Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5003 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 3 **Starting Line #** 1 **Fig/Table#** **Section** 1.4.2

It is not proper to mark a subclause as informative (see 2005 IEEE Style Guide).

Suggested Remedy

Move this text to an informative Annex.

Proposed Resolution **Recommendation:** **Accepted-Modified** **Recommendation by**

[In 1.4.2 Network model for mobile communications (informative), page 3, line 1, move entire subclause to new Annex F as informative text]

[In 3. Definitions, page 10, line 16, add to end of section as:]

'**3.84 backbone network:** communication mechanism by which two or more base station (BS)s communicate to each other, and may also include communication with other networks. The method of communication for backbone networks is outside the scope of this standard.'

Reason for Recommendation

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

[In 1.4.2 Network model for mobile communications (informative), page 3, line 1, move entire subclause to new Annex F as informative text]

[In 3. Definitions, page 10, line 16, add to end of section as:]

'**3.84 backbone network:** communication mechanism by which two or more base station (BS)s communicate to each other, and may also include communication with other networks. The method of communication for backbone networks is outside the scope of this standard.'

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5004 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 9 **Starting Line #** vario **Fig/Table#** **Section** 3

Definitions need to stand on their own, so acronyms need to be spelled out in each of the definitions. In most cases it is better to avoid using them altogether. 3.73 is an example, BS, MSS and HO need to be spelled out.

Suggested Remedy

Spell out the acronyms in each of the definitions. The response is that BS is widely used. However the other acronyms, SHO, MSS, etc. are not widely used and are specific only to this draft. Even BS can be misunderstood and should be spelled out. Only acronyms that are extremely well known, such as RF, RFIC, CMOS, etc. do not need to be spelled out. The IEEE staff cannot make this determination. Do the right thing and spell them out.

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Replace "handoff" with "handover" throughout the text (5 instances)".

In Clause 4, remove the definition for "BBM - break before make"
In Clause 4, remove the definition for "MBB - make before break"

[In 3. Definitions, page 9, line 1, modify identified definitions as:]
'3.5.1 neighbor BS: For any mobile station (MS), a neighbor BS is a base station (BS) (other than the serving BS) whose downlink transmission can be received by the mobile station (MS).

3.5.2 serving BS: For any mobile station (MS), the serving BS is the base station (BS) with which the mobile station (MS) has most recently completed registration at initial network-entry or during a~~n~~ handover (HO).

3.5.3 target BS: The base station (BS) that a~~n~~ mobile station (MS) intends to be registered with at the end of a handover (HO).

3.5.4 active BS: An active BS is informed of the mobile station (MS)~~:~~ capabilities, security parameters, service flows and full MAC context information. For soft handover (SHO), the mobile station (MS) transmits/receives data to/from all active BSs in the active set.'

'3.71 active set: ~~Active set is applicable to SHO and FBSS.~~ The active set contains a list of active BSs to the mobile station (MS). The active set is managed by the mobile station (MS) and base station (BS). The active set is applicable to soft handover (SHO) and fast BS switching (FBSS)'

'3.73 anchor BS: For soft handover (SHO) or fast BS switching (FBSS) supporting mobile station (MS)s, this is a base station (BS) where the mobile station (MS) is registered, synchronized ~~with~~, performs ranging ~~with~~ and monitors the downlink~~DL~~ for control information. For fast BS switching (FBSS) supporting mobile station (MS), this is the serving BS that is designated to transmit/receive data to/from the mobile station (MS) at a given frame.

3.74 FA index: A network specific logical frequency assignment (FA) index assignment. FA index assignment is used in combination with operator specific configuration information provided to the mobile station (MS) in a method outside the scope of this standard.

3.75 fast BS switching (FBSS): base station (BS) switching that utilizes a fast switching mechanism to improve link quality. The mobile station (MS) is only transmitting/receiving data to/from one of the active BS (anchor BS) at any given frame. The anchor BS can change from frame to frame depending on the base station (BS) selection scheme.

3.76 frequency assignment (FA): A frequency assignment (FA) denotes a logical assignment of downlink~~DL~~ center frequency and channel bandwidth programmed to the base station (BS).

3.77 handover (HO): The process in which a~~n~~ mobile station (MS) migrates from the air-interface provided by one base station (BS) to the air-interface provided by another base station (BS).

3.78 group key encryption key (GKEK): ~~Encrypted by the KEK that is derived from the AK.~~ The GKEK is a random number generated by the BS or an ASA used to encrypt the GTEKs sent in multicast messages by the BS to MSs in the same multicast group.'

3.80 mobile station (MS): A subscriber station (SS) capable of communicating while in motion. A mobile station (MS) is always a subsciber station (SS) unless specifically excepted otherwise in the standard.

3.81 ~~O~~orderly power down procedure: The procedure that the mobile station (MS) performs when powering down as directed by (e.g., user input or prompted by a automatic power down mechanism).

3.82 scanning interval: A time period intended for the mobile station (MS) to monitor neighbor BSs to determine the suitability of the base station (BS)s as targets for handover (HO).

3.83 soft handover (SHO): The process in which a~~n~~ mobile station (MS) migrates from the air-interface provided by one or more base station (BS)s to the air-interface provided by other one or more base station (BS)s. This process is accomplished in the downlink~~DL~~ by having two or more base station (BS)s transmitting the same MAC/PHY protocol data unit (PDU)s to the mobile station (MS) such that diversity combining can be performed by the mobile station (MS). In the uplink~~UL~~ it is accomplished by having two or more base station (BS)s receiving (demodulating, decoding) the same protocol data unit (PDU)s from the mobile station (MS), such that diversity combining of the received protocol data unit (PDU)s can be performed among the base station (BS)s.'

Reason for Recommendation

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

Replace "handoff" with "handover" throughout the text (5 instances)".

In Clause 4, remove the definition for "BBM - break before make"
In Clause 4, remove the definition for "MBB - make before break"

[In 3. Definitions, page 9, line 1, modify identified definitions as:]
'3.5.1 neighbor BS: For any mobile station (MS), a neighbor BS is a base station (BS) (other than the serving BS) whose downlink transmission can be received by the mobile station (MS).

3.5.2 serving BS: For any mobile station (MS), the serving BS is the base station (BS) with which the mobile station (MS) has most recently completed registration at initial network-entry or during a~~n~~ handover (HO).

3.5.3 target BS: The base station (BS) that a~~n~~ mobile station (MS) intends to be registered with at the end of a handover (HO).

3.5.4 active BS: An active BS is informed of the mobile station (MS)~~'~~ capabilities, security parameters, service flows and full MAC context information. For soft handover (SHO), the mobile station (MS) transmits/receives data to/from all active BSs in the active set.'

'3.71 active set: ~~Active set is applicable to SHO and FBSS.~~ The active set contains a list of active BSs to the mobile station (MS). The active set is managed by the mobile station (MS) and base station (BS). The active set is applicable to soft handover (SHO) and fast BS switching (FBSS)'

'3.73 anchor BS: For soft handover (SHO) or fast BS switching (FBSS) supporting mobile station (MS)s, this is a base station (BS) where the mobile station (MS) is registered, synchronized ~~with~~, performs ranging ~~with~~ and monitors the downlink~~DL~~ for control information. For fast BS switching (FBSS) supporting mobile station (MS), this is the serving BS that is designated to transmit/receive data to/from the mobile station (MS) at a given frame.

3.74 FA index: A network specific logical frequency assignment (FA) index assignment. FA index assignment is used in combination with operator specific configuration information provided to the mobile station (MS) in a method outside the scope of this standard.

3.75 fast BS switching (FBSS): base station (BS) switching that utilizes a fast switching mechanism to improve link quality. The mobile station (MS) is only transmitting/receiving data to/from one of the active BS (anchor BS) at any given frame. The anchor BS can change from frame to frame depending on the base station (BS) selection scheme.

3.76 frequency assignment (FA): A frequency assignment (FA) denotes a logical assignment of downlink~~DL~~ center frequency and channel bandwidth programmed to the base station (BS).

3.77 handover (HO): The process in which a~~n~~ mobile station (MS) migrates from the air-interface provided by one base station (BS) to the air-interface provided by another base station (BS).

3.78 group key encryption key (GKEK): ~~Encrypted by the KEK that is derived from the AK.~~ The GKEK is a random number generated by the BS or a network entity (for example, an ASA server) used to encrypt the GTEKs sent in multicast messages by the BS to MSs in the same multicast group.'

3.80 mobile station (MS): A subscriber station (SS) capable of communicating while in motion. A mobile station (MS) is always a subsciber station

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

It is redundant to explicitly spell out all the acronyms; a usual common practice is to spell out the first instance of each acronym.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5020 **Comment submitted by:** Rajesh Bhalla Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 18 **Starting Line #** **Fig/Table#** **Section** 6.3.2.1.2.1.3

Since "preferred DIUC" is not longer reported in BAndwidth request and downlink burst profile change request header, there no need to include DCD change indication.

Suggested Remedy

Remove DCD change indication from Bandwith request and downlink burst profile change request header. Change DCD change indication bit to reserve bit in figure 20b and table 7b. Remove the description on Page 20, line 35

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Change:
6.3.2.1.2.1.3 Bandwidth request and downlink burst profile change request header
Bandwidth request and downlink burst profile change request (BR-DBPCR) PDU shall consist of bandwidth request and DL burst profile change request header alone, and shall not contain a payload. The bandwidth request and downlink burst profile change request header is illustrated in Figure 20b.
to:
6.3.2.1.2.1.3 Bandwidth request and CINR report header
Bandwidth request and CINR report PDU shall consist of bandwidth request and CINR report header alone, and shall not contain a payload (see Figure 20b).

