P802.16g to Sponsor Ballot: Conditional Approval

17 November 2006

Rules

Motions requesting conditional approval to forward where the prior ballot has closed shall be accompanied by:

- Date the ballot closed
- Vote tally including Approve, Disapprove and Abstain votes
- Comments that support the remaining disapprove votes and Working Group responses.
- Schedule for confirmation ballot and resolution meeting.

Date the ballot closed:
14 November 2006

Stage	Open	Close	
WG Letter Ballot Recirc #1	30 Jan	1 Mar	2006
.			
.			
.			
WG Letter Ballot Recirc #4	30 Oct	14 Nov	2006

Vote tally including Approve, Disapprove and Abstain votes

- 201 Approve 90%
- 23 Disapprove
- 30 Abstain 14%

- However:
  - Several other Disapprove voters gave verbal instruction to change vote; have not yet received written confirmation.
  - 11 Disapprove voters have never provided any comments
  - No new Disapprove voters in either LB 20c or LB 20d

Comment resolution

		Editorial	Technical	Total	Disapprove Comment	Disapprove Voter
LB20d	C802.16-06/073r3	59	70	129	0	0
LB20c	C802.16-06/048r2	22	36	58	2	1
LB20b	C802.16-06/034r4	31	87	118	8	6
LB20a	C802.16-06/024r3	19	75	94	7	3
LB20	C802.16-06/014r3	173	579	752	33	8
		304	**847**	**1151**	**50**	**12**

Comments that support the remaining disapprove votes and Working Group responses

- attached

Schedule for confirmation ballot and resolution meeting

- Nov 24: Issue D6
- Nov 28-Dec 13: recirculation
- Jan 15-18: comment resolution at 802.16 Session #47, if necessary

802.16 WG Motions

802.16 Closing Plenary: 16 Nov 2006:

Motion: To develop and issue the Working Group Draft P802.16g/D6, to authorize the WG Chair to forward P802.16g/D6 to the EC for conditional approval to initiate a Sponsor Ballot on the Draft, to initiate a Working Group Letter Ballot confirmation recirculation to close around December 13, 2006, and to authorize the WG Chair to initiate a Sponsor Ballot on the Draft

- Proposed: Phillip Barber
- Seconded: David Johnston
- Approved 77-0-1.

Motion

To grant conditional approval, under Clause 20, to forward P802.16g for Sponsor Ballot

Moved: Marks

Seconded:

Approve:

Disapprove:

Abstain:

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 236D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 164 **Line** 62 **Fig/Table#** **Subclause** F.1.3.2

The last sentence on the page that read 'The link layer events are indentified in Table-1 in the IEEE 802.21 specification.' references a table that has been changed.

Suggested Remedy

Table-1 is now incorrect and the new reference should read Table-2. Recomend updating Table-1 to Table-2 in the sentence.

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

Delete Annex F

Reason for Group's Decision/Resolution

Group's Notes

Approved unopposed

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

See resolution of comment 232 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 238D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 165 **Line** 29 **Fig/Table#** **Subclause** F.1.3.5

This entire paragraph is redunant. F.1.3.2 already mentions, by reference, where the most current information could be found.

Suggested Remedy

Remove the paragraph

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

Delete Annex F

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

see resolution of comment 232 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 167D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 41 **Line** 57 **Fig/Table#** **Subclause** 14.2.2.3

No information concering Basic RF configuration procedures for setting and retriveing information

Suggested Remedy

Add Physical Layer Standard Configuration Parameters table from contribution C802.16g-06/0018

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

Delete subclauses 14.2.2.2 through 14.2.2.5

Reason for Group's Decision/Resolution

remand contribution to 802.16i

Group's Notes

Accepted unopposed

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

See comment resolution for 166 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 168D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 41 **Line** 62 **Fig/Table#** **Subclause** 14.2.2.4

No information concering Basic MAC configuration procedures for setting and retriveing information

Suggested Remedy

Add MACLayer Standard Configuration Parameters table from contribution C802.16g-06/0018

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

Delete subclauses 14.2.2.2 through 14.2.2.5

Reason for Group's Decision/Resolution

remand contribution to 802.16i

Group's Notes

Accepted unopposed

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

See comment resolution for 166 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 234D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 159 **Line** 43 **Fig/Table#** **Subclause** 14.2.12

Add section on BS Initiated Configuration Management

Suggested Remedy

See contribution C80216g-06_018 Comment 3

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

remand contribution to 802.16i

Group's Notes

Vote:
For: 0 Against: 11 Abstain: 2

Editor's Notes **Editor's Actions**

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 246D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 5.2.8.1

It is not clear how a GPCS at the transmitter side, maps a LOGICAL_FLOW_ID to a service flow. Furthermore the receiver cannot determine to which logical flow a SDU belongs because because LOGICAL_FLOW_ID is not transferred over the 802.16 air interface. When the SFID is used, no mapping at the transmitter side is required and also the receiver can determine to which service flow a SDU belongs.

Suggested Remedy

Replace LOGICAL_FLOW_ID by SFID

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

On page 9, line 30, change:
from:
LOGICAL_FLOW_ID
to:
LOGICAL_FLOW_ID = SFID, MSID

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comment 43 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 247D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 5.2.8.4

Section 5.2.8.4 specifies the PROTOCOL_TYPE is a 16-bit number assigned from a set of possible values of the PPP data link (DL) layer protocol numbers, but Figure 17e and specifies 1 byte.

Suggested Remedy

Replace "1 Byte" by "2 Byte" in Figure 17e.

