IEEE 802.16 Motion
802.16 Session #11 Closing Plenary: 13 July 2001

Motion: **To place the following motion in front of the LMSC SEC on 13 July 2001: "To grant conditional approval to forward IEEE P802.16 to LMSC Sponsor Ballot under Procedure 10 of the LMSC Operating Rules."**

Motion by: Carl Eklund
Seconded by: Jay Klein
Approve: 40
Disapprove: 0
Abstain: 1

802 SEC Meeting: 13 July 2001

Motion: **To grant conditional approval to forward IEEE P802.16 to LMSC Sponsor Ballot under Procedure 10 of the LMSC Operating Rules.**

Motion by: Roger Marks
Seconded by: Hayes
Approve: 9
Disapprove: 0
Abstain: 2

Background Information

Letter Ballot #3 on IEEE P802.16/D2-2001 (2001-02-06 to 2001-03-13)
Ballots 93 (75% of 124 eligible members)
Approve 69 (80.2%)
Disapprove 17
Abstain 7

Recirculation Ballot #3a on IEEE P802.16/D3-2001 (2001-05-25 to 2001-06-15)
Approve 76 (89.4%)
Disapprove 9 [none new]
Abstain 8
371 Comments (218 Editorial; 149 Technical, Non-binding; 4 Technical-Binding)

Following comment resolution at Session #14:
Approve 77 (90.6%)
Disapprove 8
Abstain 8
4 new Technical-Binding comments (3 resolved and accepted by voter; 1 remaining)

{Vote change and resolution acceptance based on email of 11 July 2001 from Paul Thompson:
Roger:

For your information, on July 10 I had the opportunity to discuss my comments to 802.16.1 Recirculation 3a with the 802.16.1 PHY Task Group. Based on that discussion, I am now satisfied with the resolution of the Comments and intend to vote "Approve" at the next Recirculation.

Regards...Paul}

Disapprove Voter	LB#3 Vote	Unaccepted Comments	Recirc #2a Vote	Comments
Keith Doucet	Disapprove	9	Did not vote	No reply
Chet Shirali	Disapprove	9	Did not vote	No reply
George Fishel	Disapprove	9	Did not vote	No reply
Menashe Shahar	Disapprove	9	Did not vote	No reply
David Ribner	Disapprove	4	Did not vote	No reply
Bruce Currivan	Disapprove	4	Did not vote	No reply
Srinath Hosur	Disapprove	1	Did not vote	No reply
Allen Klein	Disapprove	3	Disapprove	1

Unaccepted Resolutions by Binding Comment Number (Recirc#3a)	**Voter**
288	Klein

Unaccepted Resolutions by Binding Comment Number (LB#3)	**Voter**
766, 767, 1058, 1059, 1060	Doucet, Fishel, Ribner, Shahar, Shirali (Identical Comments)
770, 771, 1063, 1064, 1065	Doucet, Fishel, Ribner, Shahar, Shirali (Identical Comments)
772, 773, 1066, 1067, 1068	Doucet, Fishel, Ribner, Shahar, Shirali (Identical Comments)
796, 797, 1073, 1074	Doucet, Fishel, Shahar, Shirali (Identical Comments)
748, 749, 1048, 1049	Doucet, Fishel, Shahar, Shirali (Identical Comments)
774, 775, 1069, 1070	Doucet, Fishel, Shahar, Shirali (Identical Comments)
763, 765, 1052, 1053, 1054	Doucet, Fishel, Ribner, Shahar, Shirali (Identical Comments)
762, 764, 1055, 1056	Doucet, Fishel, Shahar, Shirali (Identical Comments)

768, 769, 1061, 1062	Doucet, Fishel, Shahar, Shirali (Identical Comments)
776, 777, 1071, 1072	Doucet, Fishel, Shahar, Shirali (Identical Comments)
1047	Hosur
717	Currivan
731	Currivan
733	Currivan
736	Currivan
617	Klein
618	Klein
619	Klein

Schedule for Letter Ballot Closure

20 July 2001	Issue Draft 4 and initiate Recirc #3b
30 July 2001	Close Recirc #3b
6 August 2001	Forward to IEEE Balloting Center

2001/07/13

Document under Review: P802.16/D3-2001 **Ballot Number:** 3a **Comment Date**

Comment # 288 **Comment submitted by:** Allan Klein

Change Type Technical, Binding **Starting Page #** 288 **Starting Line #** 57 **Section** 8.2.6

Add additional channelization options to address 10.5 GHz applications. 7 MHz and 3.5 MHz should be included as they are frequently used by products already operating in this frequency band.