Change:
Figure 20b—Bandwidth request and downlink burst profile change
to:
Figure 20b—Bandwidth request and CINR report

Reason for Recommendation

The definition of DCD change indication for this table has a different meaning from what the commentor is saying. For the definition that is being referred, it is not needed, but for the actual definition, the bit is needed and useful.
The actual definition is that there was a change in state, and this bit is used to report the change in state.

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

Change:
6.3.2.1.2.1.3 Bandwidth request and downlink burst profile change request header
Bandwidth request and downlink burst profile change request (BR-DBPCR) PDU shall consist of bandwidth request and DL burst profile change request header alone, and shall not contain a payload. The bandwidth request and downlink burst profile change request header is illustrated in Figure 20b.
to:
6.3.2.1.2.1.3 Bandwidth request and CINR report header
Bandwidth request and CINR report PDU shall consist of bandwidth

request and CINR report header alone, and shall not contain a payload (see Figure 20b).

Change:
Figure 20b—Bandwidth request and downlink burst profile change
to:
Figure 20b—Bandwidth request and CINR report

Reason for Group's Decision/Resolution

The definition of DCD change indication for this table has a different meaning from what the commentor is saying. For the definition that is being referred, it is not needed, but for the actual definition, the bit is needed and useful.
The actual definition is that there was a change in state, and this bit is used to report the change in state.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5030 **Comment submitted by:** Vladimir Yanover Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 22 **Starting Line #** 14 **Fig/Table#** **Section** 6.3.2.1.2.1.

The current draft defines two mechanisms that can be used for rate adaptation: average CINR reports and preferred-DIUC reports. Both mechanisms are incomplete and lack several important definitions.

Suggested Remedy

Discuss and adopt contribution 802.16e-05/269 ("CINR and Preferred-MCS Reports For OFDMA PHY").

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Adopt contribution 802.16e-05/269r1
Add MCS definition: "Modulation Coding Scheme" to the acronym section

Make the following change to the text:
If the BS instructs CINR reporting on an AAS zone ~~with AMC permutation~~, then the MS shall report the estimate of the CINR on pilot or data subcarriers that belong to slots allocated to it.

Reason for Recommendation

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

Vote: 5-5.

Group's Notes

Contribution 802.16e-05/269r2 was uploaded but we addressed 269r1 in the discussion.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5048 **Comment submitted by:** Rajesh Bhalla Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 27 **Starting Line #** 19 **Fig/Table#** **Section** 6.3.2.1.2..3

Incorrect section numbers

Suggested Remedy

Change section number 6.3.2.1.2.3 to 6.3.2.1.2.2.1;
Change section number 6.3.2.1.2.3.1 to 6.3.2.1.2.2.1.1;

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

[In 6.3.2.1.2.3 Feedback header, page 28, Figure 20i, replace 'EC (1)' with 'EC=1 (1)' in the figure:]
In Figure 20j, Change: HT = 0 (1) to HT = 1(1)
in Figure 20k, change EC (1) to EC = 1(1)
Change section number 6.3.2.1.2.3 to 6.3.2.1.2.2.1;
Change section number 6.3.2.1.2.3.1 to 6.3.2.1.2.2.1.1;

Reason for Recommendation

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

[In 6.3.2.1.2.3 Feedback header, page 28, Figure 20i, replace 'EC (1)' with 'EC=1 (1)' in the figure:]
In Figure 20j, Change: HT = 0 (1) to HT = 1(1)
in Figure 20k, change EC (1) to EC = 1(1)
Change section number 6.3.2.1.2.3 to 6.3.2.1.2.2.1;
Change section number 6.3.2.1.2.3.1 to 6.3.2.1.2.2.1.1;

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5053 **Comment submitted by:** Rajesh Bhalla Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 30 **Starting Line #** 29 **Fig/Table#** **Section** 6.3.2.1.2.3

Feedback type 0011 reports Preferred DIUC index from the MS. However, there is not indication of which DCD the preferred DIUC is associated to.

Suggested Remedy

Add DCD change count to feedback content. Change line 29 to:
" Preferred-DIUC (4 bits) + DCD change count (4 bits) "

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

Add DCD change count to feedback content. Change line 29 to:
" Preferred-DIUC (4 bits) + DCD change count (4 bits) "

Reason for Recommendation

Resolution of Group **Decision of Group:** Accepted

Add DCD change count to feedback content. Change line 29 to:
" Preferred-DIUC (4 bits) + DCD change count (4 bits) "

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5059	Rajesh	Bhalla	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 35 **Starting Line #** 14 **Fig/Table#** **Section** 6.3.2.2.2

The grant mangement subheader is still only two bytes long, why was the description changed?

Suggested Remedy

Change the following text:

" The Grant Management subheader is ~~two~~ ~~three~~ two bytes in length"

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5058.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5150 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 61 **Starting Line #** 33 **Fig/Table#** Tabl **Section** 6.3.2.3.26

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: Again, inappropriate SS to MS changes from the 802.16-2004 documents that would remove necessary specification for 802.16-2004 compliant SS breaking backwards compatibility, thus is out-of-scope of the 16e PAR.

Simple remedy is to change the MS back to SS where appropriate in the Table.

Also, in Action Code 2 actions, correcting improper Action Code response to resume Normal Operation specified. Says '0x00' but should be '02 or 03'.

Suggested Remedy

Accept Contribution C802.16e-05/273r0

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Insert the following editorial instruction (before the text and table):
[Change the title of Table 55 as indicated:]
"Table 55 -- Action codes and actions for an SS"

[Insert the following text before Table 55:]
"The BS and SS shall use the action codes defined in Table 55 if the agreed MAC version value supported on the channel is less than 5 in TLV number 148 (see section 11.1.3)."

Adopt the text in Table 55 from Contribution C802.16e-05/273r1 as a new Table 55a: "Action codes and actions for an MS".
[Insert the following text before Table 55a:]
"The BS and SS shall use the action codes defined in Table 55a if the agreed MAC version value supported on the channel is equal to 5 in TLV number 148 (see section 11.1.3)."

Change 'SS' to 'MS' in the first 5 entries of the new Table 55a.

Reason for Recommendation

Codes 0x0 through 0x4 are legacy and cannot be deleted or changed without undermining backwards compatibility, which would be out-of-scope of the 16e PAR. So no changes are being made to Action Codes 00-04. The adopted resolution of this comment resolves the "conflict" between the Action Codes required for fixed subscribers and mobile subscribers.

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

Insert the following editorial instruction (before the text and table):
[Change the title of Table 55 as indicated:]
"Table 55 -- Action codes and actions for an SS"

[Insert the following text before Table 55:]
"The BS and SS shall use the action codes defined in Table 55 if the agreed MAC version value supported on the channel is less than 5 in TLV number 148 (see section 11.1.3)."

Adopt the text in Table 55 from Contribution C802.16e-05/273r1 as a new Table 55a: "Action codes and actions for an MS".
[Insert the following text before Table 55a:]
"The BS and SS shall use the action codes defined in Table 55a if the agreed MAC version value supported on the channel is equal to 5 in TLV number 148 (see section 11.1.3)."

Change 'SS' to 'MS' in the first 5 entries of the new Table 55a.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5155 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 66 **Starting Line #** 30 **Fig/Table#** Tabl **Section** 6.3.2.3.43.5

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: Changes to all of 6.6.3.2.3.43.5 as they stand to be implemented through this 16e amendment, would make retroactive changes to 802.16-2004 compliant SS without any appropriate mechanism to distinguish SS supporting only the 802.16-2004 original iteration and SS supporting the 802.16-2004 PLUS the amended, non-MS centric, changes of 16e, breaking backwards compatibility, thus is out-of-scope of the 16e PAR. This is a real problem.

Simple remedy is to make the IE change to the Table specific to MS.

Suggested Remedy

Accept Contribution C802.16e-05/275r0

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Accept Contribution C802.16e-05/275r0

The correct table reference should be Table 95, CQICH Control IE. The correct page/line numbers should be page 97, lines 14-16, lines 25-29.

Reason for Recommendation

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

Accept Contribution C802.16e-05/275r0

The correct table reference should be Table 95, CQICH Control IE. The correct page/line numbers should be page 97, lines 14-16, lines 25-29.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5157 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 67 **Starting Line #** 59 **Fig/Table#** **Section** 6.3.2.3.43.6

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: Changes to all of 6.3.2.3.43.6.1&.2&.3 are certainly more properly Corrigenda items. The changes, as they stand to be implemented through this 16e amendment, would make retroactive changes to 802.16-2004 compliant SS without any appropriate mechanism to distinguish SS supporting only the 802.16-2004 original iteration and SS supporting the 802.16-2004 PLUS the amended, non-MS centric, changes of 16e. This is a real problem, breaking backwards compatibility, thus is out-of-scope of the 16e PAR.

I looked at a remedy for this for a long time, and I cannot see a way to make changes to the proposed revisions, keeping the revised features, and maintain backwards compatibility/not disrupt legacy SS function. The answer is certainly to process these as Corrigenda items; not as 16e amendments. Note that some of these changes duplicate, or supersede changes to the Corrigenda D3 document.

Suggested Remedy

[Delete page 67, line 62 through page 72, line 56, including the editorial instructions; and remand material to Corrigenda]

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

Reason for Recommendation

Until such time as corrigenda makes a change, these changes are required for 802.16e. Should corrigenda adopt this, we will remove it from 802.16e.

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

Until such time as corrigenda makes a change, these changes are required for 802.16e. Should corrigenda adopt this, we will remove it from 802.16e.

Group's Notes

Group's Action Items

Monitor corrigenda group to determine the status of this change.

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5160 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 73 **Starting Line #** 27 **Fig/Table#** **Section** 6.3.2.3.43.6.7

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: These changes are a bit more interesting. They relate to the new Map added in 6.3.2.3.43.6.7, so not really Corrigenda related, but, as they stand to be implemented through this 16e amendment, would make retroactive changes to 802.16-2004 compliant SS without any appropriate mechanism to distinguish SS supporting only the 802.16-2004 original iteration and SS supporting the 802.16-2004 PLUS the amended, non-MS centric, changes of 16e. This is a real problem, breaking backwards compatibility, thus is out-of-scope of the 16e PAR.

