### IEEE 802.16-05/010r1

Document	under R	eview: P802.16e/D5	Bal	llot Number: 0000754			Comment Date
Comment #	0033	Comment submitted	by: Carl	Eklund	٦	Nember	2004-11-04
Comment	Туре Т	echnical, Binding	Starting Page # 4	Starting Line #	Fig/Table#	Section	6.3.21.1
Several issu	les:						

The reference model does not include an entitiv called the Paging Controller which is as it should be. Therefore no reference should be made to such an entity. Additionally the retention of information in the network after a MSS enters Idle mode is totally up to the configuration of the network. There is no need to negotiate it between MSS and BS. Additionally the parameters mentioned in the text are currently not allowed parameters for the DREG-REQ and DREG-CMD messages which again is the things should be.

Suggested Remedy

Change lines 4-27 to :

The MSS shall maintain an Idle Mode Timer to prompt MSS Idle Mode Location Update activity and demonstrate MSS continued network presence Idle Mode Timer and Idle Mode System Timer shall start on Serving BS transmission of DREG-CMD directing MSS transition to Idle Mode. Idle Mode Timer and Idle Mode System

Proposed Resolution Recommendation:

Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: Rejected

Motion from the floor to create a definition for Paging controller and add to section 3: "Paging Controller: the Serving BS or other network entity administering Idle Mode activity for the MSS"

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

The vote on the motion from the floor to add a Paging Controller definition failed: For - 1 Against - 9 While the group agrees that the Paging controller is not defined, the proposed remedy deletes too much other material to be considered acceptable.

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

Document under Review:	P802.16e/D5	Ballot	Number: 0000754		Comment Date				
Comment # 0034	Comment submitted	by: Carl	Eklund	Member	2004-11-04				
<b>Comment Type</b> Technic The current reference mod happens in potential race of	al, Binding lel does not support sc conditions.	Starting Page # 4 oft hand over. It is not cle	Starting Line # 1 ar where protocols are te	Fig/Table# Section 1.4 erminated, especially on the cont	4.3.1 rol plane and what				
This comment does not contest or affirm the usefulness of the concept in the standard. The point is that the group should not introduce insufficiently defined features. If it is included it should be defined in a way that a) fits the reference model, b) offers the protocol to deal with new events that will occur as a result of this added feature.									
Suggested Remedy Delete everything that has to do with soft hand over or rewrite the reference model in such a way that is supports it witout breaking the legacy protocol.									
Proposed Resolution	Recommendation: Reje	ected	Recommendation by						
Reason for Recommendation The commenter has not provided sufficient text to determine exactly what needs to be changed.									
Resolution of Group	Decision of Grou	p: Rejected							
Reason for Group's Decision/Resolution The commenter has not provided sufficient text to determine exactly what needs to be changed.									
Group's Notes Group's Action Items Editor's Notes Editor's Questions and Con Editor's Action Items	Editor's Actions I) r ncerns	none needed							

2005/04/09		IEEE 802.16-05/010r1						
Document under Review:	P802.16e/D5	Ballot Number: 0000754		Comment Date				
Comment <b># 0105</b>	Comment submitted by: John	Barr	Member	2004-11-04				
Comment Type Technica [Identical comment submitt Migaldi[satisfied], Nat Natar The combination of wide ch devices leads to severe link sizes (e.g. at least 2 km). A than the uplink. In addition uplink data-rate are need to Suggested Remedy	I, Binding Starting Page a ed by John Barr[satisfied], Mark Cuda ajan, Huaiyuan Wang[satisfied].] nannel bandwidths (up to 20 MHz or budget imbalance between the dow as a result, the larger power-amp (PA the variety of data-rate enhancing te b support all possible cellular deplovr	# 13 Starting Line # 1 ak, Lester Eastwood[satisfied], more) and practical constraints nlink and uplink. In addition, th at the base station. allows the echniques such as MIMO server ments. A solution enabling low	Fig/Table# Section 6 Colin Frank[satisfied], Qiang Guo s on the output power of portable, e economics of cellular deployme e downlink to achieve much higher to exacerbate this problem. Tech -cost relavs would prove useful in	[satisfied], Scott battery operated ents favor larger cell throughput rates hniques to aid the systems that don't				
Provide a solution to enabl	e low-cost relays. Adopt the transpa	arent relay in contribution IEEE	C802.16e-04/417					
Voted 11-13	lecommendation: Accepted	Recommendation by						
Reason for Recommendation	1							
Resolution of Group	Decision of Group: Rejected							
<ul> <li>Reason for Group's Decision/Resolution</li> <li>There are several reasons for the rejection of this comment. They are enumerated below: <ol> <li>The magnitude of this problem has not been adequately quantified, so it is unclear if the complexity of this solution is justified.</li> <li>The uplink delay due to relays may cause problems in H-ARQ operation.</li> <li>This comment proposes a substantial change in air interface structure without adequate justification. The contribution is incomplete, glossing over issues of synchronization, UL frame re-transmission latency, and security to name only a few. Substantially more diligence needs to be done before the droup should adopt such an enhancement. It may be better to add this as a feature in a future 'enhanced' mobility project.</li> </ol> </li> </ul>								
Group's Action Items								
Editor's Notes	Editor's Actions I) none needed							
Editor's Questions and Con Editor's Action Items	cerns							

#### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number:	0000754			Comment Date
Comment #	0107	Comment submitted b	y: Richa	ırd	Pace			Member	2004-11-04
Comment	Type Technica	, Binding	Starting	Page # 13	Starting	Line # 1	Fig/Table#	Section	6.3.1
Several diffe	erent prefixes a	re used to qualify the	Connecti	on ID (CID).	For exan	nple, there are t	the Basic CID,	Short Basic Cl	D, the Primary CID,
the Manage	ment CID, Sec	ondary Management	CID, Mul	ticast CID and	the redu	iced CID. The p	problems are:	1)The description	on of CID functions
are scattered throughout the document, and 2) it is difficult to quickly discern the relevance and purpose of each CID. 3), it is unclear why so many									
different CIE	)'s are necessa	ry and likely that seve	ral CIDs	could be cons	olidated.				

#### Suggested Remedy

Address the taxonomy of all CIDs in the introductory section on addressing in 6.3.1.

Proposed Resolution Recommendation: Rejected Recommendation by

#### **Reason for Recommendation**

While the commentor makes a valid point that the CID language could use some clean-up, the overall assertion that many of the CIDs presented in the document could be consolidated into fewer is unsupported. Which CIDs would the commenter suggest be combined? Which ones would the commenter suggest be eliminated?

The comment is rejected due to a lack of specific text.

Resolution of Group Decision of Group: Rejected

Reason for Group's Decision/Resolution

While the commentor makes a valid point that the CID language could use some clean-up, the overall assertion that many of the CIDs presented in the document could be consolidated into fewer is unsupported. Which CIDs would the commenter suggest be combined? Which ones would the commenter suggest be eliminated?

The comment is rejected due to a lack of specific text.

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot	t Number: 0000754		Comment Date			
Comment # 0128	Comment submitted I	oy: Jonathan	Labs	Member	2004-11-04			
<b>Comment Type</b> Technical I believe there is a backwa	l, Binding rd compatibility issue	Starting Page # 14 with respect to the MA	Starting Line # 16 C header formats. In F	Fig/Table#         Section           2802.16-REVd/D5, p. 35, lin	n 6.3.2.1 e 51 it states:			
"Two MAC header formats containing either MAC man to request additional bandw header and bandwidth requ to one for a bandwidth requ Suggested Remedy Delete Sections 6.3.2.1.3,	are defined. The first nagement messages of vidth. The single-bit H uest header formats. T uest header." 6.3.2.1.4, and 6.3.2.1	is the generic MAC he or CS data. The second eader Type (HT) field he HT field shall be se .5.	eader that begins each l d is the bandwidth reque distinguishes the gener t to zero for the Generic	MAC PDU est header used ic MAC Header and				
Proposed Resolution R	Recommendation: Acce	epted	Recommendation by					
Delete Sections 6.3.2.1.3,	6.3.2.1.4, and 6.3.2.1	.5.						
Reason for Recommendation	ı							
Resolution of Group	Decision of Grou	p: Rejected						
Reason for Group's Decision/Resolution The commenter is incorrect. There is no backward compatibility issue, therefore these changes are not required.								
Group's Notes								
Group's Action Items								
Editor's Notes	Editor's Actions I) n	one needed						
Editor's Questions and Con	cerns							

Document under Review:	P802.16e/D5	Ballot	Number: 0000754			Comment Date
Comment # <b>0173</b>	Comment submitted	by: Mark	Cudak	Meml	ber	2004-11-04
Comment Type Technic Table 340a is a wholy ina Suggested Remedy Reconcile field size and se	al, Binding ppropriate reference. elect Figure 231c as th	Starting Page # 18 This table does not havi the reference	Starting Line # 32 ing anything to do with M	Fig/Table# IIMO feedback	Section 6.3.2.2	2.7
Proposed Resolution	Recommendation:		Recommendation by			
Reason for Recommendation	on					
Resolution of Group Change table reference to Reason for Group's Decisi The table reference is inco	Decision of Grou 296a. on/Resolution prrect. However, the fie	up: Accepted-Modified eld size is correct.				
Group's Notes						
Group's Action Items						
Editor's Notes	Editor's Actions I)	none needed				
Editor's Questions and Co Editor's Action Items	ncerns					

Document under Review	v: P802.16e/D5	Ballot	Number: 0000754		Comment Date		
Comment # <b>0225</b>	Comment submitted k	əy: John	Barr	Member	2004-11-04		
Comment Type Techn [Identical comment subm Successive interference Subscriber stations with this capability. IA base s SIC receiver capability s	ical, Binding hitted by John Barr, Mark cancellation (SIC) receive this receiver design can tation must adjust the mo hould be included as par	Starting Page # 22 Cudak, Lester Eastwo ers providing significant provide a considerable odulation and coding ra t of a subscriber station	Starting Line # 48 od, Colin Frank, Qiang G performance gains when system capacity gain pro- te assigned to take advar profile and exchanged o	Fig/Table# Section uo, Scott Migaldi, Nat Nataraja used in conjunction with MIM wided that base station sched ntage of the superior performa during the system registration	6.3.2.3.7 an, Huaiyuan Wang.] O transmission. Julers are aware of Ince. As a result, a process.		
Suggested Remedy Provide a SIC receiver capability as part of a subscriber stations capabilities. Adopt contribution number IEEE C802.16e-04/419							
Proposed Resolution	<b>Recommendation:</b>		Recommendation by				
Reason for Recommendat	ion						
Resolution of Group	Decision of Grou	p: Rejected					
Reason for Group's Decision/Resolution During comment resolution, the author of contribution 04/419 withdrew the contribution, however the commenters did not withdraw this related comment, therefore the comment resolution group was forced to reject this comment for lack of a proposed remedy.							
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions I) n	one needed					
Editor's Questions and C Editor's Action Items	oncerns						

