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Re:	This is a response to announcement of IEEE 802.16 Working Group Recirculation Ballot #4a, IEEE 802.16-02/06
Abstract	The document contains suggestion on changing the document 802.16a-D2-2002 within the procedure of Working Group Recirculation Ballot #4a
Purpose	The document provides additional material for several comments to be considered during the process of comments resolution
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Multicast Data in 802.16 MAC
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1. Problem of data Multicast Support

There is a problem in D5 that when BS CS is requesting from MAC to establish a connection, it should be specified what is the destination of connection / data flow. As CS is unaware of CIDs, the only identification available is the 48-bit universal MAC address of the SS. So this parameter should be added to the MAC_CREATE_CONNECTION.request primitive

2. Changes in Subsection 6.1.1.1.2

Replace the definition of MAC_CREATE_CONNECTION.request primitive with the following

MAC_CREATE_CONNECTION.request
(
       MAC Address,
       scheduling service type,
       convergence sublayer,
       service flow parameters,
       payload header suppression indicator,
       length indicator,
       encryption indicator,
       Packing on/off indicator,
       Fixed-length or variable-length SDU indicator,
       SDU length (only needed for fixed-length SDU connections),
       CRC request,
       ARQ parameters,
       sequence number
)

Insert the following paragraph immediately after the definition of MAC_CREATE_CONNECTION.request

MAC Address
48-bit universal MAC address, as defined in IEEE Std 802. Particularly, it can be a multicast address according to certain upper layer convention (out of scope of 802.16).
This parameter is "don't care" for uplink connections.

3. Changes in Subsection 6.1.1.1.4

Through network management (MAC Management entity) it becomes known to SS MAC of each relevant SS whether it is associated with the given Group MAC Address address.

A MAC_CREATE_CONNECTION.request is issued by the CS at BS with **MAC Address** that is an IEEE group address generated by upper layers.

After BS MAC gets such a request, it starts establishment of several DL MAC connections with the same CID addressed to a group of SSs. With each SS it is a separated session of connection addition as described in 6.1.1 and 6.2.14.7. Any available CID value can be used for this purpose. A multicast connection should be associated with certain Service Flow (thus QoS properties), as described in 6.2.14.7.

ARQ is not applicable to multicast connections.

After the connection created, data transmitted at the connection is received and processed by MAC layers of all involved SSs. Thus each multicast SDU is transmitted only once per BS downlink channel.

4. Broadcast Data Connection

Broadcast MAC SDUs are transmitted at Broadcast Data connection. MAC of any SS has to process all MAC PDUs arriving at this connection.

Changes in Table 121
replace the last two rows with the following:

Connection Identifier	Value	Description
Multicast Polling CIDs	0xFF00 0xFFFD	An SS may be included in one or more multicast groups for the purposes of obtaining bandwidth via polling. These connections have no associated Service Flow.
Broadcast Data CID	0xFFFE	Used for broadcast of the network data to all SSs
Broadcast Management CID	0xFFFF	Used for broadcast information that is transmitted on a downlink to all SSs