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

1. page 9 line 27, insert a new item with the following text:
With GPCS, the upper layer protocol that is immediatedly above the 802.16 GPCS is identified by a TLV parameter, GPCS protocol type, as defined in 11.13.19.3.3.20. The GPCS protocol type shall be included in C-SFM primitives and DSx messages during connection establishment.
2a. p 9, delete line 32
2b. p 10, delete line 50 to 62
3. p 11, delete line 39
4. p 11, delete line 46 to 48
5. p 12, delete line 31
6. p 12, delete line 37 to 47

1. p9, replace line 31 to 37 with the following text:
GPCS allows ~~provides an optional way to~~ multiplexing of multiple layer protocol types (e.g., IPv4, IPv6, Ethernet) over the same 802.16 connection. ~~A TLV parameter, MULTIPROTOCOL_ENABLE, is defined in the DSx messages to enable/disable this feature. . The capability of supporting this feature is indicated in a TLV parameter of the REG messages.~~ An appropriate protocol type value is used to represent multiprotocol, and it is used in the protocol type TLV in DSx messages to indicate the mutiple protocols are supported for a conncection/service flow. It is beyond the scope of the GPCS to specify how to multiplex and demultiplex multiple protocol data packets over a 802.16 connection/service flow.

2. p11, delete line 7 to 14
3. p13, delete line 7 to 35
4. p 27, delete line 7 to 32
5. p 10, delete line 1 to 7

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comments 35, 46 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 248D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 11.7.7.1

There is no support bit defined for GPCS.

Suggested Remedy

Suggested remedy: Add a bit definition in the "Classification/PHS options and SDU encapsulation support" bitmap.

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

Add the following

[Modify section 11.7.7.1]

11.7.7.1 Classification/PHS options and SDU encapsulation support

This parameter indicates which classification/PHS options and SDU encapsulation the SS supports. By default, Packet, IPv4 and 802.3/Ethernet shall be supported, thus absence of this parameter in REG-REQ means that named options are supported by the SS. When the length field of the TLV is 2 or 4, it indicates that bits 16-31 are zero.

Type	Length	Value	Scope
7	2 or 4	Bit #0: ATM	REG-REQ
		Bit #1: Packet, IPv4	REG-RSP
		Bit #2: Packet, IPv6	
		Bit #3: Packet, 802.3/Ethernet	
		Bit #4: Packet, 802.1/Q VLAN	
		Bit #5: Packet, IPv4 over 802.3/Ethernet	
		Bit #6: Packet, IPv6 over 802.3/Ethernet	
		Bit #7: Packet, IPv4 over 802.1Q VLAN	
		Bit #8: Packet, IPv6 over 802.1Q VLAN	
		Bit #9: Packet, 802.3/ethernet (with optional 802.1Q VLAN tags) and ROHC header compression	
		Bit 10: Packet, 802.3/ethernet (with optional 802.1Q VLAN tags) and ECRTP header compression	
		Bit 11: Packet, IP (v4 or v6) with ROHC header compression	

Bit 12: Packet, IP (v4 or v6) with ECRTP header compression
Bit 13: GPCS
Bits #~~13~~14-31: Reserved; Shall be set to zero

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comment 116 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 250D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 11.13.19.2.1

Section 5.2.8.4 specifies the PROTOCOL_TYPE is a 16-bit number assigned from a set of possible values of the PPP data link (DL) layer protocol numbers, but section 11.13.19.2.1 mentions a TBD IANA registry.

Suggested Remedy

Specify the same as in 5.2.8.4

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

1. page 9 line 27, insert a new item with the following text:
With GPCS, the upper layer protocol that is immediatedly above the 802.16 GPCS is identified by a TLV parameter, GPCS protocol type, as defined in 11.13.19.3.3.20. The GPCS protocol type shall be included in C-SFM primitives and DSx messages during connection establishment.
2a. p 9, delete line 32
2b. p 10, delete line 50 to 62
3. p 11, delete line 39
4. p 11, delete line 46 to 48
5. p 12, delete line 31
6. p 12, delete line 37 to 47

1. p9, replace line 31 to 37 with the following text:
GPCS allows ~~provides an optional way to~~ multiplexing of multiple layer protocol types (e.g., IPv4, IPv6, Ethernet) over the same 802.16 connection. ~~A TLV parameter, MULTIPROTOCOL_ENABLE, is defined in the DSx messages to enable/disable this feature. . The capability of supporting this feature is indicated in a TLV parameter of the REG messages.~~ An appropriate protocol type value is used to represent multiprotocol, and it is used in the protocol type TLV in DSx messages to indicate the mutiple protocols are supported for a conncection/service flow. It is beyond the scope of the GPCS to specify how to multiplex and demultiplex multiple protocol data packets over a 802.16 connection/service flow.

2. p11, delete line 7 to 14
3. p13, delete line 7 to 35
4. p 27, delete line 7 to 32
5. p 10, delete line 1 to 7

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comments 35, 46 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 251D-0 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 11.13.19.2.1

Section 5.2.8.4 specifies the PROTOCOL_TYPE is a 16-bit number assigned from a set of possible values of the PPP data link (DL) layer protocol numbers, but section 11.13.19.2.1 specifies a length of 1 byte.

Suggested Remedy

Change the length to 2 bytes

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

1. page 9 line 27, insert a new item with the following text:
With GPCS, the upper layer protocol that is immediatedly above the 802.16 GPCS is identified by a TLV parameter, GPCS protocol type, as defined in 11.13.19.3.3.20. The GPCS protocol type shall be included in C-SFM primitives and DSx messages during connection establishment.
2a. p 9, delete line 32
2b. p 10, delete line 50 to 62
3. p 11, delete line 39
4. p 11, delete line 46 to 48
5. p 12, delete line 31
6. p 12, delete line 37 to 47

1. p9, replace line 31 to 37 with the following text:
GPCS allows ~~provides an optional way to~~ multiplexing of multiple layer protocol types (e.g., IPv4, IPv6, Ethernet) over the same 802.16 connection. ~~A TLV parameter, MULTIPROTOCOL_ENABLE, is defined in the DSx messages to enable/disable this feature. . The capability of supporting this feature is indicated in a TLV parameter of the REG messages.~~ An appropriate protocol type value is used to represent multiprotocol, and it is used in the protocol type TLV in DSx messages to indicate the mutiple protocols are supported for a conncection/service flow. It is beyond the scope of the GPCS to specify how to multiplex and demultiplex multiple protocol data packets over a 802.16 connection/service flow.