Reason

Channel sizes of 20 MHz and greater are not viable for typical frequency allocations at 10.5 GHz, where the overall 150 MHz band is sub-divided for use among many different operators- typically in tranches of 30 MHz. Since the standard is supposed to address applications from 10-66 GHz, at least one of the mandatory channelizations should be suitable for 10. 5 GHz applications. The specific channelizations and baud rates were submitted as comments to letter ballot # 3.

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

Reason for Recommendation

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

The fact that the 802.16 (TG1) standard addresses 10-66 GHz does not mean that ANY spectrum oppurtunity could be used for LMDS-like services (i.e., 20 MHz vs. 500 MHz). The example given by the comment is more suitable for the 802.16a (TG3) case which addresses such spectrum oppurtunities in a better way. The fact that 10 GHz is a lower limit to 802.16 (TG1) is more of propagation aspects and suitability of the PHY.

Furthermore, please note the actual language of section 8.2.6 :
"...other combinations of channel size, symbol rate, roll-off factor, and frame duration could be made, but interoperability will not be guaranteed in these cases."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 766 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 49 **Starting Line #** 37 **Section** 6.2.2

Change the generic header format to DOCSIS 1.1 header.
Extended header is required (as defined in DOCSIS).
Change HCS to 16 bits.

Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO where, low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO appplications.
Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

For wireless access systems, the suggested headers would cause a significant capacity reduction. The 802.16 system was designed to efficiently carry connectionless as well as connection-oriented protocols and fits seamlessly into a routed IP network. The MAC protocol is well suited to residential and SOHO applications. It is to be noted that the proposed alternative is also connection-oriented.

Similar suggestions were extensively debated and rejected during development of the draft.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 767 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 49 **Starting Line #** 37 **Section** 6.2.2

Change the generic header format to DOCSIS 1.1 header.
Extended header is required (as defined in DOCSIS).
Change HCS to 16 bits.

Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO, where low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO appplications.
Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless

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

Reason for Recommendation

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

766

Reason for Group's Decision/Resolution

See 766

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1058 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 49 **Starting Line #** 37 **Section** 6.2.2

Change the generic header format to DOCSIS 1.1 header. Extended header is required (as defined in DOCSIS).Change HCS to 16 bits

Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO, where low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO appplications. Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless products). It is important to support applications such as VoIP, QoS, link

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 766, 767, 1059, and 1060.

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

766

Reason for Group's Decision/Resolution

See 766

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1059 **Comment submitted by:** David Ribner Member

Change Type Technical, Binding **Starting Page #** 49 **Starting Line #** 37 **Section** 6.2.2

Change the generic header format to DOCSIS 1.1 header.
Extended header is required (as defined in DOCSIS).
Change HCS to 16 bits.

Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO, where low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO appplications.
Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 766, 767, 1058, and 1060.

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

766

Reason for Group's Decision/Resolution

See 766

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1060 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 49 **Starting Line #** 37 **Section** 6.2.2

Change the generic header format to DOCSIS 1.1 header.
Extended header is required (as defined in DOCSIS).
Change HCS to 16 bits.

Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO where, low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO appplications.
Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 766, 767, 1058, and 1059.

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

766

Reason for Group's Decision/Resolution

See 766

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 776 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 69 **Starting Line #** 3 **Section** 6.2.2.2.6

Change to:
A RNG-RSP shall be transmitted by the BS in response to received RNG-REQ or to send corrections, based on measurements that have been done on other received data or MAC messages.

Reason

This change enables faster correction, based on data, without the need for high rate of RNG-REQ messages. Active SSs will be calibrated based on measurement information obtained by BS from data bursts while non active modems will be calibrated by slower rate of RNG-REQ messages, which can be done at slower rates.
This is mainly important for NLOS channles with more dynamic changing parameters.

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

Reason for Recommendation

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

777

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 777 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 69 **Starting Line #** 3 **Section** 6.2.2.2.6

Change to:
A RNG-RSP shall be transmitted by the BS in response to received RNG-REQ or to send corrections, based on measurements that have been done on other received data or MAC messages.

