Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Errata – Miscellaneous base document corrections**
Date Submitted	**2003-01-15**
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Re:	Call for contributions on Project 802.16d: IEEE Standard 802.16:2-11 GHz System Profiles and corrections of errors in base standard, 18 Dec.2002. **Errata** in IEEE 802.16a or 802.16c, or those **in 802.16 not corrected in 802.16a for 802.16c.**
Abstract	Suggested remedies to issues with the definition of the MAC header HCS field and limitations to the DSD-XX message dialogs
Purpose	For consideration for inclusion in the 802.16d amendment document
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Errata – Miscellaneous base document corrections

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Note: All page/section/table references refer to the base document, 802.16-2001

Incomplete Definition of MAC Header HCS

Issue:
The definition of HCS in tables 3 and 6 specifies only the generating polynomial for the CRC calculation. This is insufficient information to completely specify the calculation algorithm.

Resolution:
Modify the current text to reference the ATM standard that includes the specification for the HCS calculation.

Suggested Text Changes:
In tables 3 and 6, replace the contents of the description field for the HCS row with

> Header Check Sequence
>
> An 8-bit field to detect errors in the header. The CRC is calculated as specified in ATM Forum Specification af-aaa-xxxx.xxx, ATM ??? Specification, Ver. X.x

Inconsistent messaging for Connection Management

Issue:
DSA and DSC transaction messages may carry information for one uplink and one downlink connection. The DSD message, however, is limited to dealing with only a single connection

Resolution:
Replace restriction of one service flow only for DSD with same limitation as DSA and DSC, no more than one uplink and one downlink service flow..

Suggested Text Changes:

Page 68, Section 6.2.2.3.16, Replace the current text with the following:

6.2.2.3.16 Dynamic Service Deletion—Request (DSD-REQ) message

A DSD-REQ is sent by an SS or BS to delete one or two existing service flows. The format of a DSD-REQ shall be as shown in Table 42. The message shall contain Service Flow IDs for at most one uplink and one downlink service flow.

Table 42—DSD-REQ message format

Syntax	Size	Description
DSD-REQ_Message_Format() {		
Management Message Type = 17	8 bits	
Transaction ID	16 bits	
Service Flow ID	32 bits	
TLV Encoded Information	Variable	TLV specific
}		

Parameters shall be as follows:

CID *(in the Generic MAC Header)*

SS's Primary Management CID.

Service Flow Identifier

When a single service flow is to be deleted, the ID of the service flow is held in this field. When two service flows are to be deleted, one ID is included in this field, and the second is encoded as a TLV.

Transaction ID

Unique identifier for this transaction assigned by the sender.

All other parameters are coded as TLV tuples.

If Privacy is enabled, the DSD-REQ shall include the following:

HMAC Tuple (see 11.4.10)

The HMAC Tuple Attribute contains a keyed Message digest (to authenticate the sender). The HMAC Tuple Attribute shall be the final Attribute in the Dynamic Service Message's Attribute list.

Page 69, Section 6.2.2.3.17, Replace the current text with the following:

6.2.2.3.17 Dynamic Service Deletion—Response (DSD-RSP) message

A DSD-RSP shall be generated in response to a received DSD-REQ. The format of a DSD-RSP shall be as shown in Table 43.

Table 43—DSD-RSP message format

Syntax	Size	Notes
DSD-RSP_Message_Format() {		
Management Message Type = 18	8 bits	
Transaction ID	16 bits	
Confirmation Code	8 bits	
Service Flow ID	32 bits	
TLV Encoded Information	Variable	TLV specific
}		

Parameters shall be as follows:

CID *(in the Generic MAC Header)*

SS's Primary Management CID.

Transaction ID

Transaction ID from the corresponding DSD-REQ.

Confirmation Code (see 11.4.12)

The appropriate Confirmation Code for the corresponding DSD-REQ.

Service Flow Identifier

Value from the SFID field of the DSD-REQ to which this acknowledgement refers. When a second SFID was included in the DSD message as a TLV, that value shall be encoded in the response message as a TLV value.

If Privacy is enabled, the DSD-RSP shall include:

HMAC Tuple (see 11.4.10)

The HMAC Tuple Attribute contains a keyed Message digest (to authenticate the sender). The HMAC Tuple Attribute shall be the final Attribute in the Dynamic Service Message's Attribute list.

Page 165, Section 6.2.13.8.5, Delete the following text:

NOTE—Unlike DSA and DSC Messages, DSD Messages are limited to only a single service flow.

Page 165, Section 6.2.13.8.5.1, Delete the following text (last line of first paragraph):

Only one service flow can be deleted per DSD-REQ.

Page 165, Section 6.2.13.8.5.2, Delete the following text (last line of first paragraph):

Only one service flow can be deleted per DSD-REQ.