

# RS-initiated Handover Procedure for Handover-manageable RS

## IEEE 802.16 Presentation Submission Template (Rev. 8.3)

Document Number:

IEEE S802.16j-07/152r1

Date Submitted:

2007-01-16

Source:

Young-uk Chung, Yong-Hoon Choi,  
Woosin Lee, Hyukjoon Lee  
Kwangwoon University

E-mail: yuchung@kw.ac.kr

Yong Su Lee, Young-il Kim  
ETRI

E-mail: yikim@etri.re.kr

Venue:

IEEE 802.16 Session #47, London, UK

Base Document:

IEEE C802.16j-07/152r1, IEEE C802.16j-07/151r1

Purpose:

Discuss and adapt proposed text and message format.

Notice:

This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.

Release:

The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.

IEEE 802.16 Patent Policy:

The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures <<http://ieee802.org/16/ipr/patents/policy.html>>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <<mailto:chair@wirelessman.org>> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <<http://ieee802.org/16/ipr/patents/notices>>.

# RS-initiated Handover

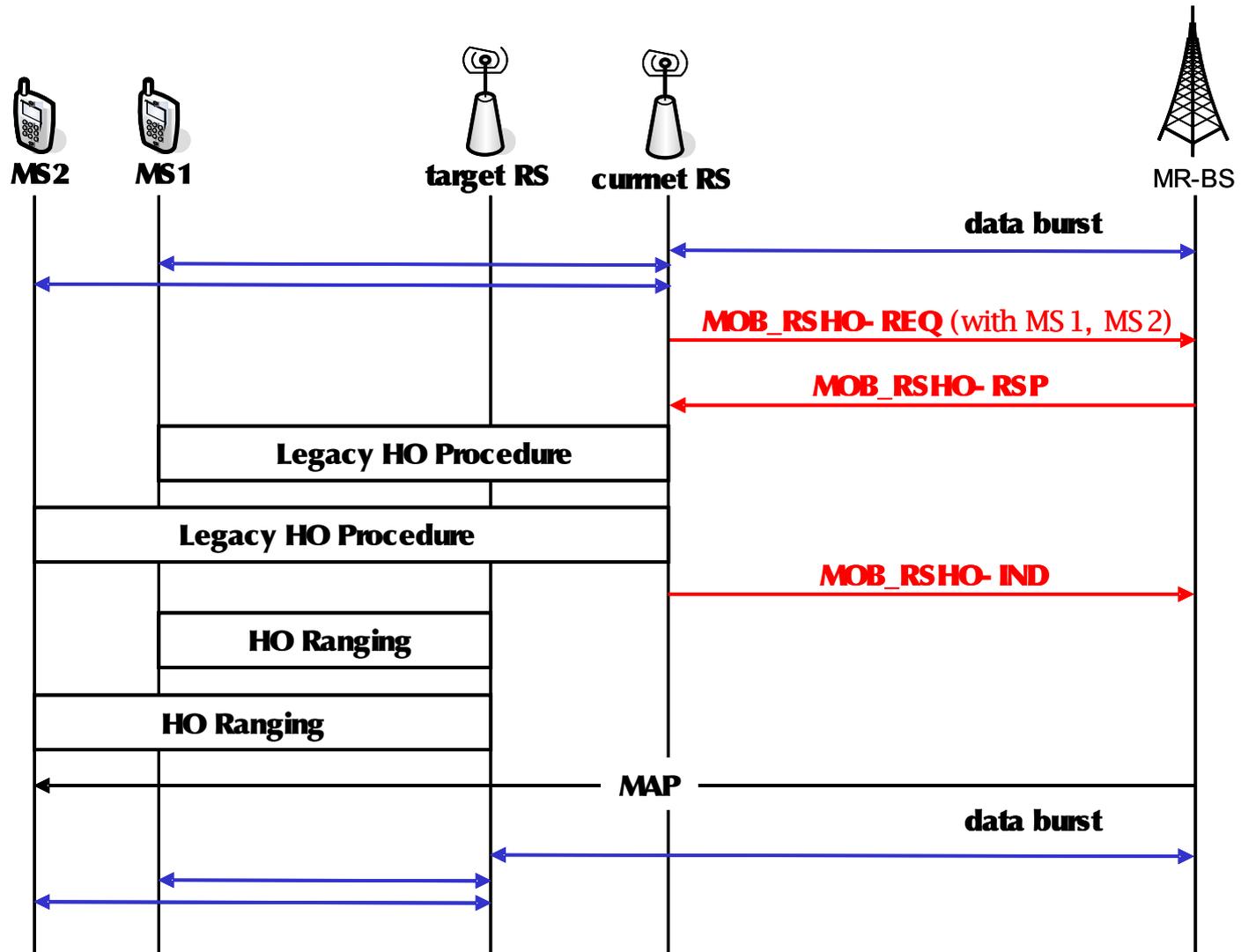
## Objective

To support cases when RS should trigger handover

## Main features

- RS types according to capability of handover
  - Handover-unmanageable RS: The handover-unmanageable RS indicates the RS, which can initiate handover but cannot support handover process and decision. This type of RS just relays handover messages between MS and MR-BS.
  - Handover-manageable RS: The handover-manageable RS indicates the RS, which can initiate, process, and decide handover. This type of RS can issue MOB\_BSHO-REQ message to start handover and manage handover request from MS's.
- Introduction of MOB\_RSHO-IND: After handover completion, the handover-manageable RS should report the new access station ID of the handovered MS to MR-BS to establish a new downlink path.

# An Example of RS-initiated handover procedure



# MOB\_RSHO-IND

<u>Syntax</u>	<u>Size (bits)</u>	<u>Notes</u>
<b><u>MOB-RSHO-IND_Message_Format()</u></b> {		
<b><u>Management Message Type=XX</u></b>	<b><u>XX</u></b>	
<b><u>MS_Number</u></b>	<b><u>XX</u></b>	<b><u>Number of handovered MS</u></b>
<b><u>For(i=0; i&lt;MS_Number; i++)</u></b> {		
<b><u>Mobile Station ID</u></b>	<b><u>48</u></b>	
<b><u>Access Station ID</u></b>	<b><u>48</u></b>	
<b><u>}</u></b>		
<b><u>TLV Encoding Information</u></b>	<b><u>variable</u></b>	<b><u>optional</u></b>
<b><u>}</u></b>		

# Text Proposal

Text to be inserted into standard (extracts)

## **6.3.22.2.2 Descriptions of RS-initiated handover**

- the purpose of RS-initiated handover
- RS-initiated handover procedure according to RS capability of handover

## **6.3.2.3.XX-ZZ Three messages**

- MOB\_RSHO-IND