Reason

This change enables faster correction, based on data, without the need for high rate of RNG-REQ messages. Active SSs will be calibrated based on measurement information obtained by BS from data bursts while non active modems will be calibrated by slower rate of RNG-REQ messages, which can be done at slower rates.
This is mainly important for NLOS channles with more dynamic changing parameters.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1071 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 69 **Starting Line #** 3 **Section** 6.2.2.2.6

Change to: A RNG-RSP shall be transmitted by the BS in response to received RNG-REQ or to send corrections, based on measurements that have been done on other received data or MAC messages.

Reason

This change enables faster correction, based on data, without the need for high rate of RNG-REQ messages. Active SSs will be calibrated based on measurement information obtained by BS from data bursts while non active modems will be calibrated by slower rate of RNG-REQ messages, which can be done at slower rates. This is mainly important for NLOS channles with more dynamic changing parameters.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 776, 777, and 1072.

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

777

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1072 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 69 **Starting Line #** 3 **Section** 6.2.2.2.6

Change to:
A RNG-RSP shall be transmitted by the BS in response to received RNG-REQ or to send corrections, based on measurements that have been done on other received data or MAC messages.

Reason

This change enables faster correction, based on data, without the need for high rate of RNG-REQ messages. Active SSs will be calibrated based on measurement information obtained by BS from data bursts while non active modems will be calibrated by slower rate of RNG-REQ messages, which can be done at slower rates.
This is mainly important for NLOS channles with more dynamic changing parameters.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 776, 777, and 1071.

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

777

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 770 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 56 **Starting Line #** 28 **Section** 6.2.2.2.1-2,

DCD and UCD messages should be adapted to support OFDM PHY and adaptive modulation. It is required to configure the OFDM parameters in these messages. The messages should enable the definition of multiple profiles for each usage code (DIUC/ UIUC) .

Reason

These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

These messages are based on TLVs and so can support this in the future when an OFDM PHY is finalized. This will be done under the PARs 802.16a and 802.16b

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** **#3** **Comment Date**

Comment # **771** **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 56 **Starting Line #** 28 **Section** 6.2.2.2.1-2,

DCD and UCD messages should be adapted to support OFDM PHY and adaptive modulation. It is required to configure the OFDM parameters in these messages. The messages should enable the definition of multiple profiles for each usage code (DIUC/ UIUC) .

Reason

These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.

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

Reason for Recommendation

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

770

Reason for Group's Decision/Resolution

See 770

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1063 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 56 **Starting Line #** 28 **Section** 6.2.2.2.1-2,

DCD and UCD messages should be adapted to support OFDM PHY and adaptive modulation. It is required to configure the OFDM parameters in these messages. The messages should enable the definition of multiple profiles for each usage code (DIUC/ UIUC) .

Reason

These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 770, 771, 1064, and 1065.

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

770

Reason for Group's Decision/Resolution

See 770

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1064 **Comment submitted by:** David Ribner Member

Change Type Technical, Binding **Starting Page #** 56 **Starting Line #** 28 **Section** 6.2.2.2.1-2,

DCD and UCD messages should be adapted to support OFDM PHY and adaptive modulation. It is required to configure the OFDM parameters in these messages. The messages should enable the definition of multiple profiles for each usage code (DIUC/ UIUC) .

Reason

These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 770, 771, 1063, and 1065.

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

Reason for Group's Decision/Resolution

See 770

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1065 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 56 **Starting Line #** 28 **Section** 6.2.2.2.1-2,

DCD and UCD messages should be adopted to support OFDM PHY and adaptive modulation. It is required to configure the OFDM parameters in these messages. The messages should enable the definition of multiple profiles for each usage code (DIUC/ UIUC) .

Reason

These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 770, 771, 1063, and 1064.

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

Reason for Group's Decision/Resolution

See 770

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 736 **Comment submitted by:** Bruce Currivan Member

Change Type Technical, Binding **Starting Page #** 106 **Starting Line #** 44 **Section** 6.2.3.4

delete "for future study"; Add section defining details of ARQ function.

Reason

ARQ needs to be better defined before the draft is approved.

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

Reason for Recommendation

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

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Reason for Group's Decision/Resolution

This is the place holder for PARs 802.16a and 802.16b to complete. 802.16 systems above 10 GHz operate without ARQ and so it is not necessary in the current version of the standard. To clarfy this point ARQ-ACK message was deleted (see comment 731).