### IEEE 802.16-05/010r1

Document under Review	: P802.16e/D5	Ballo	t Number: 0000754		Comment Date			
Comment # 0226	Comment submitted by	r: Richard	Pace	Member	2004-11-04			
CommentTypeTechnical, BindingStarting Page # 22Starting Line # 48Fig/Table#Section6.3.2.3.7Successive interference cancellation (SIC) receivers provide significant performance gains when used in conjunction with MIMO transmission. Subscriber stations (SS) with this receiver design can provide considerable system capacity gain provided that base station schedulers are aware of the SS's capability. A base station must adjust the modulation and coding rate assigned to take advantage of the superior performance. As a result, a SIC receiver capability should be included as part of the SS profile and exchanged during the system registration process.Suggested Remedy Provide a SIC receiver capability as part of a subscriber stations capabilities. Adopt contribution number IEEE C802.16e-04/419								
Proposed Resolution	Recommendation:		Recommendation by					
Reason for Recommendati	on							
Resolution of Group	Decision of Group:	Rejected-Duplicate						
Reason for Group's Decision/Resolution This comment is identical to comment #225 from John Barr, the resolution of which is repeated below:								
During comment resolution, the author of contribution IEEE C802.16e-04/419 withdrew the contribution, however the commenter did not withdraw this comment, therefore the group was forced to reject this comment for lack of text.								

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5			Ballot	Number: 0000754	4			Comment Date
Comment #	0280	Comment submitted I	y: Carl			Eklund		Merr	nber	2004-11-04
Comment	Type Technica	l, Binding	Starting	Page #	29	Starting Line # 2	21 Fig/Table#	55a	Section	6.3.2.3.26
The editorial instruction is totally wrong. Not all changes are shown with revision marks. Also the proposed change breaks the fixed standard. A MSS is a SS but the reverse is not true.										
Suggested F Fix the edito	Remedy rial instruction a	and the content of the t	able.							
Proposed Re Adopt text in	esolution F n contribution 5	ecommendation: Acce 68.	pted			Recommendation I	by Phil Barber			

Reason for Recommendation

Resolution of GroupDecision of Group: AcceptedAccept the changes in contribution IEEE C802.16e-04/568.

Reason for Group's Decision/Resolution

The accepted contribution provides the requested editorial instruction changes.

Group's Notes Group's Action Items Editor's Notes Editor's Actions k) done Editor's Questions and Concerns

Are these new entries? Or have they been modified? Require contribution 568 details.

### IEEE 802.16-05/010r1

Document under Review: P802.16e/D5	Ballot	Number: 0000754		Comment Date
Comment # 0294 Comment submitted	by: Richard	Pace	Member	2004-11-04
Comment Type Technical, Binding	Starting Page # 31	Starting Line # 4	Fig/Table# Section	6.3.2.3.43.1
Several methods are defined for allocating reso	urce for the IEEE 802.10	6 PHY in the OFDMA PH	IY. For example, the DL_M	IAP, compressed
DL_MAP, the HARQ_MAP and the AAS_MAP.	An AAS_MAP is require	red to provide additional	link margin when using ada	ptive antenna
technology as a range extension technique. It is	not clear why three alter	nate MAPs are defined to	provide similar functionality.	Commonality and

duplication exist between the DL\_MAP, compressed DL\_MAP and HARQ\_MAP: 1) all allocate resources in the adjacent subcarrier mode, fully utilized subcarrier mode and partially used subcarrier mode, 2) all allocate resources on the uplink and downlink, 3) all provision to support STC and MIMO. This duplication unecessarily fragments the specification and hinders interoperability. Most importantly, all three maps are very verbose raising the concern that significant system resources may be required to guarantee reliable distribution of the allocation IEs. The DL MAPs

#### Suggested Remedy

The functionality in the OFDMA DL\_MAP, compressed DL\_MAP and HARQ\_MAP should be consolidated into a single comprehensive map having reduced overhead.

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

Accept the changes proposed by contributions IEEE C802.16e-04/023r5 and IEEE C802.16e-05/038r1.

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

This comment proposes consolidating the functionality in the OFDMA DL\_MAP, compressed DL\_MAP and HARQ\_MAP into a single comprehensive map. During comment resolution, an extension to the normal MAP was made for H-ARQ for both MIMO and non-MIMO cases using the above referenced contributions, effectively creating a single consolidated MAP

Group's Notes

**Group's Action Items** 

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

**Editor's Questions and Concerns** 

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot	Number: 0000754			Comment Date
Comment # 0303	Comment submitted by:	Yigal	Leiba	Merr	nber	2004-11-04
<b>Comment Type</b> Technica The H-ARQ mode = "Gene operate improperly	I, Binding Star eric" is not backwards con	rting Page # 34 npatible with 802.16	Starting Line # 24 6-2004, and will cause a	Fig/Table# 94 n H-ARQ supportii	Section 6.3.2.3 ng 802.16-2004 co	.43.6.1 ompliant MSS
Suggested Remedy Undo ALL the changes ma 6.3.2.3.43.6.1 6.3.2.3.43.6.2 6.3.2.3.43.6.3 6.3.2.3.43.6.3 6.3.2.3.43.6.8 6.3.2.3.43.7.1 6.3.2.3.43.7.2	de to sections:					
Proposed Resolution F Adopt C802.16e-04_545	Recommendation: Accepted	d-Modified	Recommendation by			
Reason for Recommendation	ı					
Resolution of Group	Decision of Group: Ac	ccepted-Modified				
Accept the changes proportion incorporate changes docur 8.4.5.4.x: "a UIUC value of 8.4.5.3.x: " <del>15</del> 14" 8.4.5.3.1: <del>UIUC</del> DIUC	sed in contributions IEEE nented in contribution IEE f <del>15<u>11</u>"</del>	E C80216e-04/23r5 E C802.16e-05/022	and IEEE C80216e-05/3 r1 with the following char	38r1. nges:		
Reason for Group's Decision	on/Resolution					
This comment proposes cl MIMO and non-MIMO case	nanges to the H-ARQ MAR es using the above referer	<ul> <li>During comment nced contributions.</li> </ul>	resolution, an extensior	to the normal MA	P was made for H	-ARQ for both
The text in contribution IEE raised by the commenter.	EE C802.16e-05/22r1, ac	cepted during comr	nent resolution, specifica	lly addresses the b	backward compatil	oility issue
Group's Notes						

PHY

Group's Action Items

Editor's Notes

Editor's Actions I) none needed

Editor's Questions and Concerns

Document under Review: Comment # 0319	P802.16e/D5 Comment submitted	by: Mark	Ballot Number: Cudak	0000754	Me	mber	<b>Comment Date</b> 2004-11-04	
Comment Type Technica It is unclear how the Time "Subchannel Offset" while	al, Binding Diversity_MBS_DL-MA all the other message	Starting Page # AP_IE alloations is do not.	40 Starting nteracts with the	Line # 30 e other allocatio	Fig/Table# ons in the H-ARQ n	Section 6 nap because	it uses a	
Suggested Remedy This IE should either be cla	arified or removed.							
Proposed Resolution	Recommendation:		Recomm	endation by				
Reason for Recommendatio	n							
Resolution of Group       Decision of Group: Accepted         Remove this IE from the amendment text         Reason for Group's Decision/Resolution         The TimeDiversity_MBS_DL-MAP_IE has been removed as a consequence of accepting Contribution IEEE C802.16e-04/442r3 and the deletion of section 6.3.2.3.43.6.6.1.								
Group's Notes Group's Action Items								
Editor's Questions and Cor Editor's Action Items	cerns	ione needed						

### IEEE 802.16-05/010r1

Comment # 0320Comment submitted by: YigalLeibaMember2004-11-04CommentType Technical, BindingStarting Page # 40Starting Line # 55Fig/Table#Section6.3.2.3.43.6.7Not clear how a non-MIMO MSS, or an 802.16-2004 MSS are going to handle the MIMO portion of the H-ARQ MAP	Comment Date		Number: 0000754	Ballot	Document under Review: P802.16e/D5					
CommentTypeTechnical, BindingStarting Page # 40Starting Line # 55Fig/Table#Section6.3.2.3.43.6.7Not clear how a non-MIMO MSS, or an 802.16-2004 MSS are going to handle the MIMO portion of the H-ARQ MAP	2004-11-04	Member	Leiba	Yigal	Comment submitted by:	Comment # 0320				
	2.3.43.6.7	Fig/Table# Section tion of the H-ARQ MAP	Starting Line # 55 handle the MIMO po	arting Page # 40 04 MSS are going to	CommentTypeTechnical, BindingStartingPage # 40Not clear how a non-MIMO MSS, or an 802.16-2004 MSS are goinSuggestedRemedy					
Suggested Remedy Either clarify how the compatibility (both backwards, and for non MIMO MSS) is maintained, or remove sections 6.3.2.3.43.6.7 and 6.3.2.3.43.7.8	16.3.2.3.43.7.8	remove sections 6.3.2.3.43.6.	MSS) is maintained, o	, and for non MIMO	atibility (both backwards	Suggested Remedy Either clarify how the com				
Proposed Resolution Recommendation: Recommendation by			Recommendation by		lecommendation:	Proposed Resolution				
Reason for Recommendation					ı	Reason for Recommendation				
Resolution of GroupDecision of Group: Accepted-ModifiedAccept the changes proposed by contributions IEEE C80216e-04/023r5 and C80216e-05/038r1.Reason for Group's Decision/ResolutionThis comment proposes fixing the H-ARQ MAP. During comment resolution, an extension to the normal MAP was made for H-ARQ for both MIMO and non-MIMO cases using the above referenced contributions.	२Q for both	38r1. he normal MAP was made for	r5 and C80216e-05/0 ution, an extension to	Accepted-Modified EE C80216e-04/023 uring comment reso enced contributions.	Decision of Group: A sed by contributions IEE on/Resolution king the H-ARQ MAP. Dr as using the above refere	Resolution of Group Accept the changes prop Reason for Group's Decis This comment proposes f MIMO and non-MIMO cas				
Group's Notes						Group's Notes				
Group's Action items				pandad	Editor's Astions Doors	Group's Action Items				
Editor's Questions and Concorns				neeueu		Editor's Questions and Co				