2. p11, delete line 7 to 14
3. p13, delete line 7 to 35
4. p 27, delete line 7 to 32
5. p 10, delete line 1 to 7

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comments 35, 46 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 081D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 16 **Line** 43 **Fig/Table#** **Subclause** 6.3.2.3.71.1

Sections 6.3.2.3.71.1 and 6.3.2.3.71.2 define TLVs. Since they aren't defined in Chapter 11, the formatting rules mentioned in the beginning of that Chapter aren't necessarily applicable to these TLVs. Therefore there is no unambigous format for these TLVs (e.g. size of length field is undefined).

Suggested Remedy

Create new Section "11.20 SII-ADV message encodings" and move and renumber subsections 6.3.2.3.71.1 and 6.3.2.3.71.2 into that section.

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

Add new section 6.3.25:

6.3.25 MIH Handover Function

MIH handover function is the support of Std 802.21-2007 specific features and functions. MS and BS that support the MIH handover function shall identify themselves by inclusion of the MIH capability supported. MS and BS that do not support the 802.21 MIH handover function shall not support the MOB_MSMIH-REQ, MOB_MSMIH-RSP, MOB_BSMIH-REQ, or MOB_BSMIH-RSP MAC management messsages.

Modify 11.1.3 by adding the following rows:

Type | Length | Value | Scope

| 6 | Indicates conformance with IEEE Std 802.16g-2007 |

| ~~6~~7-255 | *Reserved* |

Add a new section 11.20:

11.20 MIH Message Encodings

These management frames carry MIHF Frame described in subclause 8.2.1 of Std 802.21-2007 under transport option 3 of Table 17, subclause 8.2 of Std 802.21-2007.

Name | Type | Length | Value

MIHF_Frame_package | ?? | variable | MIHF Frame described in subclause 8.2.1 of Std 802.21-2007 under transport option 3 of Table 17, subclause 8.2 of Std 802.21-2007

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comment 62 as suggested

Comment by: Scott Migaldi **Membership Status:** Member **Date:** 2006/06/01

Comment # 112D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 23 **Line** 46 **Fig/Table#** **Subclause** 8.4.5.3.27

There are two problems with this Section: 1) The described IE is 9 bits long and therefore breaks the DLMAP's nibble alignment. 2) This section defines a BS capability that is to be broadcasted by the BS in DLMAP messages. Not only is this not in line with the remainder of the standard (which uses DCD/UCD or SBC/REG messages for capabilities), it also generates an unnecessary amount of overhead when BS start to include this indication every frame or every so many frames.

Suggested Remedy

Remove section 8.4.5.3.27 and add a similar capability TLV for either the DCD or in case it is necessary for the SS/MS to indicate if it supports MIH as well (which seems likely to be the case) for the REG-REQ/RSP messages.

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

Delete subclause 8.4.5.3.27

Editor to insert appropriate editorial instruction

[Modify section 11.4.1 DCD Channel encoding, table 358]:

Table 358 - DCD channel encoding

Name	Type (1 byte)	Length	Value (variable lenght)	PHY scope
MIH Capability Support	55	1	0 = MIH Capability not supported 1 = MIH Capability supported	All

1. Remove section 8.4.5.3.27
2. Insert new section 11.7.26 on Page 27, line 33 as the follwing:

11.7.26 MIH Capability Supported

The "MIH Capability Supported" TLV indicates if MIH is supported.

Type	Length	Value	Scope
46	1	0: MIH Capability not supported	REG-REQ/RSP
		1: MIH Capabiltiy supported	

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

2006/06/17

IEEE 802.16-06/014r3

Comment by: Yong Chang **Membership Status:** Member **Date:** 2006/06/01

Comment # **241** **Document under Review:** **IEEE 802.16-06/014r3** **Ballot ID:** **20b**

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 11.7.4

Section 11.7.4 is related with the section 5.2.8 Generic Packet Convergence Sublayer (GPCS).
This section also is beyond the scope of 802.16g PAR

Suggested Remedy

Remove section 11.7.4

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: José Costa **Membership Status:** Member **Date:** 2006/06/01

Comment # 034 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 4 **Fig/Table#** **Subclause** 5.2.8

A new Packet Convergence sublayer is not required to enable interoperable and efficient management of conformant 802.16 devices, and is therefore out of scope of the 802.16g project and beyond the limits of its purpose. 802.16 devices can be efficiently managed with the existing packet convergence sublayers.

Suggested Remedy

Remove Section 5.2.8 starting on line 13, along with all other references to GPCS and its related parameters in the remainder of the 16g draft (as a consequence lines 4-11 on page 9 should also be removed).

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources

Group's Notes

Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Yong Chang **Membership Status:** Member **Date:** 2006/06/01

Comment # 037 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 13 **Fig/Table#** **Subclause** 5.2.8

Section 5.2.8 Generic Packet Convergence Sublayer (GPCS) is to add another CS option.
This section also is beyond the scope of 802.16g PAR because this is not related to the Management function.