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 731 **Comment submitted by:** Bruce Currivan Member

Change Type Technical, Binding **Starting Page #** 99 **Starting Line #** 18 **Section** 6.2.2.2.21

delete "this section is for future study"; Add section defining details of ARQ function."

Reason

ARQ needs to be better defined before the draft is approved.

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

Reason for Recommendation

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

delete section 6.2.2.2.21 ARQ-ACK Message. Also remove it from page 56, line 17, in table 3.

Reason for Group's Decision/Resolution

This is the place holder for PARs 802.16a and 802.16b to complete. 802.16 systems above 10 GHz operate without ARQ and so it is not necessary in the current version of the standard. To clarfy this point ARQ-ACK message was deleted.

Group's Notes

Group's Action Items

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

Marked Type 25 as "Reserved for future use"

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 772 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 61 **Starting Line #** 34 **Section** 6.2.2.2.3-4

DL-MAP and UL-MAP should be adapted to support allocation on both frequency and time domain for OFDM and for multiple antennas for MIMO.

Reason

OFDM and MIMO are required by customers to support reliable and efficient operation in the NLOS environment. The current allocation scheme refers to a single carrier scheme where the allocations refer just to the time domain.

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

Reason for Recommendation

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

The burst descriptors were moved these to the PHY specific sections to allow future PHYs to define their own.

Reason for Group's Decision/Resolution

Currently no OFDM PHY is defined in the specification. OFDM is considered under PARs 802.16a and 802.16b.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 773 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 61 **Starting Line #** 34 **Section** 6.2.2.2.3-4

DL-MAP and UL-MAP should be adapted to support allocation on both frequency and time domain for OFDM and for multiple antennas for MIMO.

Reason

OFDM and MIMO are required by customers to support reliable and efficient operation in NLOS environment. The current allocation scheme refers to a single carrier scheme where the allocations refer just to the time domain.

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

Reason for Recommendation

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

772

Reason for Group's Decision/Resolution

See 772

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1066 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 61 **Starting Line #** 34 **Section** 6.2.2.2.3-4

DL-MAP and UL-MAP should be adapted to support allocation on both frequency and time domain for OFDM and for multiple antennas for MIMO.

Reason

OFDM and MIMO are required by customers to support reliable and efficient operation in NLOS environment. The current allocation scheme refers to a single carrier scheme where the allocations refer just to the time domain.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 772, 773, 1067, and 1068.

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

Reason for Group's Decision/Resolution

See 772

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1067 **Comment submitted by:** David Ribner Member

Change Type Technical, Binding **Starting Page #** 61 **Starting Line #** 34 **Section** 6.2.2.2.3-4

DL-MAP and UL-MAP should be adapted to support allocation on both frequency and time domain for OFDM and for multiple antennas for MIMO.

Reason

OFDM and MIMO are required by customers to support reliable and efficient operation in NLOS environment. The current allocation scheme refers to a single carrier scheme where the allocations refer just to the time domain.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 772, 773, 1066, and 1068.

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

772

Reason for Group's Decision/Resolution

See 772

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1068 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 61 **Starting Line #** 34 **Section** 6.2.2.2.3-4

DL-MAP and UL-MAP should be adapted to support allocation on both frequency and time domain for OFDM and for multiple antennas for MIMO.

Reason

OFDM and MIMO are required by customers to support reliable and efficient operation in the NLOS environment. The current allocation scheme refers to a single carrier scheme where the allocations refer just to the time domain.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 772, 773, 1066, and 1067.

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

772

Reason for Group's Decision/Resolution

See 772

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 796 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 124 **Starting Line #** 37 **Section** 6.2.7

Initialization procedure should be changed to optimize the channel selection, based on frequency selective performance, channels load, PHY parameters (more robust or higher throughput tradeoff), geographical location, antenna direction (sector) and polarization.
Both initial selection and on the fly channel changing should be supported.

Reason

The current proposal can cause a SS to randomly select a channel or in a typical implementation to select the first one that is found in the scanning for downstream, and the first one in the UCD for upstream. This will result in a very unloaded system and managing it with channel change messages will make the initialization very slow.
Channels may have big difference in the performance per SS, based on the frequency diversity in NLOS channels, channels that serve different antenna sectors or cells, and channels with different PHY parameters. It is important to select the optimal channel per SS, while

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

The text in the MAC specification has been made generic enough to accomadate all PHYs. Any rules that are necessary for a specific PHY will be included within the appropriate PHY section. RNG-RSP can direct an SS to a different channel. In addition, a BS ID is present to allow an SS to register only with a pre-specified BS.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 797 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 124 **Starting Line #** 37 **Section** 6.2.7

Initialization procedure should be changed to optimize the channel selection, based on frequency selective performance, channels load, PHY parameters (more robust or higher throughput tradeoff), geographical location, antenna direction (sector) and polarization.
Both initial selection and on the fly channel changing should be supported.