### IEEE 802.16-05/010r1

Document under Review	: P802.16e/D5	Ballo	ot Number: 0000754			Comment Date	
Comment # <b>0327</b>	Comment submitted	by: Mark	Cudak	Me	mber	2004-11-04	
Comment Type Techni The HARQ MAP support for two HARQ_MAP allow remedy this problem, a s	cal, Binding s MIMO allocation and cations to overlap in the solution similar to that e	Starting Page # 42 d STC allocations, how e time-frequency space employed for MIMO HA	Starting Line # 5 ever, there is no way to al e due to the inherent cum ARQ can be used to enab	Fig/Table# locate spatial mululative nature of the spatial multiples	Section 6.3.2 tiplexed users. It e HARQ_MAP as king.	.3.43.6.7 is impossible ssignments. To	
Suggested Remedy Adopt contribution numb	per IEEE C802.16e-04	./473					
Proposed Resolution	Recommendation: Acc	cepted-Modified	Recommendation by				
Accept the changes in contribution IEEE C802.16e-04/473r2							
Reason for Recommendat	ion						
Resolution of Group	Decision of Gro	up: Accepted-Modified					
Accept the changes in co	ontribution IEEE C802.	16e-04/473r5					
After the table, add the se information shall be prov For each Padding entry i	entence: "The CQI con ided by the preceding n the table, in the notes	trol information and H-/ compact DL MAP IE." s, define the padding to	ARQ control be "Shall be set to zero".				
Accept the changes in co	ontribution IEEE C802 <sup>2</sup>	16e-05/084r4.					
Reason for Group's Decis	sion/Resolution	ring comment resolution	n the contribution cited in	the suggested for	nedy was undator	and ultimately	

This comment was initially rejected, however during comment resolution, the contribution cited in the suggested remedy was updated and ultimately accepted with modifications.

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns

Document under Review: P802.16e/D5						Ballot	Number: 0	000754			Comment Date		
Comme	nt#	0331	1	Commen	t submitted	by: Marl	ĸ		Cudak		Mer	nber	2004-11-04
Commen	t.	Туре	Technic	al, Binding		Starting	Page #	42	Starting L	.ine # 48	Fig/Table#	Section	6.3.2.3.43.6.7
In the Ta soundin where zo	able g tec ero C	97a– hniqu CQI cl	–MIMO ( ues are e nannels a	Compact I employed i are allocate	DL-MAP IE, in a TDD de ed.	the CQI ploymen	CH_Nun t no CQI	n field a I chann	allows one els are neo	to allocate 1 cessary. Thi	to 4 CQI channels. is message must be	However, updated to	when uplink channel allow for the case
Suggeste In Table this MS	ed Ro 97a Sis (	emedy , incr (CQI(	y ease the CH_Num	field size ר +1)" with	fo the CQIC "Total num	H_Num	field fro QICHs a	m 3 bits assigne	s to 2 bits. ed"	Replace the	e note text , "Total n	umber of C	QICHs assigned to
Proposed	d Re	soluti	on	Recommen	dation:				Recommer	dation by			
Reason	for R	Recom	mendatio	n									
Resolutio	on of	Grou	р	Decis	sion of Grou	p: Accep	ted-Mod	ified					
Delete:	"Tota	al nui	mber of	CQICHs a	assigned to	this MSS	S is (CQ	ICH_N	um +1)"				
Reason This is a	for G sim	∋roup pler r	's Decisi emedy.	on/Resoluti	ion								
Group's	Note	S											
Group's	Actio	on Ite	ms										
Editor's	Note	S		Editor's	Actions I) r	none neede	d						
Editor's	Ques	tions	and Co	ncerns									
Editor's	Actio	on Ite	ms										

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5			Ballot	Number:	0000754			Comment Date
Comment # 0343	Comment submitted by	y: Yiga	I		Leiba			Member	2004-11-04
Comment Type Technica Two issues with this section 1. Not clear what is it doing 2. Not clear how is it bacwr Suggested Remedy Either provide a very convir	l, Binding : and what benefit is ga ds compatible to 802. ncing explanation as to	Starting ained by 16-2004 the be	Page # / all this 4 enefit an	44 comple d comp	Starting exity patibilty, o	Line # 9 r delete sectio	Fig/Table#	Section	6.3.2.3.43.6.9 43.6.10.
Proposed Resolution R This comment is the same a Reason for Recommendation	ecommendation: Super as commment #331	ceded			Recomme	endation by			
Resolution of Group	Decision of Group	Ассер	ted-Mod	ified					

An explanation has been provided as follows. . .

H-ARQ Compact MBS MAP IE is for MBS service only for MSS's supporting H-ARQ. Like MBS MAP IE in DL\_MAP, H-ARQ Compact MBS MAP IE support single BS MBS and multi BS MBS. And when usage of H-ARQ Compact MBS MAP IE will enhance coverage of MBS service with time diversity and macro diversity. And it is marked that it is used only when there is MBS service for H-ARQ enabled MSS. Therefore, it does not invoke any compatibility problem. The only remaining issue is that 6.3.2.3.43.6.4 is duplicated with 6.3.2.3.43.6.9, therefore 6.3.2.3.43.6.4 should be deleted.

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

The group has provided an explanation as requested by the commenter. The explanation is provided above. No changes are required to the document.

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

# IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot	Number: 0000754		Comment			
Comment # 0349	Comment submitted	by: Mark	Cudak	Mer	mber	2004-11-04		
<b>Comment Type</b> Technic Multi-frame transmission II operation of the multi-fram	al, Binding E's in subclauses 6.3.2 e transmission exists.	Starting Page # 44 2.3.43.6.9 and 6.3.2.3.4	Starting Line # 44 3.6.10 are not defined su	Fig/Table# Ifficiently. No norm	Section 6.3.2 native text describ	3.43.6.9 ing the		
Suggested Remedy A disccussion of multi-fram	ne transmissions shou	ld be added to the spec	ification or the IE's shoul	d be removed.				
Proposed Resolution This comment is superced Reason for Recommendation								
Reason for Recommendation         Resolution of Group       Decision of Group: Superceded         This comment is superceded by comment #338         Reason for Group's Decision/Resolution         The commenter has provided no specific text, however, one of the suggested remedies is accomplished by the resolution of comment #338 which removes these sections.								
Group's Notes Group's Action Items Editor's Notes	Editor's Actions I) r	none needed						
Editor's Questions and Co	ncerns							

Document under Review	·: P802.16e/D5		Ballot	Number: 0000754			Comment Date
Comment # <b>0424</b>	Comment submitted	by: Ron		Murias	Mer	mber	2004-11-04
Comment Type Techni	cal, Binding	Starting Page	# 65	Starting Line #	Fig/Table#	Section	6.3.2.3.47
Several messages are n Specifically the definition	ot sufficiently defined f is missing from Page 6	for the OFDM F 5, line 57, Table	PHY. An e 106e, a	example is the Neigand Table 106f.	ghbor Advertisement n	nessage (Mo	OB_NBR-ADV).
Suggested Remedy Modify the relevant defini	tions in Section 6.3.2.4	7 and other sec	tions as	required to include	the OFDM PHY.		
Proposed Resolution Refer to comment #430	Recommendation: Sup	erceded		Recommendation by	y		
Reason for Recommendati Comment #430 accepted	ion d the changes propose	ed by contribution	on IEEE	C802.16e-04/520			
Resolution of Group	Decision of Grou	ip: Accepted					
Reason for Group's Decis Comment #430, which a	sion/Resolution ccepted the changes p	proposed by co	ntributior	n IEEE C802.16e-0	04/520, provides the su	ggested ren	nedy.
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions k)	done					
Editor's Questions and Co	oncerns						
Editor's Action Items							

### IEEE 802.16-05/010r1

Document und	ler Review:	P802.16e/D5			Ballot	Number: 0000754				Comment Date
Comment # 05	88	Comment submitted	by: Jo	nathan		Labs		Member		2004-11-04
Comment Typ A mechanism for Suggested Remo 1) On p. 92, lin 6.3.7.5 Map rel [Modify the sec	oe Technical or MBS sup edy e 24, insert levance and cond paragra	, Binding port is needed for th the following: synchronization aph in Section 6.3.7	Startin e OFD	ng Page # ₩ PHY.	94	Starting Line # 59	Fig/Table#	Section	6.3.13.	1.4
Proposed Resolu	ution Ro	ecommendation:				Recommendation by				
Reason for Reco	ommendation									
Resolution of Gr	roup	Decision of Grou	ıp: Reje	cted						
Reason for Grou The commenter	up's Decision r's proposed	n/Resolution remedy is only a pa	rtial sol	ution for M	IBS for	OFDM. Other areas, s	uch as security	, are not addres	ssed.	

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot	Number: 0000754		Comment Date			
Comment # 0619	Comment submitted	by: Carl	Eklund	Mem	ber 2004-11-04			
Comment Type Technica The fundamental mistake	al, Binding was already done in 8	Starting Page # 98 302.16-2004 but since n	Starting Line # 48 nost of the text is going to	Fig/Table# change we could c	Section 6.3.17 orrect the problem now.			
The problem is that H-AR the PHY PDU'.	Q is not a MAC layer	function. This is stated	clearly on line 57. ' and	d an H-ARQ packet	formed by adding a CRC to			
Suggested Remedy Move the text on H-ARQ to the appropriate PHY section. Even better define a H-ARQ sublayer. Also move 6.3.17.1								
Proposed Resolution	Recommendation:		Recommendation by					
Reason for Recommendatio	n							
Resolution of Group	Decision of Grou	up: Rejected						
Reason for Group's Decision Although the comment has 6.3.17, paragraph 1), there	on/Resolution s merit, the current te fore there is no technic	xt specifically states tha cal error requiring a char	it "H-ARQ may be suppo ige in the draft.	rted only for the OF	DMA PHY" (See section			
Group's Notes								
Group's Action Items								
Editor's Notes	Editor's Actions I)	none needed						
Editor's Questions and Cor	ncerns							

