2007/07/16	6	20	07-04-26	IEEE 802.16-	-07/027	IEE	E 802.16-07/001
<u>Commen</u>	<u>t by:</u>	GIESBERTS, PIETER-PA	AUL	<u>Membership St</u>	tatus:		Date: 01/12/2007
Comment #	53	Document und	ler Review:	P802.16g/D6		Ballot ID: P802.	16g/D6
<u>Comment</u>	Type Technical	Part of Dis X Satisfied	<u>Page</u> 14	Line 34	Fig/Table#	<u>Subclause</u>	6.3.2.3.63

The current NSP request/response mechanism is unnecessary complex, badly documented (no 6.x section describes the behavior), not negotiated (there are no capability bits that indicate whether or not a BS or MS supports these messages) and it may generate unnecessary (partial) network entries by MS' looking for a network. NSP TLVs should be communicated through DCD messages, rather than through the SII-ADV and SBC-REQ/RSP messages. That is much simpler for both the MS and the BS, it is more in line with the current network entry procedures and it is more flexible as it makes it possible for a BS to inform an MS of its' neighbours NSPs (through the MOB_NBR-ADV and the DCD settings TLV).

Suggested Remedy

Remove 6.3.2.3.63 (SII-ADV message, page 14), 11.1.8.2 (NSP Change Count TLV, page 21) and 11.8.9 (SIQ TLV, page 23) and change the scope of the NSP List TLV (11.1.8.1) to DCD only; change the section number of 11.1.8.1. to 11.4.3 and remove 11.1.8. In Section 11.1.8.1 remove the line "When an SBC-REQ message with an SIQ TLV (with bit 1 set) is received, the BS should respond with an SBC-RSP message with an NSP List TLV.". Optionally add the following note to that section: "In case NSP TLV is not present in DCD, the only NSPID that is available is equal to the NAPID (Operator ID)".

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

The commenter may be correct that the proposed remedy may reduce overhead and be more efficient, but it is unclear at this time. The group would prefer to see additional validation/simulation justifying the proposed method, especially demonstrating improved efficiency over the current solution, prior to approving the revised method. Additionally, the group proposes a revised remedy, should the commenter's proposal be proven:

```
Remove 6.3.2.3.63 (SII-ADV message, page 14)
```

```
Remove 11.1.8.2 (NSP Change Count TLV, page 21)
```

```
Remove 11.8.9 (SIQ TLV, page 23)
```

In the table in 11.1.8.1, change the scope of NSP List TLV (11.1.8.1) to DCD only

In the table in 11.1.8.1, add "Assignment method, administration, and usage of NSP Ids are outside the scope of this standard." to the end of the paragraph in for 'value'

Move the content of the table in section number of 11.1.8.1 to insert into Table 358

2007-04-26 IEEE 802.16-07/027

At the end of 6.3.2.3.2, add text:

"If the BS has a list of NSP IDs to transmit, it shall include the NSP List TLV in the DCD. If the BS has no list of NSP IDs to transmit, NSP List TLV shall be omitted."

Remove 11.1.8

Group's Notes

Approved without opposition

Editor's Notes		Editor's Actions				
2007/07/16					IEEE 802.16	-07/001
<u>Comment</u>	by:	GIESBERTS, PIETER-PAU	UL <u>Membership St</u>	atus:	<u>Date:</u> 01/12	2/2007
Comment #	54	Document unde	r Review: P802.16g/D6		Ballot ID: P802.16g/D6	
Comment	<u>Type</u> Technica	Part of Dis X Satisfied	Page 15 Line 1	Fig/Table#	Subclause 6.3.2.3.6	4

The proposed Location Based Services message is unnecessary and a needless complication: it requires the BS to transmit yet another message with its own and neighbours' information. There is no reason why the only currently proposed TLV couldn't be included in the DCD instead - the DCD and MOB_NBR-ADV messages can in that case transfer all required information and this message can be removed.

Suggested Remedy

Remove section 6.3.2.3.64 (LBS-ADV message) and change the scope of the BS Coordinate Broadcast (11.21) to DCD; change its section number to 11.4.4.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

It is unecessary and incurs substantial overhead penalty to transmit the LBS info with the same frequency as DCD. LBS can be transmitted at much longer intervals. Transmitting LBS in a separate broadcast message is the only other reasonable option. It may be that we could engineer a way to put it into NBR-ADV instead of creating an all new broadcast MAC management message, but that has not been proposed, and we are concerned about backwards compatibility of message parsing.

