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Re:	IEEE 802.16j-07/013: "Call for Technical Comments Regarding IEEE Project 802.16j"
Abstract	This contribution proposes procedures for network topology advertisement in MR system
Purpose	Text proposal for 802.16j Baseline Document
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MS handover to target MR-BS with transparent RS

Introduction

This contribution describes the network topology acquisition in MR system by combining C802.16j-07/071r1 and C802.16j-07/072r1. The purpose of this contribution is to clarify 6.3.22.1.1 of baseline document in order to accomondate transparent RS and non-transparent RS under centralized scheduling. In order to facilitate the incorporation of this proposal into IEEE 802.16j standard, specific changes to the baseline working document IEEE 802.16j-06/026r3 are listed below.

Text Proposal

6.3.22 MAC layer handover procedures

6.3.22.1 Network topology acquisition

6.3.22.1.1 Network topology advertisement

[Modify subclause 6.3.22.1.1 in page 80 as following indicated:]

The MR-BS and the RS shall broadcast information about the infrastructure stations that are present in the network using the MOB_NBR-ADV message defined in 6.3.2.3.47. The MR-BS and the RS may obtain the information to be included in the MOB_NBR-ADV message over the backbone network or over the relay links. Each non-transparent RS can broadcast a different MOB_NBR-ADV message that is suitable for its service area. For transparent RS, the MOB_NBR-ADV message shall be broadcasted by the MR-BS depicted in Figure xxx.
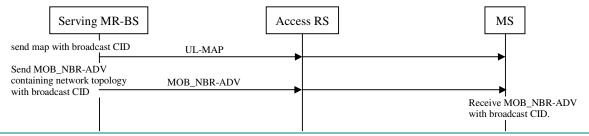

Figure xxx –Network topology advertisement in transparent RS system

To facilitate each non-transparent RS to transmit a MOB_NBR-ADV message suitable for its service area, the MR-BS shall transmit a MR_NBR-INFO message to the RSs. The MR_NBR-INFO is a customized, unicast message that is composed by the MR-BS according to the specific neighborhood of the receiving RS. The MR_NBR-INFO message is transmitted by the MR-BS to the RSs over the relay links. In order to compose the MR_NBR-INFO customized for the subordinate RSs, the MR-BS can use location information or the interference measurement reports received from the infrastructure stations. Under centralized schduling, as shown in Figure yyy, the RS shall request bandwidth on the access link to broadcast MOB_NBR-ADV. Under distributed scheduling, as shown in Figure zzz, the RS shall autonomously broadcast MOB_NBR-ADV on the

access link.

An RS, depending on its capability and depending on the messages that it receives, can choose between one of the following options in generating the MOB_NBR-ADV message:
(a) An RS can broadcast the MOB_NBR-ADV message without modifying the neighbor list of the MR_NBR-INFO message, received from the MR-BS.
(b) An RS can further customize and compose a MOB_NBR-ADV message that is suitable for its service area by utilizing the information present in the MR_NBR-INFO messages received from the MR-BS.
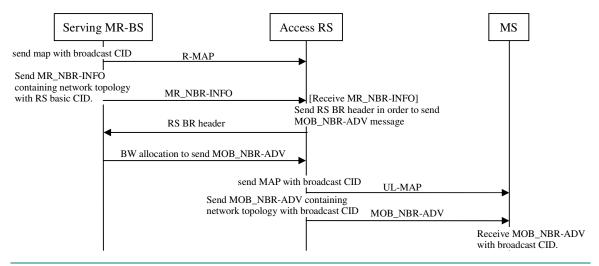

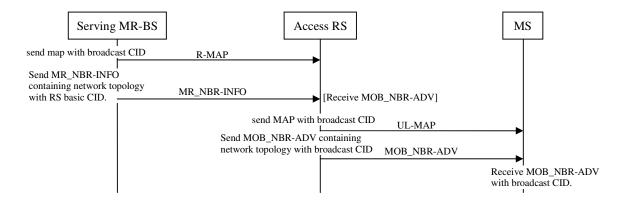Figure yyy – Network advertisement in non-transparent RS system with centralized scheduling

Figure zzz – Network advertisement in non-transparent RS system with distributed scheduling