of TDD frame, starting from 0 for the first downlink <ins>uplink</ins> subframe and numbering up to U□-1, where HARQ subpacket begins its transmission

GroupResolution Decision of Group: Agree

[Remedy-1: Change the following text, in page 469, line 18, subclause 16.2.14.2.2.2.3, as]

[Remedy-2: Change the following text, in page 469, line 28, subclause 16.2.14.2.2.2.3, as]

m' is the reference to the UL subframe of TDD frame, starting from 0 for the first del

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.14; MAC HARQ

<u>Editor's Notes</u> a) done

<u>Comment by:</u> Kiseon Ryu <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10054 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 479 Line 9 Fig/Table# Subclause 16.2.15.6

When the information of Global carrier configuration needs to be updated, a unicast AAI-Global-CFG message may be transmitted to the AMS during network (re-)entry. It's not clearly specified regarding when the unicast AAI-Global-CFG message is sent to the AMS. Moreover, there are redundant texts regarding this, which causes confusion.

Suggested Remedy

Adopt the contribution C80216m-10 1413.doc

GroupResolution Decision of Group: Principle

Adopt the text proposed in contribution C802.16m-10/1413r1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.15; MAC Network Entry and Initialization

<u>Comment by:</u> Kiseon Ryu <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10055 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 482 Line 11 Fig/Table# Subclause 16.2.17

There are some inconsistent and unclear terminologies used in sleep mode (i.e. sleep, awake, wake up, listening mode). Need to rewrite the whole section 16.2.17 to follow the concept of clearly defined states.

Suggested Remedy

Adopt the contribution C80216m-10_1412.doc

GroupResolution Decision of Group: Principle

Adopt the text proposed in contribution C80216m-10 1412r1

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.2.17; MAC Sleep Mode

<u>Editor's Notes</u> a) done

Comment by: Sangheon Kim Membership Status: Member Date: 2010-12-18

Comment # D10056 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 535 Line 1 Fig/Table# Subclause 16.3.3.1

Total number of UL bursts is defined as "maximum three UL HARQ bursts + one additional UL burst allocated by either CDMA Allocation A-MAP IE or by BR-ACK-A-MAP IE" even for two carrier mode. Although an AMS can process with maximum four UL HARQ bursts, the peak rate is limited since only three UL HARQ bursts can be allocated for data and one UL burst is reserved for CDMA allocation or BR. Therefore, we propose to relax the limitation to UL HARQ burst without changing the current total number of UL HARQ bursts.

Suggested Remedy

Adopt the proposed text in C80216m-10/1451 or its latest version.

GroupResolution Decision of Group: Agree

Adopt the proposed text in C80216m-10/1451.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.3; PHY Frame Structure

<u>Comment by:</u> Hyunkyu Yu <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10057 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 547 Line 45 Fig/Table# Subclause 16.3.3.5.1

D10 has a restriction regarding FRAME_OFFSET: "The FRAME_OFFSET of different ABSs shall be the same within the same deployment region". But it is not clear whether this rule is applied to intra-FA case only (ABSs with the same center frequency) or not. Because there's no critical reason to align FRAME_OFFSET for inter-FA case, we suggest clarifying this sentence to contain intra-FA case only.

Suggested Remedy

[Change the text in page 547, line 45, subcluase 16.3.3.5.1, as]

... in Figure 493 and Figure 494.
The FRAME_OFFSET of different ABSs shall be the same within the same deployment region.
- (del> - (sins) Regarding the TDD frame structure supporting WirelessMAN-OFDMA, all ABSs with the same center frequency within the same deployment region shall have the same FRAME_OFFSET value regardless of ABS type.
- (sins) When the Advanced Air Interface frames ...

GroupResolution Decision of Group: Agree

[Change the text in page 547, line 45, subcluase 16.3.3.5.1, as]

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.3; PHY Frame Structure

Comment by: Hyunkyu Yu Membership Status: Member Date: 2010-12-17

Comment # D10058 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 550 Line 34 Fig/Table# Subclause 16.3.3.5.1

When macro ABSs with 16m only frame configuration and macro ABSs with 16e/16m mixed frame configuration are deployed in the same FA, AMSs in macro ABSs with 16m only frame configuration may perform scanning operation with the help of AAI-NBR-ADV. However, when macro ABSs with 16m only frame configuration and femto ABSs with 16e/16m mixed frame configuration are deployed in the same FA, it is very difficult for AMSs in ABSs with 16m only frame configuration to do scanning operation. Femto ABSs may not be included in AAI-NBR-ADV or AAI-NBR-ADV including femto ABS information may be transmitted with very long periodicity because the number of femto ABSs can be very large in a certain deployment region. Furthermore, it seems that there's no critical reason to support such scenario at the sacrifice of large implementation burden.

Suggested Remedy

[Add the text in page 550, line 34, subclause 16.3.3.5.1]

<ins>Femto ABS shall not use the frame configuration supporting the WirelessMAN-OFDMA when overlay Macro ABS(s) with the same center frequency is(are) operating in the frame configuration supporting AAI only.

<u>GroupResolution</u> <u>Decision of Group:</u> Agree

[Add the text in page 550, line 34, subclause 16.3.3.5.1]

<ins>Femto ABS shall not use the frame configuration supporting the WirelessMAN-OFDMA when overlay Macro ABS(s) with the same center frequency is(are) operating in the frame configuration supporting AAI only.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.3; PHY Frame Structure

Comment by: Taeyoung Kim Membership Status: Member Date: 2010-12-17

Comment # D10059 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 570 Line 1 Fig/Table# Subclause 16.3.4.2.3

In D10, the number of minibands for each frequency partition (KMB,FPi) is defined as the equation (190) and (260) for DL and UL. However, those equations do not cover all of DFPC and UFPC. For example, when DFPC=1 (FP0:FP1:FP2:FP3=0:1:1:1), the current equation (190) and (260) define the number of DL and UL minibands for wrong frequency partition. According to equation (190) and (260), the number of minibands for FP0, FP1 and FP2 are defined, but it should be defined for FP1, FP2 and FP3, not FP0. This kind of problem is due to the range of index i (e.g., 0<=i<FPCT). So, we propose to change the range of index i in equation (190) and (260). In addition, we propose to clarify the definition on the number of subbands for the ith frequency partition (KSB,FPi) by changing equation (188) and (259).

Suggested Remedy

Adopt the proposed text in C802.16m-10/1434 or its latest version

GroupResolution Decision of Group: Agree

Adopt the proposed text in C802.16m-10/1434.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.4; PHY DL Physical Structure

Comment by: Chia-Lung Tsai Membership Status: Date: 2010-12-16

Comment # D10060 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 612 Line 16 Fig/Table# 612 Subclause 16.8.3.4

Some typos in Section 16.8.3 of IEEE P802.16m/D10 have been identified. In Fig. 612, the abbreviations for superframes should be "SU" instead of "SF". Moreover, the legends for SA-preamble and PA-preamble are identical, which causes confusions. In this contribution, we propose modifications to Fig. 612 to resolve these issues.

Suggested Remedy

Please adopt the contribution IEEE C802.16m-10/1404 to correct the Figure.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Please adopt the contribution IEEE C802.16m-10/1404r4.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.8; OTHER LBS

Comment by: Chiwoo Lim Membership Status: Nonmember Date: 2010-12-17

Comment # D10061 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 617 Line 35 Fig/Table# Subclause 16.3.5.1.2

SA-Preamble shall be transmitted using at least two antennas. So, it is required to delete all 1Tx transmission cases in SA-Preamble to avoid any possible confusion.

In addition, there are some inconsistencies between figure and corresponding text in two cases;

- 1) The figure for the antenna order of 4Tx in 512-FFT size is wrong.
- 2) The text for 8Tx in 1024-FFT size is wrong

Suggested Remedy

Adopt the contribution C80216m-10/1414 or its latest version.

GroupResolution Decision of Group: Agree

Adopt the contribution C80216m-10/1414.doc.

<Note to the editor: Remedy 5 require change to the figures with different patterns. Also there are change across figures and texts on other remedies. Be careful!!!>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Hyunkyu Yu Membership Status: Member Date: 2010-12-17

Comment # D10062 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 638 Line 6 Fig/Table# Subclause 16.3.5.3.2.2

Table number is wrong.

Suggested Remedy

Change the 'Table 792' to 'Table 789' in page 638, line 6, subcluase 16.3.5.3.2.2

GroupResolution Decision of Group: Agree

Change the 'Table 792' to 'Table 789' in page 638, line 6, subcluase 16.3.5.3.2.2

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

Editor's Notes Editor's Actions a) done

Comment by: Hyunkyu Yu Membership Status: Member Date: 2010-12-17

Comment # D10063 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 645 Line 13 Fig/Table# Subclause 16.3.5.5.1.2

This comment is to clarify parameters that are not properly defined for 7/8.75 MHz BW operation. For example 'Resource Index' fields in assignment A-MAP IEs only specify 5/10/20 MHz cases. 7/8.75 MHz bandwidths need to be added. We thus suggest simply modifying 'BW' to 'FFT size' in order to include 7/8.75 MHz BW cases.

Suggested Remedy

Adopt the text proposal in C802.16m-10/1426 or its latest revision.

GroupResolution Decision of Group: Agree

Adopt the text proposal in C802.16m-10/1426.doc.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

remedy 2,3,4 done hyunjeong

Comment by: Hyunkyu Yu Membership Status: Member Date: 2010-12-17

Comment # D10064 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 666 Line 8 Fig/Table# Subclause 16.3.5.5.2.4.1

The resource indexing for contiguous LRUs has a rule such as "an allocated resource shall be contained within the same frequency partition". In D10, however, there is no clear description about the resource indexing for non-contiguous LRUs (subband A-A-MAP IE). Considering system performance and implementation, it is straightforward to apply such a rule to the allocation of non-contiguous LRUs.

Suggested Remedy

[Add the text in page 666, line 8, subclause 16.3.5.5.2.4.1 as follows]

... The contiguous LRUs shall consist of the same type of LRU (i.e., DLRU, NLRU, or SLRU) within the same frequency partition except for the allocation over SLRU and NLRU within the same frequency partition. An allocation may span over contiguous SLRUs and NLRUs within the same frequency partition. Contiguous LRUs in an allocated resource shall be contained within the same frequency partition and cannot span multiple frequency partitions. Multiple non-contiguous subbands are indexed using the DL/UL Subband Assignment A-MAP IEs and <ins>the SLRUs assigned for a burst shall belong to the same frequency partition.</in>

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

[Add the text in page 666, line 8, subclause 16.3.5.5.2.4.1 as follows]

... The contiguous LRUs shall consist of the same type of LRU (i.e., DLRU, NLRU, or SLRU) within the same frequency partition except for the allocation over SLRU and NLRU within the same frequency partition. An allocation may span over contiguous SLRUs and NLRUs within the same frequency partition. Contiguous LRUs in an allocated resource shall be contained within the same frequency partition and cannot span multiple frequency partitions.

<<< convert the last sentence into a new paragraph>>>>>>

Multiple non-contiguous subbands are indexed using the DL/UL Subband Assignment A-MAP IEs and <ins>the SLRUs assigned for a burst shall belong to the same frequency partition.</ins>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Hyunkyu Yu Membership Status: Member Date: 2010-12-17

Comment # D10065 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 669 Line 59 Fig/Table# 847 Subclause 16.3.5.5.2.4.2

The size of reserved bits in UL basic assignment A-MAP IE is wrong. The IE size should be 40 including reserved bits.

Suggested Remedy

Remedy-1: Change the reserved bit size from 2 to 3 in page 669, line 59, subclause 16.3.5.5.2.4.2.

Remedy-2: Change the reserved bit size from 5 to 6 in page 669, line 63, subclause 16.3.5.5.2.4.2.

Remedy-3: Delete the reserved bit field in page 670, line 64, subclause 16.3.5.5.2.4.2.

GroupResolution Decision of Group: Agree

Remedy-1: Change the reserved bit size from 2 to 3 in page 669, line 59, subclause 16.3.5.5.2.4.2.

Remedy-2: Change the reserved bit size from 5 to 6 in page 669, line 63, subclause 16.3.5.5.2.4.2.

Remedy-3: Delete the reserved bit field in page 670, line 64, subclause 16.3.5.5.2.4.2.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> Sudhir Ramakrishna <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10066 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 680 Line 42 Fig/Table# Subclause 16.3.5.5.2.4.3

In between Lines 42 and 43 on Page 680, there's an un-tethered "y" character that has slipped into the text.

Suggested Remedy

Please remove the "y" character between Lines 42 and 43 on Page 680.

GroupResolution Decision of Group: Agree

Please remove the "y" character between Lines 42 and 43 on Page 680.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Hyunkyu Yu <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10067 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 682 Line 61 Fig/Table# Subclause 16.3.5.5.2.4.4

There's a Typo in UL Subband Assignment A-MAP IE subcaluse. '5' is written twice.

Suggested Remedy

[Delete '5' in page 682, line 61, subclause 16.3.5.5.2.4.4, as]

4) When $4 <= Y_{SB} <= 10$, the AMS and ABS shall interpret the RA field in the same manner as in the $< del > \frac{5}{5} < / del > 5 <= Y_{SB} <= 10$ case in the DL Subband Assignment A-MAP IE.

GroupResolution Decision of Group: Agree

[Delete '5' in page 682, line 61, subclause 16.3.5.5.2.4.4, as]

4) When $4 <= Y_{SB} <= 10$, the AMS and ABS shall interpret the RA field in the same manner as in the $< del > \frac{5}{5} < / del > 5 <= Y_{SB} <= 10$ case in the DL Subband Assignment A-MAP IE.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

Editor's Notes Editor's Actions a) done

Comment by: Jeongho Park Membership Status: Member **Date:** 2010-12-17 Comment # D10068 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 693 Fig/Table# 840 Subclause 16.3.5.5.2.3 Line 9 Comment [Clarification] 1. Table 840 shows the minimum number of HARQ region in various DL:UL ration cases. DL:UL = 5:3 case has one HARQ region as its minimum number among UL subframes. 2. Since UL FBCH index is counted within a subframe. Q shall be Qmax. **Suggested Remedy** # Remedy 1: Change line 9 in page 693(659) as follows: 5:3 | 21 |" # Remedy 2: Change line 21 in page 693(659) as follows: "q: the feedback channel index specified in Feedback Allocation A-MAP IE (0 <= q <= $\frac{Q}{Q_{max}}$ 1)" **GroupResolution Decision of Group:** Agree # Remedy 1: Change line 9 in page 693(659) as follows: 5:3 | 2 1 |" # Remedy 2:

"q : the feedback channel index specified in Feedback Allocation A-MAP IE ($0 \le q \le Q_{max}$ 1)"

Reason for Group's Decision/Resolution

Change line 21 in page 693(659) as follows:

Clause 16.3.5; PHY Downlink control structure

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Taeyoung Kim <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10069 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 703 Line Fig/Table# 857 Subclause 16.3552411

In Table 857 – Feedback Polling A-MAP IE, the reserved bit is not included. So, this contribution inserts the reserved bit for the Feedback Polling A-MAP IE.

In order to de-allocate the uplink resource for MIMO feedback in Polling_sub_type=0b0 (e.g., uplink resource allocation), Polling_deallocation_bitmap (3bit) is not necessary because de-allocation for Polling_sub_type=0b0 is to de-allocate the resource indicated by Resource Index (11bit).

Suggested Remedy

Adopt the proposed text in C802.16m-10/1442 or its latest version

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Adopt the proposed text in C802.16m-10/1442r1.doc.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.5; PHY Downlink control structure

<u>Comment by:</u> Taeyoung Kim <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10070 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 720 Line 24 Fig/Table# Subclause 16.3.6.1

Some parameters for downlink MIMO are not consistent in D10. This contribution proposes the change of parameters for the consistency of downlink MIMO section.

Suggested Remedy

Adopt the proposed text in C802.16m-10/1435 or its latest version

GroupResolution Decision of Group: Principle

Adopt the proposed text in C802.16m-10/1435r2.doc.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.6; PHY Downlink MIMO

Comment by: Chia-Lung Tsai Membership Status: Date: 2010-12-16

Comment # D10071 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 809 Line 1 Fig/Table# 572 Subclause 16.3.8.1.4.3

Some typos in Section 16.3.8 of IEEE P802.16m/D10 have been identified. OFDMA symbol period shall include the CP or Guard interval. In this contribution, we provide text modifications to correct typos.

Suggested Remedy

Please adopt the contribution IEEE C802.16m-10/1401 to correct the Figure.

GroupResolution Decision of Group: Agree

Please adopt the contribution IEEE C802.16m-10/1401 to correct the Figure.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

Editor's Notes Editor's Actions a) done

Comment by: Chiwoo Lim Membership Status: Nonmember Date: 2010-12-17

Comment # D10072 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 830 Line 65 Fig/Table# Subclause 16.3.8.3.1

In current draft, the number of fast feedback channels that the ABS allocates to an AMS is restricted as less than or equal to one. However, there is no consideration for multicarrier operation.

