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Title	Service Primitives for Paging Group Action
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Re:	Call for Comment on P802.16g Baseline Document
Abstract	This contribution proposes service primitive for paging group action
Purpose	The document should be considered during the resolution of comments on the baseline document.
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Service Primitive for Paging Group Action

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Problem Statement

The location information of an idle MSS is managed by the unit of Paging Group in Paging Service of an NCMS, and paging messages are sent to all the BSs within the called MSS's Paging Group. The NCMS should divide the whole service area into multiple Paging Groups and notify this Paging Group information to all the BSs within the service area, where a BS may be a member of one or more Paging Group. In this contribution, we propose service primitives for Paging Group Action which are exchanged through Management Service Access Point (M-SAP) of Management Plane specified in IEEE 802.16g baseline document. Paging Group Action is performed by Paging Service of an NCMS, as shown in Fig. 1.

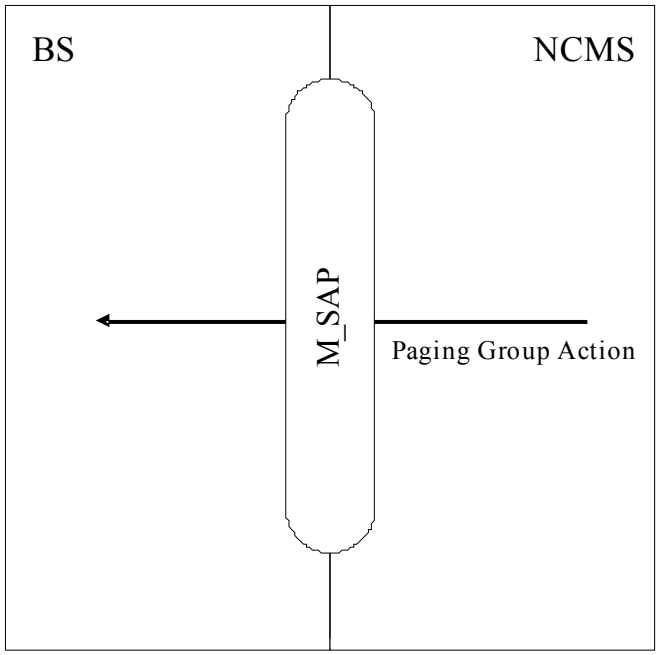

Fig. 1 - Paging Group Action Primitive

Summary of the Proposed Remedy

In this contribution, we define a primitive for supporting Paging Group Management between a BS and an NCMS, which is described briefly in the following table.

Primitive	Direction	Primitive Contents
Paging Group Action	NCMS -> BS	Paging Controller ID, Number of Paging Group IDs, Paging Group ID List

Proposed Text Changes

[Modify section 14.5.9.2 as follow]

14.5.9.2 Paging Management

14.5.9.2.1 Paging Group Management

14.5.9.2.1.1 Paging Group Management Procedure

The location information of an idle MSS is managed by the unit of Paging Group in Paging Service of an NCMS, and paging messages are sent to all the BSs within the called MSS's Paging Group. The NCMS should divide the whole service area into multiple Paging Groups and notify this Paging Group information to all the BSs within the service area, where a BS may be a member of one or more Paging Groups. In this contribution, we propose service primitives for Paging Group Action which are exchanged through Management Service Access Point (M-SAP) of Management Plane specified in IEEE 802.16g baseline document. Paging Group Action is performed by Paging Service of an NCMS, as shown in Fig. 2

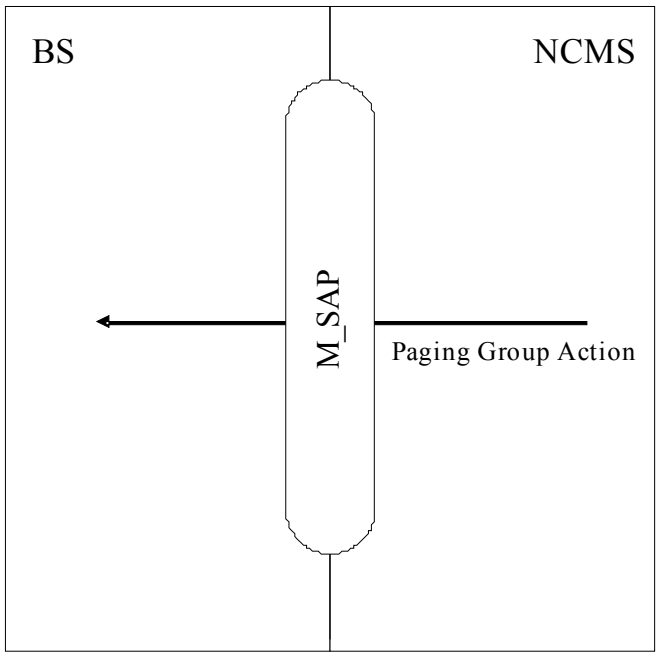

Fig. 2 - Paging Group Action Procedures

14.5.9.2.1.2 Service Primitive for Paging Group Management

14.5.9.2.1.2.1 Paging Group Action

14.5.9.2.1.2.1.1 Function

This primitive is issued by an NCMS to inform a BS of Paging Group ID(s) of the BS.

14.5.9.2.1.2.1.2 Semantics of the service primitive

The parameter of the primitive is as follows:

Paging Group Action
(

Paging Controller ID
Number of Paging Group IDs
Paging Group ID List
)

Paging Controller ID
The Paging Controller ID is a logical network identifier for the serving BS or other network entity retaining MSS service and operational information and/or administering paging activity for the MSS while in Idle Mode.

Number of Paging Group IDs
The number of Paging Group IDs in this primitive.

Paging Group ID List
List of Paging Group IDs of a BS (eg, Paging Group ID1, Paging Group ID2, … , Paging Group IDn)

14.5.9.2.1.2.1.3 When generated

This primitive is generated when an NCMS adds, deletes, or changes paging group configuration information and notifies the information to a BS.

14.5.9.2.1.2.1.4 Effect of receipt

When the BS receives this primitive, it updates its Paging Group ID information according to the delivered Paging Group ID List, and broadcasts the updated Paging Group ID information in MOB_NBR-ADV message.

References

[1] IEEE 802.16e/D9
[2] IEEE 802.16g-04/03r3, “Baseline Document – P802.16g Management Plane Procedures and Services”
[3] IEEE Std 802-16-2004