Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Proposed text for Accounting Management**
Date Submitted	**2007-01-18**
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Re:	
Abstract	This contribution proposes Text for Accounting Management.
Purpose	Adoption
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Table of Content

1. Introduction

This contribution proposes the Text for Accounting Management.

2. Accounting Management

[Change subclause 14.2.1.2.1 to 14.2.1.2.3. with the following:]

14.2.1.2.1 M-ACM-REQ

Function:

~~This primitive can be issued by the NCMS depending on the policy of service provider.~~

This primitive can be issued by the NCMS to retrieve the accounting records from BS.

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-REQ
(
Operation_type: Action,
Action_type: null,
Destination: BS,
Attribute_List :
MS MAC Address
Service Flow Identifier
~~Accounting Record Type~~
Accounting Record Number
Accounting Correlation Index
)

MS MAC Address
48-bit MAC address which will identify MS

Service Flow identifier
32-bit service flow identifier which will identify service flows of an MS

~~Accounting Record Type~~
~~The type of accounting record being sent and EVENT_RECORD, START_RECORD, INTERIM_RECORD, and STOP_RECORD are currently defined. An Event Record is used to indicate that a one-time event has occurred (meaning that the start and end of the event are simultaneous). A Start Record is used to initiate an accounting session for a given service flow and contains accounting information that is relevant to the initiation of the service flow and its accounting session. An Interim Record contains cumulative accounting information for an existing accounting session. A Stop Record is sent to terminate an accounting session and contains cumulative accounting information relevant to the existing session.~~

Accounting Record Number
Identifies accounting record within one session

Accounting Correlation Index
Provides a unique correlation index for generated records. This field can contain the Account Session ID or the Account-Multi-Session ID that is typically used by the AAA server to consolidate the session records.

When generated:

This primitive can be generated at the NCMS to request accounting event from a BS.

Effect of receipt:

This primitive is generated by the NCMS, the BS shall gather accounting information and return the information using the M-ACM-RSP primitive.

14.2.1.2.2 M-ACM-RSP

Function:

This primitive is issued by a BS to respond to M-ACM-REQ.

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-RSP
(
Operation_type: Action,
Action_type: null,
Destination: NCMS,
Attribute_List :
MS MAC Address
Service Flow Identifier
~~Result Code~~
~~Accounting Record Type~~
Accounting Record Number
~~Accounting Input Octets~~
Accounting ~~Output~~ Octets
Accounting ~~Input~~ Packets
~~Accounting Output Packets~~
~~Accounting Lost Octets~~
~~Accounting Lost Packets~~
Service Flow Information
Accounting Correlation Index
)

MS MAC Address
48-bit MAC address which will identify MS

Service Flow identifier
32-bit service flow identifier which will identify service flows of an MS

~~**Result Code**~~
~~The result of M-ACM-REQ~~

~~**Accounting Record Type**~~
~~The type of accounting record being sent and EVENT_RECORD, START_RECORD, INTERIM_RECORD, and STOP_RECORD are currently defined. An Event Record is used to indicate that a one-time event has occurred (meaning that the start and end of the event are simultaneous). A Start Record is used to initiate an accounting session and contains~~

~~accounting information that is relevant to the initiation of the session. An Interim Record contains cumulative accounting information for an existing accounting session. A Stop Record is sent to terminate an accounting session and contains cumulative accounting information relevant to the existing session.~~

Accounting Record Number

Identifies accounting record within one session

~~Accounting Input Octets~~

~~The number of octets received from the MS during the session~~.

Accounting ~~Output~~ Octets

The number of octets ~~sent to~~ recorded at the MS during the session.

Accounting ~~Input~~ Packets

The number of packets ~~received from~~ recorded at the MS during the session.

