Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**NCMS Initiated Idle Entry**
Date Submitted	**2006-11-12**
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Re:	
Abstract	Adding the missing NCMS initiated Idle entry
Purpose	Adoption
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1

NCMS Initiated Idle Entry

Peretz Feder - Lucent Technologies

Problem Definition

Present text only describes MS initiated Idle Mode Initiation

Remedy

Text and Figure are added to cover the case where the NCMS through the BS commands the MS to enter Idle mode in unsolicited manner and the MS sends a DRG-REQ message with a Dregistration Request code =0x02.

Proposed Text Changes

Per red text and figure below.

Section 14.2.5.2

Add the following figure in this section:

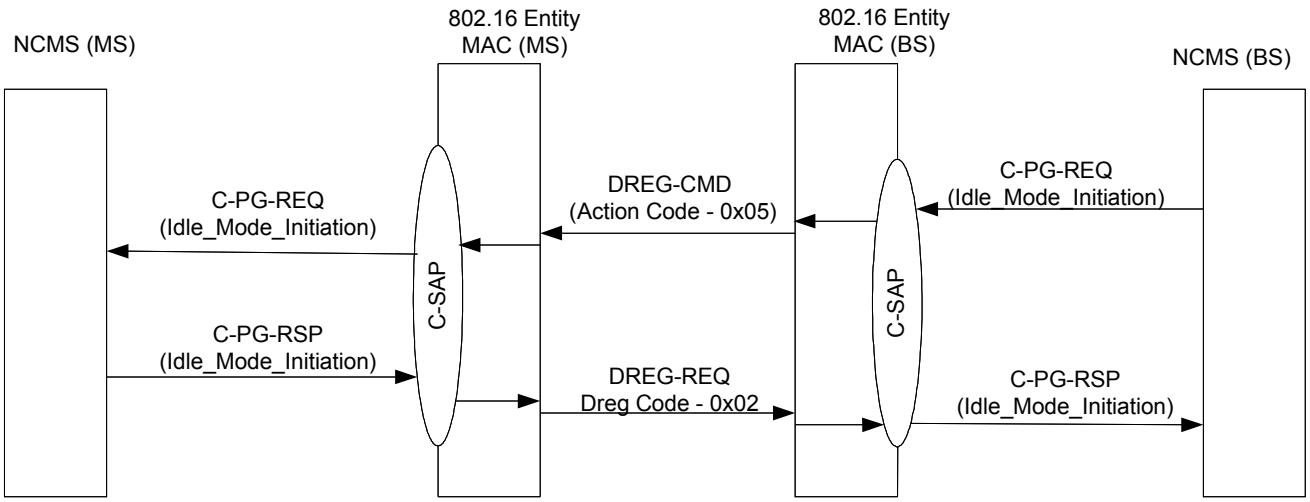

Figure 484a – Idle Mode initiation (NCMS side)

14.2.5.2.1 C-PG-REQ

This primitive is used by an 802.16 entity or NCMS to trigger an idle mode service procedure. The Operation Type included in this primitive defines the type of idle mode service procedure to be performed. The possible Operation Types for this primitive are listed in Table below.

Operation Type	Action Type	Description
Action	Idle Mode Initiation	Idle Mode Initiation Request
Action	Network Re-Entry from Idle Mode	Network Re-Entry from Idle Mode Request

Function:

•Idle mode initiation:

This primitive is issued by BS to inform a management entity of Paging Services in NCMS that an MS requests to initiate Idle Mode. This primitive can also be issued by the NCMS to force MS into an Idle mode by instructing the BS to initiate a DREG-CMD to the MS with Action Code = 0x05.

•Network re-entry from Idle mode:Idle mode initiation:

This primitive is issued by a BS to inform a management entity of Paging Services that the specified MS is attempting to re-enter network in response to paging.

Semantics of the service primitive:

•Idle Mode Initiation:

The parameters of the primitives are as follows:

C-PG-REQ
(
Operation_type: Action,
Action_type: Idle_Mode_Initiation,
Object_ID: NCMS, BS, MS
Attribute_List:
MS MAC Address
Paging_Information
Paging Controller ID
Security Information
Idle Mode Retain Information
MAC Hash Skip Threshold
Service Flow parameters
Service and operational information
)

MS MAC Address
48-bit MAC Address which will identify MS during Idle Mode
Paging_Information
Paging Group ID, Paging Cycle, Paging Offset
Paging Controller ID

A logical network identifier for the serving BS or other network entity retaining MS service and operational information and/or administrating paging activity for the MS while in Idle Mode. Paging Controller ID shall be set to BSID when a BS is acting as Paging Controller.

Security Information

AK Context, security association info, authenticator ID, etc.

Idle Mode Retain Information

MS request for Paging Controller retention of MS service and operational information to expedite future Network Re-entry from Idle Mode. (see 6.3.2.3.42.)

MAC Hash Skip Threshold

Maximum number of successive MOB_PAG-ADV messages that may be sent from a BS individual notification for an MS, including MS MAC Address Hash of an MS for which Action Code is 0b00, 'No Action Required'.

Service Flow parameters

Parameters for Service Flow which exists without actually being activated to carry traffic at MS Idle Mode Initiation, e.g. Paging Preference.

Service and operational information

MS service and operational information associated with MAC state machines, CS classifier information, etc.

Section 14.2.5.2.2 C-PG_RSP

Add to the following primitive:

Semantics of the service primitive:

•Idle Mode Initiation:

The parameters of the primitives are as follows:

C-PG-RSP
(
Operation_type: Action,
Action_type: Idle_Mode_Initiation,
Object_ID: NCMS, BS, MS
Attribute_List:
Action code
MS MAC Address
Paging Information
Paging Controller ID
Idle Mode Retain Information
MAC Hash Skip Threshold
REQ-duration
)