Suggested Remedy

[Modify the text on page 831 line 1 as following]

The number of UL fast feedback channels that the ABS allocates to an AMS shall be less than or equal to one per each active carrier.

GroupResolution Decision of Group: Agree

[Modify the text on page 831 line 1 as following]

The number of UL fast feedback channels that the ABS allocates to an AMS shall be less than or equal to one per each active carrier.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

<u>Comment by:</u> Jeongho Park <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10073 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 801 Line 51 Fig/Table# Subclause 16.3.7.4

[Clarification]

Description sentence about type-4 subframe pilot pattern does not match with figure for it in case of stream 2. According to the previous discussion about pilot pattern of type-4 subframe, the figure is correct.

Suggested Remedy

Change line 51 ~ 57 in page 835 (801) as follows:

The pilot patterns of type-4 AAI subframe are derived from the type-2 AAI subframe patterns. The first seven symbols of type-4 AAI subframe pilot patterns are identical to the type-2 AAI subframe patterns. In case of one stream, the The last two symbols of type-4 AAI subframe pilot patterns are generated by appending the first two symbols of type-2 AAI subframe pilot patterns. In case of two streams, the last symbol of type-4 AAI subframe pilot pattern copies the first symbol of type-2 AAI subframe pilot pattern and the eighth symbol does not include pilot.

GroupResolution Decision of Group: Agree

Change line 51 ~ 57 in page 835 (801) as follows:

The pilot patterns of type-4 AAI subframe are derived from the type-2 AAI subframe patterns. The first seven symbols of type-4 AAI subframe pilot patterns are identical to the type-2 AAI subframe patterns. In case of one stream, the The last two symbols of type-4 AAI subframe pilot patterns are generated by appending the first two symbols of type-2 AAI subframe pilot patterns. In case of two streams, the last symbol of type-4 AAI subframe pilot pattern copies the first symbol of type-2 AAI subframe pilot pattern and the eighth symbol does not include pilot.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.7; PHY Uplink physical structure

Editor's Notes Editor's Actions a) done

Comment by: Taeyoung Kim Membership Status: Member Date: 2010-12-17

Comment # D10074 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 840 Line 60 Fig/Table# Subclause 16.3.8.3.1.5

The bit mapping for differential CQI (2bits) is not defined in D10.

Suggested Remedy

Replaced by

Differential CQI shall be encoded with 2 bits indicating values $\frac{del}{-1, 0, +1, +2}$ $\frac{del}{-1, 0, +1, +2}$ <ins>, e.g., 0b00: -1, 0b01: 0, 0b10: +1, 0b11: +2</ins>.

GroupResolution Decision of Group: Principle

<Adopt the following text>

Differential CQI shall be encoded with 2 bits indicating values $\frac{del}{-1, 0, +1, +2} < \frac{del}{-1, 0, +2$

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

<u>Comment by:</u> Jeongho Park <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10075 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 864 Line 65 Fig/Table# Subclause 16.3.8.3.1

[Clarification]

Assignment restriction for fast feedback allocation channel to AMS does not say anything about Multi-carrier scenario.

Currently, only one or less than one FBCH can be assigned to AMS.

Proposal is to make it per carrier.

Suggested Remedy

Change the line 65 at page 864 (830) as follows:

allocations are configurable. The number of UL fast feedback channels that the ABS allocates to an AMS per carrier

GroupResolution Decision of Group: Principle

Resolved by comment #D10072.

Resolution:

[Modify the text on page 831 line 1 as following]

The number of UL fast feedback channels that the ABS allocates to an AMS shall be less than or equal to one per each active carrier.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Jeongho Park <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10076 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 856 Line 35 Fig/Table# Subclause 16.3.8.4.5

Tone power of sounding sequence from Equation (277) is different for CDM and FDM case. This is because FDM (decimation) uses decimated subcarriers only.

UL sounding channel power control does not give sufficient description about connection between tone power of sounding sequence from Equation (277) and tone power obtained by power control Equation (291).

Therefore we need to clearly define the relationship of them to avoid different understanding.

Suggested Remedy

Adopt the proposed remedies of contribution C80216m-10/1445 or its latest version.

GroupResolution Decision of Group: Principle

<<Modify line 28~36 of page 856 as follows:>>
------Text Change Start ------

16.3.8.4.5 Sounding Channel Power Control

Power control for the UL sounding channel is supported to manage the sounding quality. AMS.'s transmit power for UL sounding channel is controlled separately according to its sounding channel target SINR value. The power per subcarrier shall be tone maintained for the UL sounding transmission as shown in Equation (291) of 16.3.8.4.1. <ins> The transmission power per subcarrier shall be determined by multiplying the modulation coefficient bk calculated as per equation (278) or (279) by the linear scale factor corresponding to P(dBm) derived from equation (291). </ins>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.8; PHY Uplink control channel

<u>Editor's Notes</u> <u>a) done</u>

Comment by: Chiwoo Lim Membership Status: Nonmember Date: 2010-12-17

Comment # D10077 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 904 Line 47 Fig/Table# Subclause 16.4.6

There is a confusion for network synchronization in femto ABS. There are several ways to make the synchronization. However, some methods can have different assumption with others. So, it's required to clarify the definition of synchronization.

Suggested Remedy

[Modify the text on page 904 line 47~50 as following]

A Femto ABS shall be synchronized with the overlay ABS network at least in all cases where interference in UL or DL can occur, where the synchronization means the aligned frame boundary based on overlay ABS transmission timing, and the aligned DL / UL split in TDD systems.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

<resolved by comment #10078>
Adopt the text in contribution C80216m-10_1449r3.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.4; OTHER Femto

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Ying Li <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10078 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 904 Line 52 Fig/Table# Subclause 16.4.6

Some clarification on femto ABS network synchronization is needed.

- 1. E.g., if the Femto ABS can successfully detect the Macro ABS A-Preamble, the Femto ABS does not always necessarily sync with the detected A-Preamble, since the Femto ABS may also choose to sync with the reference signal via GPS, or other choose to use other methods.
- 2. Also, in the sentence of "The Femto ABS may also achieve network synchronization from GPS or backhaul network (e.g. IEEE 1588) or from AMS that is either attached to it or to the overlaid macro in which case the overlaid macro indicates the time difference via the backhaul to the Femto ABS", the methods mentioned related to the AMS are not clear. E.g., how the Femto ABS can sync with AMS? What is the definition of "time difference" that the macro indicates to the Femto ABS?

Hope that someone who understands it could clarify this part.

Suggested Remedy

Please adopt the text in contribution C80216m-10 1449 or its latest version.

Please clarify what is the definition of "time difference" that the macro indicates to the Femto ABS.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Adopt the text in contribution C80216m-10_1449r3.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.4; OTHER Femto

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Anshuman Nigam <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10079 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 906 Line Fig/Table# 591 Subclause 16.4.7.1

A "+" sign is unnecessarily present.

Few arrows are not touching the boxes at the proper corners.

Suggested Remedy

Please adopt the figure proposed in contribution C80216m-10_1436

GroupResolution Decision of Group: Agree

Please adopt the figure proposed in contribution C80216m-10_1436

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.4; OTHER Femto

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Ying Li <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10080 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 910 Line 49 Fig/Table# Subclause 16.4.8.1.2

In the current draft D10, the scanning report message does not include the indicator of whether the detected CSG-closed femtocell is in the AMS's local whitelist. Since AMS should have a whitelist to check whether the detected femtocell is in the whitelist or not, if AMS reports this information, it gives the ABS some free information, which it otherwise would have to realize through some extra processing. The ABS needs to know whether the AMS is accessible to the reported cell for different follow-up operations:

- If it is accessible, the ABS may use the cell as handover candidate
- If it is inaccessible, the AMS may use the cell as the one to coordinate interference mitigation

If the AMS would not report whether the CSG-clsoed femto is in its whitelist or not, the ABS had to check about it via the backhaul every time when the AMS reports CSG-closed femtocell, because the ABS may not have the AMS's whitelist or subscription information, and the backhaul check adds on the latency for the ABS to perform the handover or interference mitigation, which are very importantly to be timely treated.

Suggested Remedy

Please adopt the text in contribution C80216m-10 1448 or its latest version.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Rejected due to imcompleted remedy.

Group's Notes

Clause 16.4; OTHER Femto

Editor's Notes b) none needed

Comment by: Tsung-Yu Tsai Membership Status: Member Date: 2010-12-17

Comment # D10081 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 918 Line 57 Fig/Table# Subclause 16.5.1.2.1

This contribution suggests modified text as well as an equation to make the description of operation of single BS precoding with Multi-BS coordination more clear.

Suggested Remedy

Adopt C80216m-10_1416 or its latest version

GroupResolution Decision of Group: Principle

Adopt C80216m-10 1416r3.doc.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.5; Other Mutli-BS MIMO

<u>Comment by:</u> Ping-Heng Kuo <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10082 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 919 Line 53 Fig/Table# Subclause 16.5.1.3.1

The definition of concatenating precoder for DL multi-BS joint MIMO processing should be clarified.

(This comment has been accepted during Session 69 in St. Petersburg but was not implemented)

Suggested Remedy

Adopt the proposed text in contribution C80216m-10/1399 or its latest revision.

GroupResolution Decision of Group: Agree

Adopt the proposed text in contribution C80216m-10/1399.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.5; Other Mutli-BS MIMO

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> Ping-Heng Kuo <u>Membership Status:</u> Member <u>Date:</u> 2010-12-16

Comment # D10083 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 922 Line 54 Fig/Table# Subclause 16.5.2.1.2

- 1. Some parts of the operational procedure for UL Multi-BS coordination (16.5.2.1.2) has not been written clearly. For instance, how ISL are provided should be clarified.
- 2. There are some editorial errors, such as font inconsistency, in the section.
- 3. Equation (334) looks messy and should be re-arranged to tidy up.

Suggested Remedy

Adopt the proposed text in contribution C80216m-10/1400 or its latest revision.

GroupResolution Decision of Group: Agree

Adopt the proposed text in contribution C80216m-10/1400.doc.

<< Note: The new equation 334 (in 1400) is technically the same as the original one (in D10) with the intention to fix the framemake/pdf file conversion issue (the last part of lamda in the set of {1, 2, 3, 4} is missing in D10 pdf file, probably due to conversion). Talk to JK if any clarification is needed.>>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.5; Other Mutli-BS MIMO

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Tsung-Yu Tsai Membership Status: Member Date: 2010-12-17

Comment # D10084 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 923 Line 10 Fig/Table# Subclause 16.5.1.2.1

This contribution suggests modified text as well as an equation to make the description of the generation of UL single BS precoder with Multi-BS coordination more clear.

Suggested Remedy

Adopt C80216m-10_1433 or its latest version

GroupResolution Decision of Group: Principle

<resolved by comment 10083>

Adopt the proposed text in contribution C80216m-10/1400.doc.

<< Note: The new equation 334 (in 1400) is technically the same as the original one (in D10) with the intention to fix the framemake/pdf file conversion issue (the last part of lamda in the set of {1, 2, 3, 4} is missing in D10 pdf file, probably due to conversion). Talk to JK if any clarification is needed.>>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.5; Other Mutli-BS MIMO

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Chung-Pao Chen <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10085 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 932 Line 37 Fig/Table# Subclause 16.6.2.9.1.1.2

1. The notation $T_{UL_Rx_Processing}$ required by the AMS is incorrect, and it should be changed to $T_{UL_Tx_Processing}$.

2. T_{UL Rx Processing} should be required by the ARS instead of the AMS.

Suggested Remedy

 $T_{UL_Rx_Processing}$ $T_{UL_Tx_Processing}$ is the data burst Tx processing time required by the AMS and measured in subframes.

 $T_{UL\ Rx\ Processing}$ is the data burst Rx processing time required by the AMS ARS and measured in subframes.

GroupResolution Decision of Group: Principle

<<adopt the following texts>> pp. 932 line 37

 $T_{UL_Rx_Processing}$ $T_{UL_Tx_Processing}$ is the data burst Tx processing time required by the AMS and measured in subframes.

 $T_{UL\ Rx\ Processing}$ is the data burst Rx processing time required by the AMS ARS and measured in subframes.

Apply same changes on page 930 line # 32 and # 34.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Jinyoung Chun <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10086 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 932 Line 37 Fig/Table# Subclause 16.6.2.9.1.1.2

There is a typo. The first row is T_{UL_RX_Processing}, not T_{UL_Tx_Processing},

Suggested Remedy

GroupResolution Decision of Group: Principle

<resolved by comment 10084>

<<adopt the following texts>> pp. 932 line 37

 $\mathcal{T}_{UL_Rx_Processing}$ $\mathcal{T}_{UL_Tx_Processing}$ is the data burst Tx processing time required by the AMS and measured in subframes.

 $T_{UL_Rx_Processing}$ is the data burst Rx processing time required by the AMS ARS and measured in subframes.

Apply same changes on page 930 line # 32 and # 34.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Chung-Pao Chen <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10087 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 933 Line 1 Fig/Table# 598 Subclause 16.6.2.9.1.1.2

Some errors in Figures 598 and 599 have been identified. We provide modifications to correct errors in the figures.

Suggested Remedy

Adopt the contribution C80216m-10/1407 or its latest version.

GroupResolution Decision of Group: Principle

Adopt the contribution C80216m-10/1407r1.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> Jinyoung Chun <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10088 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 933 Line 1 Fig/Table# 598 Subclause 16.6.2.9.1.1.2

In Figure 598 and Figure 599, the arrows shall go to the UL subframe index 0, not index 1.

Suggested Remedy

GroupResolution Decision of Group: Principle

Resolved by comment #D10087.

Resolution:

Adopt the contribution C80216m-10/1407r1.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Jeongho Park <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10089 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 900 Line 18 Fig/Table# Subclause ?

[Clarification]

Since SIR_DL for UL power control is based on reuse 1 frequency partition, line 18 in page 934(900) makes readers confused and is not necessary.

Suggested Remedy

Delete the line 18 in page 934 (900) as follows:

The measured signal power for boosted reuse-3 FP shall be multiplied by P_{seu0} to obtain P_{signal}[k]_i-

GroupResolution Decision of Group: Agree

Delete the line 18 in page 934 (900) as follows:

The measured signal power for boosted reuse-3 FP shall be multiplied by P_{seu0} to obtain P_{sional}[k]_i-

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.3.13; PHY Channel quality measurement

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Chung-Pao Chen <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10090 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 936 Line 20 Fig/Table# Subclause 16.6.2.9.1.2.2

 $T_{DL_Rx_Processing}$ should be required by the ARS instead of the AMS.

Suggested Remedy

 $T_{DL\ Rx\ Processing}$ is the data burst Rx processing time required by the AMS ARS and measured in subframes.

GroupResolution Decision of Group: Agree

T_{DL Rx Processing} is the data burst Rx processing time required by the AMS ARS and measured in subframes.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Comment by:</u> Chung-Pao Chen <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10091 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 936 Line 50 Fig/Table# Subclause 16.6.2.9.1.2.2

 $T_{UL_Rx_Processing}$ should be required by the ABS instead of the ARS.

Suggested Remedy

T_{UL Rx Processing} is the data burst Rx processing time required by the ARS ABS and measured in subframes.

GroupResolution Decision of Group: Agree

 $T_{UL_Rx_Processing}$ is the data burst Rx processing time required by the ARS ABS and measured in subframes.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Comment by:</u> Chung-Pao Chen <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10092 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 937 Line 1 Fig/Table# 602 Subclause 16.6.2.9.1.2.2

One error in Figure 602 has been identified. We provide a modification to correct the error in the figure.

Suggested Remedy

Adopt the contribution C80216m-10/1408 or its latest version.

GroupResolution Decision of Group: Agree

Adopt the contribution C80216m-10/1408.doc.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Anshuman Nigam <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10093 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 905 Line 4 Fig/Table# Subclause 16.4.7.1

"as" is missing

Suggested Remedy

The figure only serves <ins>as </ins>an illustration of the procedure inside AMS.

GroupResolution Decision of Group: Agree

The figure only serves <ins>as </ins>an illustration of the procedure inside AMS.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.4; OTHER Femto

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Youngbin Chang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10094 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 941 Line Fig/Table# 973 Subclause 16.6.2.16.2

Last meeting, table 973 (RS-ESI) is defined in control message section. It shall be deleted

Suggested Remedy

Remove table 973

GroupResolution Decision of Group: Principle

Resolved by comment #D10095.

Resolution:

Remedy 1. Delete Table 973

Remedy 2. [Modify the text in line 37 on the page 941 as below:]
In TTR mode the ABS shall notify an ARS of SFH information change via an AAI-ARS-ESI control message <ins> in 16.2.3.58 </ins>.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Editor's Notes b) none needed

<u>Comment by:</u> Jinyoung Chun <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10095 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 941 Line 35 Fig/Table# 973 Subclause 16.6.2.16.2

The AAI-ARS-ESI message format is in the MAC section 16.2.3.58.