Group's Notes

Approved without opposition

Editor's Notes

2007/07/16	5	20	007-04-26	IEEE 802.16	-07/027	I	EEE 802.16-07	7/001
<u>Comment</u>	<u>by:</u>	GIESBERTS, PIETER-P	AUL	<u>Membership S</u>	tatus:		Date: 01/12/20)07
Comment #	55	Document une	der Review: P	802.16g/D6		Ballot ID: P8	02.16g/D6	
<u>Comment</u>	<u>Type</u> Technical	Part of Dis X Satisfied	<u>Page</u> 15	Line 51	Fig/Table#	Subcla	<u>use</u> 6.3.25	
Section 6.3.2 it altogether.	5 currently does	not contain any normative tex	kt and seems	s to be pretty	much useless.	. Either extend	d the section or r	emove

Suggested Remedy

Remove Section 6.3.25 (page 15)

GroupResolution

Decision of Group: Principle

Replace the text of 6.3.25 as: MIH handover function is the support of IEEE Std 802.21 specific features and functions.

The 802.16 entity may send or receive the MOB_MIH-MSG message to or from the peer 802.16 entity in order to convey MIHF Frames carrying the 802.21 MIH protocol messages.

In 6.3.2.3.62, modify the text before the table as:

[BEGIN DELETE] The 802.16 entity may send or receive the MOB_MIH-MSG message to or from the peer 802.16 entity in order to convey MIHF Frames carrying the 802.21 MIH protocol messages. The [END DELETE] [BEGIN INSERT] This [END INSERT] message shall be transmitted on the Primary Management connection.

Reason for Group's Decision/Resolution

Group's Notes Approved without opposition

Editor's Notes

2007/07/16					20	07-04-26	IEEE 802.16-07	/027		IEEE 8	802.1	16-07/001	
<u>Comment</u>	by:	VI	adimir	Yanover			<u>Membership Statu</u>	<u>s:</u> Member		Da	<u>ite:</u> 1/	(15/2007	
Comment #	1125				Document und	er Review:			Ballot ID:	P802.16	g/D6		
Comment	<u>Type</u>	Technical	Part o	of Dis 🛛 S	atisfied	Page 9	Line 16	Fig/Table#	<u>Su</u>	bclause 5	.3		

There is a concern with regard to utility of this feature alone in absence of certain framework (like upper layer protocol between the network and the terminal). For example, to use GPCS Service Flows the terminal has to apply certain classifiers at UL connections. The classification happens in this case above MAC, but anyway there should be some [upper layer] protocol to communicate the classification rules to the terminal. Currently there is no definition of such protocol. Particularly NWG spec does not have such function. Another example is negotiation of exact encapsulation format.

It was noticed by some members that this feature is actually out of the scope of 16g project defined as follows: "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."

Recommendation: Define GPSC support as optional in 802.16g

Suggested Remedy

Change

5.3 Generic Packet Convergence Sublayer (GPCS) The Generic Packet CS (GPCS) is an upper layer protocol-independent packet convergence sublayer that supports multiple protocols over 802.16 air interface.

Implementation of GCPS is optional.

It is defined as follows:

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

All convergence sublayers are optional. Selection of the specific CS employed in an implementation is specified by bit selection, negotiated in REG-REQ/RSP. See 11.7.7.1 Classification/PHS options and SDU encapsulation support, Table 440. This bit selection makes support of the feature optional for the SS and optional for the BS.

Group's Notes

Approved without opposit	tion 2	2007-04-26 IEEE 802.16-	-07/027	
Editor's Notes	Editor's Actions			
2007/07/16				IEEE 802.16-07/001
Comment by:	Vladimir Yanover	<u>Membership S</u>	tatus: Member	Date: 1/15/2007
Comment # 1126	Document ur	nder Review:	Bal	llot ID: P802.16g/D6
<u>Comment</u> <u>Type</u> Tech No need to specify MIH fe		Page 15 Line 51	Fig/Table#	<u>Subclause</u>
	nction the support of IEEE Std 802.21 s andover function is optional.	specific features and functi	ons.	
<u>GroupResolution</u>	Decision of Group: Disa	Igree		
<u>Reason for Group's Decision/R</u> The requested optionality	esolution / is already present in the text.			
The use of the term 'may	does not impose a requirement	on either the BS or the MS).	
Note that the capability n	egotiation for the feature specification	ally calls out that MS and E	3S may indicate 'N	ot Support'
function shall identify the	ported" TLV indicates if MIH is su mselves by inclusion of the MIH o t the MOB_MIH-MSG manageme	capability supported. MS a		indover support the 802.21 MIH handover
From 6.3.2.3.62 The 802.16 entity may so carrying the 802.21 MIH		G message to or from the	peer 802.16 entity	in order to convey MIHF Frames
<u>Group's Notes</u> Approved without opposit	tion			
Editor's Notes	Editor's Actions			

2007/07/16	5			20	07-04-26	IEEE 802.16-07	/027	IEE	E 802.16-07/001
Comment	by:	Vladimir	Yanover			<u>Membership Statu</u>	<u>s:</u> Member		Date: 1/15/2007
Comment #	1127		ļ	Document und	er Review:			Ballot ID: P802.	16g/D6
<u>Comment</u>	<u>Type</u> Technica	Part of	of Dis 🛛 Sa	tisfied	<u>Page</u> 14	<u>Line</u> 34	Fig/Table#	<u>Subclause</u>	6.3.2.3.63