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot Number: 0000754		Comment Date
Comment # 0802	Comment submitted by: Vladimir	Yanover	Member	2004-11-04
<b>Comment Type</b> Technic There are many ambiguou The following is a list of iss	al, Binding Starting Page # us and incomsistent elements in specific ues	119 Starting Line # 57 ation of SHO and FBSS.	Fig/Table# Section	6.3.20.2.6
1. There is a need in detai IEEE C802.16e-04/170r1	led specification of PHY scenarios for S J. For MAC operations there is a big diff	HO/FBS [similar to "SHO Base ference between RF level com	ed Macro-Diversity Transmissi bining, soft combining and se	on Scenarios" in election diversity.
2. The assumption of SHC Suggested Remedy Either modify text to fix m	D is that state machines of MAC lof spectrum of the state machines of the spectrum of the sections of the section of the	cific connections1 at all BSs fro 5.3.20.2.6	m Active Set are tightly synch	ronized. At SHO two
Proposed Resolution	Recommendation:	Recommendation by		
Reason for Recommendation	on			
Resolution of Group During comment resolution	Decision of Group: Accepted-Modi n the following remedies were adopted:	fied		
Remedy 1: In section 6.3 Delete section 6.3.20.1.1. Change in Table 106d "Ha Delete text at p. 80 "Handoff Neighbor Prefere Defines the logical prefere serving base station (see	8.20.1.1.1 page 128. 1 "Neighbor preference" and Off Neighbor Preference" field to re ence once for handing off to a neighbor base s section 6.3.20.1.1.1)"	eserved bits stations as determined by the		
Remedy 2: Accept the ch Reason for Group's Decisi The text was modified to c	anges proposed in contribution IEEE C on/Resolution conform with an updated contribution (I	C802.16e-05/003r3. EEE C802.16e-05/003r3) prov	vided by the commenter.	
Group's Notes Group's Action Items Editor's Notes	Editor's Actions I) none needed			

Editor's Questions and Concerns

Document	Document under Review: P802.16e/D5			Ballot	Number: 0000754				Comment Date
Comment #	¥ 0882	Comment submitted I	oy: Carl		Eklund	Mer	nber		2004-11-04
Comment This is a sta Suggested	Type Technica andard, not mark Remedy	al, Binding keting material!	Starting Page #	129	Starting Line # 60	Fig/Table#	Section (	6.3.21	
Delete line	s 60-64								
Proposed F	Resolution	Recommendation:			Recommendation by				
Reason for	Recommendatio	n							
Resolution	of Group	Decision of Grou	p: Rejected						
Reason for The text in	Group's Decisi question is con	on/Resolution sidered beneficial to th	e propoer unders	standir	ng of idle mode.				
Group's No	tes								
Group's Act	tion Items								
Editor's No	tes	Editor's Actions I) n	one needed						
Editor's Que Editor's Act	estions and Coı tion Items	ncerns							

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number: 0000754			Comment Date
Comment #	ŧ 0883	Comment submitted	by: Carl		Eklund	Mem	ber	2004-11-04
Comment The text on speculation	Type Technica BS paging gro , and speculatio	l, Binding ups is irrelevant to th n should not be incluc	Starting Page # e MSS Idle Mode led in a standards	130 as the docun	Starting Line # 1 heading of 6.3.21 idle n nent.	Fig/Table# node is local to the	Section 6.3.21 MSS. The text co	ntains mostly
Suggested Delete text	Remedy t from lines 1 to	53.						
Proposed R	Resolution F	Recommendation:			Recommendation by			
Reason for	Recommendation	ı						
Resolution of	of Group	Decision of Grou	p: Rejected					
Reason for The text in	Group's Decision question is bene	on/Resolution eficial to the proper ur	nderstanding of id	lle mod	e.			
Group's No	tes							
Group's Act	tion Items							
Editor's No	tes	Editor's Actions I)	none needed					

**Editor's Questions and Concerns** 

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number: 0000754				Comment Date	÷
Comment #	1007	Comment submitted I	by: Tal		Kaitz		Mem	ber	2004-11-04	
Comment	Type Technical	, Binding	Starting Page #	147	Starting Line #	Fig/Table#	309	Section	8.4.6.1.2.2	
Ion behalf o	f Ran Yanivl									

There are several errors in the FUSC subcarrier allocation tables 309a-c and related text:

1) In table 309a-c - number of pilots in each set is wrong..

2) The number of used subcarriers in FUSC for FFT-512 and FFT-128 (tables 309c and 309d respectively) leads to an assymetric frequency **Suggested Remedy** Apply the following corrections:

1) Table 309a: [Apply the following changes to existing table entries:]

VariabeSet #0	<del>12</del> <u>36</u> <del>2</del> 6	39 <b>330 333</b> 351 645 <b>726 729</b> 850
Proposed Resolution	Recommendation:	Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

This comment is superseded by comment #1341, the resolution of which is repeated below

Accept the changes in contribution IEEE C802.16e-04/410r1

Reason for Group's Decision/Resolution The accepted contribution makes corrections to the symbol structure in scalable OFDMA modes

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

Document under Review:	P802.16e/D5	Ballot	Number: 0000754			Comment Date
Comment # <b>1010</b>	Comment submitted by	· James	Gilb	Mem	nber	2004-11-04
Comment Type Technica The cross references (See 7 Suggested Remedy Provide the correct subclau	I, Binding s (.x.x.x) are missing the se numbers here and the	Starting Page # 147 subclause numbers. proughout the draft, e.c	Starting Line # 25	Fig/Table#	Section 7.	.8.1.2.2
Proposed Resolution R	ecommendation:		Recommendation by			
Reason for Recommendation	n					
Resolution of Group Provide the correct subclau Reason for Group's Decisio Group's Notes Group's Action Items Editor's Notes	Decision of Group se numbers here and the on/Resolution Editor's Actions c) in	Accepted nroughout the draft, e.g	J., search for x.x.			
Editor's Questions and Con- What are the correct subcla Editor's Action Items	cerns auses that are suppose	d to go in here?				

# IEEE 802.16-05/010r1

Document under Review: P802.16e/D5	Ballot Number: 0000754		Comment Date
Comment # 1038 Comment submitted by:	Ron Murias	Member	2004-11-04
CommentTypeTechnical, BindingStarSection 8.3 is mis-named.This naming convention dapublic perception.In view of the changes included in 802.16d and e with"Wireless MAN-OFDM PHY" to "Wireless MAN OF	ting Page # 153 Starting Line # ates back to 802.16a and is no longer relevant respect to uplink and downlink sub-channeli -DMA- 256 PHY".	Fig/Table#Section8.3and is creating confusion in the statezation this section should be renamed	andard and ned from
Suggested Remedy Rename Section 8.3 from "Wireless MAN-OFDM P	PHY" to "Wireless MAN OFDMA- 256 PHY"		
Proposed Resolution Recommendation:	Recommendation by		
Voted 3- 10 to keep the name the same			
Reason for Recommendation			
Resolution of GroupDecision of Group: ReThis comment is similar to comment #1037.Voted 3- 10 to keep the name the same.Reason for Group's Decision/ResolutionSections 8.3 and 8.4 are different PHY specifications.and technical content of the base standard, IEEE 802downlink and is technically distinct from the mandatory	The renaming of section 8.3 in the "802.16e 2.16-2004. For example: In section 8.3, the s subchannelization in section 8.4	" Amendment is inconsistent with t ub channelization is optional on bo	he organization th uplink and
Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none no Editor's Questions and Concerns	eeded		

Docum	nent u	nder Revie	w: P802.16e/D5			Ballot	Number:	00007	54			Comment Date
Comme	nt # 1	107	Comment submitted	by: Tal			Kaitz			Me	mber	2004-11-04
Commen The defi It is not o It is not o does no	nt T inition clear v clear v clear v ot prov	ype Techr of the AAS what is the what is the ide low PA	hical, Binding S Downlink preamble is r sector number (s= 0~3) boosting to implied The APR, and all its subcarrie	Starting not clea and wha value c rs are n	g Page # r. at n signif of 9dB, a nodulated	161 fies. s in the d.	Starting frame pr	Line # eamble	48 , is too l	Fig/Table# high. Unlike the fra	Section me preamb	8.4.4.6.3 le, this preamble
Suggeste Clarify c	ed Re	medy ace text										
Proposed	d Res	olution	<b>Recommendation:</b>				Recomm	endation	by			
Reason	for Re	ecommenda	tion									
Resolutio Remove Reason This clar	on of e lines for Gi rifies th	Group 37-41 an roup's Dec ne text.	Decision of Grou d lines 45-60. ision/Resolution	p: Acce	pted-Mod	lified						
Group's Group's Editor's Editor's	Notes Actior Notes Quest	n Items ions and C	Editor's Actions I) r Concerns	one need	led							
Editor's	Actior	n Items										

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number: 0000754			Comment Date
Comment #	1110	Comment submitted	by: Tal		Kaitz		Member	2004-11-04
Comment [on behalf o	туре Technical of Ran Yaniv]	, Binding	Starting Page #	162	Starting Line #	Fig/Table#	Section	8.4.5.3.2, 8.4.5.4.4
There are s	everal duplicate	extended DIUCs in u	use throughout se	ection 8	3.4.5.3. As a result, a tot	al of 18 extende	ed DL IEs are	defined while there

are only 16 available extended DIUCs.

#### Suggested Remedy

Define a second layer of extended DIUCs and UIUCs

1. Add the following text before the end of section 8.4.5.3.2

In addition, a BS may transmit DIUC=15 with extended DIUC=15 to indicate that the extended IE conforms to the structure shown in table 275a. A station shall ignore an extended IE entry with an extended<sup>2</sup> DIUC value for which the station has no knowledge. In the case of a known extended<sup>2</sup>

Proposed Resolution Recommendation: Accepted-Modified Recommendation by

Accept the changes in contribution IEEE C802.16e-05/088.

Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

Accept the changes in contribution IEEE C802.16e-05/088.

Reason for Group's Decision/Resolution

This comment was originally rejected, however, during comment resolution, the cited contribution, which corrects and clarifies the extended DIUC and UIUC text, was accepted.

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

#### IEEE 802.16-05/010r1

Document under Review: P802.16e/D5	Ballot Number: 0000754		Comment Date					
Comment # 1113 Comment submitted by: John	Barr	Member	2004-11-04					
Type Technical, BindingStarting Page # 162Starting Line # 23Fig/Table#Section8.4.5.3.4Identical comment submitted by John Barr[satisfied], Mark Cudak, Lester Eastwood[satisfied], Colin Frank[satisfied], Qiang Guo[satisfied],, ScottMigaldi[satisfied], Nat Natarajan, Huaiyuan Wang[satisfied].]The current draft does not allow a base to "beam form" the pilots in non-AAS configurations. Beam formed pilots can provide a significant systemcapacity gain with virtually no added complexity to the subscriber station. With beam-formed pilots, a base station may pre-code the both the dataand pilot with the same complex weights. This weighting is compatible with conventional subscriber implementations since the weights areindistinguishable from the channel response. These pilot pre-coding techniques are applicable to SDMA, Beam Steering, TXAA and MIMOSuggested RemedyEnhance the STC zone to allow for beam formed pilots. Adopt contribution number IEEE C802.16e-04/416.								
Proposed ResolutionRecommendation: Accepted-ModifiedAccept the changes in contribution IEEE C802.16e-04/416r2. Modify text to substitute "optional FUSC" for "O-FUSC" in the textReason for RecommendationResolution of GroupDecision of Group: Accepted-Modified	Recommendation by							

Accept the changes in contribution IEEE C802.16e-04/416r2. Modify text to substitute "optional FUSC" for "O-FUSC" in the text.