Suggested Remedy

Remedy 1. Delete Table 973

Remedy 2. [Modify the text in line 37 on the page 941 as below:]

In TTR mode the ABS shall notify an ARS of SFH information change via an AAI-ARS-ESI control message <ins> in 16.2.3.58 </ins>.

GroupResolution Decision of Group: Agree

Remedy 1. Delete Table 973

Remedy 2. [Modify the text in line 37 on the page 941 as below:]

In TTR mode the ABS shall notify an ARS of SFH information change via an AAI-ARS-ESI control message <ins> in 16.2.3.58 </ins>.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Youngbin Chang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10096 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 941 Line 38 Fig/Table# Subclause 16.6.2.16.2

Add section reference

Suggested Remedy

In TTR mode the ABS shall notify an ARS of SFH information change via an AAI-ARS-ESI control message (see section (16.2.3.58).

GroupResolution Decision of Group: Agree

In TTR mode the ABS shall notify an ARS of SFH information change via an AAI-ARS-ESI control message (see section (16.2.3.58).

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

Same as D10095

<u>Comment by:</u> Youngbin Chang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10097 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 944 Line Fig/Table# 605 Subclause 16.6.3.1

Figure 605, Figure 606, Fgiure 607, SA-Preambe in F3 frame shall be removed to align figure 521 in PHY section

Suggested Remedy

Remove SA-preamble in figure 605, 606 and 607 in F3 frame

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Remove SA-preamble in figure 605 and 607 in F3 frame. <Note figure 606 is treated in a seperate comment #10101>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> <u>a) done</u>

Comment by: Chia-Lung Tsai Membership Status: Date: 2010-12-16

Comment # D10098 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 944 Line 1 Fig/Table# 605 Subclause 16.6.3.1

Some typos in Section 16.6.3 of IEEE P802.16m/D10 have been identified. SA-preamble shall not be allocated in the F3. In this contribution, we provide text modifications to correct typos.

Suggested Remedy

Please adopt the contribution IEEE C802.16m-10/1402 to correct the Figure.

GroupResolution Decision of Group: Principle

Resolved by comment #D10097.

Resolution:

Remove SA-preamble in figure 605 and 607 in F3 frame. <Note figure 606 is treated in a seperate comment #10101>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Comment by:</u> Anshuman Nigam <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10099 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 910 Line 39 Fig/Table# Subclause 16.4.8.1.2

add space between "index" and "or"

Suggested Remedy

hat includes a list of femto ABSs which is formed based on the reported FA, A-preamble index<ins> </ins>or BSIDs, or

GroupResolution Decision of Group: Agree

hat includes a list of femto ABSs which is formed based on the reported FA, A-preamble index<ins> </ins>or BSIDs, or

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.4; OTHER Femto

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Anshuman Nigam <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10100 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 911 Line 31 Fig/Table# Subclause 16.4.9

add "s" to support

Suggested Remedy

The Femto ABSs support<ins>s</ins> Idle mode by use of the same procedures as specified for macro ABSs with the exceptions given in this section.

GroupResolution Decision of Group: Agree

The Femto ABSs support<ins>s</ins> Idle mode by use of the same procedures as specified for macro ABSs with the exceptions given in this section.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.4; OTHER Femto

Editor's Notes Editor's Actions a) done

Comment by: Chia-Lung Tsai Membership Status: Date: 2010-12-16

Comment # D10101 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 946 Line 1 Fig/Table# 606 Subclause 16.6.3.2.1

Some typos in Section 16.6.3 of IEEE P802.16m/D10 have been identified. A-preamble shall not be allocated in the F3. When the AAI subframe has been allocated R-RTI or R-TTI., the number of symbol shall be five instead of six. In this contribution, we provide modifications to correct typos.

Suggested Remedy

Please adopt the contribution IEEE C802.16m-10/1406 to correct the Figure.

GroupResolution Decision of Group: Principle

Adopt the contribution IEEE C802.16m-10/1406r4.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> <u>a) done</u>

Jinyoung Chun Comment by: Membership Status: Member **Date:** 2010-12-17 Comment # D10102 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Editorial Satisfied Page 947 Line 12 Subclause 16.6.3.2.2 Part of Dis Fig/Table# Comment Change 'fpr' to 'for' **Suggested Remedy GroupResolution Decision of Group:** Agree Change 'fpr' to 'for' Reason for Group's Decision/Resolution **Group's Notes** Clause 16.6; Other Relay **Editor's Notes Editor's Actions** a) done 2011/11/27 IEEE 802.16-10/0061r4 Comment by: Jinyoung Chun Membership Status: Member Date: 2010-12-17 Comment # D10103 Document under Review: P802.16m/D10 Ballot ID: sb 16m Type Technical Part of Dis Satisfied Page 947 Fig/Table# 974 <u>Subclause</u> 16.6.3.2.3 Line 61 Comment In the previous meetings, the contribution IEEE802.16m-10/1337 was accepted but not inserted in IEEE802.16m/D10. **Suggested Remedy** Adopt the proposed text in C802.16m-10/1430.doc or the latest version. GroupResolution **Decision of Group: Agree** Adopt the proposed text in C802.16m-10/1430.doc. Reason for Group's Decision/Resolution **Group's Notes**

Clause 16.6; Other Relay

Editor's Actions

a) done

Editor's Notes

<u>Comment by:</u> Youngbin Chang <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10104 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 949 Line 47 Fig/Table# Subclause 16.6.3.3.3

correct reference section

Suggested Remedy

The downlink physical structure for both data and pilot subcarriers described in 16.3.54 is used for AAI DL Access and Relay zones at ABS and ARS frames.

GroupResolution Decision of Group: Agree

The downlink physical structure for both data and pilot subcarriers described in 16.3.54 is used for AAI DL Access and Relay zones at ABS and ARS frames.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.6; Other Relay

<u>Editor's Notes</u> a) done

Membership Status: Member Comment by: Jinyoung Chun **Date:** 2010-12-17 Comment # D10105 Ballot ID: sb_16m Document under Review: P802.16m/D10 Type Editorial Part of Dis Satisfied Page 949 Line 51 Subclause 16.6.3.3.3 Fig/Table# Comment Write 'Ts' to italic text style. **Suggested Remedy GroupResolution Decision of Group:** Agree Write 'Ts' to italic text style. Reason for Group's Decision/Resolution **Group's Notes** Clause 16.6; Other Relay **Editor's Notes Editor's Actions** a) done 2011/11/27 IEEE 802.16-10/0061r4 Comment by: Jinyoung Chun Membership Status: **Date:** 2010-12-17 Member Comment # D10106 **Document under Review: P802.16m/D10** Ballot ID: sb 16m Type Editorial Part of Dis Satisfied Page 949 Line 62 <u>Subclause</u> 16.6.3.4 Fig/Table# Comment Write 'Ts' to italic text style. **Suggested Remedy GroupResolution Decision of Group:** Agree Write 'Ts' to italic text style. Reason for Group's Decision/Resolution **Group's Notes** Clause 16.6; Other Relay

Editor's Notes

Editor's Actions a) done

Comment by: Chiwoo Lim Membership Status: Nonmember Date: 2010-12-17

Comment # D10107 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 953 Line 53 Fig/Table# Subclause 16.7.5

There is a wrong section reference.

Suggested Remedy

Modify 16.7.2.11 as <u>16.7.2.1</u>

GroupResolution Decision of Group: Agree

Modify 16.7.2.11 as <u>16.7.2.1</u>

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.7; Other SON

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Chiwoo Lim Membership Status: Nonmember Date: 2010-12-17

Comment # D10108 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 953 Line 59 Fig/Table# Subclause 16.7.5

There is a wrong Table reference.

Suggested Remedy

Modify Table 554 as Table 979.

GroupResolution Decision of Group: Agree

Modify Table 554 as Table 979.

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.7; Other SON

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Chia-Lung Tsai Membership Status: Date: 2010-12-16

Comment # D10109 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Comment Type Technical Part of Dis Satisfied Page 960 Line 30 Fig/Table# 611 Subclause 16.8.3.1.2

Some typos in Section 16.8.3 of IEEE P802.16m/D10 have been identified. The legends in Fig. 611 might cause confusions as graphical keys for SA-preamble and PA-preamble are too similar. In this contribution, we correct the errors as well as suggesting modifications to clarify the legends for PA-preamble and SA-preamble used in Fig. 611.

Suggested Remedy

Please adopt the contribution IEEE C802.16m-10/1403 to correct the Figure.

GroupResolution Decision of Group: Principle

adopt the contribution IEEE C802.16m-10/1403r3.doc

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.8; Other LBS

<u>Editor's Notes</u> <u>a) done</u>

<u>Comment by:</u> Eunkyung Kim <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10110 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Editorial Part of Dis Satisfied Page 968 Line 65 Fig/Table# Subclause 16.9.3.1

cross reference is wrong.

Suggested Remedy

[Adopt the following change in line 60-65, page 968 in P802.16m/D10]

The information regarding E-MBS configuration is transmitted periodically to the AMSs interested in EMBS using a MAC control message called the AAI-E-MBS-CFG message. The E-MBS configuration indicators specify the resources reserved for E-MBS traffic in the downlink physical resources and additional information necessary for E-MBS operation. The details of E-MBS Configuration Indicators are described in del.2.3.60/del.2.3.61/jins.

<u>GroupResolution</u> <u>Decision of Group:</u> Agree

[Adopt the following change in line 60-65, page 968 in P802.16m/D10]

Reason for Group's Decision/Resolution

Group's Notes

Clause 16.9; Othe eMBS

<u>Editor's Notes</u> a) done

Comment by:	Jin Lee	<u>Membership S</u>	tatus: Member	Date: ?
Comment # D1011	1 Document u	nder Review: P802.16m/D10	Ballo	ot ID: sb_16m
Comment Type	Technical Part of Dis Satisfied	Page 979 <u>Line</u> 52	Fig/Table# 979	Subclause 16.11
The definition of activ	ve_ABS_timer is missing.			
Suggested Remedy				
Insert the following re	ow at the end of Table 979 :		======	
ABS active_ABS_ti	mer Time period for ABS to check		I I	
	whether AMS is alive in active n 	node or not - - ============	- :======	
CusumBasslution	Decision of Crown Dain	ainla		
<u>GroupResolution</u>	<u>Decision of Group:</u> Prin	cipie		
Insert the following re	ow at the end of Table 979 :			
ABS active_ABS_ti	mer Time period for ABS to check			I
	whether AMS is active mode in	connected state or not ==========	-	1
Reason for Group's Decis	sion/Resolution			
Group's Notes				
Clause 16.11; Gener	ral AAI Global Values			

Editor's Notes

Editor's Actions a) done

Comment by:JoeyChouMembership Status:MemberDate:2010-12-17

Comment # D10112 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 983 Line 8 Fig/Table# Subclause Annex R.2

16.2.3 MAC Control messages states that

"Table 677 lists the MAC control messages that shall be defined in the ASN.1 format, as shown in Annex R."

802.16m spec is not complete, If the ASN.1 code in Annex R.2 is not made normative, since there is not way to enforce AMS - ABS MAC control message interoperability

Suggested Remedy

Change as the following:

Annex R

(informative Normative) Definition of AAI MAC control messages

Annex R.2 MAC Control Message Definitions (Normative)

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

<resolved by comment # 10004>

1) In subclause 16.2.3, change the sentence:

"Table 677 lists the MAC control messages that shall be defined in the ASN.1 format as shown in Annex R"

to:

"MAC control messages are specified in subclause 16.2.3 and Annex R using ASN.1 notation. MAC control messages are listed in Table 677."

2) At the beginning of Annex R, change the word "informative" in the heading (line 8) to "normative" and change the initial paragraph (lines 11-14) to:

This Appendix defines MAC control messages using ASN.1 notation. The Packed Encoding Rules (PER) with byte unaligned option shall be used to produce compact transfer syntax for MAC control message to be transmitted over the air interface efficiently <\del>.

3) pp. 984 line 31 make the following change: Annex R.2 MAC Control Message Definitions <ins> (Normative) <\ins>

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> b) none needed

<u>Comment by:</u> Joey Chou <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10113 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 984 Line 31 Fig/Table# Subclause Annex R.2

The main reason to have a separate data file for ASN.1 code is to allow members to compile or check syntax, without the need to extract ASN.1 cdoe from the PDF file that is a painful task. But, this data file - P80216m_D10_ASN1.docx is in Word format that is good for people to read, but can't not be compiled.

It is noticed that P80216m_D10_ASN1.docx is not exactly the same as teh ASN.1 code in Annex R.2, It poses several serious issues:

- 1. The editor is not authorized to add or change the ASN.1 code in P80216m_D10_ASN1.docx without the comment resolution. P80216m_D10_ASN1.docx is 58 pages long, there is no way to review what editor did was all correct.
- 2. When the ASN.1 code in D10 draft is different from the ASN.1 code in P80216m_D10_ASN1.docx, which document takes precedence?
- 3. There is no way to compile and check the the syntax P80216m_D10_ASN1.docx , since the ASN.1 compiler can accept the word format.
- 4. How can we be sure the change the editor made without comment resolution is correct, if P80216m_D10_ASN1.docx can't be compiled

Suggested Remedy

Here are some recommendations:

- 1. The data file should be in the format (e.g. .txt) that is accepted by most ASN.1 compilers, not in the Word format
- 2. The ASN.1 code should be identical in both 16m draft and the data file
- 3. The editor should not add or change ASN.1 code in the data file without comment resolution

<u>GroupResolution</u> <u>Decision of Group:</u> Out of Scope

Reason for Group's Decision/Resolution

It is out of scope for the recirc as it is asking for changes to document which is outside of the balloted draft.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Implemented as part of the ASN.1 code alignment.

2011/11/27

Comment

IEEE 802.16-10/0061r4

Membership Status: Nonmember Comment by: Alessandro Triglia **Date:** 2010-12-18

Comment # D10114

Document under Review: P802.16m/D10

Ballot ID: sb 16m

Type Technical Part of Dis Satisfied

Page 986

Line 4 Fig/Table#

Subclause R.2

The identifier "aaig" within the ASN.1 type definition "MAC-Control-Msg-Type" is a typo. It should be "aaiClcReg".

The type reference "PHYCarrierIndex" (occurring twice on page 1082) is a typo. It should be "PhyCarrierIndex".

Suggested Remedy

Change "aaiq" to "aaiClcReq".

On page 1082, line 24 and page 1082, line 52, change "PHYCarrierIndex" to "PhyCarrierIndex"

GroupResolution

Decision of Group: Agree

Change "aaiq" to "aaiClcReq".

On page 1082, line 24 and page 1082, line 52, change "PHYCarrierIndex" to "PhyCarrierIndex"

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10115 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 986 Line 44 Subclause R.2 Fig/Table# **Comment** The ASN.1 choice type "MAC-Control-Msg-Type" currently lacks an extension marker (...). In a major type definition like this, it would be good to include an extension marker in order to support the addition of new AAI messages in a future version of this specification while ensuring backward and forward compatibility of the PER encodings. **Suggested Remedy** Add a comma (,) and an extension marker (...) immediately before the closing curly bracket (}) of the CHOICE, as shown below: aaiL2Xfer AAI-L2-XFER, aaiMsgAck AAI-MSG-ACK, AAI-RES-CMD, aaiResCmd **GroupResolution Decision of Group: Principle** On page 986 line 44, add a comma (,) and an extension marker (...) immediately before the closing curly bracket (}) of the CHOICE, as shown below: AAI-L2-XFER, aaiL2Xfer

Reason for Group's Decision/Resolution

AAI-MSG-ACK,

AAI-RES-CMD <ins> , </ins>

aaiMsgAck

aaiResCmd

<ins> ... </ins>

Group's Notes

Editor's Notes

Editor's Actions a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10116 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 987 Line 40 Fig/Table# Subclause R.2

The ASN.1 type definition "BasicCID" is not particularly useful. The existing references to this type could be changed to references to the "CID" type with no loss of clarity.

Suggested Remedy

Delete the "BasicCID" type definition.

On page 1043, line 55 and on page 1044, line 61, change "BasicCID" to "CID".