Remedy would normally be to provide guiding language specifying that BS not use the new Maps when legacy SS are present and use of the Maps would cause the legacy SS to fail to perform. SS not supporting the new, optional Maps would simply ignore the new map types, not intended for them anyway, and it would remove implied retroactive specification.

Suggested Remedy

[In 6.3.2.3.43.6.7 MIMO Compact_DL-MAP IE format, page 74, line 5, add new paragraph before Table 101b as:]
'BS shall not configure and transmit MIMO Compact DL-MAP IE or SDMA Compact DL-MAP IE such that SS currently attached to the BS but not supporting this feature would fail to properly read the message and thereby fail to perform.'

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

[In 6.3.2.3.43.6.7 MIMO Compact_DL-MAP IE format, page 74, line 5, add new paragraph before Table 101b as:]
'BS shall not configure and transmit MIMO Compact DL-MAP IE or SDMA Compact DL-MAP IE such that SS currently attached to the BS but not supporting this feature would fail to properly read the message and thereby fail to perform.'

Reason for Recommendation

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

This is an optional feature and it is unreasonable to expect the SS to be able to decode a message for an option which it is not capable of supporting. However, the MIMO definition in the standard allows a SISO user to be supported in its definition. The same can be said of SDMA. Units incapable of supporting a feature would always "fail to perform".

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5168 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 82 **Starting Line #** 47 **Fig/Table#** **Section** 6.3.2.3.43.7

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: Same problem as in 6.3.2.3.43.6. Changes to all of 6.3.2.3.43.7.1&.2&.3 are certainly more properly Corrigenda items. The changes, as they stand to be implemented through this 16e amendment, would make retroactive changes to 802.16-2004 compliant SS without any appropriate mechanism to distinguish SS supporting only the 802.16-2004 original iteration and SS supporting the 802.16-2004 PLUS the amended, non-MS centric, changes of 16e. This is a real problem, breaking backwards compatibility, thus is out-of-scope of the 16e PAR.

I looked at a remedy for this for a long time, and I cannot see a way to make changes to the proposed revisions, keeping the revised features, and maintain backwards compatibility/not disrupt legacy SS function. The answer is certainly to process these as Corrigenda items; not as 16e amendments. Note that some of these changes duplicate, or supersede changes to the Corrigenda D3 document.

Suggested Remedy

[Delete page 82, line 50 through page 86, line 55, including the editorial instructions; and remand material to Corrigenda]

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

Reason for Recommendation

Until such time as corrigenda makes a change, these changes are required for 802.16e. Should corrigenda adopt this, we will remove it from 802.16e.

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

Until such time as corrigenda makes a change, these changes are required for 802.16e. Should corrigenda adopt this, we will remove it from 802.16e.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5169 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 87 **Starting Line #** 38 **Fig/Table#** **Section** 6.3.2.3.43.7.8

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: These changes are a bit more interesting. They relate to the new Map added in 6.3.2.3.43.7.8, so not really Corrigenda related, but, as they stand to be implemented through this 16e amendment, would make retroactive changes to 802.16-2004 compliant SS without any appropriate mechanism to distinguish SS supporting only the 802.16-2004 original iteration and SS supporting the 802.16-2004 PLUS the amended, non-MS centric, changes of 16e. This is a real problem, breaking backwards compatibility, thus is out-of-scope of the 16e PAR.

Remedy would normally be to provide guiding language specifying that BS not use the new Maps when legacy SS are present and use of the Maps would cause the legacy SS to fail to perform. SS not supporting the new, optional Maps would simply ignore the new map types, not intended for them anyway, and it would remove implied retroactive specification.

Suggested Remedy

[In 6.3.2.3.43.7.8 MIMO Compact UL MAP IE format, page 88, line 2, add new paragraph before Table 108a as:]
'BS shall not configure and transmit MIMO Compact UL-MAP IE or SDMA Compact UL-MAP IE such that SS currently attached to the BS but not supporting this feature would fail to properly read the message and thereby fail to perform.'

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

This is an optional feature and it is unreasonable to expect the SS to be able to decode a message for an option which it is not capable of supporting. However, the MIMO definition in the standard allows a SISO user to be supported in its definition. The same can be said of SDMA.

Units incapable of supporting a feature would always "fail to perform".

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5178 **Comment submitted by:** Victor Stolpman Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 93 **Starting Line #** 61 **Fig/Table#** **Section** 6.3.2.3.45

SLPID should be optional and conditionaly present, if FMT bit =0. As MOB_PAG-ADV provides option for two formats: 1) with SLPID , 2) with Short CID. If a system chose not to implement SLPID, it would unnecessarily required to fill out SLPID.

Suggested Remedy

Replace SLPID in with
FMT 1 bit
If FMT=0 {
SLPID
Reserved}.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5176

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5184 **Comment submitted by:** Victor Stolpman Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 97 **Starting Line #** 14 **Fig/Table#** **Section** 6.3.2.3.46

The table is not in harmony with the fields explained after the table. It is only defined for FMT=0 case.

Suggested Remedy

Need to introduce FMT field after line 13. Need to correct the structure in the table: If FMT=0 {SLPID CID}.Group Indication bitmap; Traffic Indication bitmap} else FMT=1 {Num-pos; Short Basic

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5176.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 Ballot Number: 0001045 Comment Date

Comment # 5186 Comment submitted by: Phillip Barber Member 2005/06/08

Comment Type Technical, Binding Starting Page # 98 Starting Line # 47 Fig/Table# Section 6.3.2.3.47

I object to the resolution of comment 4094, and its predecessor 2095.

Resolution of comment 2095 removed reference and mechanics of the 'Neighbor Preference' from the Neighbor Advertisement (NBR-ADV) message. This feature had previously been added after substantial harmonization activity on NBR-ADV and reflected a perceived need by the group for BS broadcasting the NBR-ADV message to give a subjective/bias indication to MS receiving the message as to which Neighbor BS the Serving BS would prefer MS target for initial network entry as well as handover.

The reason that this mechanic was removed through the resolution of 2095 was because of a perceived lack of defined/structured mechanics for objective differentiation of the various selection responses. Specifically, how does a given BS know whether to declare one neighbor BS a 'Preferred BS' and another neighbor BS a 'Normal BS'. While I agree that no objective mechanics were defined, that rational for removal is flawed. It was always intended that selection of 'type' of Neighbor Preference would be entirely subjective; that this was a hook for different vendors to apply differing criteria in determining individual Neighbor Preference. For some networks, it might be based on some CINR threshold; on others it might be based on sector granularity for differently configured cells; for others it might be differentiating between pico, micro, and macro cells. The point is that it was entirely subjective, and there was nothing wrong with that. It would not interfere with interoperable performance to have this feature subjectively assigned, and inclusion provides a simple mechanism for networks to direct entering or re-entering MS toward neighbor BS that would in some way benefit the network; though the activity is not enforced through this mechanism.

Finally, through use of the new 'Skip-Optional-Fields bitmap' implementors of the standard need not use this feature, nor suffer the 1 byte transmission penalty, should they elect not to use this optional feature.

Comment 4094 asked that the feature be reinstated in the modified remedy to alleviate the previous concerns. The Groups reason for rejection was flawed. The Group rejected for:

'Vote: 8-4
For handoff, this capability already exists since target BS list is sorted by preference. This capability provides no real benefit for initial entry as the MS would not yet have a serving BS.'

MS lack of having a Serving BS is irrelevant. MS entering the network can, and certainly should synchronize to the first channel and BS that it detects, then listen for the NBR-ADV message in order to obtain information about the network and other channels & Neighbor BS available while avoiding lengthy scanning of all available channels, and, even worse, unecessary air interface overhead as the MS performs network entry into a less desireable BS. This would all be done before the MS enters the network; before the MS has a Serving BS.

The most valuable use for the excised feature, and the rationale for its reinstatement, is that:

1) it permits the BS, and thereby the network to subjectively direct or prioritize Neighbor BS for MS that have received a NBR-ADV broadcast message but have yet to join the network. This is extremely useful in that an MS need not actually enter the network, with appropriate delay and unecessary non-productive air interface overhead, in order to get a list of prioritized Neighbor BS for the network. The MS need only decode a NBR-ADV broadcast message on the first channel and BS it detects, thereby acquiring the channels, operating characteristics, and network prioritization for all Neighbor BS to the sampled BS. Note that this would allow the MS to then conduct a much more efficiently focused and less protracted scanning and ranging of Neighbor BS to perform network entry, tailoring the choices to the network preferences.

2) can be of similar benefit as in 1), but for MS that have actually entered the network, but have yet to scan Neighbor BS to create data to prioritize targets for an immediate HO. In a high mobility environment this can be immensely helpful. Note that this also allows the MS to rely, to a degree, on the regularly scheduled NBR-ADV broadcast message instead of creating specific unicast HO messaging, which may be unecessary air interface

overhead to the MS current needs.

Essentially, the feature is very useful in focusing both MS conducting initial entry and HO, in instances when they have yet to conduct scanning and ranging to Neighbor BS, to focus their activity on BS subjectively preferred by the sampled BS. It can eliminate unproductive scanning, ranging, and HO messaging overhead at times when inadequate information is available.

Again, reinstatement of this excised feature, do the mechanics involved, would not increase overhead for anyone not using this optional feature while providing those who choose to use it an opportunity to reduce air interface overhead and network entry latency.

