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Re:	Comment on P802.16g/D4
Abstract	This contribution proposes amendment to accounting management.
Purpose	Adoption
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# Amendment to Accounting Attributes, Section 14.2.2.2

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## 1. Introduction

In Section 14.2.2.2, service primitives for accounting management are defined, where Accounting Input Packets are defined in order to measure the number of packets sent to the MS from the BS. In practical situation, however, data packets which were sent to the MS from the BS may not be successfully delivered due to errors. Thus, the number of packets that the MS successfully received may be less than the number of packets actually sent to the MS from the MS. Since the accounting should be made for the number of successfully delivered packets to the MS from the BS only, two attributes, i.e., Accounting Lost Octets and Accounting Lost Packets are newly defined in M-ACM-RSP/IND primitives in this contribution.

## 2. Proposed Text Changes

[Modify section 14.2.2.2 as follows]

### Semantics of the service primitive:

The parameters of the primitives are as follows:

#### M-ACM-RSP

```
(
    Message_id,
    Operation_type: Action,
    Action_type: null,
    Object_ID: BS_ID or 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
)
```

#### 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 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 accounting session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

**Accounting Output Octets**

The number of octets sent to the MS during the accounting session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

**Accounting Input Packets**

The number of packets received from the MS during the accounting session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

**Accounting Output Packets**

The number of packets sent to the MS during the session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

**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 This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

[Modify section 14.2.2.2.3 as follows]

**Semantics of the service primitive:**

The parameters of the primitives are as follows:

**M-ACM-IND**

(

Message\_id,  
 Operation\_type: Action,  
 Action\_type: null,  
 Object\_ID: BS\_ID or 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

)

**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.

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The number of octets received from the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

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The number of octets sent to the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

**Accounting Input Packets**

The number of packets received from the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

**Accounting Output Packets**

The number of packets sent to the MS during the session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

[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 This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).