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Re:	Call for Comment on P802.16g D6 Document
Abstract	This contribution proposes service primitives for network entry.
Purpose	The document should be considered during the resolution of comments on the D6 document.
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# Addition of SS Basic Capability Negotiation in Network Entry Management

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## 1. Introduction

In Section 14.2.7, network entry management is described, where network entry procedure consists of ranging, registration, and network attachments. The current network entry management, however, does not contain SS basic capability negotiation during initial network entry. Since NCMS (MS) does not know when it should generate C-NEM-REQ(registration) primitive without indication from 802.16 Entity(MS) because it does not know whether SS basic capability negotiation procedure in MAC layer is completed or not, SS basic capability negotiation should be included for network entry management procedures. Thus, in this contribution, we propose to add SS basic capability negotiation primitives and related procedures in Section 14.2.7.

## 2. Proposed Text Changes

[Inserts the following figure between figure 498 and figure 499 in Section 14.2.7.1 ]

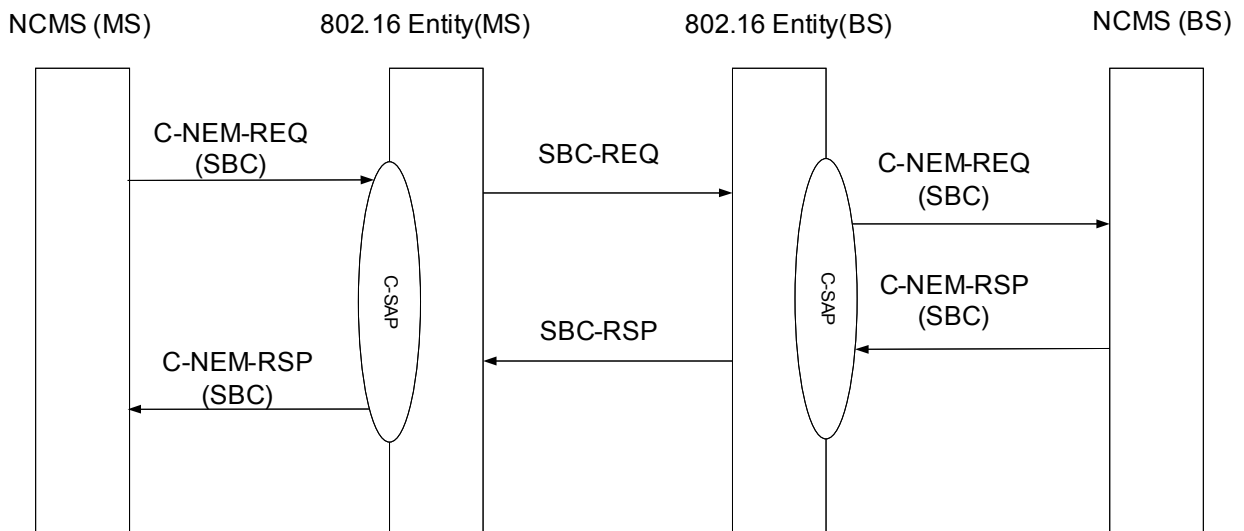


Figure xxx – SS Basic Capability Negotiation Primitives (MS and BS)

[Modify table in section 14.2.7.1 as follows]

Action type	Description
Ranging	Ranging procedures between 802.16 Entity and NCMS
SS Basic Capability	SS Basic Capability negotiation procedures between 802.16 Entity and NCMS
Registration	Registration Procedures between 802.16 Entity and NCMS

[Insert as follows before 14.2.7.1.2.]

#### 14.2.7.1.2 C-NEM-REQ (Action = SS Basic Capability)

##### Function:

This primitive is initiated by the upper layer entity to request SBC (SS Basic Capability).

##### Semantics:

###### C-NEM-REQ

```
(
    Operation_type: Set
    Action_type: SS Basic Capability
    Destination: MS or NCMS
    Attribute_List:
        MS MAC Address,
        Authorization Policy
        Service Information Query (SIQ)
)
```

###### MS MAC Address

48-bit MAC Address which identify MS.

###### Authorization Policy

Enumerated type which indicates authorization policy used by MS and BS. The value can be assigned to No Authorization, Only EAP-based authorization, Authenticated EAP authorization after EAP authorization, Only RSA-based authorization, authenticated EAP-based authorization after RSA authorization, or EAP-based authorization after RSA-based authorization.

###### Service Information Query

1Byte Service Information Query to request the Service Network Provider Identifiers supported by the Operator Network that includes the current BS.

##### When generated:

This primitive is generated by NCMS at MS after receiving ranging response message. This primitive is also generated by BS when the BS receives SBC-REQ message over the air interface.

**Effect of receipt:**

The 802.16 entity (MS) generates SBC-REQ MAC message when it receives C-NEM-REQ (SS basic capability). The NCMS at BS processes the information from this primitive and shall generate C-NEM-RSP(SBC).

[Insert as follows before 14.2.7.2.2.]

**14.2.7.2.2 C-NEM-RSP (Action = SS Basic Capability)****Function:**

This primitive is returned by the result of SBC request.

**Semantics:**

```

C-NEM-RSP
(
    Operation_type: Set
    Action_type: SS Basic Capability
    Destination: BS or NCMS
    Attribute_List:
        MS MAC Address,
        Authorization Policy
        NSP List
        NSP Change Count
)

```

**MS MAC Address**  
48-bit MAC Address which identify MS.

**Authorization Policy**  
Enumerated type which indicates authorization policy used by MS and BS. The value can be assigned to No Authorization, Only EAP-based authorization, Authenticated EAP authorization after EAP authorization, Only RSA-based authorization, authenticated EAP-based authorization after RSA authorization, EAP-based authorization after RSA-based authorization.

**NSP List**  
One or more Network Service Provider 24-bit Identifier.

**NSP Change Count**  
1 Byte NSP Change Count which indicates a change of the NSP list. It will be increased by one (modulo 256) whenever the NSP list changes.

**When generated:**

This primitive is generated to respond to C-NEM-REQ(SBC) from BS. It is also used by the MS when the MS receives SBC-RSP MAC message.

Effect of receipt:

The BS generates SBC-RSP MAC message and sends it to MS. The NCMS at MS receives SS basic capability results.