Suggested Remedy

[In 6.3.2.3.47 Neighbor Advertisement (MOB_NBR-ADV) message, Table 108f, page 101, line 16, modify table by insert before '}':]
'*reserved* | 6 bits | Shall be set to zero
Neighbor Preference | 2 bits | 00 Normal
01 Preferred
10 Non-Preferred
11 Reserved'

*[In 6.3.2.3.47 Neighbor Advertisement (MOB_NBR-ADV) message, page 103, line 18, modify by Insert before '**DCD Configuration Change Count**':]*
' **Neighbor Preference**
The Neighbor Preference field is present only if bit #3 of Skip-Optional-Fields bitmap is '0'. It defines an implementation specific, subjective preference for MS network entry and handover to neighbor BS, as determined by the serving BS (see section 6.3.21.1.1.1)'

[Add new sub-section to 6.3.21.1.1, page 170, line 35; Insert new section 6.3.21.1.1.1:]
' **6.3.21.1.1.1 Neighbor preference**
The message element "Neighbor Preference" in MOB_NBR-ADV MAC Management message defines a subjective assignment of handover priorities or preferences as determined and set by the serving base station. The serving BS may consider factors including, but not limited to, neighbor BS CINR service threshold, configuration including sectorization and service granularity support, coverage footprint, current loading, and QoS support in deciding to report a BS as a handover candidate, according to the rules specified by a handover policy management entity out-of-scope of this standard. Neighbor Preference is a mechanism to permit a serving BS to influence MS decisions for network entry and handover. MS may use information obtained through Neighbor Preference to prejudice a decision on which BS to conduct initial network entry, or to construct and prioritize BS in a MOB_MSHO-REQ message.'

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

Reason for Recommendation

Selection of 'type' of Neighbor Preference is entirely subjective and vendor-dependent.
The commenter says: "for some networks, it might be based on some CINR threshold; on others it might be based on sector granularity for differently configured cells etc.".

It is not correct:
it will be based on different criteria for BSs from different vendors within sane network . Moreover, criteria applied by each single BS will remain UNKNOWN to other BSs assuming they are from another vendor[s]. This effectively precludes from having any sort of intelligent group behavior in the network.

the network.

If this feature is necessary, serving BS may include the BS (preferred BS in this comment) in MOB_BSHO-RSP as recommended target BS.

Resolution of Group **Decision of Group:** **Rejected**

Reason for Group's Decision/Resolution

Selection of 'type' of Neighbor Preference is entirely subjective and vendor-dependent.
The commenter says: "for some networks, it might be based on some CINR threshold; on others it might be based on sector granularity for differently configured cells etc.".

If this feature is necessary, serving BS may include the BS (preferred BS in this comment) in MOB_BSHO-RSP as recommended target BS.

The criteria for the list is subjective, and the decision of the mobile is also subjective, and there is no clear definition of what the mobile is supposed to do with it and no clear benefit for this capability.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5193 **Comment submitted by:** Rajesh Bhalla Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 106 **Starting Line #** **Fig/Table#** **Section** 6.3.2.3.49

Comment #4102 was approved in session #37. MOB-SCAN_RSP message was changed according to contribution C802.16e-05/221r1. But the change is not reflected in D8.

Suggested Remedy

Change MOB_SCAN-RSP message according to contribution C802.16e-05/221r

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5611.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5221 **Comment submitted by:** Phillip Barber Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 152 **Starting Line #** 17 **Fig/Table#** **Section** 6.3.13

I object to the resolution of comment 4001.

The Group rejected the comment for:
'Vote: 3-5
Reason: This contribution addresses a larger problem than the original scope.'

This reason for rejection is entirely arbitrary and imprecise and demonstrates a lack of proper review and deliberation. The Group was unable to approve a single one of the 19 individually proposed remedies? All 19 were perceived as exceeding the original mandate for the work? Remember that many of these proposed remedies just said change an instance of 'MS' back to 'SS'; hardly outside the scope of the mandate. Regardless of the reason for the work, each of the 19 remedies were reviewed on their merit? Some of the identified problems were of instances of elements of the 16e DRAFT that are out-of-scope of the 16e PAR and must be remedied to bring the DRAFT back into alignment with its PAR. Regardless of mandate, these issues cannot be just shunted aside without due consideration.

Frankly, the unprofessional disposition of this matter should be a source of embarassment to the membership.

Problem: Changing out the text here to expand the Multicast feature to include MBS has resulted in a couple of troubling consequences: 1) the language is now MS specific; reference to support SS has been inappropriately removed, breaking backwards compatibility, thus is out-of-scope of the 16e PAR, and 2) it conflicts with changes made to this section in Corrigenda D3. Note that there is a conflict between Table 345 in 16e/D8 and Corrigenda D3.

Remedy is to re-write the subsections to re-instate previous support for Multicast function for legacy SS while preserving the new MBS features and revisions. Also, re-writing allows us to bring the section into allignment with Corrigenda D3.

When reviewing the proposed remedy it is important to remember that an MS is always also an SS unless specifically excepted otherwise.

Suggested Remedy

[In 6.3.13 Multicast and broadcast services (MBS), page 152, lines 37-55, replace as:]

'**6.3.13 Multicast and broadcast services (MBS)**

Some globally defined service flows may carry broadcast or multicast information that should be delivered to a plurality of SS or MS. Such service flows have certain QoS parameters and may require encryption performed using a globally defined sequence of TEKs. Since a multicast or broadcast transport connection is associated with a service flow, it is associated with the QoS and traffic parameters for that service flow. Some MS are registered to certain BS while some are in Idle mode and not currently served by any specific BS.

Two types of access to multicast and broadcast services (MBS) may be supported: single-BS access and multi-BS access. Single-BS access is implemented over multicast and broadcast transport connections within one BS, while multi-BS access is implemented by transmitting data from Service Flow(s) over multiple BS. Single-BS access is optional for SS. Multi-BS access is optional for MS. ARQ is not applicable to either single-BS-MBS or multi-BS-MBS. Initiation of MBS with respect to specific SS is always performed in registered state by creation of multicast connection carrying MBS data. During such initiation the SS learns the Service Flow ID that identifies the service. For multi-BS-MBS, each BS capable of providing MBS belongs to a certain MBS Zone, which is a set of BSs where the same CID and same SA is used for transmitting content of certain Service Flow(s). MBS Zone is identified by a unique MBS_ZONE identifier.'

[In 6.3.13.1 Single-BS Access, page 152, line 60 through page 153, line 6, replace as:]

'The BS may provide to SS single-BS access by creating a multicast traffic connection with each SS to be associated with the service, or a broadcast transport connection. Any available traffic CID value may be used for the single-BS-MBS service. The CID used for the service is the same for all SS on the same channel that participate in the connection. The data transmitted on the connection with the given CID shall be received and processed by the MAC of each involved SS. Thus each multicast MAC SDU is transmitted only once per BS channel.

If a downlink multicast connection is to be encrypted, each SS participating in the connection shall have an additional security association (SA), allowing that connection to be encrypted using certain keys that are independent of those used for other encrypted transmissions between the SS and BS.'

Proposed Resolution Recommendation: Accepted-Modified Recommendation by

"In 6.3.13 Multicast and broadcast services (MBS), page 152, lines 37-55, replace as:]

'6.3.13 Multicast and broadcast services (MBS)

Some globally defined service flows may carry broadcast or multicast information that should be delivered to a plurality of SS or MS. Such service flows have certain QoS parameters and may require encryption performed using a globally defined sequence of TEKs. Since a multicast or broadcast transport connection is associated with a service flow, it is associated with the QoS and traffic parameters for that service flow. Some MS are registered to certain BS while some are in Idle mode and not currently served by any specific BS.

Two types of access to multicast and broadcast services (MBS) may be supported: single-BS access and multi-BS access. Single-BS access is implemented over multicast and broadcast transport connections within one BS, while multi-BS access is implemented by transmitting data from Service Flow(s) over multiple BS. Single-BS access and Multi-BS access ~~is~~ are optional for SS. Multi-BS access is optional for MS. ARQ is not applicable to either single-BS-MBS or multi-BS-MBS. Initiation of MBS with respect to specific SS or MS is always performed in registered state by creation of multicast connection carrying MBS data. During such initiation the SS or MS learns the Service Flow ID that identifies the service. For multi-BS-MBS, each BS capable of providing MBS belongs to a certain MBS Zone, which is a set of BSs where the same CID and same SA is used for transmitting content of certain Service Flow(s). MBS Zone is identified by a unique MBS_ZONE identifier.'

[In 6.3.13.1 Single-BS Access, page 152, line 60 through page 153, line 6, replace as:]

'The BS may provide to SS single-BS access by creating a multicast traffic connection with each SS to be associated with the service, or a broadcast transport connection. Any available traffic CID value may be used for the single-BS-MBS service. The CID used for the service is the same for all SS on the same channel that participate in the connection. The data transmitted on the connection with the given CID shall be received and processed by the MAC of each involved SS. Thus each multicast MAC SDU is transmitted only once per BS channel.

If a downlink multicast connection is to be encrypted, each SS participating in the connection shall have an additional security association (SA), allowing that connection to be encrypted using certain keys that are independent of those used for other encrypted transmissions between the SS and BS.'"

Reason for Recommendation

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

“In 6.3.13 Multicast and broadcast services (MBS), page 152, lines 37-55, replace as:]

'6.3.13 Multicast and broadcast services (MBS)

Some globally defined service flows may carry broadcast or multicast information that should be delivered to a plurality of SS or MS. Such service flows have certain QoS parameters and may require encryption performed using a globally defined sequence of TEKs. Since a multicast or broadcast transport connection is associated with a service flow, it is associated with the QoS and traffic parameters for that service flow. Some MS are registered to certain BS while some are in Idle mode and not currently served by any specific BS.