Advertisement of Service providers IDs makes sense only for mobile and may be nomadic systems. It should be defined as optional in the standard to make it "required" in specific profiles

Suggested Remedy

Change

6.3.2.3.63 Service Identity Information (SII-ADV) message

A BS may use the SII-ADV message to broadcast a list of Network Service Provider (NSP) Identifiers. The message may be broadcast periodically without solicitation or could be solicited by an (M)SS. This message is sent from the BS to all MSs on a broadcast CID. Assignment method, administration, and usage of NSP Ids are outside the scope of this standard. Implementation of SII-ADV message is optional for both BS and MS.

Change in p.20, line 35

11.1.8 NSP List encodings

11.1.8.1 NSP List TLV

The NSP LIST TLV is a TLV that contains one or more Network Service Provider 24-bit Identifiers. When an SBC-REQ message with an SIQ TLV (with bit 1 set) is received, the BS should respond with an SBC-RSP message with an NSP List TLV.

Implementation of NSP List TLV is optional for both BS and MS.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The requested optionality is already present in the text.

The text only requires support for the specified messages and TLVs when NSP IDs are used on the BS. No NSP IDs, no messages need be supported. And there is no requirement that any network or BS support NSP IDs.

Group's Notes

Approved without opposition

Editor's Notes

2007/07/16	5				20	07-04-26	IEEE 802.16-0	07/02	27		IEEE 80	2.16-	07/001
<u>Comment</u>	<u>by:</u>	VI	adimir Y	anover			Membership Sta	<u>atus:</u>	Member		Date	1/15/2	2007
Comment #	1128				Document und	er Review:	EEE P802.16g	-06/[D6	Ballot ID:	P802.16g/	D6	
Comment	<u>Type</u>	Technical	Part of D	Dis Sa	atisfied	<u>Page</u> 15	Line 1	Fig	/Table#	Sub	clause 6.3	.2.3.64	Ļ

Some 802.16 members noticed that more analysis needed, particularly about PHY features to be used in locating the terminal's position. Menawhile it should be defined as optional.

Suggested Remedy

6.3.2.3.64 Location Based Services (LBS-ADV) message

A BS may use the LBS-ADV message to broadcast the LBS information. The message may be broadcast periodically without solicitation. This message is sent from the BS to all MSs on a broadcast CID.

Implementation of LBS-ADV message is optional for both BS and MS.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The requested optionality is already present in the text.

The use of the term 'may' does not impose a requirement on either the BS or the MS.

Group's Notes

Approved without opposition

Editor's Notes Editor's

2007/07/16 2007-04-26 IEEE 802.16-07/027 IE	
Comment by:Vladimir YanoverMembership Status:Member	Date: 1/15/2007
Comment #1129Document under Review:IEEE P802.16g-06/D6Ballot ID:P80	02.16g/D6
Comment Type Technical Part of Dis Satisfied Page 20 Line 13 Fig/Table# Subclau	<u>ıse</u> 11.1.13

There are several problems in MAC version encoding (11.1.3).

1. The text says [about TLV value]:

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

The problems:

- needs clarification as there is no "conformance with IEEE Std 802.16e-2005" (which is a combination of amendment and corrigenda to IEEE Std 802.16-2004)

- Conformance to IEEE Std 802.16-2004 + IEEE Std 802.16e-2005 is surprisingly bound to the conformance to IEEE Std 802.16f-2005 (MIB for fixed OFDM applications)

- Value 7 indicates conformance to 802.16g-2007 as a whole. Unfortunately the 16g standard includes so many topics not related to each other (ND&S, LBS, MIH, RRM, management primitives) that the only reasonable way of handling them is to make all optional and select features using profiles mechanism. It means that there should not be mandatory features in 802.16g. In this sense any system will be conformant to 802.16g, so no need to indicate conformance in the TLV

Suggested Remedy

Change to

6: Indicates conformance with IEEE Std 802.16-2004 as amended and corrected by 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 <u>7</u>8-255: Reserved

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

IEEE documents are not separable and severable. Implementers cannot pick and choose which 'Amendments' to the standard they may enjoy implementing. The standard is specifically written so that it is the combination of all published standards documents, taken together as a whole, that yields the complete standard definition.

The presentation of the MAC version selection is dictated by the standard document publication sequence.

2007-04-26 IEEE 802.16-07/027 If the commenter wishes to select a set of features for a specific implementation, he should provide a remedy that includes a profile of such a set of features.