GroupResolution Decision of Group: Principle

On page 987 line 40, delete the "BasicCID" type definition:

 BasicCID ::= INTEGER (0..65535)

On page 987 line 25, change the "CID" type definition as follows:

CID ::= BIT STRING (SIZE (16)) <ins> INTEGER (0..65535) </ins>

On page 1043, line 55 and on page 1044, line 61, change "BasicCID" to "CID"

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10117 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 987 Line 50 Subclause R.2 Fig/Table# Comment In ASN.1, the items of an ENUMERATED type do not need to have a number associated with them. Those numbers are a legacy feature of ASN.1. They may still have some utility when the Basic Encoding Rules (BER) or the Distinguished Encoding Rules (DER) are used, but are completely useless when the Packed Encoding Rules (PER) are used, as in this specification. Since those numbers have no purpose in this specification, they should not be included. **Suggested Remedy** Delete the numbers (0), (1), (2), etc., from within the following ENUMERATED type definitions: **CPLength** page 987, line 50 ServiceLevelPrediction page 1044, line 37 For example, CPLength should be defined as follows: CPLength ::= ENUMERATED { one-eighth, one-sixteenth. one-fourth GroupResolution **Decision of Group:** Principle Delete the numbers (0), (1), (2), etc., from within the following ENUMERATED type definitions: - CPLength page 987, line 50 - ServiceLevelPrediction page 1044, line 37 For example, change CPLength as follows: CPLength ::= ENUMERATED {

one-eighth

 (0) .

```
one-sixteenth <del> (1) </del>,
one-fourth <del> (2) </del>
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10118 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page 988 Subclause R.2 Line Fig/Table# Comment This ASN.1 specification can be made easier to read, maintain, and implement if certain meaningful ASN.1 types are defined with a type assignment ("::=") and referenced by name wherever needed instead of being replicated in multiple places. The current specification already defines many such "common" types, but here we suggest a few more. **Suggested Remedy** On page 988 add the following type assignment: **STID** MulticastGroupID ::= On page 999, line 1; page 999, line 4; page 999, line 28; and page 999, line 31 change BIT STRING (SIZE(12)) to MulticastGroupID On page 1028, line 37; page 1029, line 27; page 1030, line 55; and page 1030, line 59 change INTEGER (0..4095) to MulticastGroupID *** On page 988 add the following type assignment: AMSMobilityLevel ::= **ENUMERATED {** slow, medium, fast On page 1000, line 58 and page 1015, line 40 change ENUMERATED { } to AMSMobilityLevel

```
On page 996
add the following type assignment:
      MapMaskSeed ::=
                               BIT STRING (SIZE(15))
On page 1007, line 61; page 1008, line 8; and page 1014, line 11
change BIT STRING (SIZE(15)) to MapMaskSeed
***
On page 1017
add the following type assignment:
      VendorID ::=
                               BIT STRING (SIZE(24))
On page 1019, line 7 and page 1022, line 1
change OCTET STRING (SIZE(3)) to VendorID
***
On page 1027
add the following type assignment:
      UnicastAvailIntervalBitmap ::= CHOICE {
            nmsi2
                                     BIT STRING (SIZE(4)),
                                     BIT STRING (SIZE(4)),
            nmsi4
            nmsi8
                                     BIT STRING (SIZE(8)),
                                     BIT STRING (SIZE(16))
            nmsi16
On page 1028, line 24; page 1029, line 14; page 1030, line 42; and page 1086, line 59
change CHOICE { ...... } to UnicastAvailIntervalBitmap
***
On page 1069
add the following type assignment:
      CLCID ::=
                         INTEGER (0..7)
```

On page 1069, line 63 and page 1071, line 12 change INTEGER (0..7) to CLCID

On page 1075 add the following type assignment:

WidebandCqi ::= INTEGER (0..15)

On page 1074, line 45; page 1074, line 51; page 1075, line 11; and page 1075, line 35 change INTEGER (0..15) to WidebandCqi

On page 1077 add the following type assignment:

Cqi ::= INTEGER (0..15)

On page 1076, line 25; page 1076, line 28; page 1076, line 31; page 1076, line 34; and page 1079, line 35 change INTEGER (0..15) to Cqi

GroupResolution Decision of Group: Principle

On page 988 line 20 add the following type assignment:

MulticastGroupID ::= BIT STRING (SIZE (12))

On page 999, line 1; page 999, line 4; page 999, line 28; and page 999, line 31 change BIT STRING (SIZE(12)) to MulticastGroupID

On page 1028, line 37; page 1029, line 27; page 1030, line 55; and page 1030, line 59 change INTEGER (0..4095) to MulticastGroupID

On page 988 line 20 (after MulticastGroupID) add the following type assignment:

On page 1000, line 58 and page 1015, line 40 change ENUMERATED {} to AMSMobilityLevel

On page 996 line 54 add the following type assignment:

MapMaskSeed ::= BIT STRING (SIZE(15))

On page 1007, line 61; page 1008, line 8; and page 1014, line 11 change BIT STRING (SIZE(15)) to MapMaskSeed

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10119 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 988 Line 24 Fig/Table# Subclause R.2

The ASN.1 type definition "TriggerConditions" type is semantically equivalent to the type definition "Triggers" and is probably an unintended duplicate of that one. Either one (preferably "TriggerConditions") should be deleted.

Suggested Remedy

Delete the "TriggerConditions" type definition.

On page 993, line 64, change "TriggerConditions" to "Triggers".

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The proposed ASN.1 change needs to be supported by a contribution comparing the two definitions in detail, but no such contribution has been provided.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> b) none needed

Comment by: Joey Chou Membership Status: Member Date: 2010-12-17

Comment # D10120 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 992 Line 52 Fig/Table# Subclause Annex R.2

Typo

Suggested Remedy

Change as the following

RaingingSyncInfo ::= SEQUENCE {

GroupResolution Decision of Group: Agree

Change as the following

RaingingSyncInfo ::= SEQUENCE {

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10121 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 992 Line 52 Fig/Table# Subclause R.2

In this ASN.1 specification there are a few names beginning with "ring-" instead of "rang-" (or "Ring-" instead of "Rang-"). They should be changed to "rang-" (or "Rang-", respectively).

Suggested Remedy

Change "ring" to "rang" (or "Ring" to "Rang") at the following locations:

page 992, line 52 page 994, line 42 (two occurrences) page 1008, line 11 page 1008, line 12

GroupResolution

Decision of Group: Agree

Change "ring" to "rang" (or "Ring" to "Rang") at the following locations:

page 992, line 52 page 994, line 42 (two occurrences) page 1008, line 11 page 1008, line 12

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Comment by: Joey Chou Membership Status: Member Date: 2010-12-17

Comment Type Technical Part of Dis Satisfied Page 994 Line 42 Fig/Table# Subclause Annex R.2

Typo

Suggested Remedy

Change as the following

raingingSyncInfo RaingingSyncInfo OPTIONAL,

GroupResolution Decision of Group: Agree

Change as the following

raingingSyncInfo RaingingSyncInfo OPTIONAL,

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10123 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 998 Line 10 Fig/Table# Subclause R.2

In this ASN.1 specification there are a few type definitions containing a value range constraint or a size range constraint that equals a power of two plus one (e.g., the range (0..16), which takes 5 bits in the encoding). We suspect that some or all of these situations may be unintended (since they are inefficient), and either the lower bound should be increased to 1 or the upper bound should be decreased by one.

Here are the cases identified:

On page 998, line 10 flowIdUpdate has the size constraint (0..16)

On page 1039, line 24 trafficIndicationBitmapArray has the size constraint (0..32)

On page 1040, line 39 slpidUpdateArray has the size constraint (0..1024)

On page 1050, line 39 ulCarrierFrequency has the value range constraint (0..65536)

On page 1061, line 65 pagingGroupInfoArray has the size constraint (0..4)

Suggested Remedy

Discuss to determine whether each of the above definitions is correct or not. Where a range is incorrect, either increase the lower bound of the range from 0 to 1 or decrease the upper bound by one.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

These is no adequate remedy proposed. The group discussed and there may be merit to the proposal. However, there is no specific instance of remedy was proposed.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

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

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10124 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 998 Line 11 Fig/Table# Subclause R.2

In this ASN.1 specification there are several cases in which a type definition having a name is replicated (within another type definition) instead of being referenced by its name, as it should be.

For example, the type "FID" (flow identifier) is a frequently used common type defined as INTEGER (0..15). Most "flow identifier" fields in this specification correctly reference the "FID" type by its name, but some of them are specified as INTEGER (0..15) or even as BIT STRING (SIZE (4)).

Suggested Remedy

On page 998, line 11; page 998, line 22; and page 998, line 25 change BIT STRING (SIZE(12)) to EMBSID

On page 998, line 12; page 998, line 24; page 998, line 27; page 999, line 2; page 999, line 5; page 999, line 30; and page 999, line 32 change BIT STRING (SIZE(4)) to FID

On page 1027, line 25; page 1027, line 29; page 1027, line 51; page 1027, line 55; page 1028, line 38; page 1028, line 61; and page 1031, line 21 change INTEGER (0..15) to FID

On page 998, line 44; page 998, line 46; page 999, line 15; and page 999, line 17 change BIT STRING (SIZE(7)) to EMBSZoneID

On page 998, line 47 and page 998, line 18 change INTEGER (0..63) to PhyCarrierIndex

On page 1006, line 35 change BIT STRING (SIZE(48)) to BSID

On page 1006, line 36 change BIT STRING (SIZE(10)) to PreambleIndex

On page 1008, line 15 and page 1008, line 19 change INTEGER (2..15) to FID (2..15)

On page 1008, line 41 change BIT STRING (SIZE(32)) to SFID

On page 1036, line 65 change ENUMERATED {} to DirIndicator

On page 1058, line 21 change BIT STRING (SIZE(24)) to OperatorID

On page 1083, line 54 change INTEGER (0..1023) to IDCell

On page 1084, line 27 change INTEGER (0..255) to FAIndex

On page 1022, line 58 and page 1022, line 60 change BIT STRING (SIZE(48)) to MACAddress

<u>GroupResolution</u>

On page 998, line 11; page 998, line 22; and page 998, line 25 change BIT

STRING (SIZE(12)) to EMBSID

Decision of Group: Principle

On page 998, line 12; page 998, line 24; page 998, line 27; page 999, line 2; page 999, line 5; page 999, line 30; and page 999, line 32 change BIT STRING (SIZE(4)) to FID

On page 1027, line 25; page 1027, line 29; page 1027, line 51; page 1027, line 55; page 1028, line 38; page 1028, line 61; and page 1031, line 21 change INTEGER (0..15) to FID

On page 998, line 44; page 998, line 46; page 999, line 15; and page 999, line 17 change BIT STRING (SIZE(7)) to EMBSZoneID

On page 998, line 47 and page 999, line 18 change INTEGER (0..63) to PhyCarrierIndex

On page 1006, line 35 change BIT STRING (SIZE(48)) to BSID

On page 1006, line 36 change BIT STRING (SIZE(10)) to PreambleIndex

On page 1008, line 15 and page 1008, line 19 change INTEGER (2..15) to FID (2..15)

On page 1008, line 41 change BIT STRING (SIZE(32)) to SFID

On page 1058, line 21 change BIT STRING (SIZE(24)) to OperatorID

On page 1083, line 54 change INTEGER (0..1023) to IDCell

On page 1084, line 27 change INTEGER (0, 255) to FAIndex

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10125 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page ? Line 37 Fig/Table# Subclause R.2

In this ASN.1 specification there are several named type definitions (e.g., RangingRsp) that are not referenced anywhere. Those type assignments should be deleted.

Suggested Remedy

Delete the following type assignments:

RangingRsp page 1002, line 37 to line 45 RangingStatus2 page 1002, line 28 to line 34 ClassifierDscAction page 1020, line 7 to line 13

PreambleIndex3 page 986, line 59
NewPgOffset page 996, line 41
Supported page 996, line 52
IPv6Address page 996, line 58
MACAddrMask page 996, line 64
SfNumberLSB page 997, line 1

ShortFrameld page 1002, line 21 to line 26 FsnSize page 1020, line 15 to line 20 MbsService page 1020, line 22 to line 30 SnFeedback page 1020, line 32 to line 37 HarqServiceFlow page 1020, line 39 to line 44

AlertClass page 1020, line 62 to page 1021, line 5

DfpcUfpc page 1050, line 21 to line 28

SONActionType page 1082, line 61 to page 1083, line 13

SONReason page 1082, line 15 to line 33

<u>GroupResolution</u> <u>Decision of Group:</u> Agree

Delete the following type assignments:

RangingRsp page 1002, line 37 to line 45

RangingStatus2 page 1002, line 28 to line 34 ClassifierDscAction page 1020, line 7 to line 13

PreambleIndex3 page 986, line 59
NewPgOffset page 996, line 41
Supported page 996, line 52
IPv6Address page 996, line 58
MACAddrMask page 996, line 64
SfNumberLSB page 997, line 1

ShortFrameld page 1002, line 21 to line 26
FsnSize page 1020, line 15 to line 20
MbsService page 1020, line 22 to line 30
SnFeedback page 1020, line 32 to line 37
HarqServiceFlow page 1020, line 39 to line 44

AlertClass page 1020, line 62 to page 1021, line 5

DfpcUfpc page 1050, line 21 to line 28

SONActionType page 1082, line 61 to page 1083, line 13

SONReason page 1082, line 15 to line 33

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10126 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 38 Subclause R.2 Fig/Table# Comment The field "csSpecificationType" is defined of type "CsSpecification", but according to Table 685 (AAI-REG-REQ) and Table 686 (AAI-REG-RSP), the type of this field should be a 16-bit bitmap having one bit for each CS type (indicating whether the AMS supports that CS type). The type "CsSpecification" itself is still needed because it is referenced elsewhere (e.g., AAI-DSA-REQ); but a suitable type for the field "csSpecificationType" does not exist. Suggested Remedy On page 1004, line 38 change the name of the field "csSpecificationType" to "csSpecificationTypes" (plural) change "CsSpecification" to "CsSpecificationTypes" On page 1007, line 42 add the following type assignment: CsSpecificationTypes ::= BIT STRING { packetlpv4 (0), packetlpv6 (1), packetEthernet (2), packetlpv4Orlpv6 (3), multiProtocol (4) } (SIZE(16)) GroupResolution **Decision of Group: Principle** On page 1004, line 38 change the name of the field "csSpecificationType" to "csSpecificationTypes" (plural) change "CsSpecification" to "CsSpecificationTypes", as follows: CsCapabilities ::= SEQUENCE { csSpecificationType<ins>s</ins> CsSpecification<ins>Types</ins>

OPTIONAL,

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10127 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 59 Fig/Table# Subclause R.2

The field "activeClassLimit" is currently defined of type INTEGER (0..7) with a comment indicating that the value 0 is to be understood as 8. This is an unnecessary complication. If the field were defined as INTEGER (1..8), its encoding would still occupy 3 bits, with '000'b representing the value 1, '001' representing the value 2, ..., and '111' representing the value 8. Therefore, if the field were defined as INTEGER (1..8) there would be no need to handle the values of this field in a special way.

Suggested Remedy

Change INTEGER (0..7) to INTEGER (1..8) and delete the two comment lines preceding the field

<u>GroupResolution</u> <u>Decision of Group:</u> <u>Disagree</u>

Reason for Group's Decision/Resolution

The proposed ASN.1 change makes sense but needs to be supported by a corresponding change to the table, which has not been proposed.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> b) none needed

Alessandro Triglia Comment by: Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10128 Document under Review: P802.16m/D10 Ballot ID: sb 16m Type Technical Part of Dis Satisfied Page ? Line 38 Subclause R.2 Fig/Table# Comment In this ASN.1 specification there are three BIT STRING type definitions that lack a size constraint. Here is an example: BIT STRING { RngAckBitmap ::= rngOpp1 (0),rngOpp2 (1),rngOpp3 (2),rngOpp4 (3)

A size constraint (SIZE(4)) is missing in the above definition.

In ASN.1 a bit string type without a size constraint is a variable-length bit string type that supports any length from zero to infinity. The encodings of such types are preceded by a field containing the length. The three BIT STRING types in question should be fixed-length bit strings, not variable-length bit strings.

Suggested Remedy

On page 1005, line 38 add (SIZE(4))

On page 1059, line 51 add (SIZE(4))

On page 1061, line 25 add (SIZE(3))

GroupResolution

Decision of Group: Agree

On page 1005, line 38 add (SIZE(4))

On page 1059, line 51

add (SIZE(4))

On page 1061, line 25 add (SIZE(3))

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10129 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 25 Fig/Table# Subclause R.2

The type "RangingAbort" is defined as a SEQUENCE containing a CHOICE. The outer sequence is superfluous.

Suggested Remedy

Delete the word "SEQUENCE", the initial left curly bracket, the word "rangingAbort", and the final right curly bracket.

The result will be as follows:

```
RangingAbort ::= CHOICE {
    noMoreRanging NULL,
    rngAbortTimer INTEGER (1..65535)
    }
```

GroupResolution Decision of Group: Agree

Delete the word "SEQUENCE", the initial left curly bracket, the word "rangingAbort", and the final right curly bracket.

The result will be as follows:

```
RangingAbort ::= CHOICE {
    noMoreRanging NULL,
    rngAbortTimer INTEGER (1..65535)
  }
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Date: 2010-12-17

Comment by: Joey Chou Membership Status: Member Comment # D10130 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 38 Subclause Annex R.2 Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. FATAL: Unknown type "CentralFreg" referenced by "centerFregForNeighborABS" at line 931 in ASN1.mib.asn1 For example CentralFreq is not defined RedirectionInfo ::= SEQUENCE { absidForNeighborABS BIT STRING (SIZE (48)). preambleForNeighborABS BIT STRING (SIZE (10)), centerFreqForNeighborABS CentralFreq **Suggested Remedy** Define the CentralFreq type CentralFreg ::= INTEGER (0..4294967295) **GroupResolution Decision of Group: Principle** <resolved by comment #10131> Change "CentralFreq" to "CenterFreq" at the following locations: page 1006, line 38 page 1067, line 61 page 1068, line 3 Reason for Group's Decision/Resolution **Group's Notes** Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions

b) none needed

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10131 Ballot ID: sb_16m Document under Review: P802.16m/D10 Type Technical Part of Dis Satisfied Page ? Line 38 Subclause R.2 Fig/Table# Comment In this ASN.1 specification there is a type definition named "CenterFreq" and a few references to a non-existent type "CentralFreq". Those references should be changed to "CenterFreq". **Suggested Remedy** Change "CentralFreg" to "CenterFreg" at the following locations: page 1006, line 38 page 1067, line 61 page 1068, line 3 **GroupResolution Decision of Group:** Agree Change "CentralFreq" to "CenterFreq" at the following locations: page 1006, line 38 page 1067, line 61 page 1068, line 3 Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Joey Chou <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10132 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 11 Fig/Table# Subclause Annex R.2

Typo

Suggested Remedy

Change as the following

raingingSyncInfo RaingingSyncInfo OPTIONAL,

-- response based on rainging purpose sent in AAI-RNG-REQ raingingPurpose CHOICE {

GroupResolution Decision of Group: Agree

Change as the following

raingingSyncInfo RaingingSyncInfo OPTIONAL,

-- response based on rainging purpose sent in AAI-RNG-REQ raingingPurpose CHOICE {

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10133 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 42 Fig/Table# Subclause R.2

The field "updateOrDelete" is defined of type BOOLEAN, but there is no indication of whether the boolean value TRUE means "update" or "delete".