Reason

The current proposal can cause a SS to randomly select a channel or in a typical implementation to select the first one that is found in the scanning for downstream, and the first one in the UCD for upstream. This will result in a very unloaded system and managing it with channel change messages will make the initialization very slow.
Channels may have big difference in the performance per SS, based on the frequency diversity in NLOS channels, channels that serve different antenna sectors or cells, and channels with different PHY parameters. It is important to select the optimal channel per SS, while

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

Reason for Recommendation

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

796

Reason for Group's Decision/Resolution

See 796

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1073 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 124 **Starting Line #** 37 **Section** 6.2.7

Initialization procedure should be changed to optimize the channel selection, based on frequency selective performance, channels load, PHY parameters (more robust or higher throughput tradeoff), geographical location, antenna direction (sector) and polarization. Both initial selection and on the fly channel changing should be supported.

Reason

The current proposal can cause a SS to randomly select a channel or in a typical implementation to select the first one that is found in the scanning for downstream, and the first one in the UCD for upstream. This will result in a very unloaded system and managing it with channel change messages will make the initialization very slow. Channels may have big difference in the performance per SS, based on the frequency diversity in NLOS channels, channels that serve different antenna sectors or cells, and channels with different PHY parameters. It is important to select the optimal channel per SS, while maintaining load balance in the whole system.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 796, 797, and 1074.

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

796

Reason for Group's Decision/Resolution

See 796

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1074 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 124 **Starting Line #** 37 **Section** 6.2.7

Initialization procedure should be changed to optimize the channel selection, based on frequency selective performance, channels load, PHY parameters (more robust or higher throughput tradeoff), geographical location, antenna direction (sector) and polarization.
Both initial selection and on the fly channel changing should be supported.

Reason

The current proposal can cause a SS to randomly select a channel or in a typical implementation to select the first one that is found in the scanning for downstream, and the first one in the UCD for upstream. This will result in a very unloaded system and managing it with channel change messages will make the initialization very slow.
Channels may have big difference in the performance per SS, based on the frequency diversity in NLOS channels, channels that serve different antenna sectors or cells, and channels with different PHY parameters. It is important to select the optimal channel per SS, while

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 796, 797, and 1073.

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

796

Reason for Group's Decision/Resolution

See 796

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 717 **Comment submitted by:** Bruce Currivan Member

Change Type Technical, Binding **Starting Page #** 26 **Starting Line #** 10 **Section** 5.1.3

Insert more complete information on payload header suppression for ATM. Extended header should be included, as, for example, in DOCSIS.

Reason

Existing definition of payload header suppression with ATM is ambiguous.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

ATM payload header supression requires no extended/sub-headers. The exact mapping of ATM header fields to the ATM CS header is fully defined in the document in section 5.1.

Similar suggestions were extensively debated and rejected during development of the draft.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 733 **Comment submitted by:** Bruce Currivan Member

Change Type Technical, Binding **Starting Page #** 103 **Starting Line #** 1 **Section** 6.2.3.2

Insert numerical limitation on the number of fragmentation flows open at once.

Reason

Incomplete specification. Without a limit specified, the memory size of the implementation could become unbounded.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

The number of supported service flows is bounded via SS capability negotiation. Each service flow can only have one SDU in a fragmented state. This bounds the required memory size for an implemtation.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1047 **Comment submitted by:** Srinath Hosur Member

Change Type Technical, Binding **Starting Page #** **Starting Line #** **Section**

Need the extended header feature of DOCSIS to be reflected in Chapter 6 of the TG1 spec.

Reason

The extended header adds to the flexibility to add new features like ARQ.

Proposed Resolution **Recommendation:** **Superceded** **Recommendation by** Roger Marks

Reason for Recommendation

Comment is a subset of 717, 766, and 767.

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

Reason for Group's Decision/Resolution

Same functionality is accomplished using sub-headers and the Type field.
Similar suggestions were extensively debated and rejected during development of the draft.