Group's Notes

Approved without opposition

Editor's Notes

2007/07/16					200	07-04-26	IEEE 80	2.16-07/02	27		IEEE	E 802	2.16-07/	001
<u>Comment</u>	by:	Vla	adimir	Yanover			Member	ship Status:	Member			Date:	1/15/2007	
Comment #	1130				Document unde	er Review:	IEEE P80	2.16g-06/I	D6	Ballot ID:	P802. 1	6 <mark>g/</mark> D	6	
<u>Comment</u>	<u>Type</u>	Technical	Part o	of Dis	Satisfied	<u>Page</u> 26	<u>Line</u>	23 <u>Fic</u>	/Table#	<u>Sul</u>	<u>bclause</u>	11.1:	3.38	

Problems:

The following text in 802.16g is inconsistent and does not fit the scope of 16g project.

It leaves to the implementation to choose if the reported value is before or after HARQ applied, so no way for proper interpretation by the peer device:

"This TLV indicates the target packet error rate (PER) for the service flow as defined below. 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). The particular use of this TLV is left open to implementations and vendor differentiations. "

Suggested Remedy

Remove 11.13.38

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

The problem statement is incorrect. There is no confusion on the part of the peer.

In 11.13.38 Packet Error Rate (PER), bit #7 (value of 0 – PER measured by the application, 1 – PER measured on the airlink) disambiguates the interpretation.

On the air interface, the peer always knows that the reported PER value is before ARQ and/or HARQ. At the application layer, the application always knows that the reported PER value is after ARQ and/or HARQ.

Group's Notes Accpeted without objection

Editor's Notes

2007/07/16	6			20	007-04-26	IEEE 802.1	6-07/02	27		IEEE	E 802.	16-07/001
Comment	<u>t by:</u>	Vlad	imir Yand	ver		<u>Membership</u>	Status:	Member			Date: 1	/15/2007
Comment #	1131			Document une	<u>der Review:</u>	IEEE P802.1	6g-06/[06	Ballot ID:	P802. 1	6 <mark>g/D</mark> 6	
<u>Comment</u>	<u>Type</u>	Technical I	Part of Dis	Satisfied	<u>Page</u> 31	Line 1	Fig	/Table#	Su	<u>bclause</u>	14	
Section 14 "	long	omont intorfoo		cooduroo" must	ha inform	otivo og it odd	Iroooo	monogon	oont orimi	tivoo w	which or	o not visible

Section 14 "Management interfaces and procedures" must be informative as it addresses management primitives, which are not visible in the air interface.

Suggested Remedy Make section 14 an informative addendum

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Section 14 forms the basis for the normative model for 802.16 to provide a method for base station-to-NCMS-to-base station communications essential for mobility, as well as other features, to function. As such, while the primitives defined in section 14 are not conformantly testable (outside of a protocol implementation) on the air interface, they provide the essential key to mobility and other features.

Group's Notes

Accpeted without objection

Editor's Notes

2007/07/16	200	07-04-26	IEEE 802.16-07	7/027		IEEE 802.16-	07/012
Comment by:	YANOVER, VLADIMIR		<u>Membership Statı</u>	<u>IS:</u>		Date: 02/11/	/2007
Comment # 1	Document unde	er Review:			Ballot ID:	P802.16g/D7	
<u>Comment</u> <u>Type</u> Technica	Part of Dis X Satisfied	Page	Line	Fig/Table#	<u>Su</u>	<u>bclause</u>	
	ary" format required in 802.16 V bload/NetMan_db/16g_D7_Yan			802.16 WE	B site at		
Suggested Remedy							
GroupResolution	Decision of Group: Agree						
No action required							
Reason for Group's Decision/Resolu	tion						
Comments incorporated into	the commentary database for in	nvidual co	mment resolutior	n			
Group's Notes Accepted without opposition							
Editor's Notes	Editor's Actions						

2007/07/1	6	20	07-04-26	IEEE 802.	16-07/027	IEE	E 802.16-07/012
Commer	<u>nt by:</u>	GIESBERTS, PIETER-P	AUL	<u>Membershi</u>	<u>p Status:</u>		Date: 02/12/2007
Comment #	2	Document une	der Review:			Ballot ID: P802.	16g/D7
Comment	Type Technical	Part of Dis X Satisfied	<u>Page</u> 17	<u>Line</u>	Fig/Table#	<u>Subclause</u>	6.3.2.3.63

I do not agree with the resolution of comment #53 in the 80216-07_002r5 dbase.

The current NSP mechanism using SII-ADV and SBC messages is unnecessarily complex, badly documented and it may generate unnecessary (partial) network entries by MS' looking for a network. NSP TLVs should be communicated through DCD messages, rather than through the SII-ADV and SBC-REQ/RSP messages. That is much simpler for both the MS and the BS, it is more in line with the current network entry procedures and it is more flexible as it makes it possible for a BS to inform an MS of its' neighbours NSPs (through the MOB_NBR-ADV and the DCD settings TLV).