Two types of access to multicast and broadcast services (MBS) may be supported: single-BS access and multi-BS access. Single-BS access is implemented over multicast and broadcast transport connections within one BS, while multi-BS access is implemented by transmitting data from Service Flow(s) over multiple BS. Single-BS access and Multi-BS access ~~is~~ are optional for SS. Multi-BS access is optional for MS. ARQ is not applicable to either single-BS-MBS or multi-BS-MBS. Initiation of MBS with respect to specific SS or MS is always performed in registered state by creation of multicast connection carrying MBS data. During such initiation the SS or MS learns the Service Flow ID that identifies the service. For multi-BS-MBS, each BS capable of providing MBS belongs to a certain MBS Zone, which is a set of BSs where the same CID and same SA is used for transmitting content of certain Service Flow(s). MBS Zone is identified by a unique MBS_ZONE identifier.'

[In 6.3.13.1 Single-BS Access, page 152, line 60 through page 153, line 6, replace as:]

'The BS may provide to SS single-BS access by creating a multicast traffic connection with each SS to be associated with the service, or a broadcast transport connection. Any available traffic CID value may be used for the single-BS-MBS service. The CID used for the service is the same for all SS on the same channel that participate in the connection. The data transmitted on the connection with the given CID shall be received and processed by the MAC of each involved SS. Thus each multicast MAC SDU is transmitted only once per BS channel.

If a downlink multicast connection is to be encrypted, each SS participating in the connection shall have an additional security association (SA), allowing that connection to be encrypted using certain keys that are independent of those used for other encrypted transmissions between the SS and BS.'”

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 Ballot Number: 0001045 Comment Date

Comment # 5226 Comment submitted by: Phillip Barber Member 2005/06/08

Comment Type Technical, Binding Starting Page # 158 Starting Line # 34 Fig/Table# Section 6.3.17

I object to the resolution of comment 4424 & 4001.

While the resolution of 4424 repairs some of the problems with changes proposed in 6.3.17, it does not adequately repair the underlying problem that the proposed changes to 6.3.17 in the 16e/D8 DRAFT break backwards compatibility with the 802.16-2004 baseline document and are thus out-of-scope of the 16e PAR. More specifically, 6.3.17 in the 802.16-2004 document specifies the mechanics for a HARQ mechanism that is Incremental Redundancy (IR) and per-terminal. There is certainly nothing wrong with adding a new Chase Combining HARQ method. Even better, making it per-connection instead of per-terminal. However, legacy SS are going to be expecting their enabled HARQ to be IR and per-terminal. The current language revisions in 16e/D8 inappropriately change the base document as to make D8 not backwards compatible; would require legacy SS to retroactively support per-connection and Chase Combining HARQ.

Also, changing out the text here to expand the feature to include MBS has resulted in a couple of troubling consequences: 1) the language is now MS specific in places; 2) reference to support 802.16-2004 SS has been inappropriately obscured, breaking backwards compatibility with the 802.16-2004 baseline document, thus out-of-scope of the 16e PAR.

Fortunately, some editorial revision to the section can remedy this problem and bring the section back into conformance with the 16e PAR, while preserving the new features and mechanics.

When reviewing the proposed remedy it is important to remember that an MS is always also an SS unless specifically excepted otherwise.

Suggested Remedy

[In 6.3.17 MAC support for H-ARQ, page 158, lines 34-42, modify as:]

'Hybrid automatic repeat request (~~H-ARQ~~HARQ) scheme is an optional part of the MAC ~~and can be enabled on a per terminal basis~~. H-ARQ may be supported only for the OFDMA PHY. ~~As a MS capability, T~~~~he per terminal H-ARQ~~HARQ and associated parameters shall be specified and negotiated using SBC-REQ/RSP messages during initialization procedure. ~~The utilization of HARQ is on a per connection basis, that is, it can be enabled on a per CID basis by using the DSA/DSC messsages.~~ Two implementations of HARQ are supported: 1) per-terminal, that is, HARQ is enabled for all active CIDs for a terminal, and 2) per-connection, that is, it can be enabled on a per CID basis by using the DSA/DSC messsages. The two implementation methods shall not be employed simultaneously on any terminal. SS may support per-terminal implementation. MS may support per-terminal implementation or per-connection implementation. A burst cannot have a mixture of ~~H-ARQ~~HARQ and non-~~H-ARQ~~HARQ traffic.'

[In 6.3.17 MAC support for H-ARQ, page 159, lines 13-25, modify as:]

'Two main variants of HARQ are supported, Chase Combining or Incremental Redundancy (IR). SS may support IR. MS may support Chase Combining or IR. For IR, the PHY layer will encode the HARQ packet generating several versions of encoded subpackets. Each subpacket shall be uniquely identified using a subpacket identifier (SPID). For Chase Combining, the PHY layer shall encode the HARQ packet generating only one version of the encoded packet. As a result, no SPID is required for Chase Combining.

For downlink HARQ operation, the BS will send a version of the encoded HARQ packet. The ~~MS~~ SS will attempt to decode the encoded packet on this first HARQ attempt. If the decoding succeeds, the ~~MS~~ SS will send an ACK to the BS. If the decoding fails, the ~~MS~~ SS will send a NAK to the BS. In response, the BS will send another HARQ attempt. The BS may continue to send HARQ attempts until the ~~MS~~ SS successfully decodes the packet and sends an acknowledgement.'

[In 6.3.17 MAC support for H-ARQ, page 159, lines 45-53, modify as:]

'The ~~H-ARQ~~HARQ scheme is basically a stop-and-wait protocol where the retransmissions are only sent after receiving a NACK signal for the previous transmission or the ACK has not been received within the duration defined by "HARQ ACK Delay for UL burst" for UL HARQ or in "HARQ ACK delay for DL burst" for DL HARQ. The ACK is sent by the ~~M~~SS after a fixed delay (synchronous ACK) defined by ~~H-ARQ~~HARQ DL ACK delay offset which is specified in DCD message. Timing of retransmission is, however, flexible and corresponds to the asynchronous part of the ~~H-ARQ~~HARQ. The ACK/NAK is sent by the BS using the ~~H-ARQ~~HARQQ Bitmap IE, and sent by a ~~M~~SS using the fast feedback UL subchannel.'

Proposed Resolution **Recommendation:** **Accepted-Modified** **Recommendation by**

[In 6.3.17 MAC support for H-ARQ, page 158, lines 34-42, modify as:]
'Hybrid automatic repeat request (~~H-ARQ~~HARQ) scheme is an optional part of the MAC ~~and can be enabled on a per terminal basis~~. H-ARQ may be supported only for the OFDMA PHY. ~~As a MS capability, The per terminal~~ ~~H-ARQ~~HARQ and associated parameters shall be specified and negotiated using SBC-REQ/RSP messages during initialization procedure. The utilization of HARQ is on a per-connection basis, that is, it can be enabled on a per CID basis by using the DSA messsages. A burst cannot have a mixture of ~~H-ARQ~~HARQ and non-~~H-ARQ~~HARQ traffic.'

[In 6.3.17 MAC support for H-ARQ, page 159, lines 13-25, modify as:]
'Two main variants of HARQ are supported, Chase Combining or Incremental Redundancy (IR). SS may support IR. MS may support either Chase Combining or IR. For IR, the PHY layer will encode the HARQ packet generating several versions of encoded subpackets. Each subpacket shall be uniquely identified using a subpacket identifier (SPID). For Chase Combining, the PHY layer shall encode the HARQ packet generating only one version of the encoded packet. As a result, no SPID is required for Chase Combining.

For downlink HARQ operation, the BS will send a version of the encoded HARQ packet. The ~~MS~~ SS will attempt to decode the encoded packet on this first HARQ attempt. If the decoding succeeds, the ~~MS~~ SS will send an ACK to the BS. If the decoding fails, the ~~MS~~ SS will send a NAK to the BS. In response, the BS will send another HARQ attempt. The BS may continue to send HARQ attempts until the ~~MS~~ SS successfully decodes the packet and sends an acknowledgement.'

[In 6.3.17 MAC support for H-ARQ, page 159, lines 45-53, modify as:]
'The ~~H-ARQ~~HARQ scheme is basically a stop-and-wait protocol where the retransmissions are only sent after receiving a NACK signal for the previous transmission or the ACK has not been received within the duration defined by "HARQ ACK Delay for UL burst" for UL HARQ or in "HARQ ACK delay for DL burst" for DL HARQ. The ACK is sent by the ~~M~~SS after a fixed delay (synchronous ACK) defined by ~~H-ARQ~~HARQ DL ACK delay offset which is specified in DCD message. Timing of retransmission is, however, flexible and corresponds to the asynchronous part of the ~~H-ARQ~~HARQ. The ACK/NAK is sent by the BS using the ~~H-ARQ~~HARQQ Bitmap IE, and sent by a ~~M~~SS using the fast feedback UL subchannel.'

Reason for Recommendation

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

[In 6.3.17 MAC support for H-ARQ, page 158, lines 34-42, modify as:]
'Hybrid automatic repeat request (~~H-ARQ~~HARQ) scheme is an optional part of the MAC ~~and can be enabled on a per terminal basis~~. H-ARQ may be supported only for the OFDMA PHY. ~~As a MS capability, The per terminal~~ ~~H-ARQ~~HARQ and associated parameters shall be specified and negotiated using SBC-REQ/RSP messages during initialization procedure. The utilization of HARQ is on a per-connection basis, that is, it can be enabled on a per CID basis by using the DSA messsages. A burst cannot have a mixture of ~~H-ARQ~~HARQ and non-~~H-ARQ~~HARQ traffic.'

[In 6.3.17 MAC support for H-ARQ, page 159, lines 13-25, modify as:]
'Two main variants of HARQ are supported, Chase Combining or Incremental Redundancy (IR). SS may support IR. MS may support either Chase Combining or IR. For IR, the PHY layer will encode the HARQ packet generating several versions of encoded subpackets. Each subpacket

shall be uniquely identified using a subpacket identifier (SPID). For Chase Combining, the PHY layer shall encode the HARQ packet generating only one version of the encoded packet. As a result, no SPID is required for Chase Combining.