Suggested Remedy

Change BOOLEAN to ENUMERATED { update, delete }

GroupResolution Decision of Group: Agree

Change BOOLEAN to ENUMERATED { update, delete }

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Joey Chou Membership Status: Member Comment by: **Date:** 2010-12-17 Comment # D10134 Ballot ID: sb_16m Document under Review: P802.16m/D10 Type Technical Part of Dis Satisfied Page ? Subclause Annex R.2 Line 1 Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. WARNING: Line 1044: expected lower-case member identifier, found an unnamed FID. WARNING: Obsolete X.208 syntax detected, please give the member a name. invalidFIDList SEQUENCE (SIZE (1..24)) OF SEQUENCE { FID, dIULIndicator **ENUMERATED {** dl, ul } OPTIONAL, **Suggested Remedy** Change as the following nvalidFIDList SEQUENCE (SIZE (1..24)) OF SEQUENCE { fid FID, dlULIndicator ENUMERATED { dI, ul } OPTIONAL, **GroupResolution Decision of Group:** Agree Change as the following nvalidFIDList SEQUENCE (SIZE (1..24)) OF SEQUENCE { fid FID, dIULIndicator **ENUMERATED {** dl, ul } OPTIONAL,

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Alessandro Triglia Comment by: Membership Status: Nonmember **Date:** 2010-12-18 Comment # D10135 Document under Review: P802.16m/D10 Ballot ID: sb 16m Type Technical Part of Dis Satisfied Page ? Subclause R.2 Line 1 Fig/Table# Comment Towards the end of the type definition "RangingResponse", there is one component being defined of type FID (on page 1009, line 1) that lacks a component identifier. ASN.1 requires that every component of a SEQUENCE have an identifier and a type definition. **Suggested Remedy** On page 1009, line 1 add the identifier "fid" before the type name "FID". The result will be as follows: invalidFIDList SEQUENCE (SIZE (1..24)) OF SEQUENCE { fid FID, dIULIndicator **ENUMERATED** { dl. ul } OPTIONAL, **GroupResolution Decision of Group:** Agree On page 1009, line 1 add the identifier "fid" before the type name "FID". The result will be as follows: invalidFIDList SEQUENCE (SIZE (1..24)) OF SEQUENCE { fid FID, dIULIndicator **ENUMERATED {** dI, ul

} OPTIONAL,	

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10136 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 28 Fig/Table# Subclause R.2

Every major ASN.1 sequence type (especially those corresponding to AAI message types and PKM message types) should contain an extension marker to support the addition of components in future versions of the specification while ensuring backward and forward compatibility of the PER encodings. While many of those types in this specification already contain an extension marker, many others do not.

Suggested Remedy

Add a comma (,) and an extension marker (...) immediately before the closing curly bracket (}) of the SEQUENCE in the following type definitions (see example in the previous comment):

AAI-RNG-REQ page 1007, line 25

AAI-RNG-RSP page 1007, line 54

AAI-RNG-ACK page 1009, line 28

AAI-DREG-REQ page 1015, line 30

AAI-DREG-RSP page 1016, line 14

AAI-DSA-ACK page 1029,line 44

PKM-ReauthRequest page 1033, line 14

PKM-EAPTransfer page 1033, line 20

PKM-KeyAgreementMsg1 page 1033, line 30

PKM-KeyAgreementMsg2 page 1033, line 41

PKM-KeyAgreementMsg3 page 1033, line 52

PKM-TEKRequest page 1033, line 65

PKM-TEKReply page 1034, line 10

PKM-TEKInvalid page 1034, line 17

AAI-HO-IND page 1041, line 27

AAI-HO-REQ page 1041, line 61

AAI-HO-CMD page 1042, line 45

AAI-NBR-ADV page 1045, line 35

AAI-SCN-REQ page 1058, line 26

AAI-SCN-RSP page 1059, line 55

AAI-SCN-REP page 1061, line 30

AAI-MC-REQ page 1066, line 10

page 1066, line 37 AAI-MC-RSP **AAI-CLC-REQ** page 1071, line 4 AAI-CLC-RSP page 1071, line 24 AAI-SBS-MIMO-FBK page 1079, line 24 AAI-MBS-MIMO-FBK page 1079, line 54 AAI-FFR-CMD page 1082, line 25 **AAI-FFR-REP** page 1082, line 54 AAI-ARS-CFG-CMD page 1085, line 41

Note that in AAI-DREG-REQ and AAI-DREG-RSP there is an extension marker in the inner CHOICE (which is correct), but there is no extension marker in the SEQUENCE itself.

GroupResolution

Decision of Group: Agree

Add a comma (,) and an extension marker (...) immediately before the closing curly bracket (}) of the SEQUENCE in the following type definitions (see example in the previous comment):

AAI-RNG-REQ page 1007, line 25
AAI-RNG-RSP page 1007, line 54
AAI-RNG-ACK page 1009, line 28
AAI-DREG-REQ page 1015, line 30
AAI-DREG-RSP page 1016, line 14
AAI-DSA-ACK page 1029,line 44
PKM-ReauthRequest page 1033, line 14

PKM-EAPTransfer page 1033, line 20
PKM-KeyAgreementMsg1 page 1033, line 30
PKM-KeyAgreementMsg2 page 1033, line 41
PKM-KeyAgreementMsg3 page 1033, line 52
PKM-TEKRequest page 1033, line 65

page 1034, line 10 **PKM-TEKReply** page 1034, line 17 PKM-TEKInvalid AAI-HO-IND page 1041, line 27 AAI-HO-REQ page 1041, line 61 AAI-HO-CMD page 1042, line 45 **AAI-NBR-ADV** page 1045, line 35 AAI-SCN-REQ page 1058, line 26 AAI-SCN-RSP page 1059, line 55 **AAI-SCN-REP** page 1061, line 30

page 1066, line 10 AAI-MC-REQ AAI-MC-RSP page 1066, line 37 AAI-CLC-REQ page 1071, line 4 AAI-CLC-RSP page 1071, line 24 AAI-SBS-MIMO-FBK page 1079, line 24 AAI-MBS-MIMO-FBK page 1079, line 54 AAI-FFR-CMD page 1082, line 25 AAI-FFR-REP page 1082, line 54 AAI-ARS-CFG-CMD page 1085, line 41

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>a) done</u>

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10137 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 38 Subclause Annex R.2 Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. ASN.1 grammar parse error near line 1164 (token "}"): parse error, unexpected '}' Cannot parse "ASN1.mib.asn1" amsNspRequest CHOICE { serviceInfoQuery BIT STRING { } (SIZE (2)), sbcRequest SEQUENCE { aRSnetworkentry SEQUENCE { aRSTTG INTEGER (0..49), aRSRTG INTEGER (0..49), relaymode BOOLEAN } OPTIONAL visitedNSPID NSPID OPTIONAL visitedNSPID is added as a choice in amsNspRequest CHOICE {. Therefore, visitedNSPID can't have OPTIONAL tag. visitedNSPID should be added to the end of 2nd CHOICE. aRSnetworkentry is also not consistent with teh AAI-SBC-REQ message table **Suggested Remedy** Change as the following amsNspRequest CHOICE { serviceInfoQuery BIT STRING { } (SIZE (2)),

sbcRequest

SEQUENCE {

```
aRSnetworkentry SEQUENCE {
    aRSTTG INTEGER (0..49),
    aRSRTG INTEGER (0..49),
    relaymode BOOLEAN OPTIONAL,
    visitedNSPID NSPID OPTIONAL,
    aRSTTG INTEGER (0..49) OPTIONAL, -- If relaymode == 0
    aRSRTG INTEGER (0..49) OPTIONAL, -- If relaymode == 0
} OPTIONAL

},

visitedNSPID NSPID OPTIONAL
},

In visitedNSPID NSPID OPTIONAL
},

...
}
```

GroupResolution

Decision of Group: Principle

Resolved by comment #D10009.

Resolution:

Adopt the text changes in contribution IEEE C802.16m-11/1429r2

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions b) none needed

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10138 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 38 Fig/Table# Subclause R.2

The component "visitedNSPID" within the type definition "AAI-SBC-REQ" appears to be incorrectly nested, since it should be a field of "sbcRequest" (a SEQUENCE) and not an alternative of "amsNspRequest" (a CHOICE). The current position of this component causes a syntax error in the ASN.1.

Suggested Remedy

Delete the right curly bracket (}) on page 1011, line 38, and add a right curly bracket (}) immediately before the existing right curly bracket in line 41.

The result will be as follows:

```
aRSnetworkentry SEQUENCE {
 aRSTTG INTEGER (0..49),
 aRSRTG INTEGER (0..49),
 relaymode BOOLEAN
 } OPTIONAL,
 visitedNSPID NSPID OPTIONAL
 }
},
...
```

GroupResolution Decision of Group: Principle

Resolved by comment #D10009

Adopt the text changes in contribution IEEE C802.16m-11/1429r2

Reason for Group's Decision/Resolution

Group's Notes

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10139 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 46 Fig/Table# Subclause R.2

Within the type definition "NspInformation" there is a component with an illegal ASN.1 syntax. According to the ASN.1 grammar, the component "AaiSiiAdvPointer" should begin with a lowercase letter and should not be followed by a "::=" symbol.

Suggested Remedy

Rename "AaiSiiAdvPointer" to "aaiSiiAdvPointer" and delete the "::=" in the same line.

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

<resolved by comment #10140>

NspInformation ::= SEQUENCE {

- -- Shall present if AAI-SII-ADV Message Pointer is not included.
- -- Optional if AAI-SII-ADV Message Pointer is included.

nspldentifier SEQUENCE (SIZE (1..16)) OF NSPID OPTIONAL,

-- if SIQ bit 1 is set. The order of Verbose NSP Names presented shall be in the same order as the NSP IDs presented in the NSP List. verboseNspNameList SEQUENCE (SIZE(01..25516)) OF VerboseName OPTIONAL

AaaiSiiAdvPointer ::=-INTEGER (0..16383) OPTIONAL

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> b) none needed

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10140 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 52 Subclause Annex R.2 Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. ASN.1 grammar parse error near line 1174 (token "::="); parse error, unexpected TOK PPEQ Cannot parse "ASN1.mib.asn1" NspInformation ::= SEQUENCE { -- Shall present if AAI-SII-ADV Message Pointer is not included. -- Optional if AAI-SII-ADV Message Pointer is included. nspldentifier SEQUENCE (SIZE (1..16)) OF NSPID OPTIONAL. -- if SIQ bit 1 is set verboseNspNameList SEQUENCE (SIZE (0..255)) OF VerboseName OPTIONAL, AaiSiiAdvPointer ::= INTEGER (0..16383) OPTIONAL Comment C116 "Cleanup Text in AAI SBC-REQ/RSP messages and ASN.1 code" at the Dallas meeting was accepted, but not completely implemented. **Suggested Remedy** NspInformation ::= SEQUENCE { -- Shall present if AAI-SII-ADV Message Pointer is not included. -- Optional if AAI-SII-ADV Message Pointer is included. nspldentifier SEQUENCE (SIZE (1..16)) OF NSPID OPTIONAL, -- if SIQ bit 1 is set. The order of Verbose NSP Names presented shall be in the same order as the NSP IDs presented in the NSP List. verboseNspNameList SEQUENCE (SIZE(01..25516)) OF VerboseName OPTIONAL AaaiSiiAdvPointer ::=-INTEGER (0..16383) OPTIONAL

GroupResolution Decision of Group: Agree

```
NspInformation ::= SEQUENCE {
-- Shall present if AAI-SII-ADV Message Pointer is not included.
-- Optional if AAI-SII-ADV Message Pointer is included.
nspIdentifier SEQUENCE (SIZE (1..16)) OF NSPID OPTIONAL,
-- if SIQ bit 1 is set. The order of Verbose NSP Names presented shall be in the same order as the NSP IDs presented in the NSP List.
verboseNspNameList SEQUENCE (SIZE(01..25516)) OF VerboseName OPTIONAL
AaaiSiiAdvPointer ::= INTEGER (0..16383) OPTIONAL
}
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10141 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 28 Fig/Table# Subclause R.2

The type "IpAddrAndMask" is defined as a SEQUENCE containing a CHOICE. The outer sequence is superfluous.

Suggested Remedy

Delete the word "SEQUENCE", the initial left curly bracket, the word "ipv4Vslpv6", and the final right curly bracket.

The result will be as follows:

<u>GroupResolution</u>

Decision of Group: Agree

Delete the word "SEQUENCE", the initial left curly bracket, the word "ipv4Vslpv6", and the final right curly bracket.

The result will be as follows:

}					
Reason for Group's Decision/Resolu	<u>ıtion</u>				
Group's Notes Clause Annex R.2; Other Ann	nex; ASN.1				
Editor's Notes	Editor's Actions a) done				
Implemented as part of the A	SN.1 code alignment.				
2011/11/27				IEEE 802	.16-10/0061r4
Comment by:	Joey Chou	Membership Stat	tus: Member	<u>Da</u>	ate: 2010-12-17
Comment # D10142	Document unde	Document under Review: P802.16m/D10 Ballo		ot ID: sb_16m	
<u>Comment</u> <u>Type</u> Technical Inner IP protocol attributes in	AAI-DSA-REQ and AAI-DSC-R	Page ? Line 54 EQ are missing the ASN.	Fig/Table# 1 code	<u>Subclause</u> A	nnex R.2
Suggested Remedy Adopt contribution C80216m-	-10_1340.doc or later version				
<u>GroupResolution</u>	<u>Decision of Group:</u> Principl	e			
Resolved by comment #D100)35.				
Resolution:					
Adopt the text changes propo	osed in contribution C80216m-10	0_1340r1			
Reason for Group's Decision/Resolu	<u>ıtion</u>				
Group's Notes Clause Annex R.2; Other Ann	nex; ASN.1				
Editor's Notes	Editor's Actions b) none needed				

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 Document under Review: P802,16m/D10 Comment # D10143 Ballot ID: sb 16m Type Technical Part of Dis Satisfied Page ? Subclause R.2 Line 5 Fig/Table# Comment In ASN.1, the items of an ENUMERATED type do not need to have a number associated with them. Those numbers are a legacy feature of ASN.1. They may still have some utility when the Basic Encoding Rules (BER) or the Distinguished Encoding Rules (DER) are used, but are completely useless when the Packed Encoding Rules (PER) are used, as in this specification. Since those numbers have no purpose in this specification, they should not be included. **Suggested Remedy** Delete the numbers (0), (1), etc., from within the following ENUMERATED type: component "classificationAction" within type "ClassificationRule" page 1022, line 5 The result will be as follows: classificationAction ENUMERATED { none. discard } OPTIONAL, **GroupResolution Decision of Group:** Agree Delete the numbers (0), (1), etc., from within the following ENUMERATED type: component "classificationAction" within type "ClassificationRule" page 1022, line 5 The result will be as follows: classificationAction ENUMERATED { none. discard } OPTIONAL,

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10144 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 17 Fig/Table# Subclause R.2

The enumerated type SleepOperationDSx is superfluous because the CHOICEs used in SleepReqAction and SleepRspAction already provide for an enumeration of their alternatives (switchSleepCycle, changeSleepCycle).

(Any ASN.1 CHOICE type contains an inherent enumeration, both semantically and in the encodings. For a CHOICE type there is no need to separately indicate which alternative of the CHOICE is being used in a given instance, because that information is an inherent part of every value of the CHOICE.)

Suggested Remedy

On page 1025, line 16 to line 24 delete the type assignment "SleepOperationDSx"

On page 1025, line 38 delete the component "operation" of the type "SleepRegAction"

On page 1025, line 40 rename the component "sleepReqOperatonInfo" of the type SleepReqAction to "operation"

On page 1026, line 5 delete the component "operation" of the type "SleepRspAction"

On page 1026, line 7 rename the component "sleepRspOperatonInfo" of SleepRspAction to "operation"

GroupResolution Decision of Group: Agree

On page 1025, line 16 to line 24 delete the type assignment "SleepOperationDSx"

On page 1025, line 38 delete the component "operation" of the type "SleepReqAction"

On page 1025, line 40 rename the component "sleepReqOperatonInfo" of the type SleepReqAction to "operation"

On page 1026, line 5 delete the component "operation" of the type "SleepRspAction"

On page 1026, line 7 rename the component "sleepRspOperatonInfo" of SleepRspAction to "operation"

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10145 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 27 Fig/Table# Subclause R.2

The type "SleepCycleSetting" is defined as a SEQUENCE containing a CHOICE. The outer sequence is superfluous.

Suggested Remedy

Delete the word "SEQUENCE", the initial left curly bracket, the word "sleepRegResponses", and the final right curly bracket.

The result will be as follows:

```
SleepCycleSetting ::= CHOICE {
    request SleepReqAction,
    response SleepRspAction
}
```

GroupResolution Decision of Group: Agree

Delete the word "SEQUENCE", the initial left curly bracket, the word "sleepReqResponses", and the final right curly bracket.

The result will be as follows:

```
SleepCycleSetting ::= CHOICE {
    request SleepReqAction,
    response SleepRspAction
}
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10146 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 45 Subclause Annex R.2 Fig/Table# Comment Unicast Available Interval Bitmap is Present when ABS-initiated DSA for carrier switching, so it should be included in AbsInitDsaInfo **Suggested Remedy** Change as the following AbsInitDsaInfo ::= SEQUENCE { sfid SFID, fid FID, -- carrier switching based on Unicast Available Interval unicastAvailIntervalBitmap CHOICE { nmsi2 BIT STRING (SIZE (4)). nmsi4 BIT STRING (SIZE (4)), nmsi8 BIT STRING (SIZE (8)). nmsi16 BIT STRING (SIZE (16)) OPTIONAL AAI-DSA-REQ ::= SEQUENCE { fidChangeCount FidChangeCount, absInitDsaInfo AbsInitDsaInfo OPTIONAL. directionIndicator DirIndicator, qoSParameters QosParameter OPTIONAL, additionalSfInfo AdditionalSfInfo OPTIONAL, emergencyIndication BOOLEAN OPTIONAL, embsService EMBSService OPTIONAL. fullEMBSIDArray SEQUENCE (SIZE (1..8)) OF SEQUENCE { embsZoneID EMBSZoneID, carrierIndex PhyCarrierIndex, embsidFIDMappingList SEQUENCE (SIZE (1..15)) OF SEQUENCE { embsid EMBSID, fid FID unicastAvailIntervalBitmap CHOICE {

nmsi2 BIT STRING (SIZE (4)), nmsi4 BIT STRING (SIZE (4)), nmsi8 BIT STRING (SIZE (8)), nmsi16 BIT STRING (SIZE (16)) } OPTIONAL,

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Inadequate remedy as pointed by commenter.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Joey Chou Comment by: Membership Status: Member **Date:** 2010-12-17 Comment # D10147 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 24 Subclause Annex R.2 Fig/Table# Comment carrierSwitching is present if ABS indicates carrier switching when receiving AMS-initiated DSA, so it should be optional **Suggested Remedy** Change as the following carrierSwitching CHOICE { unicastAvailIntervalBitmap CHOICE { nmsi2 BIT STRING (SIZE (4)), nmsi4 BIT STRING (SIZE (4)), nmsi8 BIT STRING (SIZE (8)), nmsi16 BIT STRING (SIZE (16)) aaiEmbsRepMsg NULL } OPTIONAL, **GroupResolution Decision of Group:** Principle Change as follows: carrierSwitching UnicastAvailIntervalBitmap, aaiEmbsRepMsg NULL } <ins> OPTIONAL </ins>, Reason for Group's Decision/Resolution **Group's Notes** Clause Annex R.2; Other Annex; ASN.1

Editor's Actions a) done

Implemented as part of the ASN.1 code alignment.

Editor's Notes

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17

Comment # D10148 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Type Technical Part of Dis Satisfied Page ? Line 58 Subclause Annex R.2 Fig/Table# Comment

The editor wrongly implemented contribution 1268r1 (Comment C10073 in Dallas meeting). The open and closing brackets are not line up. The code can't be compiled at all.

ASN.1 grammar parse error near line 2035 (token "AAI-DSC-RSP"): parse error, unexpected TOK capitalreference, expecting '}' Cannot parse "ASN1.mib.asn1"

The editor also incorrectly moved unicastAvailIntervalBitmap out of fullEMBSIDArray, since this is not what the table says.

Suggested Remedy

```
Fix the AAI-DSC-REQ code
```

```
fullEMBSIDArray SEQUENCE (SIZE (1..8)) OF SEQUENCE {
  embsZoneID EMBSZoneID.
  newEmbsZoneID EMBSZoneID.
  carrierIndex PhyCarrierIndex.
  serviceFlowUpdateType CHOICE {
    bitmapAndNew SEQUENCE {
     serviceFlowUpdateBitmap BIT STRING (SIZE (16)),
     embsidFIDMappingArray SEQUENCE (SIZE (1..16)) OF SEQUENCE {
     newEMBSID EMBSID,
     newFID FID
   currentAndNew SEQUENCE (SIZE (1..16)) OF SEQUENCE {
     currentEMBSID EMBSID.
    currentFID FID.
    newEMBSID EMBSID,
    newFID FID
```

```
<re>olved by comment #10149></ri>
```

Add a right curly bracket (}) immediately before the existing right curly bracket (}) on line 30.

The result will be as follows:

```
serviceFlowUpdateType CHOICE {
 bitmapAndNew
                        SEQUENCE {
   serviceFlowUpdateBitmap BIT STRING (SIZE (16)),
   embsidFIDMappingArray
                           SEQUENCE (SIZE (1..16)) OF SEQUENCE {
      newEMBSID
                               EMBSID,
      newFID
                               FID
 currentAndNew
                         SEQUENCE (SIZE (1..16)) OF SEQUENCE {
    currentEMBSID
                            EMBSID,
    currentFID
                            FID,
    newEMBSID
                            EMBSID,
    newFID
                            FID
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions b) none needed

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10149 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 30 Fig/Table# Subclause R.2

A right curly bracket (}) is missing within the definition of the component "bitmapAndNew" (at the end of "embsidFIDMappingArray" on line 30).

Suggested Remedy

Add a right curly bracket (}) immediately before the existing right curly bracket (}) on line 30.

The result will be as follows:

```
serviceFlowUpdateType CHOICE {
                        SEQUENCE {
 bitmapAndNew
  serviceFlowUpdateBitmap BIT STRING (SIZE (16)),
  embsidFIDMappingArray
                           SEQUENCE (SIZE (1..16)) OF SEQUENCE {
      newEMBSID
                               EMBSID,
      newFID
                               FID
                         SEQUENCE (SIZE (1..16)) OF SEQUENCE {
 currentAndNew
    currentEMBSID
                            EMBSID,
    currentFID
                            FID,
    newEMBSID
                            EMBSID,
    newFID
                            FID
```

<u>GroupResolution</u>

Decision of Group: Agree

Add a right curly bracket (}) immediately before the existing right curly bracket (}) on line 30.

The result will be as follows:

```
serviceFlowUpdateType CHOICE {
```

```
SEQUENCE {
bitmapAndNew
 serviceFlowUpdateBitmap
                         BIT STRING (SIZE (16)),
 embsidFIDMappingArray
                         SEQUENCE (SIZE (1..16)) OF SEQUENCE {
    newEMBSID
                              EMBSID,
                              FID
    newFID
currentAndNew
                       SEQUENCE (SIZE (1..16)) OF SEQUENCE {
  currentEMBSID
                          EMBSID,
  currentFID
                          FID,
  newEMBSID
                          EMBSID,
  newFID
                          FID
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

<u>Comment by:</u> Joey Chou <u>Membership Status:</u> Member <u>Date:</u> 2010-12-17

Comment # D10150 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 42 Fig/Table# Subclause Annex R.2

Unicast Available Interval Bitmap is Present when ABS-initiated DSA for carrier switching, so it should be removed as it is already included in AbsInitDsaInfo in another comment

Suggested Remedy

Change as the following

```
AAI-DSC-REQ ::= SEQUENCE {
fidChangeCount FidChangeCount,
absInitDscInfo AbsInitDscInfo OPTIONAL.
directionIndicator DirIndicator.
serviceClassName ServiceClassName OPTIONAL,
globalServiceClass GlobalServiceClassName OPTIONAL,
gosParameterSet QosParameterSetType OPTIONAL,
goSParameters QosParameter OPTIONAL.
sduInterArrival Interval OPTIONAL. -- 0.5ms
timeBase Interval OPTIONAL, -- ms
classifierDSCAction ClassifierDSCAction OPTIONAL,
classificationRules ClassificationRule OPTIONAL.
rohcAttributes RohcAttributes OPTIONAL,
packetErrorRate PacketErrorRate OPTIONAL,
emergencyIndication BOOLEAN OPTIONAL,
embsService EMBSService OPTIONAL,
fullEMBSIDArray SEQUENCE (SIZE (1..8)) OF SEQUENCE {
embsZoneID EMBSZoneID.
newEmbsZoneID EMBSZoneID.
carrierIndex PhyCarrierIndex,
serviceFlowUpdateType CHOICE {
bitmapAndNew SEQUENCE {
serviceFlowUpdateBitmap BIT STRING (SIZE (16)),
embsidFIDMappingArray SEQUENCE (SIZE (1..16)) OF SEQUENCE {
newEMBSID EMBSID,
newFID FID
currentAndNew SEQUENCE (SIZE (1..16)) OF SEQUENCE {
```

```
currentEMBSID EMBSID,
currentFID FID,
newEMBSID EMBSID,
newFID FID
}
},
unicastAvailIntervalBitmap CHOICE {
nmsi2 BIT STRING (SIZE (4)),
nmsi4 BIT STRING (SIZE (4)),
nmsi8 BIT STRING (SIZE (8)),
nmsi16 BIT STRING (SIZE (16))
} OPTIONAL,
```

<u>GroupResolution</u>

Decision of Group: Disagree

Reason for Group's Decision/Resolution

Inadequate remedy.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions b) none needed

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10151 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 47 Fig/Table# Subclause R.2

The component "selectiveAckInfo" is a mandatory SEQUENCE that has no clear purpose and introduces an unnecessary level of nesting in the definition. The children of "selectiveAckInfo" can be made children of its parent SEQUENCE with no loss of clarity.

Suggested Remedy

Delete the first and last line (only) of component "selectiveAckInfo" (that is, page 1035, line 47 and page 1036, line 15). The components of "selectiveAckInfo", defined between these two lines, will become components of the outer SEQUENCE.

GroupResolution Decision of Group: Principle

Delete the first and last line (only) of component "selectiveAckInfo" of type ARQFeedbackle (that is, delete page 1035, line 47 and page 1036, line 15). The components of "selectiveAckInfo", defined between these two lines, will become components of the outer SEQUENCE.

```
ARQFeedbackle ::= SEQUENCE (SIZE (0..11)) OF SEQUENCE {
   .....
                      SEQUENCE {
   selectiveAck
     -- indicates ARQ blocks less than the sequence number in the SN
    -- field have been received successfully.
     sequenceNumber
                           ArgBlockSn,
<del> selectiveAckInfo
                           SEQUENCE { </del>
      nackSuspendedIndicator
                               ENUMERATED {
                       zeroIndicatesNACK.
                       zeroIndicatesNACKSuspended
       ssnSeriesList
                           SEQUENCE (SIZE (1..512)) OF
          CorrectlyRcvdArgSubBlockList
      } OPTIONAL
<del>
          </del>
```

```
}
},
...
}
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10152 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 65 Subclause Annex R.2 Fig/Table# Comment A type of direction indicator - directionIndicator is already defined, it shall be used. **Suggested Remedy** Change as the following -- ARQ Reset AAI-ARQ-RST ::= SEQUENCE { directionIndicator -ENUMERATED { directionIndicator DirIndicator. fid FID, **ENUMERATED {** type originalMessageFromInitiator, acknowledgementFromResponder, confirmationFromInitiator -- ARQ transmitter sets this field to -- (ARQ TX WINDOW START SN + ARQ WINDOW SIZE) mod -- (ARQ SN MODULUS). See section 16.2.13.5.4 for details sequenceNumber ArgBlockSn OPTIONAL,

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

Proposed remedy is incorrect. The change would cause the downlink/uplink bit values to differ from the table.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions b) none needed

Date: 2010-12-17

Subclause Annex R.2

Ballot ID: sb_16m

Fig/Table#

Joey Chou Comment by: Membership Status: Member Comment # D10153 **Document under Review:** P802.16m/D10 Type Technical Part of Dis Satisfied Page ? Line 32 Comment Traffic Location Indicator Bitmap is included in Table 704 AAI-TRF-IND, but not in the ASN.1 code **Suggested Remedy** Change as the following SlpidBasedTrfIndInfo ::= SEQUENCE { slpidArray SEQUENCE (SIZE (0..63)) OF SLPID. BIT STRING (SIZE(1..63)) OPTIONAL trafficLoationIndicator **GroupResolution Decision of Group:** Principle Insert a "trafficLocationIndicator" component on page 1040 line 45 as shown below: slpidUpdateArray SEQUENCE (SIZE (0..1024)) OF SEQUENCE { oldSlpid SLPID, newSlpid SLPID } OPTIONAL, <ins> trafficLocationIndicator BIT STRING (SIZE(1..63)) OPTIONAL. </ins> Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done



Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10154 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Subclause Annex R.2 Line 4 Fig/Table# Comment SLPID is included in the AAI-TRF-IND-RSP message table, but not in the ASN.1 code **Suggested Remedy** Change as the following -- Traffic Indication Response AAI-TRF-IND-RSP ::= SEQUENCE { emergencyAlert BOOLEAN, frameNumber INTEGER (0..1023), sleepCycleLength INTEGER (0..1023), SLPID OPTIONAL. newSlpid **GroupResolution Decision of Group: Agree** Change as the following -- Traffic Indication Response AAI-TRF-IND-RSP ::= SEQUENCE { emergencyAlert BOOLEAN, frameNumber INTEGER (0..1023), sleepCycleLength INTEGER (0..1023), SLPID OPTIONAL, newSlpid ...

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10155 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 18 Fig/Table# Subclause R.2

In this ASN.1 specification there are several ENUMERATED type definitions that include one or more items named "spareNNN", but no clear convention is being used. We suggest that the following convention be used in P802.16m (this is the same as the convention used within 3GPP RAN2).

Within an ASN.1 enumerated type definition that contains items named "spare1", "spare2", "spare3", etc., item "spare1" should be the last item in the enumeration, item "spare2" should be the one before the last, and so on. If a need to utilize one of the spare items arises in a subsequent version of the specification, the first spare item to be utilized (i.e., renamed and assigned a meaning) should be the earliest one, which has the greatest suffix ("spare3" in this example). This convention ensures that when an item is utilized (in the above sense) there will be no need to rename the remaining spare items. For example, item "spare1" will keep its name and its position (the last one) as long as there are spare items in the enumeration.

Suggested Remedy

Rename the spare items in the ENUMERATED type definitions present at the following locations:

page 1045, line 18

page 1054, line 50

page 1055, line 60

page 1056, line 24

page 1056, line 46

page 1056, line 52

page 1057, line 7

in such a way that "spare1" will be the last spare item in the enumeration, "spare2" will be the one before the last (if present), and so on.

Here is an example:

The order of the "spares" should be:

```
rssi,
                    rtd.
                    nMissedP-SFHs,
                    rd,
                    spare3,
                    spare2,
                    spare1
instead of:
TypeFuncAction ::=
                        SEQUENCE {
 triggerType
                      ENUMERATED {
                    cinr,
                    rssi,
                    rtd.
                    nMissedP-SFHs,
                    rd,
                    spare1,
                    spare2,
                    spare3
                  },
```

GroupResolution

Decision of Group: Principle

Rename the spare items in the ENUMERATED type definitions present at the following locations:

```
page 1045, line 18
page 1054, line 50
page 1055, line 60
page 1056, line 24
page 1057, line 7
```

in such a way that "spare1" will be the last spare item in the enumeration, "spare2" will be the one before the last (if present), and so on.

Here is an example:

The order of the "spares" should be:

```
TypeFuncAction ::=
                       SEQUENCE {
 triggerType
                     ENUMERATED {
                   cinr,
                   rssi,
                   rtd,
                   nMissedP-SFHs,
                   rd,
                   spare3,
                   spare2,
                   spare1
instead of:
TypeFuncAction ::=
                       SEQUENCE {
 triggerType
                     ENUMERATED {
                   cinr,
                   rssi,
                   rtd
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>a) done</u>

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10156 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 39 Fig/Table# Subclause R.2

The components "ulHarqFbkChannels" and "dlHarqFbkAMaps" of types "SFHSubpacket1" and "OptSFHSubpacket1" appear to have their respective type definitions exchanged.