Chair changed the Comment Type to 'Technical' from 'General'.

Suggested Remedy

Adopt contribution C80216g-07_027.doc.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The analysis is useful, but flawed. The underlying assumptions are likely wrong. Assume that DCD in mobile networks is transmitted at least 1x per second; that SII-ADV is transmitted 1x per 60 seconds; MS will wait for SII-ADV before attempting initial network entry. Partial entries are eliminated.

Group's Notes

Vote: In Favor: 1 Richard van Leeuwen

Against: 4 David Johnston Peretz Feder Achim Brandt Joey Chou

Abstain: 1 Sang-Youb Kim

Comment Rejected

2007/07/16				200	07-04-26	IEEE 802.16-07	7/027		IEEE 802.	16-07/012
<u>Comment</u>	<u>by:</u>	Vladimir	Yanover			<u>Membership Statı</u>	<u>is:</u> Member		Date: 2	2/11/2007
Comment #	17			Document unde	er Review:	P802.16g/D7		Ballot ID:	P802.16g/D7	
Comment	Type Technica	Part o	of Dis 🛛 S	Satisfied	Page 9	<u>Line</u> 18	Fig/Table#	<u>Su</u>	bclause 5.3	

There is a concern with regard to utility of this feature alone in absence of certain framework (like upper layer protocol between the network and the terminal). For example, to use GPCS Service Flows the terminal has to apply certain classifiers at UL connections. The classification happens in this case above MAC, but anyway there should be some [upper layer] protocol to communicate the classification rules to the terminal. Currently there is no definition of such protocol. Particularly NWG spec does not have such function. Another example is negotiation of exact encapsulation format.

It was noticed by some members that this feature is actually out of the scope of 16g project defined as follows: "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."

Recommendation: Define GPSC support as optional in 802.16g

Chair changed the Comment Type to 'Technical' from empty.

Suggested Remedy

Change

5.3 Generic Packet Convergence Sublayer (GPCS) The Generic Packet CS (GPCS) is an upper layer protocol-independent packet convergence sublayer that supports multiple protocols over 802.16 air interface. Implementation of GCPS is optional.

It is defined as follows:

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

The place to specify mandatory or optional features is a PICS.

The support of this feature is already optional via indication using the REG-REQ/RSP (See 11.7.7.1), through capabilities negotiation. The commenter gives no specific rationale why this feature should be singled-out for such declarative langauge, while similar features including IP CS and Ethernet CS do not have similar language, while being similarly negotiated. There are in fact many negotiated

parameters throughout the standard that do not have such gree in capability edangs and by the standard that do not have such approximate the standard that do not have such approximate the standard that do not have such approximate the standard that do not have such approximately approximately approximately and the standard that do not have such approximately approxim

<u>Group's Notes</u> Vote: In Favor: 1 Sang-Youb Kim	
Against: 5 Peretz Feder David Johnston Achim Brandt Richard van Leeuwen Joey Chou	
Abstain: 0 <i>none</i>	

Comment rejected

Editor's Notes

2007/07/16				200	7-04-26	IEEE 802.16-07	/027	IEE	E 802.16-07/0	12
<u>Comment</u>	by:	/ladimir	Yanover			Membership Statu	<u>s:</u> Member		Date: 2/11/2007	
Comment #	20			Document unde	r Review:	2802.16g/D7		Ballot ID: P802.	16g/D7	
Comment	Type Technical	Part of		atisfied	<u>Page</u> 17	Line 50	Fig/Table#	<u>Subclause</u>	6.3.2.3.63	

Advertisement of Service providers IDs makes sense only for mobile and may be nomadic systems. It should be defined as optional in the standard to make it "required" in specific profiles

Chair changed the Comment Type to 'Technical' from *empty*.

Suggested Remedy

Change

6.3.2.3.63 Service Identity Information (SII-ADV) message

A BS may use the SII-ADV message to broadcast a list of Network Service Provider (NSP) Identifiers. The message may be broadcast periodically without solicitation or may be solicited by an SS during network entry by including the SIQ TLV in the SBC-REQ message (see section 6.3.2.3.23). This message is sent from the BS to all SSs on the broadcast CID. Implementation of SII-ADV message is optional for both BS and MS. Assignment method, administration, and usage of NSP Ids are outside the scope of this standard. The list of NSP Ids to be included in this message and the message transmission frequency are programmable

Change in p.27, line 4

11.1.8 NSP List encodings

11.1.8.1 NSP List

The NSP LIST TLV contains one or more 24-bit Network Service Provider Identifiers. Implementation of NSP List TLV is optional for both BS and MS.

11.1.8.2 NSP Change Count

The NSP Change Count TLV indicates a change of the NSP list. Its value shall be increased by one (modulo 256) whenever the NSP list changes. Implementation of NSP Change Count TLV is optional for both BS and MS.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The place to specify mandatory or optional features is a PICS.