For downlink HARQ operation, the BS will send a version of the encoded HARQ packet. The ~~MS~~ SS will attempt to decode the encoded packet on this first HARQ attempt. If the decoding succeeds, the ~~MS~~ SS will send an ACK to the BS. If the decoding fails, the ~~MS~~ SS will send a NAK to the BS. In response, the BS will send another HARQ attempt. The BS may continue to send HARQ attempts until the ~~MS~~ SS successfully decodes the packet and sends an acknowledgement.'

[In 6.3.17 MAC support for H-ARQ, page 159, lines 45-53, modify as:]
'The ~~H-ARQ~~HARQ scheme is basically a stop-and-wait protocol where the retransmissions are only sent after receiving a NACK signal for the previous transmission or the ACK has not been received within the duration defined by "HARQ ACK Delay for UL burst" for UL HARQ or in "HARQ ACK delay for DL burst" for DL HARQ. The ACK is sent by the ~~M~~SS after a fixed delay (synchronous ACK) defined by ~~H-ARQ~~HARQ DL ACK delay offset which is specified in DCD message. Timing of retransmission is, however, flexible and corresponds to the asynchronous part of the ~~H-ARQ~~HARQ. The ACK/NAK is sent by the BS using the ~~H-ARQ~~HARQQ Bitmap IE, and sent by a ~~M~~SS using the fast feedback UL subchannel.'

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5269 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 181 **Starting Line #** vario **Fig/Table#** **Section** 6.3.21.2.8

Another missing command, HO-RSP. This also occurs in Annex C and possibly other places

Suggested Remedy

Change "MSS HO-RSP pending" to "MOB_BSHO-RSP" in this figure as well as in Figures 130d line 50 and in Figure 130e lines 3, 22, and 39.

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Change instance of 'HO-RSP' to 'MOB_BSHO-RSP' in figures in this section

Reason for Recommendation

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

Change "MSS HO-RSP pending" to "MOB_BSHO-RSP" in this figure as well as in Figures 130d line 50 and in Figure 130e lines 3, 22, and 39.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Could not find "MSS HO-RSP" in Figure 130e line 22; others are done.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5284 **Comment submitted by:** Rajesh Bhalla Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 190 **Starting Line #** **Fig/Table#** **Section** 6.3.21.3.5

6.3.21.3.5.2 DL transmission operation for regular HO not SHO or FBSS. It should be included with rest of HO sections.

Suggested Remedy

Move section 6.3.21.3.5.2, and insert it as a new section in 6.3.21.2 as section 6.3.21.2.8, move the current section 6.3.21.2.8 to 6.3.21.2.9.

Change section 6.3.21.3.5.1 as section 6.3.21.2.5

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

Move section 6.3.21.3.5.2, and insert it as a new section in 6.3.21.2 as section 6.3.21.2.8, move the current section 6.3.21.2.8 to 6.3.21.2.9.

Change section 6.3.21.3.5.1 as section 6.3.21.2.5

Reason for Recommendation

Resolution of Group **Decision of Group:** Accepted

Move section 6.3.21.3.5.2, and insert it as a new section in 6.3.21.2 as section 6.3.21.2.8, move the current section 6.3.21.2.8 to 6.3.21.2.9.

Change section 6.3.21.3.5.1 as section 6.3.21.2.5

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

I assume "Change section 6.3.21.3.5.1 as section 6.3.21.2.5" was supposed to be "Change section 6.3.21.3.5.1 as section 6.3.21.3.5" and acted accordingly. If I'm wrong, it's because I'm too tired to know any better.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5307 **Comment submitted by:** Tal Kaitz Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 200 **Starting Line #** **Fig/Table#** **Section** 6.3.23

The current draft defines two mechanisms that can be used for rate adaptation:
- average CINR reports
- preferred-DIUC reports.

Both mechanisms are not well defined, and lack several important definitions.

Suggested Remedy

Discuss and adopt contribution 802.16e-05/269 ("CINR and Preferred-MCS Reports For OFDMA PHY").

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5030.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5344 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 216 **Starting Line #** 3 **Fig/Table#** **Section** 7.2.2.4.1

Table 133 is missing the headers from the part that continues onto the next page.

Suggested Remedy

Make the headers appear on the second part of the table and add "(continued)" to the title on the second page (there is an auto-magic field in Framemaker for this.) Fix this here and all other locations in the draft. Almost all of the tables now have a consistent format, nevertheless, check all of the tables to make sure that the formatting is consistent throughout the draft.

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

Format Table 133 appropriately

Reason for Recommendation

Resolution of Group **Decision of Group:** Accepted

Format Table 133 appropriately

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes **Editor's Actions** e) editor disagrees

This is not a technical comment; this is editorial. The tight schedule for this re-circ does not permit me the luxury of tweaking cosmetic changes to tables. The IEEE-SA Standards Board Operations Manual section 5.4.3.2 (Resolution of comments, objections, and negative votes) reads: "It should be borne in mind that documents are professionally edited prior to publication."

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 Ballot Number: 0001045 Comment Date

Comment # 5401 Comment submitted by: Vladimir Yanover Member 2005/06/08

Comment Type Technical, Binding Starting Page # 258 Starting Line # 62 Fig/Table# Section

Suggested Remedy

Change
For each SS, the maximum number of bursts transmitted concurrently and directed to the SS is limited by the vaue specified in Max_Num_Bursts TLV ~~to 16~~ (including all bursts without CID or with CIDs matching the SS's CIDs). Bursts transmitted concurrently are bursts that share the same OFDMA symbol. Before the MS completed capability exchange BS shall transmit data to the MS at the first data burst specified in the DL-MAP

Add new section

11.7.8.15 Maximum number of bursts transmitted concurrently to the MS

Name	Type	Length	Value
Max_Num_Bursts	??	1	Maximum number of bursts transmitted concurrently to the MS. Includes all bursts without CID or with CIDs matching the SS's CIDs

Proposed Resolution **Recommendation: Accepted-Modified** **Recommendation by**

Replace:

"For each SS, the maximum number of bursts transmitted concurrently and directed to the SS is limited to 16 (including all bursts without CID or with CIDs matching the SS's CIDs). Bursts transmitted concurrently are bursts that share the same OFDMA symbol." (...)

Wtih:

"For each MS, the maximum number of bursts transmitted concurrently and directed to the MS is limited by the vaue specified in Max_Num_Bursts TLV (including all bursts without CID or with CIDs matching the MS's CIDs). Bursts transmitted concurrently are bursts that share the same OFDMA symbol. Before the MS completed capability exchange BS shall transmit data to the MS in the first concurrent data burst per symobol."

Add new section:

11.7.8.15 Maximum number of bursts transmitted concurrently to the MS

Name	Type	Length	Value
Max_Num_Bursts	??	1	valid values : 1-16 Maximum number of bursts transmitted concurrently to the MS. Includes all bursts without CID or with CIDs matching the MS's CIDs

[assign type value to appropriate value]

[assign type value to appropriate value]

Reason for Recommendation

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

Replace:

"For each SS, the maximum number of bursts transmitted concurrently and directed to the SS is limited to 16 (including all bursts without CID or with CIDs matching the SS's CIDs). Bursts transmitted concurrently are bursts that share the same OFDMA symbol." (...)

Wtih:

"For each MS, the maximum number of bursts transmitted concurrently and directed to the MS is limited by the vaue specified in Max_Num_Bursts TLV (including all bursts without CID or with CIDs matching the MS's CIDs). Bursts transmitted concurrently are bursts that share the same OFDMA symbol. Before the MS completed capability exchange BS shall transmit data to the MS in the first concurrent data burst per symobol."

Add new section:

11.7.8.15 Maximum number of bursts transmitted concurrently to the MS

Name	Type	Length	Value
Max_Num_Bursts	??	1	valid values : 1-16 Maximum number of bursts transmitted concurrently to the MS. Includes all bursts without CID or with CIDs matching the MS's CIDs

[assign type value to appropriate value]

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Changed type in 11.7.8.9 from 18 to 19 (since we have type 18 in the corrigendum), also remove tracking marks since this is a new section.
In 11.7.8.10 added types 20,21 since those were missing
For some reasone, we have type 51 in section 11.7.8.11, but I did not touch it.
in 11.7.8.12, changed type from 18 to 22 (we already have type 18)
In 11.7.8.13 we have also types 160/161, did not touch them
In the new added section (11.7.8.14), assigned type 23.
But then I looked ahead... There is a huge mess in type numbering that should be fixed, probably a comment will be a good idea.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5480 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 327 **Starting Line #** 1 **Fig/Table#** **Section** 8.4.5.4.10.4

Table 298d is missing "(continued)" in the title on the second page and the table format (double-ruled lines) doesn't match the other tables.

Suggested Remedy

Add "(continued)" and fix the table format.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** **Accepted**

Add "(continued)" and fix the table format.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes **Editor's Actions** e) editor disagrees

This is not a technical comment; this is editorial. The tight schedule for this re-circ does not permit me the luxury of tweaking cosmetic changes to tables. The IEEE-SA Standards Board Operations Manual section 5.4.3.2 (Resolution of comments, objections, and negative votes) reads: "It should be borne in mind that documents are professionally edited prior to publication."

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5482 **Comment submitted by:** Tal Kaitz Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 328 **Starting Line #** 31 **Fig/Table#** **Section** 8.4.5.4.10.5

The text on fast DL measurement for enhanced fast-feedback channel contains several inconsistencies:

1) equation (107b) describes quantization to 4 bits, which is appropriate for the regular 4-bit fast-feedback channel and not for the enhanced FFB channel (which is the subject of this subsection) . The enhanced FFB include 6 bits of payload.

2) equation (107b) and the text preceding it (lines 45-54 on page 328) contradict the text preceding equation (107c) (lines 1-7 on page 329). The two texts instruct different actions for the same scenarios.