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

During comment resolution, an updated contribution was presented and accepted with changes. Vote: 43-7

Group's Notes Group's Action Items Editor's Notes Editor's Actions i) to do Editor's Questions and Concerns Editor's Action Items

### IEEE 902 16 05/010r1

2005/04/09			IEEE 802.10-05/01011						
Document under Review: Comment # 1133	5 omitted by: Tal	Ballot	Number: 0000754 Kaitz	Member			<b>Comment</b> 2004-11-	Date -04	
Comment Type Technica [on behalf of Ran Yaniv]	al, Binding	Starting Page #	165	Starting Line #	Fig/Table#	281a	Section	8.4.5.3.8	
The encoding of the bits in MIMO_DL_Basic_IE and	the 'STC' field MIMO_DL_Er	l of the DL zone switch I hanced_IE.	E has be	een changed in the pr	evious meeting	g. This	change sh	ould be reflected	in
Suggested Remedy 1. [Modify table 281a as fo	ollows:]								
Matrix_indicator	2	STC matrix (see 8.4.8 STC = STC mode ind Ant23 = '2/3 antennas if (STC == 0b <del>0001</del> ar 00 = Matrix A	3.1.4) icated in select' a nd Ant2:	the latest STC_Zono is indicated in the late 3 == 0) {	e_IE(). st STC_Zone_	_IE().			
Proposed Resolution	Recommendatio	on:		Recommendation by					
Reason for Recommendatio	n								
Resolution of Group	Decision	of Group: Accepted							
Reason for Group's Decision	on/Resolution								
Group's Notes									
Group's Action Items									
Editor's Notes	Editor's Action	ons k) done							
Editor's Questions and Cor Editor's Action Items	ncerns								

Document under Revie	w: P802.16e/D5	Ballot	Number: 0000754		Comment Date			
Comment # <b>1135</b>	Comment submitted	by: John	Barr	Member	2004-11-04			
Comment Type Techr [Identical comment subr MIMO transmission can However, the decoded b squared error. The deco weighting to each MIMO Moreover, it is possible MIMO streams can prov Suggested Remedy Adopt contribution num	nical, Binding nitted by John Barr, Mar greatly increase the cap BER performance of suc oded BER performance stream in a frequency-s to further simply the recevide vide a 5.0 dB improvements of IEEE C802.16e-04	Starting Page # 165 k Cudak, Lester Eastwo bacity of the system espec- cessive cancellation reco of a successive cancella elective communication eiver by predetermining ent in frequency-selective	Starting Line # 1 ood, Colin Frank, Qiang G ecially when combined wi ceivers is limited by the po- ation receiver can be grea s channel. the successive cancellat ve channels over MIMO v	Fig/Table# Section uo, Scott Migaldi, Nat Natara th receivers implementing su erformance of the stream wit atly improved by applying a ion decoding order. Unequa with equal power on each str	8.4.5.3.8 ajan, Huaiyuan Wang.] uccessive cancellation. th the highest mean different power al power weighting on ream.			
Proposed Resolution	<b>Recommendation:</b>		Recommendation by					
Reason for Recommenda	tion							
Resolution of Group	Decision of Grou	ıp: Rejected						
Reason for Group's Decision/Resolution During comment resolution, the author of contribution 04/420 withdrew the cited contribution, however the commenters did not withdraw this related comment, therefore the comment resolution group was forced to reject this comment for lack of a proposed remedy.								
Group's Notes								
Group's Action Items								
Editor's Notes	Editor's Actions I)	none needed						
Editor's Questions and ( Editor's Action Items	Concerns							

### IEEE 802.16-05/010r1

Document under Review	- P802.16e/D5	Ballot Number: 0000754		Comment Date
Comment # <b>1157</b>	Comment submitted by: Yigal	Leiba	Member	2004-11-04
Comment Type Technic This extended IE seems I	cal, Binding Starting Page ike a duplication of the "Data location	# 167 Starting Line # 48 in another BS IE"	Fig/Table# Section 8.4	.5.3.12
Suggested Remedy Remove section 8.4.5.3.	12			
Proposed Resolution	Recommendation:	Recommendation by		
Reason for Recommendati	on			
Resolution of Group	Decision of Group: Rejected			
Reason for Group's Decis This extended IE is not a c	sion/Resolution duplication of the "Data location in and	other BS IE". The commenter is inc	correct.	
"DL PUSC Burst Alloactic normal MAP IE. Moreove Burst Alloaction in Other 3	on in Other Segment IE" can be used er, "Data location in another BS IE" d Segment IE" does.	in stand-alone way, but "Data loca loes not include DIUC and CID, so	ation in another BS IE" shall be co it can not provide the same funct	oupled with the ion as "DL PUSC
Group's Notes PHY				
Group's Action Items				

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

Editor's Questions and Concerns

### IEEE 802.16-05/010r1

Document under Review: P802.16e/D5 B	allot Number: 0000754	Comment Date
Comment # 1217 Comment submitted by: Yigal	Leiba	Member 2004-11-04
CommentTypeTechnical, BindingStartingPage#1'No. subchannels' cannot be deleted because backwards compatibSuggestedRemedy	77 Starting Line # 43 Fig/Table# bility with 802.16-2004 is to be maintained	Section 8.4.5.4.2
Undo the deletion of 'No. subchannels' field		
Proposed Resolution Recommendation:	Recommendation by	
Reason for Recommendation		
Resolution of Group Decision of Group: Accepted		
Reason for Group's Decision/Resolution This comment was satisfied by the resolution of comment 1218, the	e pertinent portion of which is repeated beli	ow:
Put the No. of subchannels row back into the table (i.e. remove strike	eout instructions for "No. subchannels" field	)
Group's PHYNotesGroup's Action ItemsEditor's NotesNotesEditor's Actions		

Editor's Questions and Concerns

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number: 0000754			Comment Date
Comment #	1255	Comment submitted	by: Tal		Kaitz		Member	2004-11-04
Comment	Type Technical	l, Binding	Starting Page #	188	Starting Line #	Fig/Table#	Section	8.4.5.4.14
ion behalf o	of Ran Yanivl							

The UL PHY modifier IE is defined for the purpose of allowing to distinct between multiple overlapping AAS preambles in SDMA transmissions. However, the UL allocation method does not allow such overlapping allocations: the starting slot of each allocation IE is the slot following the last slot of the previous allocation IE.

Suggested Remedy

Define a new IE AAS\_UL\_Basic\_IE() similar in concept to the MIMO\_UL\_Basic\_IE():

#### Section 8.4.5.4.22 AAS UL Basic IE Format

In the UL-MAP, an AAS-enabled BS may transmit UIUC=15 with the AAS\_UL\_Basic\_IE() to describe uplink allocations assigned to AAS-enabled SSs in an AAS zone. The MIMO mode and preamble parameters indicated in the AAS\_UL\_Basic\_IE() shall only apply to the

#### Section 8.4.5.4.22 AAS UL Basic IE Format

In the UL-MAP, an AAS-enabled BS may transmit UIUC=15 with the AAS\_UL\_Basic\_IE() to describe uplink allocations assigned to AAS enabled SSs in an AAS zero. The MINO mode and proamble percentators indicated in the AAS\_UL\_Basic\_IE() shall environment to the Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

Accept the changes proposed in contribution IEEE C802.16e-05/084r4.

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

This comment was originally rejected, however, during comment resolution, the harmonized contribution, to which the commenter is a co-author, containing revisions to both the UL and DL AAS IEs, was accepted.

Group's Notes PHY Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns

#### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number: 0000754				Comment Date
Comment #	1315	Comment submitted b	oy: Tal		Kaitz		Member		2004-11-04
Comment	Type Technical,	Binding	Starting Page #	199	Starting Line #	Fig/Table#	Section	8.4.6	
[on behalf of	f Ran Yaniv]								

In AAS systems, it is advantageous to use the same subcarriers in the DL and UL for transmission to an SS. This facilitates obtaining the channel response from the UL transmission by taking advantage of channel reciprocity.

Of the permutations currently defined for the DL channel, only the AMC permutation in the AAS mode supports such symmetric allocations along with assigning training pilots to specific user subchannels. However, this permutation lacks frequency diversity and does not provide ample training Suggested Remedy

Adopt contribution C80216e-04/467 ("Symmetric UL/DL diversity permutations for OFDMA PHY").

Proposed Resolution Recommendation: Recommendation by Reason for Recommendation Resolution of Group Decision of Group: Superceded Superseded by comment #1314 Reason for Group's Decision/Resolution This comment is superseded by comment #1314, which accepted updated contribution IEEE C802.16e\_04/467r8. Group's Notes Group's Action Items

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

**Editor's Questions and Concerns** 

Document under Review	r: P802.16e/D5	Ballot	t Number: 0000754		Comment Date
Comment # 1327	Comment submitted	by: John	Barr	Member	2004-11-04
Comment Type Technic [Identical comment subm Migaldi[satisfied], Nat Nat The offset, in symbols, b the common sync symbol symbol. As a result, it is subscriber station must p	cal, Binding itted by John Barr[satis arajan, Huaiyuan Wang etween the optional co I has no simple means unclear how the subsc erform an exhaustive s	Starting Page # 212 sfied], Mark Cudak, Lest g[satisfied].] mmon sync symbol and of identifying the begin riber station benefits fro earch to find the beginn	Starting Line # 28 er Eastwood[satisfied], C I the beginning of the fran ning of the frame without m the common sync sym ing of the frame.	Fig/Table#SectionColin Frank[satisfied], Qiang Gume is variable. A subscriber sperforming an exhaustive seabol. With or without the comr	8.4.6.1.1.1 uo[satisfied], Scott tation making use of arch for pre-amble non sync symbol, the
Suggested Remedy Adopt contribution numb	per IEEE C802.16e-04	/418			
Proposed Resolution Vote failed: 20-14	Recommendation: Acc	epted	Recommendation by		
Reason for Recommendat	ion Decision of Cro				
Reason for Group's Decision of Group's Decisio	sion/Resolution g comment resolution, vithdraw this related co	the author of contributio mment, therefore the g	n IEEE C802.16e-04/418 roup was forced to reject	3 requested the contribution be this comment for lack of a pro	e rejected, however posed remedy.
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions I)	none needed			
Editor's Questions and C Editor's Action Items	oncerns				

#### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5			Ballot	Number: 0000754			Comment Date
Comment #	1445	Comment submitted I	by: Johr	า		Barr		Member	2004-11-04
Comment	Type Technica	al, Binding	Starting	Page #	225	Starting Line # 33	Fig/Table#	Section	8.4.6.2.7
[Identical con Huaiyuan W Section 8.4. between the subcarriers t	mment submitt /ang.] 6.2.7 of IEEE I BS antennas hat are estimat	ed by John Barr, Mark P802.16e/D5 provides and an SS, for system ed is selectable from r	Cudak, an effici s where narrowba	Lester E ient and the cha ind all th	Eastwoo d flexible innel is ne way i	ed, Colin Frank, Qiang e means for the BS to reciprocal and the BS up to the entire channe	Guo, Scott Migal estimate the dow antenna/RF syste I bandwidth.	di, Richard Pac vnlink complex em is calibrated	e, Nat Natarajan, channel responses I. The number of
Since Section Suggested R Adopt control	on 8.4.6.2.7 on Remedy ibution numbe	v covers the case of T r IEEE C802.16e-04/-	FDD with 422	calibra	ted ante	enna/RF svstem. it mu	st be modified to	enable the san	ne capabilities for the
Proposed Re	esolution F	Recommendation: Acce	epted			Recommendation by			

Reason for Recommendation

Resolution of GroupDecision of Group: Accepted-ModifiedAccept the changes in contributions IEEE C802.16e-04/552r7, C802.16e-04/554r4, C802.16e-04/422r4.

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

During comment resolution, the original contribution and others addressing this issue were updated and submitted. These revised contributions were accepted.

Group's Notes During comment resolution: Contribution C802.16e-04/552r7 will be provided by Jose Puthenkulam in FrameMaker format. There is a note to the editor to change text/equations into a table. This will be provided by the coauthors of this contribution. Group's Action Items

Editor's Notes Editor's Actions i) to do

**Editor's Questions and Concerns** 

### IEEE 802.16-05/010r1

Document under Review-	P802.16e/D5		Ballot	Number: 0000754			Commont Data
Comment # 1495	Comment submitted	by: Yigal	Banot	Leiba	Mer	nber	2004-11-04
<b>Comment Type</b> Technical The requirement that 'types AMC is mapped like any ot In addition, this rule has dev	l, Binding , the index of the sub her permutation. /estating effects in te	Starting Page # bchannels in a bai erms of memory re	234 nd is inc equired i	Starting Line # 7 creased along bins and t in the MSS for implemer	Fig/Table# then symbols' is no ntation.	Section 8.4.6. ot consistent with 8	3 802.16-2004.
Suggested Remedy Remove the sentence "In a instead add the sentence ' 'In all the types, data mappi	Suggested Remedy Remove the sentence "In all the types, the index of the subchannels in a band is increased along bins and then symbols." nstead add the sentence ' In all the types, data mapping follows section 8.4.3.4"						
Proposed Resolution R	ecommendation: Acc	cepted-Modified		Recommendation by			
8.4.3.4 except for region ma 6.3.2.3.43 are allocated alor (across bands when multiplied Slots for uplink AMC zone in of data mapping for uplink A Reason for Recommendation	In all the types, the index of the subchannels in a band is increased along bins and then symbols. In all the types, data mapping follows section 8.4.3.4 except for region mapped according to section 6.3.2.3.43. Slots for downlink AMC zone in a region mapped according to section 6.3.2.3.43 are allocated along the subchannel index first within a band. The direction of data mapping for downlink AMC slots shall be frequency first (across bands when multiple bands are allocated). Slots for uplink AMC zone in a region mapped according to section 6.3.2.3.43 are allocated along the symbol index first within a band. The direction of data mapping for downlink AMC slots shall be frequency first (across bands when multiple bands are allocated). Slots for uplink AMC zone in a region mapped according to section 6.3.2.3.43 are allocated along the symbol index first within a band. The direction of data mapping for uplink AMC slots shall be frequency first (across bands when multiple bands are allocated). Slots for uplink AMC zone in a region mapped according to section 6.3.2.3.43 are allocated along the symbol index first within a band. The direction of data mapping for uplink AMC slots shall be frequency first (across bands when multiple bands are allocated).						
Resolution of Group	Decision of Grou	up: Accepted-Modi	ified				
In all the types, the index of 8.4.3.4 except for region ma 6.3.2.3.43 are allocated alor (across bands when multipl Slots for uplink AMC zone in of data mapping for uplink A	the subchannels in a subchannels in a subchannel in the subchannel in the bands are allocated in a region mapped a MC slots shall be free subchannel in the	a band is increase section 6.3.2.3.43 ndex first within a b d). according to section requency first (across	ed along 3. Slots band. Th on 6.3.2 oss ban	tins and then symbols for downlink AMC zone ne direction of data map 3.3.43 are allocated alon ds when multiple bands	In all the types, day in a region mapper ping for downlink A g the symbol index are allocated).	ata mapping folloved according to set ac	ws section ection frequency first d. The direction
Reason for Group's Decisio	n/Resolution	a					
The H-ARQ MAP operation	n necessitates an ex	cception to the pro	oposed	change.			
Group's Notes PHY							

Group's Action Items

Editor's Notes Editor's Actions k) done

Editor's Questions and Concerns

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5		Ballot Number:	0000754			Comment Date
Comment # <b>1532</b>	Comment submitted	by: Tal	Kaitz		Me	ember	2004-11-04
<b>Comment Type</b> Technic The definition of 3 antenna Also it not clear what is a 'l	al, Binding as STC is not clear. It i ogical -data-subcarrier	Starting Page # is not clear how th r_number_for_first	239 <b>Starting</b> e 3x4 matrices tone_of-code	Line # 34 map to two OF and how it is re	Fig/Table# DMA symbols and lated to the Bin st	Section 8.4. d two subcarriers ructure defined in	.8.3.4 5. 1 8.4.6.3.
Suggested Remedy Clarify or delete							
Proposed Resolution	Recommendation:		Recomm	endation by			
Reason for Recommendation	n						
Resolution of Group Accept the changes propo Reason for Group's Decisi The accepted contribution	Decision of Grou osed in contribution IE on/Resolution clarifies the text referre	up: Accepted-Modi EEE C802.16e-04 ed to in the comme	fied /557r5 ent.				
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions I)	none needed					
Editor's Questions and Co	ncerns						

Document under Review:	P802.16e/D5	Ballot	Number: 0000754		Comment Date
Comment # <b>1550</b>	Comment submitted	by: Tal	Kaitz	Member	2004-11-04
Comment Type Technica	l, Binding	Starting Page # 242	Starting Line # 29	Fig/Table# Section	8.4.8.3.6
It is not clear how the weigh only define the physical ma	nt coefficients w are n pping of a single coef	napped to fast-feedback ficient. It is not clear how	message. Section 8.4. to map a matrix of coe	5.4.10.2 and its enhanced cou fficients.	unterpart 8.4.5.4.10.6
Suggested Remedy Clarify. It is worth clarifying	also for the vector w o	case. (8.4.8.3.5 etc.)			
Proposed Resolution R	ecommendation:		Recommendation by		
Reason for Recommendation	1				
Resolution of Group Accept the changes propose Reason for Group's Decision The accepted contribution of	Decision of Grou sed in contribution IE on/Resolution clarifies the text cited in	<b>IP: Accepted-Modified</b> EEE C802.16e-04/552r7 n the comment.	, section 8.4.5.4.10.6		
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions I) r	none needed			
Editor's Questions and Con	cerns				
Editor's Action Items					

Document under Review:	P802.16e/D5	Ballot	Number: 0000754		Comment Date
Comment # <b>1582</b>	Comment submitted	by: Nico	van Waes	Mem	per 2004-11-04
<b>Comment</b> Type Technica [Identical comment submit In Table 314m, the STC su transmission is of spatial ra	al, Binding ted by Nico van Waes ubpacket combining is ate of 4 symbols/chan	Starting Page # 259 s and Victor Stolpman.] defined for the 4 transm nel use (spatial multiplex	Starting Line # it antenna case. Howeve king, matrix C).	Fig/Table# r, it only includes th	Section 8.4.8.9 e case where the initial
Suggested Remedy Adopt text in contribution C a spatial rate of 2 symbols	080216e-04/477, in wh channel use.	nich the method currently	y in the spec is extended	to allow the case w	here the initial transmission has
Proposed Resolution voted 12-7, rejecting contr Reason for Recommendatio	Recommendation: Acc ribtion IEEE C802.160 n	epted-Modified e-04/477r1	Recommendation by		
Resolution of Group	Decision of Grou	p: Rejected			
Reason for Group's Decision This contribution needs more It is also not shown in the or regions that a SS would not	on/Resolution ore clarification. It is no document that the prop ot normally operate in.	t clear how the second p bosed scheme is the opt	backet is combined with th imal given the channel co	e first packet. Indition; for example	e, the gain is acheived in PER
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions I) r	none needed			
Editor's Questions and Cor	ncerns				
Editor's Action Items					

### IEEE 802.16-05/010r1

Document under Review: P802.16e/D5	Ballot Number: 0000754	Mombor	Comment Date			
Comment # 1309 Comment submitted by: Mark	Cudak	Member	2004-11-04			
CommentTypeTechnical, BindingStartingPage#CTC IR has poor performance or error floor for some block sizes (	260 Starting Line # 8 (e.g., 120 byte info size all cod	Fig/Table#Section8.4.9de rates floor about 1e-3)				
Suggested Remedy Fix the turbo code.						
Proposed Resolution Recommendation:	Recommendation by					
Reason for Recommendation						
Resolution of Group Decision of Group: Rejected						
Reason for Group's Decision/Resolution The commenter has provided no specific text, however, proposed text was submitted under comment #1593 (contribution IEEE C802.16e-04/484r2), as well as later comments and contributions (IEEE C802.16e-04/484r4, -05/007r1 and others). During comment resolution, consensus on an acceptable method to fix the turbo code without breaking backwards compatibility with the base standard could not be reached.						
Group's Notes						
Group's Action Items						
Editor's Notes Editor's Actions I) none needed						
Editor's Questions and Concerns						

### IEEE 802.16-05/010r1

Document under Review: P802.16e/D5	Ballot Number: 0000754		Comment Date
Comment # 1590 Comment submitted by: Da	avid Castelow	Member	2004-11-04
Comment Type Technical, Binding Startin	ng Page # 260 Starting Line # 10	Fig/Table# 254a Section	8.4.9.1
As defined, the randomiser seed may be all zeros: not	a good idea.		