13. Scope of Proposed Project:
This document provides enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices.

Suggested Remedy

Remove section 5.2.8 Generic Packet Convergence Sublayer (GPCS)

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Yong Chang **Membership Status:** Member **Date:** 2006/06/01

Comment # 242 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 11.13.19.1

Section 11.13.19.1 is related with the section 5.2.8 Generic Packet Convergence Sublayer (GPCS).
This section also is beyond the scope of 802.16g PAR

Suggested Remedy

Remove the GPCS of section 11.13.19.1

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Yong Chang **Membership Status:** Member **Date:** 2006/06/01

Comment # 243 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause** 11.13.19.2

Section 11.13.19.2 is related with the section 5.2.8 Generic Packet Convergence Sublayer (GPCS).
This section also is beyond the scope of 802.16g PAR

Suggested Remedy

Remove the GPCS of section 11.13.19.2

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: John Humbert **Membership Status:** Member **Date:** 2006/06/01

Comment # 008 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 1 **Line** 56 **Fig/Table#** **Subclause** 1.1

The introduction does not reference all of the approved ammendments

Suggested Remedy

Change from:

This document provides enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices.

Change To:

This document provides enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e and P802.16f, to create standardized procedures and interfaces for the management of conformant 802.16 devices.

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The Scope statement in the Amendment document must match the Scope statement of the approved PAR for this project. Regardless of the list of documents that may be presented as part of such a scope statement, IEEE process and procedure requires that any Amendment project have scope to amend all approved 802.16 documents at the time of the projects work, so the remedy proposed by this comment is moot.

Group's Notes

Vote:
For: 0 Against: 10 Abstain: 1

Editor's Notes **Editor's Actions**

Comment by: John Humbert **Membership Status:** Member **Date:** 2006/06/01

Comment # 033 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 6 **Line** 32 **Fig/Table#** **Subclause** 4

NCMS not a defined Abbreviation or acronym

Suggested Remedy

NCMS - Network Control and Managment System

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

Add the following to Clause 4:

NCMS - Network Control and Managment System

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

Comment by: John Humbert **Membership Status:** Member **Date:** 2006/06/01

Comment # 036 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 8 **Fig/Table#** **Subclause** 5

Need for genereic convergance sublayer not supported, nor is it well defined. The current standard defines an adequate number of converganece sublayers. Also this section leaves the managment of the GPCS to some undefined entity that is out of scope of the standard.

Suggested Remedy

Delete section 5

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.
Proposed remedy removes all of the existing sublayers as well, thus is not appropriate.

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: John Humbert **Membership Status:** Member **Date:** 2006/06/01

Comment # 068 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 14 **Line** 59 **Fig/Table#** 108a **Subclause** 6.3.2.3.67

TLV parameters not defined

Suggested Remedy

Define TLV parameters or delete table / sections

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

Add new section 6.3.25:

6.3.25 MIH Handover Function

MIH handover function is the support of Std 802.21-2007 specific features and functions. MS and BS that support the MIH handover function shall identify themselves by inclusion of the MIH capability supported. MS and BS that do not support the 802.21 MIH handover function shall not support the MOB_MSMIH-REQ, MOB_MSMIH-RSP, MOB_BSMIH-REQ, or MOB_BSMIH-RSP MAC management messsages.

Modify 11.1.3 by adding the following rows:

Type | Length | Value | Scope

| 6 | Indicates conformance with IEEE Std 802.16g-2007 |

| ~~6~~7-255 | *Reserved* |

Add a new section 11.20:

11.20 MIH Message Encodings

These management frames carry MIHF Frame described in subclause 8.2.1 of Std 802.21-2007 under transport option 3 of Table 17, subclause 8.2 of Std 802.21-2007.

Name | Type | Length | Value

MIHF_Frame_package | ?? | variable | MIHF Frame described in subclause 8.2.1 of Std 802.21-2007 under transport option 3 of Table 17, subclause 8.2 of Std 802.21-2007

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

See resolution of comment 62 as suggested

2006/06/17

IEEE 802.16-06/014r3

Comment by: Mi-Young Yoon **Membership Status:** Member **Date:** 2006/06/01

Comment # 226D-1 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 137 **Line** **Fig/Table#** **Subclause** 14.2.11.4

Scanning-related primitives are defined in 14.2.11.4, 14.2.11.5 and 14.2.11.6. They are similiar to the primitives defined in 14.2.9.4. These primitives should be merged and be kept in 14.2.9.4 for HO.

Suggested Remedy

Remove these three sections and merge with the primitives defined in 14.2.9.4

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

no specific text provided
commenter is correct, but more complicated than indicated to merge the primitives

Group's Notes

Editor's Notes **Editor's Actions**

2006/06/17

IEEE 802.16-06/014r3

Comment by: Mi-Young Yoon **Membership Status:** Member **Date:** 2006/06/01

Comment # 229D-1 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 146 **Line** **Fig/Table#** **Subclause** 14.2.11.7

HO control primitives are already defined in 14.2.9. Most of the primitives defined in 14.2.11.7 and 14.2.11.8 seem to be redundant and can be removed.