The support of this feature is already optional via usage of the support this message, and no failure in communication will result if either does not support the message.

Group's Notes
Vote:
In Favor: 0
none
Against: 6
Peretz Feder
David Johnston
Achim Brandt
Richard van Leeuwen
Sang-Youb Kim
Joey Chou
Abstain: 0
none
Comment Rejected

Editor's Notes

2007/07/16	5		:	2007-04-26	IEEE 802.16-07/	027	IEE	E 802.16-07/0	12
Comment	<u>t by:</u>	Vladimir Y	lanover		Membership Status	. Member		Date: 2/11/2007	
<u>Comment #</u>	24		Document u	Inder Review:	P802.16g/D7		Ballot ID: P802.	16g/D7	
Comment	<u>Type</u> Technic	al Part of I	Dis Satisfied	<u>Page</u> 19	Line 1	Fig/Table#	<u>Subclause</u>	6.3.2.3.64	

Some 802.16 members noticed that more analysis needed, particularly about PHY features to be used in locating the terminal's position. Menawhile it should be defined as optional.

Chair changed the Comment Type to 'Technical' from *empty*.

Suggested Remedy

6.3.2.3.64 Location Based Services (LBS-ADV) message

A BS may use the LBS-ADV message to broadcast the LBS information. The message may be broadcast periodically without solicitation. This message is sent from the BS to all MSs on a broadcast CID.

Implementation of LBS-ADV message is optional for both BS and MS.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The place to specify mandatory or optional features is a PICS.

The support of this feature is already optional via usage of 'MAY' in its invocation. There is no requirement that either a BS or SS support this message, and no failure in communication will result if either does not support the message.

Group's Notes

Vote: In Favor: 0 *none*

Against: 5 Peretz Feder David Johnston Achim Brandt Richard van Leeuwen Sang-Youb Kim

Abstain: 0

2007-04-26 IEEE 802.16-07/027

Comment Rejected

Editor's Notes

2007/07/16	5				20	07-04-26	IEEE 802.16-	07/02	27	IEEE	E 802.16-07/012	2
Commen	<u>t by:</u>	VI	adimir	Yanover			Membership Sta	atus:	Member		Date: 2/11/2007	
Comment #	26				Document und	er Review:	P802.16g/D7			Ballot ID: P802.1	16g/D7	
<u>Comment</u>	<u>Type</u>	Technical	<u>Part o</u>	<u>f Dis</u> 🛛 S	Satisfied	<u>Page</u> 21	<u>Line</u> 16	Fig	/Table#	<u>Subclause</u>	6.3.25	
No need to s	pecify	MIH feature	as ma	ndatory								

Chair changed the Comment Type to 'Technical' from *empty*.

Suggested Remedy

6.3.25 MIH handover Function

MIH handover function is the support of IEEE Std 802.21 specific features and functions. The 802.16 entity may send or receive the MOB_MIH-MSG message to or from the peer 802.16 entity in order to convey MIHF Frames carrying the 802.21 MIH protocol messages.

Implementation of MIH handover function is optional.

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

The place to specify mandatory or optional features is a PICS.

The support of this feature is already optional via usage of 'MAY' in its invocation. There is no requirement that either a BS or SS support this message, and no failure in communication will result if either does not support the message. Support of this MIH function is negotiated in 11.8.10, capability negotiation.

Group's Notes Vote: In Favor: 0 none

Against: 5 Peretz Feder David Johnston Achim Brandt Sang-Youb Kim

Abstain: 0 *none* Comment Rejected

2007-04-26 IEEE 802.16-07/027

Editor's Notes

2007/07/16					200)7-04-26	IEEE 802.16-07	/027	I	EEE 802	.16-07/012
<u>Comment</u>	<u>by:</u>	Vlad	limir	Yanover			Membership Statu	s: Member		Date:	2/11/2007
Comment #	30				Document unde	er Review:	2802.16g/D7		Ballot ID: P8	302.16g/D7	7
<u>Comment</u>	<u>Type</u>	Technical I	Part of	Dis S	atisfied	<u>Page</u> 26	Line 42	Fig/Table#	<u>Subcla</u>	<u>use</u> 11.1.	13

There are several problems in MAC version encoding (11.1.3).

1. The text says [about TLV value]:

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

The problems:

- needs clarification as there is no "conformance with IEEE Std 802.16e-2005" alone (which is a combination of amendment and corrigenda to IEEE Std 802.16-2004)

- Conformance to IEEE Std 802.16-2004 + IEEE Std 802.16e-2005 is surprisingly bound to the conformance to IEEE Std 802.16f-2005 (MIB for fixed OFDM applications)

- Value 7 indicates conformance to 802.16g-2007 as a whole. Unfortunately the 16g standard includes so many topics not related to each other (ND&S, LBS, MIH, RRM, management primitives) that the only reasonable way of handling them is to make all optional and select features using profiles mechanism. It means that there should not be mandatory features in 802.16g. In this sense any system will be conformant to 802.16g, so no need to indicate conformance in the TLV

Chair changed the Comment Type to 'Technical' from *empty*.