3) equations (107b) and (107c) instruct the MS to reduce 10*log10(Nr) from the post-processing SNR. However:
- The BS is interested in the post-processing SNR (i.e. SNR at the input to the FEC decoder per layer or average over layers), which includes all gains (including any Rx antenna gains).
- Further, the BS does not know the number of Rx antennas at the MS (there is no message to instruct this).
- The number of Rx antennas at the MS may be transparent to the BS, for example when the MS operates an MRRC scheme at the receiver.

4) Reference to figure 231c on line 47 is incorrect. The correct figure is missing from the draft.

Suggested Remedy

1) remove text on page 328, lines 45-65.

2) provide correct figure and fix erroneous reference on line 47 of page 328.

3) remove all references to "delta" from equation 107c.

4) modify text on page 329, lines 14-18, as follows:

~~where D=10log10(Nr) for the cases of single transmit antenna BS or 2 and 4 transmit antenna BS using matrix A transmission format and D=10log10(Nr/2) for case of 2 and 4 transmit antennas BS using matrix B transmission format. Nr is the number of receive antennas.~~ S/N is post processing S/N averaged over layers as defined in 8.4.5.4.10.5.

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Adopt C802.16e-05/305 with the following changes:

Modify the second paragraph on page 2 of the contribution as indicated:
The BS may allocate one or multiple CQICH channels to the MS in UL_MAP for the purposes of Fast DL Measurement. If a single CQICH is allocated, MS shall report the average post processing S/N. If more than one CQICH is allocated with same CINR parameters, the MS shall report post processing S/N of individual layers in order of layer index.

[Add the eq. number for the two equestions]
[(107a) for the first equation, (107b) for the second equation]

[Add the following text just below the first eq. (eq. 107a)
where B is the positive integer value indicated in the SN Reporting Base IE (see 11.7.27). B shall default to "3" if the SN Reporting Base IE was not included in the REG-RSP.

Reason for Recommendation

Resolution of Group **Decision of Group:** **Superceded**

Reason for Group's Decision/Resolution

See comment 5487.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5487 **Comment submitted by:** Victor Stolpman Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 328 **Starting Line #** 458 **Fig/Table#** **Section**

Comment #3360, contribution 118r3 was accepted in the D6 recirc, but not reflected in D7 and D8. We have revised 118r3 to 118r4 to reflect the changes in the line number and page numbers from D6 to D8, and to clarify the color coding in 118r3. 118r4 is uploaded.

Suggested Remedy

Incorporte accepted 118r3, which has been revised to 118r4 to reflected the Changes in line number and page numbers from D6 to D8, and to clarify the color coding in 118r3.

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Adopt Contribution C802.16e-05/310r1.

Reason for Recommendation

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

Adopt Contribution C802.16e-05/310r1.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5528 **Comment submitted by:** Joanne Wilson Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 379 **Starting Line #** 42 **Fig/Table#** **Section** 8.4.5.8.1

This comment supercedes my previous comment to make reference to the correct input contribution in the section on "Suggested Remedy". Contribution C802.16e-05/216r1 related to "Reduced Private Maps" was accepted in session #37 but the changes were not correctly incorporated into D8.

Suggested Remedy

Accurately incorporate into the next draft the already adopted the changes that are now shown in contribution C80216e-05_267r1.pdf.

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

Adopt C80216e-05_267r1.pdf.

Reason for Recommendation

Resolution of Group **Decision of Group:** Accepted

Adopt C80216e-05_267r1.pdf.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 Ballot Number: 0001045 Comment Date

Comment # 5604 Comment submitted by: Rajesh Bhalla Member 2005/06/08

Comment Type Technical, Binding Starting Page # 473 Starting Line # 16 Fig/Table# Section 8.4.9.2.5.1

The existing CINR measurement is inadequate in frequency selective channels.

Suggested Remedy

Adopt the resolution in IEEE C802.16e-05/303.

Proposed Resolution Recommendation: Rejected Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: Rejected

Reason for Group's Decision/Resolution

Incomplete.

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/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5605	Rajesh	Bhalla	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 473 **Starting Line #** 16 **Fig/Table#** **Section** 8.4.9.2.5.1

The existing H-matrix in the optional LDPC is non-uniform for all the code rates and types.

Suggested Remedy

Adopt the remedies in IEEE C802.16e-05/126r1.

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

Adopt Remedy #2 from Contribution C802.16e-05/288r1.

Reason for Recommendation

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

Adopt Remedy #2 from Contribution C802.16e-05/288r1.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Changes are complete with the following exception:
Remedy 2 contains:
In the page 477 of P802.16e/D8,there is a sentence below formula (129i) as following:
"Define (equation) and with the parity check matrix as indicated (equation) or a cycle shift matrix."
In D8, this does not exist as written. In D9, this text has been moved to Annex G, so it'll be harder to locate, but the fact remains that I'm unable to make this change because the contribution is incorrect.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5606 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 475 **Starting Line #** 14 **Fig/Table#** **Section** 8.4.9.2.5.2

It is not proper to mark a subclause as informative (see 2005 IEEE Style Guide).

Suggested Remedy

Move this text to an informative Annex.

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

Move this text to an Informative Annex "LDPC Direct Encoding".

Reason for Recommendation

Resolution of Group **Decision of Group:** Accepted

Move this text to an Informative Annex "LDPC Direct Encoding".

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 Ballot Number: 0001045 Comment Date

Comment # 5616 Comment submitted by: James Gilb Member 2005/06/08

Comment Type Technical, Binding Starting Page # 497 Starting Line # 56 Fig/Table# Section 11.1.2.2

All notes are informative, but the proper way to use them is with "NOTE:" and the correct style in Framemaker.

Suggested Remedy

Check the 2005 IEEE Style Guide for instructions or call me and I will walk you through it.

Proposed Resolution Recommendation: Accepted-Modified Recommendation by

Change:
"Informative note: It would..."
To:
"NOTE: It would..."

Reason for Recommendation

Resolution of Group Decision of Group: Accepted-Modified

Change:
"Informative note: It would..."
To:
"NOTE: It would..."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions k) done

This comment (and many other comments with a similar theme) can hardly be considered "technical". Perhaps the group could create a manual or guide similar to the IEEE Style Guide, clearly defining what constitutes a technical, editorial, and a trivial comment.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5689 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 577 **Starting Line #** 23 **Fig/Table#** **Section** C.1.1

The command HO-IND appears in the figure but not in the draft. Is this supposed to be MOB-HO-IND?

Suggested Remedy

Change the command name here and in all other locations to match a command in the standard or delete all of the figures that refer to it. I found occurances in Figure C.6, C.7, D.1, D.2, D.3, etc.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Accepted

Change the command name here and in all other locations to match a command in the standard or delete all of the figures that refer to it. I found occurances in Figure C.6, C.7, D.1, D.2, D.3, etc.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5695 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** vario **Starting Line #** vario **Fig/Table#** **Section** various

I am continuing to find commands in MSCs that don't exist elsewhere.

Suggested Remedy

Review each MSC and figure to verify that every command referenced in figure is the correct name for it. If the names don't match, the standard is broken.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

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

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5696 **Comment submitted by:** James Gilb Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** vario **Starting Line #** vario **Fig/Table#** **Section** various

The table heading needs to repeat across pages at the top of each continuation of the table and the table title should include one of "continuation", "cont." or a suitable notation. Tables 298r and 298t are examples of this.

Suggested Remedy

Change as indicated here and throughout the draft. This is a repeat of my earlier comment, which apparently did not get applied to the entire draft as I have found at least two table that violate this requirement. This time, check the entire draft for this mistake and correct it.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** **Accepted**

Change as indicated here and throughout the draft. This is a repeat of my earlier comment, which apparently did not get applied to the entire draft as I have found at least two table that violate this requirement. This time, check the entire draft for this mistake and correct it.

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes **Editor's Actions** e) editor disagrees

This is not a technical comment; this is editorial. The tight schedule for this re-circ does not permit me the luxury of tweaking cosmetic changes to tables. The IEEE-SA Standards Board Operations Manual section 5.4.3.2 (Resolution of comments, objections, and negative votes) reads: "It should be borne in mind that documents are professionally edited prior to publication."

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5700 **Comment submitted by:** Greg Phillips Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** Gen. **Starting Line #** **Fig/Table#** **Section**

In light of the report from the IETF on the security review of IEEE 802.16e D8. I cast a disapprove ballot.

If we knowingly allow the adoption of this standard after a report showing that the security of data transferred under the 802.16 standard can be compromised we can expect significant resistance from the market in adopting this technology.

One section of the specific text from the report that highlights these concerns is:

"Overall, significant issues were found in the usage of EAP by 802.16e. Issues were found with IEEE 802.16e compatibility with RFC 3748, the EAP Key Management Framework as well as AAA Key Management Requirements. Several of the issues discovered are considered "critical" in that if they are not repaired, IEEE 802.16e will provide little in the way of guaranteed security."

Their are many other items presented in addition to those relating to interoperability of AAA servers and failings of the current document.

I strongly make note that the work undertaken in this review process should not be ignored. These are very serious considerations that have been raised in the past and now we have highly qualified team describe them in sufficent detail for us not to ignore.

Suggested Remedy

Due to the late nature of this report sufficent time to draft a total remedy is not available. I suggest that the remedy process be undertaken as outlined in the report.

The review is available at http://www.drizzle.com/~aboba/EAP/review.txt.

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

Reason for Recommendation

No text proposed. See comments 5129, 5135, 5320, 5321, 5329, 5341, 5614, 5669.

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

No text proposed. See comments 5129, 5135, 5320, 5321, 5329, 5341, 5614, 5669.

Group's Notes

Group's Action Items

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

No action required for this comment.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5705	Dorothy	Stanley	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 2

Incomplete references

Suggested Remedy

Include the RFC title and authors in the reference list

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

No text provided.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5706 **Comment submitted by:** Dorothy Stanley Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 3.71

Awkward definition

Suggested Remedy

Delete the first sentence. Insert "The Active Set is applicable to SHO and FBSS." at the end of the definition

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5004.