Suggested Remedy

Remove these two sections and merge with primitives defined in 14.2.9

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

seeking contribution to merge these primitives with section 14.2.9 before removing them from 14.2.11.7 & 8

Group's Notes

Editor's Notes **Editor's Actions**

Comment by: Naftali Chayat **Membership Status:** Member **Date:** 2006/06/01

Comment # 038 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 13 **Fig/Table#** **Subclause** 5.2.8

Adding a new CS option (GPCS) does not fit 802.16g PAR: to provide enhancements to the MAC and PHY management entities

Suggested Remedy

Delete section 5.2.8 Generic Packet Convergence Sublayer (GPCS)

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/01

Comment # 040 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 13 **Fig/Table#** **Subclause** 5.2.8

Adding a new CS option (GPCS) does not fit 802.16g PAR: to provide enhancements to the MAC and PHY management entities

Suggested Remedy

Delete section 5.2.8 Generic Packet Convergence Sublayer (GPCS)

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/01

Comment # 136D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 32 **Line** 51 **Fig/Table#** 383a **Subclause**

Table 383a—"Target BER Information" in the section 11.13.38 does not belong to 802.16g according to the PAR

Suggested Remedy

Remove Table 383a

GroupResolution **Decision of Group:** **Accepted**

Remove Table 383a

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/01

Comment # 256D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause**

The section 11.13.38 does not belong to 802.16g according to the PAR

Suggested Remedy

Remove the section 11.13.38

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

In certain circumstances and for certain QoS types, the PER value can provide valuable and useful direction when the network is making decisions on handover, burst profiles, and error correction to be applied to a given service flow and MS

Group's Notes

Vote:

For: 0 Against: 1 Abstain: 19

Editor's Notes **Editor's Actions**

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/01

Comment # 041 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 13 **Fig/Table#** **Subclause** 5.2.8

Section 5.2.8 Generic Packet Convergence Sublayer (GPCS) contains material that does not belong to 802.16g according to the PAR:

13. Scope of Proposed Project:
This document provides enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices.
Additional CS option [5.2.8 Generic Packet Convergence Sublayer (GPCS)] clearly does not fit.
CS is a part of MAC. CS operations occur at the data plane. So this is not "management" (or the whole MAC is "management").

Suggested Remedy

Remove section 5.2.8 Generic Packet Convergence Sublayer (GPCS)

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources

Group's Notes

Same as comment 34
Vote:
For: 13 Against: 14 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/01

Comment # 137 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 32 **Line** 51 **Fig/Table#** 383a **Subclause**

Table 383a—"Target BER Information" in the section 11.13.38 does not belong to 802.16g according to the PAR:

13. Scope of Proposed Project:
This document provides enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices.

Table 383a is a sort of PHY related information: Normalized C/N values for certain Target BER values, so it is not in scope of 802.16g project. The text does not provide any explanation what management entities are supposed to do with this information.

I would understand if the standard contained specification of Target BER per Service Flow.
But how is it related to S/N? Per SF?

Suggested Remedy

Remove Table 383a

GroupResolution **Decision of Group:** **Accepted**

Remove Table 383a

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/01

Comment # 257 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 999 **Line** **Fig/Table#** **Subclause**

The section 11.13.38 does not belong to 802.16g according to the PAR:

13. Scope of Proposed Project:
This document provides enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices.

I would understand if 802.16 MAC contained a TLV specifying the Target BER per Service Flow. But how is it related to management?

The text says: "*This PER could either be the PER as seen by the application (post ARQ and/or HARQ processing) or as seen on the airlink (before the application of ARQ and/or HARQ)*" ... can it be a standard?

Suggested Remedy

Remove the section 11.13.38

GroupResolution **Decision of Group:** **Rejected-Duplicate**

Reason for Group's Decision/Resolution

In certain circumstances and for certain QoS types, the PER value can provide valuable and useful direction when the network is making decisions on handover, burst profiles, and error correction to be applied to a given service flow and MS

Group's Notes

Same comment as 256
Vote:
For: 0 Against: 1 Abstain: 19

Editor's Notes **Editor's Actions**

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/01

Comment # 143 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 33 **Line** 39 **Fig/Table#** **Subclause** 11.13.39

Numerous problems in 11.13.39 "DL Available Radio Resource" (marked by red)

Available Radio Resource indicator shall indicate the average percentage of available physical radio resources [what is physical radio resource?] for DL where averaging shall take place over a time interval which shall be defined by configuration [no definition of configuration so far, therefore it can be that BS and SS calculate this parameter based on different formulas].
Available physical radio resources shall be defined as the set of subchannels and symbols within a radio frame, which are not used by any non-best-effort service flow class [there are no "service flow classes" in 802.16. Also at the DL allocation is a rectangular region shared between several Service Flows, so in many cases it is impossible to say which symbols are occupied by which Service Flows]

Suggested Remedy

Remove section 11.13.39

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

On page 33, line 41, modify text as:
Available Radio Resource indicator shall indicate the average percentage of available physical radio resources for DL where averaging shall take place over a time interval which shall be common to all BS within an operator network~~defined by configuration~~. Available physical radio resources shall be defined as the set of subchannels and symbols within a radio frame, which are not used by any non-best-effort service flow class as identified by either the uplink grant scheduling type or the data delivery service as identified in the service flow encodings.

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/01

Comment # 165 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 40 **Line** 6 **Fig/Table#** **Subclause**

Numerous problems in 11.13.40 "UL Available Radio Resource" (marked by red)

Available Radio Resource indicator shall indicate the average percentage of available physical radio resources [what is physical radio resource?] for UL where averaging shall take place over a time interval which shall be defined by configuration [no definition of configuration so far, therefore it can be that BS and SS calculate this parameter based on different formulas].
Available physical radio resources shall be defined as the set of subchannels and symbols within a radio frame, which are not used by any non-best-effort service flow class [there are no "service flow classes" in 802.16. Also UL allocation in 802.16 is not provided in terms of symbols (all MSs share same set of symbols)]

Even if those problems resolved, how this value can be used? No instructions.

Suggested Remedy

Remove section 11.13.40

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

On page 34, line 8, modify text as:
UL Available Radio Resource indicator shall indicate the average percentage of available physical radio resources for UL where averaging shall take place over a time interval which shall be common to all BS within an operator network~~defined by configuration~~.
Available physical radio resources shall be defined as the set of subchannels and symbols within a radio frame, which are not used by any non-best-effort service flow class as identified by either the uplink grant scheduling type or the data delivery service as identified in the service flow encodings.