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 748 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** **Starting Line #** **Section**

Proposals for the changes of message formats that support the above comments are included in document number 802.16-3c-01/37 dated March 7, 2001

Reason

Faster to market with matured standard.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

The proposed message set doesn't provide adequate functionality for a next generation standard. Shorter time to market does not warrant significantly compromising the technical quality of the standard.
Similar suggestions were extensively debated and rejected during development of the draft.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 749 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** **Starting Line #** **Section**

Proposals for the changes of message formats that support the above comments are included in document number 802.16-3c-01/37 dated March 7, 2001

Reason

Faster to market with matured standard.

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

Reason for Recommendation

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

748

Reason for Group's Decision/Resolution

See 748

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1048 **Comment submitted by:** George Fishel Member

Change Type Technical Binding **Starting Page #** **Starting Line #** **Section**

Proposals for the changes of message formats that support the above comments are included in document number 802.16-3c-01/37 dated March 7, 2001

Reason

Faster to market with matured standard.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 748, 749, and 1049.

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

748

Reason for Group's Decision/Resolution

See 748

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1049 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** **Starting Line #** **Section**

Proposals for the changes of message formats that support the above comments are included in document number 802.16-3c-01/37 dated March 7, 2001

Reason

Faster to market with matured standard.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 748, 749, and 1048.

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

748

Reason for Group's Decision/Resolution

See 748

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 774 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 67 **Starting Line #** 54 **Section** 6.2.2.2.5

RNG-REQ should include feedback information regarding the downstream reception, such as CNR and error rate.

Reason

This information is required to enable the BS to make decisions for adaptive modulation, channel switching, ARQ, MIMO and OFDM allocations.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

The requested functionality is achieved by allowing the SS to request the burst profile for downlink transmissions. This method is faster and uses less link capacity than continuously reporting measurements to the BS.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 775 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 67 **Starting Line #** 54 **Section** 6.2.2.2.5

RNG-REQ should include feedback information regarding the downstream reception, such as CNR and error rate.

Reason

This information is required to enable the BS to make decisions for adaptive modulation, channel switching, ARQ, MIMO and OFDM allocations.

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

Reason for Recommendation

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

see 774

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1069 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 67 **Starting Line #** 54 **Section** 6.2.2.2.5

RNG-REQ should include feedback information regarding the downstream reception, such as CNR and error rate.

Reason

This information is required to enable the BS to make decisions for adaptive modulation, channel switching, ARQ, MIMO and OFDM allocations.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 774, 775, 1066, and 1070.

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

See 774

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1070 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 67 **Starting Line #** 54 **Section** 6.2.2.2.5

RNG-REQ should include feedback information regarding the downstream reception, such as CNR and error rate.

Reason

This information is required to enable the BS to make decisions for adaptive modulation, channel switching, ARQ, MIMO and OFDM allocations.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 774, 775, 1066, and 1069.

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

see 774

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 763 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Timing mechanisms should be defined and adapted for an OFDM PHY.

Reason

OFDM PHY is required by customers to support reliable and efficient operation in NLOS environment. The proposed timing scheme is designed for single carrier where the data is spread only on the time domain. For OFDM it is required to define exactly the time reference of the time related messages. It is required to define an efficient mechanism for the initial ranging on OFDM.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

If an OFDM PHY is added in the future, the timing mechanism will be defined in the particular PHY section at that time.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 765 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Timing mechanisms should be defined and adapted for an OFDM PHY.

Reason

OFDM PHY is required by customers to support reliable and efficient operation in the NLOS environment. The proposed timing scheme is designed for single carrier where the data is spread only on the time domain. For OFDM it is required to define exactly the time reference of the time related messages. It is required to define an efficient mechanism for the initial ranging on OFDM.

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

Reason for Recommendation

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

763

Reason for Group's Decision/Resolution

See 763

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1052 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Timing mechanisms should be defined and adapted for an OFDM PHY.

Reason

OFDM PHY is required by customers to support reliable and efficient operation in the NLOS environment. The proposed timing scheme is designed for single carrier where the data is spread only on the time domain. For OFDM it is required to define exactly the time reference of the time related messages. It is required to define an efficient mechanism for the initial ranging on OFDM.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 763, 765, 1053, and 1054.

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

763

Reason for Group's Decision/Resolution

See 763

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1053 **Comment submitted by:** David Ribner Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Timing mechanisms should be defined and adapted for an OFDM PHY.