Suggested Remedy

Change

6: Indicates conformance with IEEE Std 802.16-2004 as amended and corrected IEEE Std 802.16e-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 <u>7</u>8-255: Reserved

GroupResolution

Decision of Group: Disagree

Reason for Group's Decision/Resolution

The proposed remedy in all ways is inconsistent with practice and precedence in IEEE 802 for identification of MAC version support.

The proposed changes to line 6 fails to be backwards compatibile with previous amendments.

2007-04-26 IEEE 802.16-07/027

Commenter's argument regarding the optionality of supporting 802.16g features is inaccurate. While some changes introduced in 802.16g, such as fundamental changes to the 802.16 architecture and reference model are not overly testable, compliane is required to ensure proper support for future 802.16 activity. Thus, compliance with 802.16g is material, and identification of MAC support is important.

Group's Notes

Vote:	
In Favor: 0)
none	

Against: 6
Peretz Feder
David Johnston
Achim Brandt
Richard van Leeuwen
Sang-Youb Kim
Joey Chou

Abstain:	0
none	

Comment Rejected

Editor's Notes

2007/07/16	5				20	07-04-26	IEEE 802.16-0	7/027		IEE	E 802.16-07/	012
Comment	<u>t by:</u>	V	ladimir	Yanover			Membership Stat	us: Member			Date: 2/11/2007	
Comment #	38				Document unde	er Review:	P802.16g/D7		Ballot ID:	P802.	16g/D7	
<u>Comment</u>	<u>Type</u>	Technical	<u>Part o</u>	of Dis 🗌 S	Satisfied	<u>Page</u> 37	Line 1	Fig/Table#	<u>Su</u>	<u>bclause</u>	11.13.38	
Drahlama												

Problems:

The following text in 802.16g is inconsistent and does not fit the scope of 16g project.

It leaves to the implementation to choose if the reported value is before or after HARQ applied, so no way for proper interpretation by the peer device:

"This TLV indicates the target packet error rate (PER) for the service flow as defined below. 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). The particular use of this TLV is left open to implementations and vendor differentiations. "

Chair changed the Comment Type to 'Technical' from *empty*.

Suggested Remedy

Remove 11.13.38

GroupResolution Decision of Group: Principle

On page 37, in 11.13.38, in the Table, In the 'value' field, modify as:

'0 - PER measured by the application[BEGIN INSERT], post -ARQ and post-HARQ process[END INSERT]'

'1 – PER measured on the airlink[BEGIN INSERT], before the application of ARQ and HARQ[END INSERT]'

Reason for Group's Decision/Resolution

<u>Group's Notes</u> Accepted without opposition

Editor's Notes

2007/07/16				20	07-04-26	IEEE 802.16-07/	027		IEEE 80	2.16-07/012
<u>Comment</u>	<u>by:</u>	Vladimir	Yanover			Membership Status	<u>.</u> Member		Date:	2/11/2007
Comment #	11			Document und	er Review:	P802.16g/D7		Ballot ID:	P802.16g/I	D7
<u>Comment</u>	Type Technica	Part o	of Dis	Satisfied	<u>Page</u> 41	Line 1	Fig/Table#	<u>Su</u>	<u>bclause</u> 14	

Section 14 "Management interfaces and procedures" must be informative as it addresses management primitives, which are not visible in the air interface.

Chair changed the Comment Type to 'Technical' from empty.

Suggested Remedy

Make section 14 an informative addendum

GroupResolution Decision of Group: Disagree

Reason for Group's Decision/Resolution

Section 14 forms the basis for the normative model for 802.16 to provide a method for base station-to-NCMS-to-base station communications essential for mobility, as well as other features, to function. As such, while the primitives defined in section 14 are not conformantly testable (outside of a protocol implementation) on the air interface, they provide the essential key to mobility and other features.

Group's Notes

Vote: In Favor: 0 none

Against: 6 Peretz Feder David Johnston Achim Brandt Richard van Leeuwen Sang-Youb Kim Joey Chou

Abstain: 0 none

Comment Rejected

2007/07/16		2007-04-26 IEEE 802.16-07/027			IEEE 802.16-07/018			
Comment by:		GIESBERTS, PIETER-PAUL		Membership Status: Mem		Date: 03/10/2007		
Comment # 1		Document under Review: P802.16g/D8				Ballot ID: 16gD8		
<u>Comment</u>	<u>Type</u> Technical	Part of Dis X Satisfied	<u>Page</u> 17	Line 50	ig/Table#	<u>Subclause</u>	6.3.2.3.63	
I don't agree	with the resolution	of my comment #2 in the 80	216-07_01	12r4 database.				