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

As already addressed by comment 149 and the resolution in that essentially renumbers this section to 11.18.3

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/01

Comment # 232 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 158 **Line** 10 **Fig/Table#** **Subclause**

The draft contains requirements to itself that is strange (unprecedented) and misleading. What is a reader of this document expected to do with the requirements?

Suggested Remedy

Delete Annex F

GroupResolution **Decision of Group:** **Accepted**

Delete Annex F

Reason for Group's Decision/Resolution

Group's Notes

Accepted unopposed

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

Comment by: José Costa **Membership Status:** Member **Date:** 2006/06/30

Comment # 1066 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 58 **Line** ? **Fig/Table#** **Subclause** 14.2.4.1.1.2.2

C-SM-NOTFY is Event Type primitive.

Suggested Remedy

C-SM-NOTFY
(
~~Operation Type : Action~~,
~~Action~~ Event Type : AK_Transfer,
Object ID : BS,
Attribute List :
MS ID
AK
AK Lifetime
AK Sequence Number
AKID
)

GroupResolution **Decision of Group:** **Accepted**

C-SM-NOTFY
(
~~Operation Type : Action~~,
~~Action~~ Event Type : AK_Transfer,
Object ID : BS,
Attribute List :
MS ID
AK
AK Lifetime
AK Sequence Number
AKID
)

Reason for Group's Decision/Resolution

Group's Notes

Accepted without objection

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

2006/06/17

IEEE 802.16-06/014r3

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/30

Comment # **1007** **Document under Review:** **IEEE 802.16-06/014r3** **Ballot ID:** **20b**

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 13 **Fig/Table#** **Subclause** 5.2.8

The document contains section 5.2.8 Generic Packet Convergence Sublayer (GPCS) that in my view falls out of the scope of "Management Plane Procedures and Services" document. CS features include defiition of format (of encapsulation), calssification, PHS. If one calls this "management" in the sense of 16g, then the scope of 16g must include the whole 802.16 MAC that certainly would not be correct.

Suggested Remedy

Remove section 5.2.8, 11.7.7.1

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The consensus of the group is that the material does indeed fall within the scope of the amendment. The scope of the project has been interpreted as including the interface between the 802.16 entities and the NCMS, including data plane, management plane and control plane. The GPCS is in scope in that it includes the mapping of the classification of the service flows from network connectionless service to 802.16 connection oriented service.

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Group's Notes

Vote:
For: 4 Against: 16 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/30

Comment # 1026 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 13 **Line** 21 **Fig/Table#** **Subclause** 6.3.25

The document contains section 6.3.25 MIH Handover Function that in my view falls out of the scope of "Management Plane Procedures and Services" document. Though this set of features would be a good thing to cover, including it in 16g document means an unaccetable extension of the scope of this document defined in the reviewed document as

"enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices".

MIH for certain is NOT a feature from 802.16-2004 amended by P802.16e, so related management procedures and messages cannot appear in 16g document.
My recommendation is to remove MIH stuff to another (yet to be created) amendment.

Suggested Remedy

Remove section 6.3.25

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The consensus of the group is that the material does indeed fall within the scope of the amendment. The scope of the project has been interpreted as including the interface between the 802.16 entities and the NCMS, including data plane, management plane and control plane. IEEE 802.21 MIH material is in scope for this project in that it is a known feature of intended networks in which 802.16 will be deployed, the support of which is critical to 802.16 performance in the intended networks. See resolution of comments 1002, 1007, 1007D,1022 and 1023.

Group's Notes

Vote:
For: 1 Against: 9 Abstain: 2

Editor's Notes **Editor's Actions**

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/30

Comment # 1040 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 27 **Line** 10 **Fig/Table#** **Subclause** 11.1.3

The document contains section 11.1.3 "MAC version encoding" that in my view falls out of the scope of "Management Plane Procedures and Services" document. This table should certainly be fixed, but in future 802.16-2005e Corrigenda project.
Also there is no such thing as conformance to (just) an amendment

Suggested Remedy

Remove sections 11.1.3

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

In table 439, change the values to:
6: Indicates conformance with IEEE Std 802.16-2004, IEEE Std 802.16e-2005 and IEEE Std 802.16f-2005
7: Indicates conformance with IEEE Std 802.16-2004, IEEE Std 802.16e-2005, IEEE Std 802.16f-2005 and IEEE Std 802.16g-2007
~~7~~8-255

Reason for Group's Decision/Resolution

Commenter makes assumption about interpretation of the value that differs from previous usage for this value in previous amendments. The group feels that interpretation of this value is unclear in the standard. However, the group feels that this issue should be better evaluated in the Maintenance process, not in 16g. At this time, the group is compelled to rely upon precedent usage of this value.

Group's Notes

Accepted without objection

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

Corrected markup for last line. It should be ~~6~~ 8-255

Comment by: Ran Yaniv **Membership Status:** Member **Date:** 2006/06/30

Comment # 1086 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 165 **Line** 17 **Fig/Table#** **Subclause** F.1

There are no such things in 802.16 as
- handoff
- hard handoff

Suggested Remedy

Change the title
F.1 Hard Handoff Procedures
to
F.1 Handover Procedures

GroupResolution **Decision of Group:** **Accepted**

Change the title
F.1 Hard Handoff Procedures
to
F.1 Handover Procedures

Reason for Group's Decision/Resolution

Group's Notes

Accepted without objection

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

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/30

Comment # 1007 D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 13 **Fig/Table#** **Subclause** 5.2.8

The document contains section 5.2.8 Generic Packet Convergence Sublayer (GPCS) that in my view falls out of the scope of "Management Plane Procedures and Services" document. CS features include defiition of format (of encapsulation), calssification, PHS. If one calls this "management" in the sense of 16g, then the scope of 16g must include the whole 802.16 MAC that certainly would not be correct.

