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# Add Set operation Type to LBS primitvies

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## 1. Motivation

In current LBS primitive definitions, it only has GET operation type been defined. But in different LBS schemes, the LBS SET operation is also needed. It can be used to pass necessary LBS related parameters into corresponding LBS related network entities. The other change is to include SS as 802.16 Entity since LBS primitive will have interface with SS too.

## 2. Proposed Text Changes

*[Modify subclause 14.1.11 as follows]*

### 14.2.11 LBS Management

The NCMS manages the LBS capabilities that are implemented in the BS and the MS. LBS Management sub clause provides a set of primitives for NCMS to retrieve parameters that are required for supporting LBS. Figure 517 depicts the LBS Management primitives.

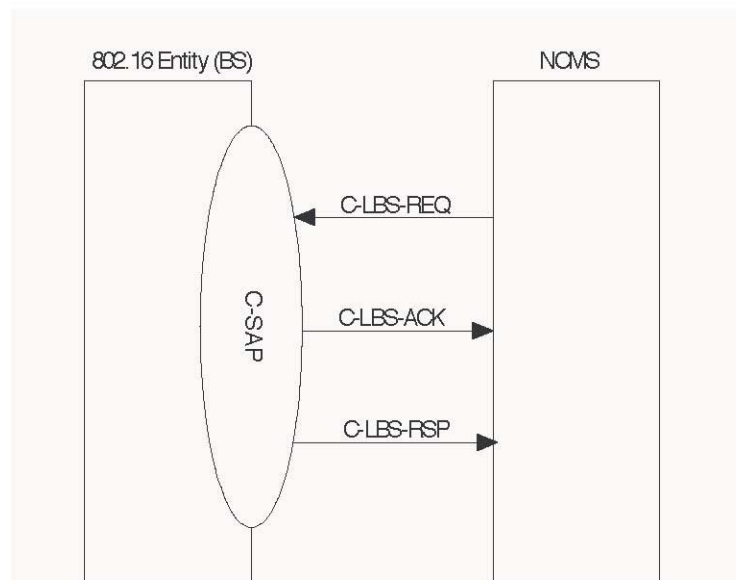


Figure 514— -LBS Management Primitives

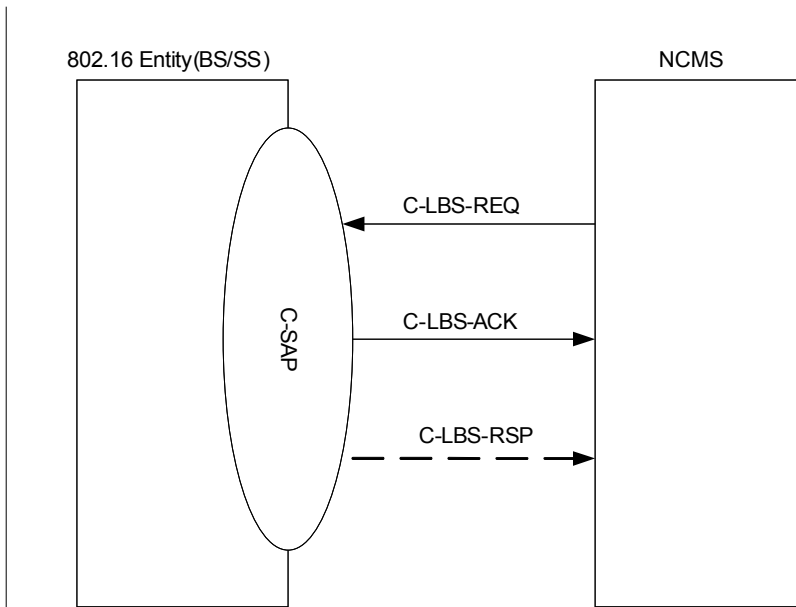


Figure 514 – LBS Management Primitives

Operation Type	Description
Get	LBS parameters
<u>Set</u>	<u>LBS related configuration Info</u>

14.2.11.1 C-LBS-REQ (Get)

NCMS sends C-LBS-REQ primitive.