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/D8 Ballot Number: 0001045

Comment #	Comment submitted by:			Comment Date
5707	Dorothy	Stanley	Member	2005/06/08

Comment Type	Starting Page #	Starting Line #	Fig/Table#	Section
Technical, Binding	999			3.73

Incorrect grammar

Suggested Remedy

Change "synchronized with" to "synchronized" and change "ranging with" to "ranging"

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5004.

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/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5709	Dorothy	Stanley	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 3.78

Incorrect definition; the definition describes a function, "encrypted by", rather than an entity, "a key"

Suggested Remedy

Replace with "The GKEK is a random number
used to encrypt the GTEKs sent in multicast messages by
the BS to the MSs in the same multicast group." or similar.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5004.

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/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5710	Dorothy	Stanley	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 3.8

Conflicting definitions - the definition of "MS" in 3.80 is different than that in Clause 1.4.3.1

Suggested Remedy

Make the definition of "MS" in 3.80 the same as that in Clause 1.4.3.1

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

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment 5004.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5712 **Comment submitted by:** Dorothy Stanley Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 4

SSID Acronym doesn't match definition

Suggested Remedy

Change "SSID" to "SSMAC" or similar, to have a more intuitive acronym. Also, Page 58 uses "MS MAC Address" Are these the same?

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

In clause 4, change SSID entry to the following:
SSID subscriber station identification (MAC address)

Reason for Recommendation

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

In clause 4, change SSID entry to the following:
SSID subscriber station identification (MAC address)

Reason for Group's Decision/Resolution

An SS and an MS are not necessarily the same device. Therefore, an SS MAC address and an MS MAC address are not the same thing.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5718	Dorothy	Stanley	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** Table 7m

Is a value of 1 valid for the N/M flag?

Suggested Remedy

Specify

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

Reason for Recommendation

No table 7m exists in D8 draft

Resolution of Group **Decision of Group:** Rejected

Reason for Group's Decision/Resolution

No table 7m exists in D8 draft

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5721 **Comment submitted by:** Dorothy Stanley Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 6.3.2.2.9.1

Incorrect meaning, grammar

Suggested Remedy

Something is wrong with this sentence, but I'm not sure what. Should "carriers" be "carries"?

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

[In 6.3.2.2.7.5 UL Tx Power Report Extended Subheader, page 40, line 4, modify as:]
'This subheader is sent from MS to BS to report the Tx power of the burst that carrier~~r~~s this subheader. ~~The format of the UL is~~'

Reason for Recommendation

Commenter is using numbering in the D8delta, so a little confusing to find where commenter is referring to. Commenter appears to be referring to language in 6.3.2.2.9.2 of the D8delta document which is 6.3.2.2.7.5 UL Tx Power Report Extended Subheader in the D8 document.

Resolution of Group **Decision of Group:** Accepted

[In 6.3.2.2.7.5 UL Tx Power Report Extended Subheader, page 40, line 4, modify as:]
'This subheader is sent from MS to BS to report the Tx power of the burst that carrier~~r~~s this subheader. ~~The format of the UL is~~'

Reason for Group's Decision/Resolution

Commenter is using numbering in the D8delta, so a little confusing to find where commenter is referring to. Commenter appears to be referring to language in 6.3.2.2.9.2 of the D8delta document which is 6.3.2.2.7.5 UL Tx Power Report Extended Subheader in the D8 document.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045

Comment # 5722 **Comment submitted by:** Dorothy Stanley Member **Comment Date** 2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** Table 33

Unclear specification. "Once per protocol run". Which protocol? PKM? EAP?

Suggested Remedy

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

See comment #5133

Reason for Recommendation

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

See comment #5133

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5723 **Comment submitted by:** Dorothy Stanley Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** Table 37a

Just below the table, the text references "MSm X509 Cert. The next paragraph references the SS's private key. Does SS=MS here?

Suggested Remedy

Proposed Resolution **Recommendation:** Accepted-Modified **Recommendation by**

[In 6.3.2.3.9.11 PKMv2 RSA-Request message, page 50, line 61, modify as:]
'The SigSS indicates an RSA signature over all the other attributes in this message, and the ~~S~~MS's private key is used to make an RSA signature.'

Reason for Recommendation

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

[In 6.3.2.3.9.11 PKMv2 RSA-Request message, page 50, line 61, modify as:]
'The SigSS indicates an RSA signature over all the other attributes in this message, and the ~~S~~MS's private key is used to make an RSA signature.'

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5724	Dorothy	Stanley	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** General

I agree with the commenter of Comment 4385and 4384. The MS/SS language MUST be cleaned up and consistent, as is required for an amendment (.16e) to a base standard (.16).

Suggested Remedy

Replace all instances of "MS" with "SS" and amend the definition of SS to include the ability to be mobile.

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

see resolution of comments 5004, 5008, 5028, 5029, 5032, 5037, 5101, 5104, 5117, 5119, 5150, 5153, 5154, 5155, 5220, 5226, 5472, 5710, 5733

Reason for Recommendation

Such change, applied to the current text, would harm backward compatibility requested by 802.16e PAR which does not allow to introduce new features that were not requested by 802.16-2004 unless applicability of such features is limited to mobile systems. For example, 802.16-2004 does not contain definition of SN report feature [used in HO]. This is why in 6.3.2.1.2.1.7 "SN report header"
the terminal is called MS, not SS:

"The SN report header is sent by the MS to report the the LSB of the next ARQ BSN or the virtual MAC
SDU Sequence number for the active connections with SN Feedback enabled."

Resolution of Group **Decision of Group:** **Superceded**

Reason for Group's Decision/Resolution

see resolution of comments 5004, 5008, 5028, 5029, 5032, 5037, 5101, 5104, 5117, 5119, 5150, 5153, 5154, 5155, 5220, 5226, 5472, 5710, 5733

*Such change, applied to the current text, would harm backward compatibility requested by 802.16e PAR which does not allow to introduce new features that were not requested by 802.16-2004 unless applicability of such features is limited to mobile systems. For example, 802.16-2004 does not contain definition of SN report feature [used in HO]. This is why in 6.3.2.1.2.1.7 "SN report header"
the terminal is called MS, not SS:*

*"The SN report header is sent by the MS to report the the LSB of the next ARQ BSN or the virtual MAC
SDU Sequence number for the active connections with SN Feedback enabled."*

Group's Notes

Group's Action Items

Editor's Notes **Editor's Actions** \\ none needed

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 Ballot Number: 0001045 Comment Date

Comment # 5725 Comment submitted by: Dorothy Stanley Member 2005/06/08

Comment Type Technical, Binding Starting Page # 999 Starting Line # Fig/Table# Section Table 26

Duplicate EAP-Start

Suggested Remedy

Delete type 29, same as type 17.

Proposed Resolution Recommendation: Superceded Recommendation by

See comment #5115

Reason for Recommendation

Resolution of Group Decision of Group: Superceded

Reason for Group's Decision/Resolution

See comment #5115

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: P802.16e/D8 **Ballot Number:** 0001045

Comment #	Comment submitted by:			Comment Date
5726	Dorothy	Stanley	Member	2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** **Fig/Table#** **Section** 6.3

Errors in EAP usage identified in IETF review

Suggested Remedy

Address the issues identified in http://www.drizzle.com/~aboba/EAP/review.txt

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

Reason for Recommendation

No text proposed. See comments 5129, 5135, 5320, 5321, 5329, 5341, 5614, 5669.

Resolution of Group **Decision of Group:** Superceded

Reason for Group's Decision/Resolution

No text proposed. See comments 5129, 5135, 5320, 5321, 5329, 5341, 5614, 5669.

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/D8 **Ballot Number:** 0001045 **Comment Date**

Comment # 5733 **Comment submitted by:** Jonathan Labs Member 2005/06/08

Comment Type Technical, Binding **Starting Page #** 999 **Starting Line #** 1 **Fig/Table#** **Section**

I object to the resolutions of comments 3034, 3233, 3269, 3474 and 3480 in IEEE 802.16-05/019 (or database IEEE 802.16-05/12r3) and comment 4384 in IEEE 802.16-05/23r5. All these comments address the improper usage of SS versus MS versus FSS. The resolution of the group was: "Change all SS to MS in 802.16e draft for new text or modified text; do not change SS in unmodified/duplicated instances. Delete the definition of FS" for the first set of comments from 05/12r3. For comment 4384, there was not even a reason given for rejection!

I feel this is a major problem with the ammendment and it is not being corrected by the group. Here is one example of the problem: if one looks at the text changes in 6.3.2.3.26 De/Re-register command (DREG-CMD) message, specifically at Table 55--Action codes and actions. All action codes are now defined for MSs, not SSs. This tells me that there are now no action codes for a fixed SS.

In my mind an SS can be either a mobile SS or a fixed SS. MS is only a mobile SS.

I provided an extensive list of modifications in a previous recirc ballot to clean this problem up, but I do not believe they were considered by the Ballot resolution committee. I will not provide "specific text" again, only to have it ignored. Phil Barber also submitted a contribution at the meeting in Sorrento to try to clean up the problem for the MAC section but not part of it was accepted.

This problem will become very apparent when this ammendment is eventually integrated with 802.16-2004 to form a new revision.

Suggested Remedy

Fix up the usage of MS versus SS, such that the text does not break the operation of fixed systems. Phil Barber made some concerted effort at Session 37 in Sorrento to fix the problem in the MAC section (refer to comment 4001), but the entire contribution was rejected by the group. I would recommend reviewing it again, as well as comments 3034, 3233, 3269, 3474 and 3480 in IEEE 802.16-05/019.

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

Reason for Recommendation

Resolution of Group **Decision of Group:** **Superceded**

Reason for Group's Decision/Resolution

See comment 5724.

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