Suggested Remedy

Remove section 5.2.8, 11.7.7.1

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The consensus of the group is that the material does indeed fall within the scope of the amendment. The scope of the project has been interpreted as including the interface between the 802.16 entities and the NCMS, including data plane, management plane and control plane. The GPCS is in scope in that it includes the mapping of the classification of the service flows from network connectionless service to 802.16 connection oriented service.

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Group's Notes

Vote:
For: 4 Against: 16 Abstain: 3

Editor's Notes **Editor's Actions**

Comment by: Vladimir Yanover **Membership Status:** Member **Date:** 2006/06/30

Comment # 1026 D **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 13 **Line** 21 **Fig/Table#** **Subclause** 6.3.25

The document contains section 6.3.25 MIH Handover Function that in my view falls out of the scope of "Management Plane Procedures and Services" document. Though this set of features would be a good thing to cover, including it in 16g document means an unaccetable extension of the scope of this document defined in the reviewed document as

"enhancements to the MAC and PHY management entities of IEEE Standard 802.16-2004, as amended by P802.16e, to create standardized procedures and interfaces for the management of conformant 802.16 devices".

MIH for certain is NOT a feature from 802.16-2004 amended by P802.16e, so related management procedures and messages cannot appear in 16g document.
My recommendation is to remove MIH stuff to another (yet to be created) amendment.

Suggested Remedy

Remove section 6.3.25

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The consensus of the group is that the material does indeed fall within the scope of the amendment. The scope of the project has been interpreted as including the interface between the 802.16 entities and the NCMS, including data plane, management plane and control plane. IEEE 802.21 MIH material is in scope for this project in that it is a known feature of intended networks in which 802.16 will be deployed, the support of which is critical to 802.16 performance in the intended networks. See resolution of comments 1002, 1007, 1007D,1022 and 1023.

Group's Notes

Vote:
For: 1 Against: 9 Abstain: 2

Editor's Notes **Editor's Actions**

Comment by: Yong Chang **Membership Status:** Member **Date:** 2006/06/07

Comment # 2013 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 7 **Line** 23 **Fig/Table#** **Subclause** 4

GPCS is beyond the scope of 802.16g PAR

Suggested Remedy

Remove 'GPCS - Generic Packet Convergence Sublayer'

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The consensus of the group is that the material does indeed fall within the scope of the amendment. The scope of the project has been interpreted as including the interface between the 802.16 entities and the NCMS, including data plane, management plane and control plane. The GPCS is in scope in that it includes the mapping of the classification of the service flows from network connectionless service to 802.16 connection oriented service.

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Group's Notes

Vote on resolution of comments 2013 & 2014:
In Favor: 5 Against: 17 Abstain: 5
Comments Rejected

Editor's Notes **Editor's Actions**

Comment by: José Costa **Membership Status:** Member **Date:** 2006/06/07

Comment # 2014 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 9 **Line** 10 **Fig/Table#** n/a **Subclause** 5.2.8

The GPCS feature is out of scope of the 16g standard. Conformant 802.16 devices can be managed and controlled equally well with the existing CS options in the standard. As pictured in Fig. 17c, GPCS concerns the data plane, not the management/control plane and is therefore out of scope. Furthermore, GPCS does not completely solve the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Suggested Remedy

Remove Section 5.2.8.

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

The consensus of the group is that the material does indeed fall within the scope of the amendment. The scope of the project has been interpreted as including the interface between the 802.16 entities and the NCMS, including data plane, management plane and control plane. The GPCS is in scope in that it includes the mapping of the classification of the service flows from network connectionless service to 802.16 connection oriented service.

Existing Convergence Sublayers fail to meet the needs of network managed service flows in a critical QoS environment with scarce air interface resources.

Group's Notes

Vote on resolution of comments 2013 & 2014:
In Favor: 5 Against: 17 Abstain: 5
Comments Rejected

Editor's Notes **Editor's Actions**

Comment by: Lester Eastwood **Membership Status:** Member **Date:** 2006/06/07

Comment # 2105 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 136 **Line** **Fig/Table#** **Subclause** 14.2.9.3.2

Lack of explanation of the usage of "MIH INFO bitmap" which is mentioned by name only in 14.2.9.3.2 (page 136) and Table 463 (page 137).

Suggested Remedy

Explain the definition and especially the usage of "MIH INFO bitmap".

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

On page 136, delete lines 31 and 32.

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

Editor's Notes **Editor's Actions**

Comment by: geunhwi lim **Membership Status:** Member **Date:** 2006/06/07

Comment # 2046 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 29 **Line** 38 **Fig/Table#** **Subclause** 11.7.26

There is no definition on MOB_MSMIH-REQ, MOB_MSMIH-RSP, MOB_BSMIH-REQ, and MOB_BSMIH-RSP in 16g/D3.

Suggested Remedy

Remove line from 36 to 39

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

First paragraph of section 11.7.26 as the following:
The "MIH Capability Supported" TLV indicates if MIH is supported. MS and BS that support the MIH handover function shall identify themselves by inclusion of the MIH capability supported. MS and BS that do not support the 802.21 MIH handover function shall not support the ~~MOB_MSMIH-REQ, MOB_MSMIH-RSP, MOB_BSMIH-REQ, or MOB_BSMIH-RSP~~ MOB_MIH-MSG MAC management messsage~~s~~.