Suggested Remedy

On page 1048, line 39 change "DIHarqfdbkA-Maps" to "HarqfdbkChannels"

On page 1048, line 41 change "HarqfdbkChannels" to "DIHarqfdbkA-Maps"

On page 1052, line 12 change "DIHarqfdbkA-Maps" to "HarqfdbkChannels"

On page 1052, line 14 change "HarqfdbkChannels" to "DIHarqfdbkA-Maps"

GroupResolution Decision of Group: Agree

On page 1048, line 39 change "DIHarqfdbkA-Maps" to "HarqfdbkChannels"

On page 1048, line 41 change "HarqfdbkChannels" to "DIHarqfdbkA-Maps"

On page 1052, line 12 change "DIHarqfdbkA-Maps" to "HarqfdbkChannels"

On page 1052, line 14 change "HarqfdbkChannels" to "DIHarqfdbkA-Maps"

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18 **Comment #** D10157 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 19 Subclause R.2 Fig/Table# Comment At the Dallas meeting a ballot comment was agreed that made a change to the type definition "SFHSubpacket2". The change consisted in replacing the component "duplexingMode" (a CHOICE) with a component "ulCarrierFrequency" (an INTEGER). At the same meeting, another ballot comment was agreed that introduced a type called "OptSFHSubpacket2", very similar to "SFHSubpacket2". However, there was no resolution requesting that the change agreed for the type "SFHSubpacket2" be applied to the new type "OptSFHSubpacket2" as well. We now suggest that the same change be applied to "OptSFHSubpacket2". **Suggested Remedy** 1) Replace the component "duplexingMode" of type "OptSFHSubpacket2" with the following: ulCarrierFrequency INTEGER (0..65535) OPTIONAL The result will be as follows: OptSFHSubpacket2 ::= SEQUENCE { **INTEGER (0..15)** OPTIONAL, macVersion ulCarrierFrequency INTEGER (0..65535) OPTIONAL, BIT STRING (SIZE (36)) OPTIONAL, absMacIdMsb 2) As a result of the above change, the type definitions "UlBandwidth" and "FddInfo" will become no longer referenced, and should be deleted.

On page 1046, line 46 to line 61 delete the type definitions "UlBandwidth" and "FddInfo"

1) Replace the component "duplexingMode" of type "OptSFHSubpacket2" with the following:

ulCarrierFrequency INTEGER (0..65535) OPTIONAL

The result will be as follows:

OptSFHSubpacket2 ::= SEQUENCE {
macVersion INTEGER (0..15) OPTIONAL,
ulCarrierFrequency absMacIdMsb BIT STRING (SIZE (36)) OPTIONAL,

.....

2) As a result of the above change, the type definitions "UlBandwidth" and "FddInfo" will become no longer referenced, and should be deleted.

On page 1046, line 46 to line 61 delete the type definitions "UIBandwidth" and "FddInfo"

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10158 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 1 Fig/Table# Subclause R.2

Our previous comment dealt with "spare" items in ASN.1 ENUMERATED types and suggested a convention to be followed for those items. Here we suggest that if that convention is followed, no other items in an enumerated type be named "spareNNN". If there is a need to "reserve" a place in an enumeration, the item in question should be named "dummy" or "reserved", rather than "spareNNN".

Suggested Remedy

In the enumerated type definitions on page 1056, line 1 and page 1056, line 15, change "spare1" to "dummy".

GroupResolution Decision of Group: Agree

In the enumerated type definitions on page 1056, line 1 and page 1056, line 15, change "spare1" to "dummy".

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10159 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 10 Fig/Table# Subclause R.2

The "emergencyAlert" enumeration is inconsistent with other similar occurrences, in which 0 (or false) indicates "no emergency" and 1 (or true) indicates "emergency". A BOOLEAN type would seem more appropriate here.

Suggested Remedy

Change ENUMERATED { emergency, no Emergency } to BOOLEAN

GroupResolution Decision of Group: Agree

Change ENUMERATED { emergency, no Emergency } to BOOLEAN

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

<u>Comment by:</u> Eunjong Lee <u>Membership Status:</u> Member <u>Date:</u> ?

Comment # D10160 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 61 Fig/Table# Subclause Annex R.2

In the last meeting, 'Reference Carrier' was defined in AAI-MC-ADV message. We need to add ASN.1 code for Reference Carrier in AAI-MC-ADV message.

Suggested Remedy

Adopt the proposed text in IEEE C802.16m-10/1423 or its latest revision.

GroupResolution Decision of Group: Principle

[Modify text in Annex R.2 in page 1064, line 61 with the following text:]

ServingABSCarrierInfo ::= SEQUENCE {

pagingGroupID PGID,

carrierIndex PhyCarrierIndex, saPreambleIndex PreambleIndex, pagingCarrierIndicator ENUMERATED {

noPagingCarrier, pagingCarrier

<ins>

referenceCarrier PhyCarrierIndex OPTIONAL,

<\ins>

caSpecificTrigger CASpecificTriggers OPTIONAL, pccSpecificTrigger Triggers OPTIONAL, sSFHChangeCount INTEGER (0..15) OPTIONAL,

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10161 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Page ? Line 31 Subclause Annex R.2 Part of Dis Satisfied | Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. FATAL: Terminal value for servingABSCarrierInfoArray->maxBSCarriers-1 not found in ASN1.mib.asn1 crxSpecificPHYCtrlMode BOOLEAN OPTIONAL, servingABSCarrierInfoArray SEQUENCE (SIZE (1..maxBSCarriers-1)) OF ServingABSCarrierInfo, **Suggested Remedy** maxBSCarriers INTEGER ::= 87 crxSpecificPHYCtrlMode BOOLEAN OPTIONAL, servingABSCarrierInfoArray SEQUENCE (SIZE (1..maxBSCarriers-1)) OF ServingABSCarrierInfo, GroupResolution **Decision of Group:** Principle <resolved by comment #10162> Make the following changes: 1. On page 1062, line 63, delete line 63 2. On page 1065, line 31, change "maxBSCarriers-1" to "7" Reason for Group's Decision/Resolution **Group's Notes** Clause Annex R.2; Other Annex; ASN.1

Editor's Actions b) none needed

Editor's Notes

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10162 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 31 Fig/Table# Subclause R.2

The component "servingABSCarrierInfoArray" of the type "AAI-MC-ADV" has a type definition that contains an undefined identifier "maxBSCarriers-1".

Suggested Remedy

On page 1062, line 63 change the value assignment "maxBSCarriers" to the following:

maxBSCarriers-minus-1 INTEGER ::= 7

On page 1065, line 31 change maxBSCarriers-1 to maxBSCarriers-minus-1

GroupResolution Decision of Group: Principle

Make the following changes:

- 1. On page 1062, line 63, delete line 63
- 2. On page 1065, line 31, change "maxBSCarriers-1" to "7"

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Joey Chou Comment by: Membership Status: Member **Date:** 2010-12-17 Comment # D10163 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Satisfied Page ? Line 39 Subclause Annex R.2 Part of Dis Fig/Table# Comment Typo, it should be FDD, instead of FFD **Suggested Remedy** Change as the following: 1. P1067. L39 CarrierTypeForFFDD ::= ENUMERATED { 2.P1067, L64 carrierTypeForFdd CarrierTypeForFFDD OPTIONAL 3.P1068, L7 carrierTypeForFFD CarrierTypeForFFD OPTIONAL **GroupResolution Decision of Group:** Principle Change as follows: 1. P1067, L39 CarrierTypeForF<ins>D</ins>FD ::= ENUMERATED { 2.P1067, L64 carrierTypeForFdd CarrierTypeForF<ins>D</ins>FD OPTIONAL

Reason for Group's Decision/Resolution

Group's Notes

3.P1068, L7

Clause Annex R.2; Other Annex; ASN.1

carrierTypeForF<ins>D</ins>FD

CarrierTypeForF<ins>D</ins>FD OPTIONAL

Editor's Notes

Editor's Actions a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 Comment # D10164 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 61 Subclause Annex R.2 Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. FATAL: Unknown type "CentralFreg" referenced by "centerFrequency" at line 3633 in ASN1.mib.asn1 For example CentralFreq is not defined numberOfcarriers CHOICE { oneCarrier SEQUENCE { centerFrequency CentralFreq, carrierIndex PhyCarrierIndex, carrierTypeForFdd CarrierTypeForFFD OPTIONAL **Suggested Remedy** Define the CentralFreq type CentralFreg ::= INTEGER (0..4294967295) GroupResolution **Decision of Group: Principle** <resolved by comment #10131> Change "CentralFreq" to "CenterFreq" at the following locations: page 1006, line 38 page 1067, line 61 page 1068, line 3 Reason for Group's Decision/Resolution **Group's Notes** Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> b) none needed

Joey Chou Comment by: Membership Status: Member **Date:** 2010-12-17 Comment # D10165 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 2 Subclause Annex R.2 Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. FATAL: Unknown type "CentralFreq" referenced by "startFrequency" at line 3640 in ASN1.mib.asn1 For example CentralFreq is not defined multipleCarriers SEQUENCE { startFrequency CentralFreq, carrierInfoArray SEQUENCE (SIZE (1..16)) OF SEQUENCE { carrierIndex PhyCarrierIndex, carrierTypeForFFD CarrierTypeForFFD OPTIONAL Suggested Remedy Define the CentralFreq type CentralFreg ::= INTEGER (0..4294967295) **GroupResolution Decision of Group:** Principle <resolved by comment #10131> Change "CentralFreq" to "CenterFreq" at the following locations: page 1006, line 38 page 1067, line 61 page 1068, line 3

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

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

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10166 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page ? Line 25 Fig/Table# Subclause R.2

Since the field "type1clcActiveCycle" contains a number of microseconds, it should be defined as an INTEGER and not as a BIT STRING.

Suggested Remedy

Change BIT STRING (SIZE(21)) to INTEGER (0..2097151)

<u>GroupResolution</u> <u>Decision of Group:</u> Principle

Change BIT STRING (SIZE(21)) to INTEGER (0..2097151) as follows:

type1clcActiveCycle BIT STRING (SIZE (21)) <ins> INTEGER (0..2097151) </ins>

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

<u>Editor's Notes</u> <u>Editor's Actions</u> a) done

Comment by: Alessandro Triglia Membership Status: Nonmember Date: 2010-12-18

Comment # D10167 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 31 Fig/Table# Subclause R.2

The types "RowOf2X2Matrix", "RowOf4X4Matrix", and "RowOf8X8Matrix" are each defined as a SEQUENCE containing a CHOICE. The outer sequence is superfluous.

Suggested Remedy

In each type definition, delete the word "SEQUENCE", the initial left curly bracket, the word "rows", and the final right curly bracket.

The locations of these type definitions are the following:

```
page 1071, line 31 to 47
page 1071, line 49 to page 1072, line 24
page 1071, line 25 to page 1074, line 13
```

As an example, the result for Row2X2Matrix will be as follows:

GroupResolution

Decision of Group: Principle

In the definition of each of the types "RowOf2X2Matrix", "RowOf4X4Matrix", and "RowOf8X8Matrix", delete the initial word "SEQUENCE", the initial left curly bracket, the word "rows", and the final right curly bracket.

The locations of these type definitions are the following:

```
page 1071, line 31 to 47
page 1071, line 49 to page 1072, line 24
page 1071, line 25 to page 1074, line 13
```

As an example, the result for Row2X2Matrix will be as follows:

```
RowOf2X2Matrix ::= CHOICE {
    firstRow SEQUENCE {
        diagonalEntry Diagonal,
        offDiagonalEntry OffDiagonal
    },
    secondRow SEQUENCE {
        empty NULL,
        diagonalEntry Diagonal
    }
}
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes Editor's Actions a) done

Joey Chou Membership Status: Member Comment by: **Date:** 2010-12-17 Comment # D10168 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Part of Dis Satisfied Page ? Line 21 Subclause Annex R.2 Fig/Table# Comment The size of PMImin is either 4 or 6 bits. But, it is ASN.1 code, as show below, can be 4, 5, 6 bits pmiMin BIT STRING (SIZE (4..6)), **Suggested Remedy** Change as the following -- Multi-BS MIMO SBP Response AAI-MBS-MIMO-SBP ::= SEQUENCE { nbrInfoArray SEQUENCE (SIZE (1..8)) OF SEQUENCE { pmiMin BIT STRING (SIZE (4..6)), pmiMin CHOICE { BIT STRING (SIZE (4)), nt2 BIT STRING (SIZE (6))}. nt4 isl ENUMERATED { one, two, three, four PmiCombinationRatio, pcr GroupResolution **Decision of Group: Agree** Change as the following

```
-- Multi-BS MIMO SBP Response
AAI-MBS-MIMO-SBP ::= SEQUENCE {
 nbrInfoArray
                    SEQUENCE (SIZE (1..8)) OF SEQUENCE {
 pmiMin BIT STRING (SIZE (4..6)),
                   CHOICE {
 <u>pmiMin</u>
   nt2
                 BIT STRING (SIZE (4)),
                 BIT STRING (SIZE (6))},
   nt4
 isl
                 ENUMERATED {
                 one,
                 two,
                 three,
                 four
                 PmiCombinationRatio,
  pcr
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Comment by: Joey Chou Membership Status: Member **Date:** 2010-12-17 **Comment # D10169** Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Page ? Line 24 Subclause Annex R.2 Part of Dis Satisfied | Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. FATAL: Unknown type "PHYCarrierIndex" referenced by "physicalCarrierIndex" at line 4265 in ASN1.mib.asn1 AAI-FFR-CMD ::= SEQUENCE { frequencyPartitionBitmap SEQUENCE (SIZE (4)) OF IntfStatistics, reportType BIT STRING { interferenceMean (0), interferenceVariance (1), sinrMean (2), sinrVariance (3) } (SIZE (4)), frameOffset INTEGER (0..255), physicalCarrierIndex PHYCarrierIndex OPTIONAL **Suggested Remedy** AAI-FFR-CMD ::= SEQUENCE { frequencyPartitionBitmap SEQUENCE (SIZE (4)) OF IntfStatistics, reportType BIT STRING { interferenceMean (0), interferenceVariance (1), sinrMean (2), sinrVariance (3) } (SIZE (4)), frameOffset INTEGER (0..255), physicalCarrierIndex PHYhyCarrierIndex OPTIONAL GroupResolution **Decision of Group: Agree** AAI-FFR-CMD ::= SEQUENCE { frequencyPartitionBitmap SEQUENCE (SIZE (4)) OF IntfStatistics, reportType BIT STRING {

```
interferenceMean (0),
interferenceVariance (1),
sinrMean (2),
sinrVariance (3)
} (SIZE (4)),
frameOffset INTEGER (0..255),
physicalCarrierIndex PHYhyCarrierIndex OPTIONAL
}
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Implemented as part of the ASN.1 code alignment.

Date: 2010-12-17

Comment by: Joey Chou Membership Status: Member **Comment #** D10170 Document under Review: P802.16m/D10 Ballot ID: sb_16m Type Technical Page ? Line 52 Subclause Annex R.2 Part of Dis Satisfied | Fig/Table# Comment The ASN.1 code in Annex R.2 can't be compiled. There are many errors. FATAL: Unknown type "PHYCarrierIndex" referenced by "physicalCarrierIndex" at line 4284 in ASN1.mib.asn1 AAI-FFR-REP ::= SEQUENCE { -- One report for each frequency partition. -- A report is sent if the corresponding element of -- frequencyPartitionBitmap in AAI-FFR-CMD is set to sendReport frequencyPartitionBitmap SEQUENCE (SIZE (4)) OF IntfStatistics, reportType BIT STRING { interferenceMean (0), interferenceVariance (1), sinrMean (2), sinrVariance (3) } (SIZE (4)), ffrReports SEQUENCE (SIZE (4)) OF SEQUENCE { report FFR-FeedbackIE OPTIONAL physicalCarrierIndex PHYCarrierIndex OPTIONAL **Suggested Remedy** AAI-FFR-REP ::= SEQUENCE { -- One report for each frequency partition. -- A report is sent if the corresponding element of -- frequencyPartitionBitmap in AAI-FFR-CMD is set to sendReport frequencyPartitionBitmap SEQUENCE (SIZE (4)) OF IntfStatistics, reportType BIT STRING { interferenceMean (0), interferenceVariance (1), sinrMean (2), sinrVariance (3) } (SIZE (4)),