14.2.11.1.1 LBS Parameters

**Function:**

This primitive is used by NCMS to request LBS parameters that are needed for estimating the MS location.

**Semantics of the service primitive:**

This parameters of the primitive are as follow:

```

C-LBS-REQ
(
  Operation_Type: Get,
  Action_Type: Null,

```

```

Destination: BS/SS,
Attribute_List:
    MS MAC Address,
    LBS Parameter Types
)

```

**MS MAC Address**

48-bit MAC address that identifies the MS.

**LBS Parameter Types**

Identify the types of LBS parameter requested by NCMS. It is a bit field {CINR, RSSI, D-TDOA, U-TDOA, GPS\_Info}. "1" in each bit indicates the corresponding parameter is requested.

**When generated:**

A trigger from a LBS application (e.g E911 service) will initiate NCMS to call this primitive.

**Effect of receipt:**

When this primitive is called, the BS will send C-LBS-ACK to NCMS to acknowledge the receipt of C-LBS-REQ, and then execute the necessary procedure to collect the LBS of parameters.

**14.2.11.2 C-LBS-ACK****14.2.11.2.1 LBS Parameters****Function:**

This primitive acknowledges that C-LBS-REQ has been received.

**Semantics of the service primitive:**

This parameters of the primitive are as follow:

**C-LBS-ACK**

```

(
Operation_Type: Get,
Action_Type: Null,
Destination: NCMS,
Attribute_List:
    MS MAC Address,
)

```

**MS MAC Address**

48-bit MAC address that identifies the MS.

**When generated:**

The reception of C-LBS-REQ.

**Effect of receipt:**

Null

**14.2.11.3 C-LBS-RSP**

NCMS sends C-LBS-REQ primitive.

### 14.2.11.3.1 LBS Parameters

#### Function:

This primitive is used by BS to return LBS parameters as requested in C-LBS-REQ.

#### Semantics of the service primitive:

The parameters of the primitive are as follow:

```

C-LBS-RSP
(
  Operation_Type: Get,
  Action_Type: Null,
  Destination: NCMS,
  Attribute_List:
    MS MAC Address,
    Requested LBS Parameters[]
)

```

#### MS MAC Address

48-bit MAC address that identifies the MS.

#### Requested LBS Parameters[]

Requested LBS Parameters is an array that contains the following parameters:

#### When generated:

The reception of C-LBS-REQ.

#### Effect of receipt:

This primitive returns the LBS parameters to NCMS.

#### 14.2.11.1 C-LBS-REQ (Set)

NCMS sends C-LBS-REQ primitive.

#### 14.2.11.1.1 LBS Parameters

#### Function:

This primitive is used by NCMS to set LBS assistant data that are needed for calculating the final MS location information operation.

#### Semantics of the service primitive:

This parameters of the primitive are as follow:

```

C-LBS-REQ
(
  Operation_Type: Set,
  Action_Type: Null,
  Destination: BS/SS,
  Attribute_List:
    LBS Assistant Data
    BS Coordinate Info
)

```

**LBS Assistant Data**

This LBS Assistant Data is used to assist BS/SS to calculate final LBS position.

**BS Coordinate Info**

BS related coordinate information

**When generated:**

A trigger from a LBS application (e.g E911 service) will initiate NCMS to call this primitive.

**Effect of receipt:**

When this primitive is called, the BS will send C-LBS-ACK to NCMS to acknowledge the receipt of C-LBS-REQ, and then execute the necessary procedure to finish corresponding LBS operations.

**14.2.11.2 C-LBS-ACK(Set)****14.2.11.2.1 LBS Parameters****Function:**

This primitive acknowledges that C-LBS-REQ has been received.

**Semantics of the service primitive:**

This parameters of the primitive are as follow:

**C-LBS-ACK**

```
(
  Operation_Type: Set,
  Action_Type: Null,
  Destination: NCMS,
  Attribute_List:
    MS MAC Address,
)
```

**MS MAC Address**

48-bit MAC address that identifies the MS.

**When generated:**

The reception of C-LBS-REQ.

**Effect of receipt:**

Null