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

Editor's Notes **Editor's Actions**

Comment by: soonyoung yoon **Membership Status:** Member **Date:** 2006/06/07

Comment # 2097 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 105 **Line** 12 **Fig/Table#** **Subclause** 14.2.7.2.1.2.4

C-HO-REQ (Action_Type == HO-Target) primitive may be sent to the candidate target BS(s). Because the target BS receiving the primitive may not be the actual target BS, it may or may not pre-allocate resources to the MS.

Suggested Remedy

The target BS prepares for the MS handover ~~for pre-allocating resources to the MS~~ and sends response to the NCMS.

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

On page 105, line 12, modify text as:
The target BS prepares for the MS handover which may include ~~for~~ pre-allocating resources ~~to~~ for the MS, and sends a response to the NCMS.

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

Editor's Notes **Editor's Actions**

Comment by: Mi-Young Yoon **Membership Status:** Member **Date:** 2006/06/07

Comment # 2070 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 52 **Line** 31 **Fig/Table#** **Subclause** 14.2.2.2

In Section 14.2.2.2, service primitives are defined for accounting management. However, it does not follow service primitive template, which is defined in Section 14.1. Thus, we modify Section 14.2.2.2 based on the defined service primitive template. In addition, we add several attributes for M-ACM-REQ and M-ACM-RSP primitives.

Suggested Remedy

Adopt the text proposed in contribution C80216g-06_039.doc

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

Accept contribution C802.16g-06/039r2

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

Editor's Notes **Editor's Actions**

Comment by: Mi-Young Yoon **Membership Status:** Member **Date:** 2006/06/07

Comment # 2086 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 87 **Line** 16 **Fig/Table#** **Subclause** 14.2.6

In Section 14.2.6, subscriber mode management is described. The subscriber mode consists of idle, normal operation, and sleep at MS and BS. The subscriber mode at NCMS consists of idle and normal operation. In this contribution, we add a new state, called for complete description of subscriber mode management.

Suggested Remedy

Adopt the text proposed in contribution C80216g-06_041.doc

GroupResolution **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

At commenter's request.
Contribution needs additional work to include changes to Section 6. Premature to accept at this time.

Group's Notes

Vote:
In Favor: 2 Against: 7 Abstain: 5
Comment Rejected

Editor's Notes **Editor's Actions**

Comment by: Mi-Young Yoon **Membership Status:** Member **Date:** 2006/06/07

Comment # 2110 **Document under Review:** IEEE 802.16-06/014r3 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☒ **Satisfied** ☐ **Page** 153 **Line** 24 **Fig/Table#** **Subclause** 14.2.11.2.2

In Section 14.2.11.2, service primitives for location management are defined. However, currently defined service primitives do not distinguish secure location update and unsecure location update, which are defined in IEEE 802.16e standard. Thus, we add Authentication Indicator both in C-PG-REQ and C-PG-RSP primitives in order to decide whether the location update is secure or unsecure.

Suggested Remedy

Adopt the text proposed in contribution C80216g-06_040.doc

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

Accept contribution C802.16g-06/040r7

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

Editor's Notes **Editor's Actions**

Comment by: Mi-Young Yoon **Membership Status:** Observer **Date:** 2006/06/17

Comment # 3020 **Document under Review:** IEEE 802.16-06/048 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☐ **Satisfied** ☐ **Page** 39 **Line** 1 **Fig/Table#** **Subclause** 14.2.2.1

IIn IEEE P802.16g/D3, ACM-REQ/RSP service primitives, are defined to be used in both direction, i.e., from NCMS to BS and from BS to NCMS. In July meeting of IEEE 802.16g, however, it was agreed that ACM-REQ should be sent from NCMS to BS and ACM-RSP should be sent from BS to NCMS for the reply to ACM-REQ. Instead, ACM-IND should be sent from BS to NCMS and ACM-ACK should be sent from NCMS to BS for the reply to ACM-IND. In order to accommodate these changes, we correct attributes in ACM-REQ/RSP primitives and Fig. 474, and redefine attributes for ACM-IND/ACK primitives in IEEE C802.16g-06/053

Suggested Remedy

Adopt the text proposed in contribution IEEE C802.16g-06/053

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

Accept contribution 802.16g-06/053r1

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

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

Done, except for the requested changes to Figure 474 since these are deviating from the remedy to Figure 474 which was accepted in comment #3021. Editor assumed that cmt#3021 prevails over #3020 since #3021 was dedicated to Fig. 474 while #3020 included many other changes.

Comment by: Mi-Young Yoon **Membership Status:** Observer **Date:** 2006/06/17

Comment # 3023 **Document under Review:** IEEE 802.16-06/048 **Ballot ID:** 20b

Comment **Type** Technical **Part of Dis** ☐ **Satisfied** ☐ **Page** 41 **Line** 33 **Fig/Table#** **Subclause** 14.2.2.2.2.2

In Section 14.2.2.2, service primitives for accounting management are defined, where Accounting Input Packets are defined in order to measure the number of packets sent to the MS from the BS. In practical situation, however, data packets which were sent to the MS from the BS may not be successfully delivered due to errors. Thus, the number of packets that the MS successfully received may be less than the number of packets actually sent to the MS from the MS. Since the accounting should be made for the number of successfully delivered packets to the MS from the BS only, two attributes, i.e., Accounting Wireless Output Octets and Accounting Wireless Output Packets are newly defined in M-ACM-RSP/IND primitives in IEEEC802.16g-06/054.

Note: Comment changed from 'Technical, Binding' to 'Technical, non-Binding' by the Chair because the commenter is not a Member. Only Members can make 'Technical, Binding' comments.

Suggested Remedy

Adopt the text proposed in contribution IEEE C802.16g-06/054

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

Adopt contribution C80216g-06_054r1

Reason for Group's Decision/Resolution

Group's Notes

Accepted without opposition

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