DCDs will not be transmitted any more often in mobile networks than in fixed networks, which will be on the order of once every 10 seconds. There is no need since they are static, and they are too big to send often.

Furthermore with the current document the MS will NOT wait for SII-ADV before attempting initial network entry, because it will use the SBC mechanism to request the info.

The current mechanism is ambiguous, flawed and overly complex.

If the group for some reason wants to keep a separate message for the SII-ADV in stead of transmitting the information in the DCD than that is suboptimal but fine. But the information should in any case be removed from the scope of the SBC-REQ/RSP.

Suggested Remedy

Solution 1:

Move SII to DCD, by adopting contribution C80216g-07_027r1.doc.

Solution 2:

Remove only the SBC SII mechanism and keep a non-solicited broadcast by means of the SII-ADV message (instead of DCD):

* Change second sentence on page 17, section 6.3.2.3.63 as follows:

"The message may be broadcast periodically without solicitation" (i.e. remove "or may be solicited by an SS during network entry by including the SIQ TLV in the SBC-REQ message (see section 6.3.2.3.23).")

* Remove all changes as listed in section 6.3.2.3.24 in this draft

* Remove SBC-RSP from scope field in Section 11.1.8.1 and 11.1.8.2

* Delete section 11.8.9.

GroupResolution Decision of Group: Disagree

Remove only the SBC SII mechanism and keep a non-solicited broadcast by means of the SII-ADV message (instead of DCD):

* Change second sentence on page 17, section 6.3.2.3.63 as follows:

"The message may be broadcast periodically without solicitation" (i.e. remove "or may be solicited by an SS during network entry by including the SIQ TLV in the SBC-REQ message (see section 6.3.2.3.23).")

- * Remove all changes as listed in section 6.3.2.3.24 in this draft
- * Remove SBC-RSP from scope field in Section 11.1.8.1 and 11.1.8.2
- * Delete section 11.8.9.

Reason for Group's Decision/Resolution

As previously reported, Members believe that DCD will be transmitted with substantially more frequency than commenter assumes, at least 1x per second.

While it is true that the information could be periodically included in DCD, there is no specific benefit of putting the information in DCD

versus in the broadcast SII-ADV message. And since the 2010 AD4 20 ay heterago nited with substantially less frequency, and since elimination of the SII-ADV message is not possible as there are other information types that SII-ADV may convey, there is no specific advantage to choosing to put the information in the DCD. So, the proposed change does not convey any specific advantage over the current mechanism.

Finally, Members believe that the current method of allowing SS to request transmission of the NSP List may be useful in certain deployment scenarios. Specifically, after a recent change in the NSP List, the network may need to transmit the SII-ADV message unsolicited and with some frequency, say every 10 seconds. But after some period of time, perhaps a few weeks or so, when the vast majority of SS have received the updated list, the network may discontinue unsolicited transmission of SII-ADV and rely on solicited request via SBC-REQ. The network may then go for many months without another change in the NSP List.

Group's Notes

Vote: In Favor: 1 Against: 3 Abstain: 2 Comment Rejected

Editor's Notes

2007/07/16		20	IEEE 802.16-07/	027	IEEE 802.16-07/018		
Comment by:		GIESBERTS, PIETER-PAUL		Membership Status: Mem		Date: 03/10/2007	
Comment # 2		Document under Review: P802.16g/D8			Ballot ID: 16gD8		
<u>Comment</u>	<u>Type</u> General	Part of Dis X Satisfied	<u>Page</u> 17	<u>Line</u> 50 <u>F</u>	Fig/Table#	Subclause 6.3.2.3.63	
		_			_		

Right now, the spec does not mandate that all BS with the same NAPID support the same NSPs. It is not clear that this flexibility is actually required, and to improve scanning & roaming for MS it is beneficial if the MS can assume that all BS from the same operator provide access to the same NSPs.

Suggested Remedy

In the first section of 6.3.2.3.63:

* Fix the typo in "transmission" in the sentence "The list of NSP Ids to be included in this message and the message transmission frequency are programmable."

Add the following text immediately after that sentence:

"All BS that use the same Operator ID shall list the same NSP Ids in their SII-ADV message."

GroupResolution Decision of Group: Principle

In the first paragraph, change the misspelled instance of 'transmssion' to 'transmission'

Reason for Group's Decision/Resolution

Based on this comment, the group made modification to the remedy in comment 119, Contribution C802.16g-07/047r2. The change made the value of NSP Change Count TLV programmable. While this does not directly address the commenter's intent, it does address an aspect. As to the commenter's remedy to make NSP List common across Operator ID, the group reasoned that there are specific implementations where such constraint would be undesireable.

Group's Notes

Accepted without opposition

Editor's Notes