~~Accounting Output Packets~~

~~The number of packets sent to the MS during the session.~~

~~Accounting Lost Octets~~

~~The number of undelivered octets to the MS on wireless link during the accounting session.~~

~~Accounting Lost Packets~~

~~The number of undelivered packets to the MS on wireless link during the accounting session.~~

Service Flow Information

Required QoS information of a service flow include traffic characteristics and a scheduling type such as service class name, QoS parameter set type, maximum sustained traffic rate, maximum traffic burst, minimum reserved traffic rate, minimum tolerable traffic rate, service flow scheduling type, tolerate jitter and maximum latency.

Accounting Correlation Index

Provides a unique correlation index for generated records. This field can contain the Account Session ID or the Account-Multi-Session ID that is typically used by the AAA server to consolidate the session records.

When generated:

This primitive shall be generated by the BS in response to an M-ACM-REQ primitive.

Effect of receipt:

The NCMS receives the primitive, it contains the requested information and it is assumed that the NCMS will use this information for accounting purposes.

14.2.1.2.3 M-ACM-IND

Function:

~~This primitive is issued by a BS to inform the NCMS of accounting event for MS Network Entry after Registration request/response (REG-REQ/RSP) or Deregistration command (DREG-CMD) of an MS.~~

This primitive is issued by a BS to indicate to the NCMS the accounting event or to report the accounting record autonomously.

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-IND
(
Operation_type: Action,
Action_type: null,
Destination: NCMS,
Attribute_List :
MS MAC Address
Service Flow Identifier
~~Accounting Record Type~~
Accounting Record Number
~~Accounting Input Octets~~
Accounting ~~Output~~ Octets
Accounting ~~Input~~ Packets
~~Accounting Output Packets~~
~~Accounting Lost Octets~~
~~Accounting Lost Packets~~
Service Flow Information
Accounting Correlation Index
)

MS MAC Address
48-bit MAC address which will identify MS

Service Flow identifier
32-bit service flow identifier which will identify service flows of an MS

~~Accounting Record Type~~
~~The type of accounting record being sent and EVENT_RECORD, START_RECORD, INTERIM_RECORD, and STOP_RECORD are currently defined. An Event Record is used to indicate that a one-time event has occurred (meaning that the start and end of the event are simultaneous). A Start Record is used to initiate an accounting session for a given service flow and contains accounting information that is relevant to the initiation of the service flow and its accounting session. An Interim Record contains cumulative accounting information for an existing accounting session. A Stop Record is sent to terminate an accounting session and contains cumulative~~ accounting information relevant to the existing session.

Accounting Record Number
Identifies accounting record within one session

~~Accounting Input Octets~~
~~The number of octets received from the MS during the session~~.

Accounting ~~Output~~ Octets
The number of octets ~~sent to~~ recorded at the MS during the session.

Accounting ~~Input~~ Packets
The number of packets ~~received from~~ recorded at the MS during the session.

~~Accounting Output Packets~~
~~The number of packets sent to the MS during the session.~~

~~Accounting Lost Octets~~
~~The number of undelivered octets to the MS on wireless link during the accounting session.~~

~~Accounting Lost Packets~~
~~The number of undelivered packets to the MS on wireless link during the accounting session.~~

Service Flow Information

Required QoS information of a service flow include traffic characteristics and a scheduling type such as service class name, QoS parameter set type, maximum sustained traffic rate, maximum traffic burst, minimum reserved traffic rate, minimum tolerable traffic rate, service flow scheduling type, tolerate jitter, and maximum latency.

Accounting Correlation Index

Provides a unique correlation index for generated records. This field can contain the Account Session ID or the Account-Multi-Session ID that is typically used by the AAA server to consolidate the session records.

When generated:

~~This primitive is generated at a BS when an MS enters a network or terminates to access a network, or when an MS starts or stops dynamic services.~~

This primitive is generated at a BS when an accounting session is created, deleted, or changed.

Effect of receipt:

~~It is assumed that the NCMS will use the received information for accounting purposes.~~

NCMS will update the accounting record accordingly.