#### DAC45

Suggested Remedy Page 260, line 20, Make initializer for B5 = 1.

Proposed Resolution Recommendation: Recommendation by

**Reason for Recommendation** 

Resolution of GroupDecision of Group: Accepted-ModifiedThis comment was originally rejected. As a result of further comment resolution, it was accepted modified as follows:

#### Page 362, line 49, Make initializer ([MSB] 0 1 1 0 1 1 1 0 0 0 1 0 1 0 1 [LSB])

Reason for Group's Decision/Resolution During comment resolution, a different solution was developed and accepted.

Group's Notes Group's Action Items Editor's Notes Editor's Actions i) to do pg & line # Editor's Questions and Concerns Editor's Action Items

Document under Review:	P802.16e/D5	Ballo	t Number: 0000754		C	omment Date
Comment # 1599	Comment submitted by	John	Barr	Mem	iber	2004-11-04
Comment Type Technica [Identical comment submitt Migaldi[satisfied], Nat Natar Contributions IEEE C802.1 incremental redundancy for inconsistent. Generic chas	al, Binding s ed by John Barr[satisfie rajan, Huaiyuan Wang[s 16e-04/136r2 and IEEE convolutional coding. H se H-ARQ is critical featu	tarting Page # 261 d], Mark Cudak, Lest atisfied].] C802.16e-04/246r3 lowever, the editing i ire for the system an	Starting Line # 1 er Eastwood[satisfied], in Seoul enabling a genstructions were applied d should be enabled as	Fig/Table# Colin Frank[satisfied] eneric chase H-ARQ f d incorrectly and the cu specified.	Section 8.4.9.2.7 , Qiang Guo[satisfie for all LDPC coding urrent specification is	l.2 d], Scott modes and s
Suggested Remedy Reapply the changes a sp	ecified in contributions	IEEE C802.16e-04/	136r2 and IEEE C802.	16e-04/246r3.		
Proposed Resolution F	Recommendation:		Recommendation by			
Reason for Recommendation	n					
Resolution of Group Accept the changes in con Reason for Group's Decision During comment resolution	Decision of Group: tribution IEEE C802.16 on/Resolution n, Contribution IEEE C8	Accepted-Modified e-05/046 02.16e-05/046 was	proposed and accepted	d as a remedy for this	comment.	
Group's Notes This comment was originall This binding comment is for security related and not der Group's Action Items Editor's Notes	y superseded to comme r channel coding only. rmane to this bindina co Editor's Actions i) to c	ent 913 which is not a During ballot comme mment. and #2289 v o	channel coding issue a nt resolution, two comm hich is a channel codir	and is also a non-bindi nents referred to this co na issue. Comment #2	ng comment. This v omment , #2136 wh 2289. which recomm	vas an error. ich is 1ended
Editor's Questions and Con	cerns					
Editor's Action Items						

### IEEE 802.16-05/010r1

Document under Review: P802.16e/D5	Ballot Number: 0000754		Comment Date			
Comment # 1605 Comment submitted by: Mark	Cudak	Member	2004-11-04			
CommentTypeTechnical, BindingStartingPageLDPC codes can provide significant capacity gain.Unfortunate	# 261 Starting Line # 44 sly, the LDPC text is incomplete.	Fig/Table# Section	8.4.9.2.5			
Suggested Remedy Adopt the contribution number IEEE C802.16e-04/526 which is	s an output from the LDPC colla	poration group				
Proposed Resolution         Recommendation: Accepted-Modified         Recommendation by           Accept the changes in contribution IEEE C802.16e-04/526r1         Recommendation by						
Reason for Recommendation						
Resolution of GroupDecision of Group: Accepted-MoAccept the changes in harmonized contributions IEEE C802.16	odified 6e-04/526r1 and IEEE C802.16	e-05/066r3.				
Reason for Group's Decision/Resolution This comment is essentially the same as comments #1604 and contributions, IEEE C802.16e-04/526r1 and IEEE C802.16e-0	l #1606. Originally accepted, du )5/066r3, were submitted and a	ring comment resolution updat ccepted.	ted LDPC			
Group's Notes						
Group's Action Items						
Editor's Notes Editor's Actions c) instructions unclear	ır					
Editor's Questions and Concerns						

### IEEE 000 16 05/010+1

2005/04/09 IEEE 802.16-05/010r1				
Document under Revie	w: P802.16e/D5	Ballot Number: 0000754		Comment Date
Comment # <b>1640</b>	Comment submitted by: Davi	d Castelow	Member	2004-11-04
<b>Comment Type</b> Techr Remove the explicit mer certainly the limit of 95 is	nical, Binding Starting ntion of Multicast CIDs. There is too small.	Page # 274 Starting Line # 48 no need to distinguish these from ot	Fig/Table# 343 Section her Transport CIDs and	
Note also that if this char DAC50	nge is rejected, the change in line	45 to the CID range will need highligh	nting as a change.	
Suggested Remedy Delete Page 274, lines As this is the only chang Delete Page 274, lines Then, as the comment for [Add at the end of section]	48 and 49. le in the table, delete the table in i 33-62. ollowing the table is orphaned, ac on 10.4:]	ts entirety. Id at Page 274, line 63:		
If it is felt necessary, adj	ust the text at page 274, line 64 to	o the effect		
Proposed Resolution	Recommendation:	Recommendation by		
Reason for Recommenda	tion			
Resolution of Group	Decision of Group: Reject	ed		
Reason for Group's Dec There is a need for an ic	ision/Resolution Ile MS to distinguish Multicast CII	Ds from normal Transport CIDs for pu	urposes of power savings and traffic	management.
Group's Notes				
Group's Action Items				
Editor's Notes	Editor's Actions I) none neede	d		
Editor's Questions and C	Concerns			

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot	Number: 0000754			Comment Date
Comment # 1643	Comment submitted by: Jonathan		Labs	Me	ember	2004-11-04
Comment Type Technica Blanks, X's and nn's are no Suggested Remedy	I, Binding Starting Page # ot valid values for Type in a TLV.	¥ 277	Starting Line # 1	Fig/Table#	Section 11	
p. 278, line 8: OMAC Tup p. 278, line 47: DCD_set p. 278, line 57: UCD_set p. 280, line 18: Allow AA p. 280, line 27: Use CQIC	ble definition tings tings S Beam Select Messages CH indication flag					
Proposed Resolution R	Recommendation:		Recommendation by			
Reason for Recommendation	1					
Resolution of Group	Decision of Group: Rejected					
Reason for Group's Decisio No specific text was provid	on/Resolution led by the commenter.					
Group's Notes						
Group's Action Items						
Editor's Notes	Editor's Actions I) none needed					
Editor's Questions and Con	cerns					

Document under Review	r: P802.16e/D5	Ballot	Number: 0000754		Comment Date		
Comment # <b>1726</b>	Comment submitted k	by: Mark	Cudak	Member	2004-11-04		
Comment Type Technic AAS capable mobiles mat base station so that the Suggested Remedy Adopt contribution IEEE	cal, Binding ay be configured with diff appropriate AAS mode C802 16e-04/536	Starting Page # 287 ferent numbers of transr es may be employed.	Starting Line # 26 mit and receive antennas	Fig/Table# Section 11.7. . This configuration must be comm	8 unicated to the		
Proposed Resolution	Recommendation:		Recommendation by				
Reason for Recommendat	ion						
Resolution of Group	Decision of Grou	p: Rejected					
Reason for Group's Decision/Resolution This comment is considered out of scope of the 802.16e project as it requires a non-backward compatible change to the fixed operation defined in the base standard.							
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions I) n	one needed					
Editor's Questions and C	oncerns						
Editor's Action Items							

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5			Ballot	Number:	0000754			Comment Date
Comment #	1851	Comment submitted	by: Carl			Eklund		Μ	lember	2004-11-04
<b>Comment</b> There are n The current becomes to constellation	Type Technica o system profil transmitter EV o low when try error requirem	al, Binding es defined for mobile M requirements defin- ring to meet the highe ents.	Starting operation ed for the er order n	Page # n. e fixed O nodulatio	311 FDMA ons. Fc	Starting SS are r or 16 QA	Line # not realistic for a M in .16 the effi	Fig/Table# a MSS. The MSS iciency is compar	Section 12 power amplifier eff rable to 64 QAM in	iciency .11 due to
Suggested I Add a syste Make 16 Q	Remedy em profile AM optional for	a MSS in the uplink.								
Proposed R	esolution I	Recommendation:				Recomm	endation by			
Reason for	Recommendatio	n								
Resolution o	of Group	Decision of Grou	ıp: Reject	ed						
Reason for During com	Group's Decision ment resolution	on/Resolution I, the working group d	id consid	er additic	onal pro	ofiles. H	owever, conser	isus could not be	reached on accept	able text.

Group's Notes Group's Action Items Editor's Notes Editor's Actions I) none needed Editor's Questions and Concerns Editor's Action Items

Document under Review Comment # 1858	: P802.16e/D5 Comment submitted by: Mark	Ballot Number: 0000754 Cudak	Member	<b>Comment Date</b> 2004-11-04
<b>Comment Type</b> Technic Many alternatives for auth profiles.	cal, Binding Starting Pathematication and security are enable	age # 311 Starting Line # 25 ed by the standards. However, none	Fig/Table#Section1of these are addressed in the 0	12.4 OFDMA PHY
Suggested Remedy A set of security profiles of	defining the algorithms and options	s employed for authentication should	be added to the standard.	
Proposed Resolution	Recommendation: Rejected	Recommendation by		
Reason for Recommendati The commenter has prov	on ⁄ided no text.			
Resolution of Group	Decision of Group: Rejected	l i i i i i i i i i i i i i i i i i i i		
Reason for Group's Decis Although the commenter consensus on acceptable	sion/Resolution provided no specific text, the work text could not be reached	ing group did consider additional pro	files. However, during commer	nt resolution,
Group's Notes				
Group's Action Items				
Editor's Notes	Editor's Actions I) none needed			
Editor's Questions and Co	oncerns			
Editor's Action Items				