```
ffrReports SEQUENCE (SIZE (4)) OF SEQUENCE {
report FFR-FeedbackIE OPTIONAL
physicalCarrierIndex PHYhyCarrierIndex OPTIONAL
GroupResolution
                                    Decision of Group: Agree
AAI-FFR-REP ::= SEQUENCE {
-- One report for each frequency partition.
-- A report is sent if the corresponding element of
-- frequencyPartitionBitmap in AAI-FFR-CMD is set to sendReport
frequencyPartitionBitmap SEQUENCE (SIZE (4)) OF IntfStatistics,
reportType BIT STRING {
interferenceMean (0),
interferenceVariance (1),
sinrMean (2),
sinrVariance (3)
} (SIZE (4)),
ffrReports SEQUENCE (SIZE (4)) OF SEQUENCE {
report FFR-FeedbackIE OPTIONAL
physicalCarrierIndex PHYhyCarrierIndex OPTIONAL
Reason for Group's Decision/Resolution
Group's Notes
Clause Annex R.2; Other Annex; ASN.1
Editor's Notes
                            Editor's Actions a) done
```

Implemented as part of the ASN.1 code alignment.

<u>Comment by:</u> Alessandro Triglia <u>Membership Status:</u> Nonmember <u>Date:</u> 2010-12-18

Comment # D10171 Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page? Line 35 Fig/Table# Subclause R.2

The component "disableSubframes" is a mandatory SEQUENCE that has no clear purpose and introduces an unnecessary level of nesting in the definition. The single child of "disableSubframes" can be made a child of its parent SEQUENCE with no loss of clarity.

Suggested Remedy

Delete the first and last line (only) of component "disableSubframes" (that is, page 1084, line 35 and page 1084, line 49). The component "disableSubframesIndex" will become a component of the outer SEQUENCE.

GroupResolution Decision of Group: Principle

Delete the first and last line (only) of component "disableSubframes" (that is, page 1084, line 35 and page 1084, line 49). The component "disableSubframesIndex" will become a component of the outer SEQUENCE.

```
fAChange
                            SEQUENCE {
<del>
            disableSubframes
                                     SEQUENCE { </del>
        -- The status of DL subframes
        -- Bit 0: the status of the first DL subframe
        -- Bit 1: the status of the 2nd DL subframe
        -- Bit 2: the status of the 3rd DL subframe
         -- Bit 3: the status of the 4th DL subframe
        -- Bit 4: the status of the 5th DL subframe
        -- Bit 5: the status of the 6th DL subframe
        -- (0 means disabled or no such subframe; 1 means enabled)
                                    BIT STRING (SIZE (6))
        disabledSubframesIndex
                </del>
<del>
   IdmParameterChange
                              SEQUENCE {
```

Reason for Group's Decision/Resolution

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

Editor's Notes

Editor's Actions a) done

Implemented as part of the ASN.1 code alignment.

Comment by: Alessandro Triglia Membership Status: Nonmember **Date:** 2010-12-18

Comment # D10172 Document under Review: P802.16m/D10 Ballot ID: sb 16m

Type Technical Part of Dis Satisfied Page ? Line 41 Subclause R.2 Fig/Table# Comment

The component "transferSubtype" of type "AAI-L2-XFER" does not support the addition of new transfer subtypes for any vendor-specific transfer types or for any (currently reserved) transfer type numbers that may be defined in a future version of this specification.

An extension marker (...) could be added to "transferSubtype". However, this would address the above problem with respect to future versions of this specification, but not with respect to vendor-specific transfer types (range 128-255). Therefore we suggest the inclusion of a generic alternative in "transferSubtype".

Suggested Remedy

Add a fourth alternative named "other" to "transferSubtype", as follows:

transferSubtype CHOICE { oratMsg INTEGER { (1), geran (2),utran (3),e-utran td-scdma (4),cdma2000 (5)} (0..15), INTEGER { sms (1),smsData smsConfirmation (2)} (0..15), mihFrame INTEGER { serviceManagement (1), eventService (2),commandService (3),informationService (4) } (0..15), **INTEGER (0..15)** other } OPTIONAL,

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The ASN.1 change needs to be supported by a corresponding change to the table, but no such change has been proposed.

Group's Notes

Clause Annex R.2; Other Annex; ASN.1

2011/11/27 IEEE 802.16-10/0061r4

<u>Comment by:</u> Shao-Cheng Wang <u>Membership Status:</u> Member <u>Date:</u> 2011-01-06

Comment # D10173L Document under Review: Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 409 Line 11 Fig/Table# Subclause 16.2652121

The "active other RAT discovery with MIHF support" solution in current spec is incomplete. Although section 16.2.6.5.2.1.2.1 contains some descriptions regarding the basic operations of using AAI-PKM-REQ/RSP and AAI-SII-ADV messages to carry the 802.21 MIH protocol messages, but no specific message formats and corresponding ASN.1 code specified anywhere else in the spec.

In addition, using AAI-PKM messages to carry MIH message poses potential security threats. Using AAI-L2-Xfer for MIH would be a much better alternative.

Therefore, I suggest to delete the whole section of 16.2.6.5.2.1.2.1.

Suggested Remedy

delete section 16.2.6.5.2.1.2.1, and change the following subsections' numbering accordingly.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The benifits of MIH operation during network entry is not clear.

Group's Notes

<u>Comment by:</u> Yan-Xiu Zheng <u>Membership Status:</u> Member <u>Date:</u> 2011-01-11

Comment # D10174L Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page Line Fig/Table# Subclause

[Re: IEEE L802.16-10/0109, Annex A]

The standard does not specify use of non-fragmented RNG-REQ messages. Additionally, other corrections are recommended:

- As BS stop re-transmissions of CDMA_Allocation_IE after 16 frames, the usage of CDMA_Allocation_IE re-transmissions by the MS shouldn't be limited to T3 but to 16 frames after the CDMA code
- T3 definitions for ranging in the approved IOPR-53947r15.
- Aligning T18 usage definitions to common method of handling management messages in IEEE802.16 document- the timer T18 shall be started after MS transmitted all fragments of the message.

Suggested Remedy

Adopt changes in 802.16maint-10/0024.

GroupResolution Decision of Group: Principle

Adopt changes in 802.16maint-10/0024r1.

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Yan-Xiu Zheng <u>Membership Status:</u> Member <u>Date:</u> 2011-01-11

Comment # D10175L Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 23 Line 52 Fig/Table# Subclause 6.3.2.3.6

[Re: IEEE L802.16-10/0109, Annex B]

Quote from the std:

"Ranging Abort Timer

Timer defined by a BS to prohibit the MS from attempting network entry at this BS, for a specific time duration."

It is not clear from the .16 std. if the MS can try to perform NW entry at a different BS.

It is also not clear what the MS will do in case it receives the Ranging Abort Timer together with the Preamble Index Override or the Downlink Frequency Override TLVs and if there can be more than one instance of the Downlink Frequency Override.

All of this can lead to potential interoperability problems.

Suggested Remedy

[Introduce new section 6.3.2.3.6 as following:]

6.3.2.3.6 RNG-RSP (ranging response) message

Ranging Abort Timer

Timer defined by a BS to prohibit the MS from attempting network entry at this BS, for a specific time duration. <ins>The MS may perform ranging at a different BS before the Ranging Abort Timer expires.</in>

GroupResolution Decision of Group: Principle

[Editor to insert the following text including editorial instruction into pp. 23 line 52]

<ins>

[Change text in section 6.3.2.3.6 as indicated:]

6.3.2.3.6 RNG-RSP (ranging response) message

Ranging Abort Timer

Timer defined by a BS to prohibit the MS from attempting network entry at this BS, for a specific time duration. The MS may perform ranging at a different BS before the Ranging Abort Timer expires.

</ins>

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes Editor's Actions a) done

<u>Comment by:</u> Yan-Xiu Zheng <u>Membership Status:</u> Member <u>Date:</u> 2011-01-11

Comment # D10176L Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 31 Line 4 Fig/Table# Subclause

[Re: IEEE L802.16-10/0109, Annex B]

Quote from the std:

"Ranging Abort Timer

Timer defined by a BS to prohibit the MS from attempting network entry at this BS, for a specific time duration."

It is not clear from the .16 std. if the MS can try to perform NW entry at a different BS.

It is also not clear what the MS will do in case it receives the Ranging Abort Timer together with the Preamble Index Override or the Downlink Frequency Override TLVs and if there can be more than one instance of the Downlink Frequency Override.

All of this can lead to potential interoperability problems.

Suggested Remedy

[Introduce new section 6.3.9.5.1 as following:]

6.3.9.5.1 Contention-based initial ranging and automatic adjustments

If the Ranging Abort Timer TLV encoding is included in RNG-RSP, the MS shall abort the current network entry attempt and shall not redo ranging to the current BS until the Ranging Abort Timer expires. <ins>The MS may perform ranging at a different BS before the Ranging Abort Timer expires.</ins>

GroupResolution Decision of Group: Principle

[Editor to insert the following text including editorial instruction into pp. 31 line 4]

<ins>

[Change text in section 6.3.9.5.1 as indicated:]

6.3.9.5.1 Contention-based initial ranging and automatic adjustments

If the Ranging Abort Timer TLV encoding is included in RNG-RSP, the MS shall abort the current network entry attempt and shall not redo ranging to the current BS until the Ranging Abort Timer expires. The MS may perform ranging at a different BS before the Ranging Abort Timer expires.

</ins>

Reason for Group's Decision/Resolution

Group's Notes

Comment by: Roger Marks Membership Status: Date: 2011-01-11

Comment # D10177L Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 75 Line 8 Fig/Table# Subclause 16.1

(1) "AMS Operational States" should not be a subset of the new 16.1. Better to make it 16.2, not 16.1.1.

- (2) Subclause should be titled appropriate. Not "Introduction" but as proposed by Takashi: "WirelessMAN-Advanced radio interface technology specification."
- (3) Typo in resolution (missing the word "is").
- (4) The modified old introduction, referring to Clause 16, no longer makes sense.

Suggested Remedy

On Page 57 Lines 8-25, modify as follows:

16.1 Introduction<ins>WirelessMAN-Advanced radio interface technology specification</ins>

The WirelessMAN-Advanced radio interface technology specification <ins>is </ins> provided in the following clauses:

Clauses 1.4, 2, 3, 4, 5.2, 16 Annexes R, S, T, U, V

Clause 16 specifies an Advanced Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation.
del>Clause 16 specifies an Advanced Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation.
del>Clause 16 specifies an Advanced Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation.
del>Clause 16 specifies an Advanced Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation.
del>Clause 16 specifies an Advanced Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation.
del Section All Conformation Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation.

16.1.1<ins>16.2</ins> AMS Operational States

Renumber subsequent subclauses accordingly.

GroupResolution Decision of Group: Agree

On Page 57 Lines 8-25, modify as follows:

16.1 Introduction<ins>WirelessMAN-Advanced radio interface technology specification</ins>

The WirelessMAN-Advanced radio interface technology specification <ins>is </ins> provided in the following clauses:

Clauses 1.4, 2, 3, 4, 5.2, 16 Annexes R. S. T. U. V Clause 16 specifies an Advanced Air Interface, defining a new MAC and PHY for AMS, ABS and ARS operation. <ins>The </ins>AMS, ABS and ARS shall conform to all requirements as specified in the WirelessMAN-Advanced radio interface technology specification.

16.1.1<ins>16.2</ins> AMS Operational States

Renumber subsequent subclauses accordingly.

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes Editor's Actions a) done

Proposed change poses significant issues for the structure of the document because it would require renumbering of all subclauses in Clause 16. Editor conferred with the commenter, who agreed to a modified resolution dividing 16.1 into 16.1.1 to 16.1.2, thereby requiring no changes beyond 16.1.

Comment by: Yan-Xiu Zheng Membership Status: Member Date: 2011-01-12

Comment # D10178L Document under Review: P802.16m/D10 Ballot ID: sb_16m

Comment Type Technical Part of Dis Satisfied Page 24 Line 57 Fig/Table# Subclause

[Re: IEEE L802.16-10/0126, Annex B]

Regarding 16e/Rel1.0 enhancement of UL coverage through soft combining / HARQ / fragmentation on RNG-REQ and SBC-REQ, a couple of IOPRs including IOPR-55557r8 had been approved in TWG and reflected in IEEE 802.16e maintenance DB. However, there are still a few items that need to be clarified on top of the prior contributions as follows:

Relation between 'HARQ application to RNG/SBC-REQ/RSP based on IR/HO ranging code set 1 or 2' and 'HARQ application to

Management connection after SBC-REQ/RSP'

Usage of PDU SN before and after SBC-REQ/RSP process when HARQ to Management connection is enabled Usage of Primary Management CID for SBC-REQ after transmission of RNG-REQ message on UL resource allocated by Fast Ranging IE

With respect to the first issue above, the usage of IR/HO/BR RNG code set 1 or HO RNG code set 2 that are defined specifically to enable HARQ support on the UL burst including RNG-REQ, SBC-REQ, or BRH/BRTH should not be affected by the enablement of HARQ on UL MAC management messages during the SBC-REQ/RSP negotiation process.

On the other hand, considering the intention of supporting HARQ on RNG-REQ and SBC-REQ (or, the enhancement in UL coverage) even before the HARQ capability negotiation in SBC-REQ/RSP process, it would be reasonable to mandate the support of HARQ on UL MAC management messages after SBC-REQ/RSP when HARQ is applied to RNG-REQ and SBC-REQ (triggered by the use of IR/HO/BR RNG code set 1 or HO RNG code set 2).

Regarding the usage of PDU-SN for HARQ reordering, it needs to be clarified how to set the PDU-SN after SBC-REQ/RSP where the PDU-SN capability (long/short) is negotiated for the support of HARQ on UL MAC management messages after SBC. Though we agreed to support PDU-SN (short) for HARQ reordering of RNG-REQ and SBC-REQ messages even before the actual capability negotiation of PDU-SN support for UL MAC management messages during SBC-REQ/RSP process, it would be logical to RESET the PDU-SN value upon actual negotiation of PDU-SN support for HARQ on MAC management messages through SBC-REQ/RSP. (Note that the PDU-SN might be long or short according to the negotiation made between BS and MS through SBC-REQ/RSP while only PDU-SN (short) is supported for RNG-REQ and SBC-REQ.) That is, when HARQ on UL MAC management messages is enabled, PDU-SN (short or long) shall be reset to '0' from the MS transmission of PKM-REQ messages, which is the first message that takes place after SBC.

For Usage of Primary Management CID for SBC-REQ after transmission of RNG-REQ message on UL resource allocated by Fast Ranging IE, we can guess that the MS may directly transmit RNG-REQ message on UL resource allocated by Fast_Ranging_IE instead of transmitting HO ranging code set 1 or 2. When the MS identifies the BS's support of UL coverage enhancement via UCD, the MS can set the CID field in the MAC header to the Primary Management CID for SBC-REQ message. We need to clarify it.

Suggested Remedy			
Adopt changes in 802.16maint-10/0026.			
GroupResolution Decis	ion of Group: Principle		
Adopt changes in 802.16maint-10/0026r2.doc.			
Reason for Group's Decision/Resolution			
Group's Notes			
Editor's Notes Editor's Action	s a) done		
2011/11/27			IEEE 802.16-10/0061r4
Comment by: Yan-Xiu Zhe	ng <u>Memb</u>	bership Status: Member	<u>Date:</u> 2011-01-12
Comment # D10179L	Document under Review: P802.10	6m/D10 Ballot I	<u>D:</u> sb_16m
<u>Comment</u> <u>Type</u> Technical <u>Part of Dis</u> [Re: IEEE L802.16-10/0126, Annex A]	Satisfied Page 48 Line	<u>Fig/Table#</u> 554	<u>Subclause</u>
Currently the Contention Ranging Retries are defined with 16 in the 16e standard. This number is too high. It can delay NW entry unnecessary by spending too much time on a not suitable cell through the MS.			
Suggested Remedy Adopt changes in 802.16maint-10/0025.			

GroupResolution Decision of Group: Agree

Adopt changes in 802.16maint-10/0025.

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes Editor's Actions a) done