Reason

OFDM PHY is required by customers to support reliable and efficient operation in the NLOS environment. The proposed timing scheme is designed for single carrier where the data is spread only on the time domain. For OFDM it is required to define exactly the time reference of the time related messages. It is required to define an efficient mechanism for the initial ranging on OFDM.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 763, 765, 1052, and 1054.

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

See 763

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1054 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Timing mechanisms should be defined and adapted for an OFDM PHY.

Reason

OFDM PHY is required by customers to support reliable and efficient operation in the NLOS environment. The proposed timing scheme is designed for single carrier where the data is spread only on the time domain. For OFDM it is required to define exactly the time reference of the time related messages. It is required to define an efficient mechanism for the initial ranging on OFDM.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 763, 765, 1052, and 1053.

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

763

Reason for Group's Decision/Resolution

See 763

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 762 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Use DOCSIS 1.1 QoS.

Reason

Compatibility with other products, mainly VoIP and management tools.

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

Current QoS originated from the source referenced in the comment. It has since been enhanced to meet 802.16's needs. Similar suggestions were extensively debated and rejected during development of the draft.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 764 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Use DOCSIS 1.1 QoS.

Reason

Compatibility with other products, mainly VoIP and management tools.

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

Reason for Recommendation

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

762

Reason for Group's Decision/Resolution

See 762

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1055 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Use DOCSIS 1.1 QoS.

Reason

Compatibility with other products, mainly VoIP and management tools.

Proposed Resolution **Recommendation:** **Superceded** **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 762, 764, and 1056.

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

762

Reason for Group's Decision/Resolution

See 762

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1056 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 38 **Starting Line #** 1 **Section** 6

Use DOCSIS 1.1 QoS.

Reason

Compatibility with other products, mainly VoIP and management tools

Proposed Resolution **Recommendation:** **Superceded** **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 762, 764, and 1055.

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

762

Reason for Group's Decision/Resolution

See 762

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 768 **Comment submitted by:** Keith Doucet Member

Change Type Technical, Binding **Starting Page #** 54 **Starting Line #** 44 **Section** 6.2.2.2

Use IEEE 802.2 format to pack MAC management messages

Reason

1. Required for IP centric protocol (see comment 1).
2. Following other mature standards and products - other IEEE 802 standards and DOCSIS

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

Reason for Recommendation

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

Reason for Group's Decision/Resolution

The 802.2 format is appropriate for LAN applications. 802.16 addresses access applications. It is designed for a multiprotocol environment including IP and 802.2 packets among others.
Similar suggestions were extensively debated and rejected during development of the draft.

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 769 **Comment submitted by:** Chet Shirali Member

Change Type Technical, Binding **Starting Page #** 54 **Starting Line #** 44 **Section** 6.2.2.2

Use IEEE 802.2 format to pack MAC management messages

Reason

1. Required for IP centric protocol (see comment 1).
2. Following other mature standards and products - other IEEE 802 standards and DOCSIS.
3. Simplify the implementation by using the same format for data and MAC management messages

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

Reason for Recommendation

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

768

Reason for Group's Decision/Resolution

See 768

Group's Notes

Group's Action Items

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

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1061 **Comment submitted by:** George Fishel Member

Change Type Technical, Binding **Starting Page #** 54 **Starting Line #** 44 **Section** 6.2.2.2

Use IEEE 802.2 format to pack MAC management messages.

Reason

1. Required for IP centric protocol (see comment 1).

Proposed Resolution **Recommendation:** **Superceded** **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 768, 769, and 1062.

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

768

Reason for Group's Decision/Resolution

See 768

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items

Document under Review: **Ballot Number:** #3 **Comment Date**

Comment # 1062 **Comment submitted by:** Menashe Shahar Member

Change Type Technical, Binding **Starting Page #** 54 **Starting Line #** 44 **Section** 6.2.2.2

Use IEEE 802.2 format to pack MAC management messages

Reason

1. Required for IP centric protocol (see comment 1).
2. Following other mature standards and products - other IEEE 802 standards and DOCSIS.

Proposed Resolution **Recommendation:** Superceded **Recommendation by** Roger Marks

Reason for Recommendation

Duplicate of 768, 769, and 1061.

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

768

Reason for Group's Decision/Resolution

See 768

Group's Notes

Group's Action Items

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

Submitted in LB#3, but accidentally left out of resolution database.

Editor's Questions and Concerns

Editor's Action Items