Document under Review	P802.16e/D5	Ballot	Number: 0000754		Comment Date
Comment # <b>1859</b>	Comment submitted	by: Mark	Cudak	Member	2004-11-04
Comment Type Technic The 802.16e has enhanc updated to reflect this new	cal, Binding e the MAC layer signifi v functionality. Profiles	Starting Page # 311 cantly with support for l should exist calling out	Starting Line # 25 handoff, sleep mode, id the minimum mobility fu	Fig/Table#Sectiole mode etc.However, the particular to build intercentnctions in order to build intercent	n 12.4.2 profiles have not been operable systems
Suggested Remedy The MAC profiles should	be updated to address	s the new MAC layer p	rofiles so that interopera	able mobile equipment may	be constructed.
Proposed Resolution	Recommendation: Reje	cted	Recommendation by		
Reason for Recommendati The commenter has prov	on ided no text.				
Resolution of Group	Decision of Grou	p: Rejected			
Reason for Group's Decis Although the commenter consensus could not be re	ion/Resolution provided no specific te eached on acceptable t	xt, additional profiles we ext.	ere considered by the g	roup during comment resolu	tion. However,
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions I) r	one needed			
Editor's Questions and Co	oncerns				
Editor's Action Items					

Document under Review:	P802.16e/D5	Ballot	Number: 0000754			Comment Date
Comment # <b>1860</b>	Comment submitted	by: Mark	Cudak	Mem	ber	2004-11-04
<b>Comment</b> Type Technica In July 2004, the United St Service (BRS). The BRS a 802.16-2004 only defines allocated.	al, Binding ates Federal Commu allocates licensed spe licensed bands of 1.2	Starting Page # 311 nication Commission re- ectrum in blocks of 6 and 25, 3.5, 7, 8.75, 14, 17.5	Starting Line # 25 structured the 2495-2690 16.5 MHz. The current s and 28 MHz. None of t	Fig/Table# MHz creating alloc specification through hese allocations are	Section 12.4.3 ations for the Bro n reference to IEE e appropriate for	adband Radio E the blocks
Suggested Remedy It is proposed that 802.166 15 MHz	e include license profil	les appropriate for the B	RS band. The working g	roup should consid	ler license bands	of 5, 10 and
Proposed Resolution	Recommendation: Rej	ected	Recommendation by			
Reason for Recommendation The commenter has provide	n ded no text.					
Resolution of Group	Decision of Grou	Jp: Rejected				
Reason for Group's Decision/Resolution Although the commenter provided no specific text, additional profiles were considered by the group. However during comment resolution, consensus could not be reached on acceptable text.						
Group's Notes						
Group's Action Items						
Editor's Notes	Editor's Actions I)	none needed				
Editor's Questions and Cor	ncerns					
Editor's Action Items						

Document under Review	r: P802.16e/D5	Ballot	Number: 0000754		Comment Date		
Comment # <b>1861</b>	Comment submitted	by: Mark	Cudak	Member	2004-11-04		
<b>Comment</b> Type Techni The 802.16e OFDMA PH sizes have been added. exist calling out the minim	cal, Binding IY has added considera However, the OFDMA num mobility functions ir	Starting Page # 311 able functionality to sup a profiles have not bee a order to build interope	Starting Line # 25 port mobility. Features, s n updated since IEEE 80 rable systems for various	Fig/Table# Section Such as MIMO, feedback modi 02.16-2004. Updated OFDMA new features.	12.4.3 fication, new FFT A profiles should		
Suggested Remedy The OFDMA PHY profile	es should be updated to	address the new featu	ures of the PHY.				
Proposed Resolution	Recommendation: Reje	ected	Recommendation by				
Reason for Recommendation The commenter has provided no text.							
Resolution of Group	Decision of Grou	p: Rejected					
Reason for Group's Decision/Resolution Although the commenter provided no specific text, the working group did consider additional profiles. However during comment resolution, consensus on acceptable text could not be reached							
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions I) r	one needed					
Editor's Questions and Co Editor's Action Items	oncerns						

### IEEE 802.16-05/010r1

Document under Review: P802.16	e/D5 Bal	lot Number: 0000754		Comment Date
Comment # 1864 Comment	submitted by: Mark	Cudak	Member	2004-11-04
<b>Comment</b> Type Technical, Binding The current specification incorporates plan for the Broadband Radio Service	Starting Page # 31 <sup>-</sup> through reference only the RF p e (BRS) in the United States.	1 Starting Line # 25 profiles in IEEE 802.16-2004.	Fig/Table# Section 12.4 These profiles do not address a	l.4 channelization
Suggested Remedy A set of RF profiles appropriate for th	ie BRS in the U.S.A should be a	added to the specification.		
Proposed Resolution Recommend	lation: Rejected	Recommendation by		
Reason for Recommendation The commenter has provided no text	i.			
Resolution of Group Decisi	ion of Group: Rejected			
Reason for Group's Decision/Resolution This comment is virtually identical to oppose the group	on comment #1860 from the same of b. However during comment res	commenter. Although the co solution, consensus could no	mmenter provided no specific text of be reached on acceptable text.	t, additional
Group's Notes				
Group's Action Items				
Editor's Notes Editor's	Actions I) none needed			

Editor's Questions and Concerns

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5		Ballot Number: 000075	4		Comment Date	
Comment # <b>1867</b>	Comment submitted b	y: James	Gilb	Mem	ber	2004-11-04	
<b>Comment</b> Type Technica [Page 319-332; various lin The following commands a	al, Binding es] are in the figure, but no	Starting Page # t the document:	319 Starting Line # HO-notification-*, HO-pr	Fig/Table# e-*. Are they defined in 8	Section C 02.16-2004?		
Suggested Remedy If they are not defined in 802.16-2004, these need to be replaced with the actual command name that is passed over the air.							
Proposed Resolution	Recommendation:		Recommendation	by			
Reason for Recommendatio	n						
Resolution of Group	Decision of Group	Rejected					
Reason for Group's Decision/Resolution These messages are backbone messages which are not passed over the air. Appendix C is purely informative text. It is expected that these messages will be defined further in P802.16g.							
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions I) no	one needed					
Editor's Questions and Concerns							

### IEEE 802.16-05/010r1

Document under Review:	P802.16e/D5	Ballot	Number: 0000754		Comment Date
Comment # <b>1874</b>	Comment submitted	by: James	Gilb	Member	r 2004-11-04
Comment Type Technic The MSC references 2 co 802.16-2004? Suggested Remedy If they are not defined in 8	al, Binding mmands, I-am-host-of 02 16-2004, these nee	Starting Page # 332 f and MSS-info-req, that	Starting Line # Vario t do not appear in this do	Fig/Table# S ocument or in 802.16-2	ection C 2001, are they defined in
Proposed Resolution	Recommendation:		Recommendation by		
Reason for Recommendation	on				
Resolution of Group	Decision of Grou	ıp: Rejected			
Reason for Group's Decisi These messages are bac messages will be defined	on/Resolution kbone messages whic further in P802.16g.	ch are not passed over	the air. Appendix C is p	urely informative text.	It is expected that these
Group's Notes					
Group's Action Items					

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

Editor's Questions and Concerns

# IEEE 802.16-05/010r1

Document under Review: P	2802.16e/D5	Ballot	Number: 0000754			Comment Date
Comment # 1902 C	Comment submitted by: James		Gilb	Men	nber	2004-11-04
Comment Type Technical, This annex has empty subcla Suggested Remedy Either delete the subclause o	Binding Starting Page # auses, e.g., E.1.1 or provide the missing information for	339 all of th	Starting Line # 14 e empty subclauses.	Fig/Table#	Section E	
Proposed Resolution Red	commendation:		Recommendation by			
Reason for Recommendation						
Resolution of Group	Decision of Group: Rejected					
Reason for Group's Decision/Resolution This comment was rejected due to the comment's lack of specific text for the empty subclauses, however, it is recognized that such text is needed and it is currently under development by members of the working group.						
Group's Notes						
Group's Action Items						
Editor's Notes E Remove undefined clauses E Editor's Questions and Conce	Editor's Actions i) to do E.1.1 and E.1.2? erns					

### IEEE 802.16-05/010r1

Document	under Review:	P802.16e/D5		Ballot	Number: 0000754				Comment Date
Comment #	1930	Comment submitted I	by: Tal		Kaitz		Member		2004-11-04
Comment	туре Technical	, Binding	Starting Page #	501	Starting Line #	Fig/Table#	Section	8.4.4	
[on behalf of	[Ran Yaniv]								

In the current IEEE P802.16-2004 specification, a frame contains a single DL-MAP and UL-MAP, each transmitted at a single rate. This constraint leads to large map overheads, especially in AA (Adaptive Antenna) systems where the single broadcast map must be transmitted at a very robust rate in order to bridge the gap between AAS transmissions and broadcast transmissions.

Multiple broadcast maps at varving rates can aid to reduce the resulting map overheads. **Suggested Remedy** Adopt contribution C80216e-04/468 ("Multiple Broadcast Maps for OFDMA PHY").

Proposed Resolution Recommendation: Recommendation by

**Reason for Recommendation** 

Resolution of GroupDecision of Group: Accepted-ModifiedAccept the changes proposed in contribution IEEE C802.16e-05/023r5

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

During comment resolution, contribution IEEE C802.16e-05/023r5 was proposed and accepted. The commenter (Ran Yaniv), who had submitted a revised contribution, IEEE C802.16e-04/468r3, withdrew his comment and the associated contribution.

Group's Notes

Group's Action Items

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

**Editor's Questions and Concerns** 

Document under Review	: P802.16e/D5	Ballot	Number: 0000754	1	Comment Date	
Comment # 1945	Comment submitted by:	Jonathan	Labs	Μ	ember 2004-11-04	
Comment Type Technic I do not like the way the a comparing Table 55Act see that the 'SS' acronym Codes now only apply to	cal, Binding Star acronym MSS has been use ion Codes and Actions in th has been replaced by the mobile SS's and not SS's	rting Page # 865 ed to replace SS in he P802.16-REVd/I 'MSS' acronym in th in general, whether	Starting Line # 6 text that has been 05 (p. 78, line 42) the description of the they are fixed or i	5 Fig/Table# pulled from the base of with Table 55a in P802 e Actions. Such a char mobile.	Section locument. For example, 2.16e/D5 (p. 29, line 20), one can nge tells me that those Action	
(On a side note, the definition of Action Code 0x00 is being redefined in 16e, which I think breaks backward compatibility.) Suggested Remedy Throughout the document, use 'SS' when the function can apply to both fixed and mobile SS's and use 'MSS' when the function only applies to mobile SS's.						
Proposed Resolution	Recommendation:		Recommendation b	ру		
Reason for Recommendati	on					
Resolution of Group This comment has been Reason for Group's Decis This comment has been	Decision of Group: So superseded by comment # sion/Resolution superseded by comment #	uperceded 71. 71 which changes t	he usage of MSS	and SS.		
Group's Notes Group's Action Items Editor's Notes Editor's Questions and Co Editor's Action Items	Editor's Actions I) none r oncerns	needed				