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Source(s)	Young-uk Chung, Yong-Hoon Choi, Woosin Lee, Hyukjoon Lee KWU 447-1 Wolgye-Dong, Nowon-Gu Seoul, 139-701, Korea Yong Su Lee, Young-il Kim ETRI 161, Gajeong-dong, Yuseong-Gu, Daejeon, 305-350, Korea Aik Chindapol, Jimmy Chui Siemens 755 College Road East, Princeton, NJ, USA
	Voice: +82-2-940-5476 Fax: +82-2-915-3168 yuchung@kw.ac.kr yhchoi@kw.ac.kr wlee@kw.ac.kr hlee@kw.ac.kr L7856@etri.re.kr yikim@etri.re.kr Voice: +1 609 734 3364 aik.chindapol@siemens.com
Re:	This is a response to Call for Technical Proposals regarding IEEE Project P802.16j.
Abstract	This document proposes RS service end procedure and related messages in an IEEE 802.16j network.
Purpose	The document is submitted for review by 802.16 Working Group members.
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RS Service End Procedure

Young-uk Chung, Yong-Hoon Choi, Woosin Lee, Hyukjoon Lee, Yong Su Lee*, Young-il Kim*, Aik Chindapol** and Jimmy Chui*

KWU, ETRI, Siemens***

1 Introduction

This contribution covers the issues related to MAC layer handover procedure defined in Table of Contents of Task Group Working Document [1]. In this proposal, we present RS service end procedure and related MAC management messages.

In MMR networks, an RS may end its service and be removed from the networks. For example, a nomadic RS is used to extend service area temporarily (e.g., conference, concert, campaign, etc.). After the temporary event, network operator may remove the RS from the network. In this case, all MS's connected to the RS should be transferred to another RS or MR-BS before uninstalling the RS. For the purpose, new messages and procedures are required during service end of an RS.

2 Service End Procedure

To support RS service end procedure, we define three messages: SVC_END-REQ, SVC_END-RSP and SVC_END-IND. Figure 1 shows RS service end procedure using these messages. The RS service end procedure is described as follows:

1. An RS shall transmit SVC_END-REQ to an MR-BS so that it initiates service-end and requests handover of all MS's connected to it.
2. Upon receiving SVC_END-REQ, the MR-BS decides whether it allows the RS service end. If the request is allowed, MR-BS transmits SVC_END-RSP and starts handover process for the requested MS's through the RS.
3. If MR-BS rejects the request, MR-BS transmits SVC_END-RSP to the RS. Then, the RS set timer Txx and continue its operation. After Txx expires, the RS retransmits SVC_END-REQ to the MR-BS.
4. After handover procedure between the MR-BS and all MS's is completed, the MR-BS informs the RS that handover is completed by transmitting SVC_END-IND. Upon receiving SVC_END-IND, the RS starts deregistration process.

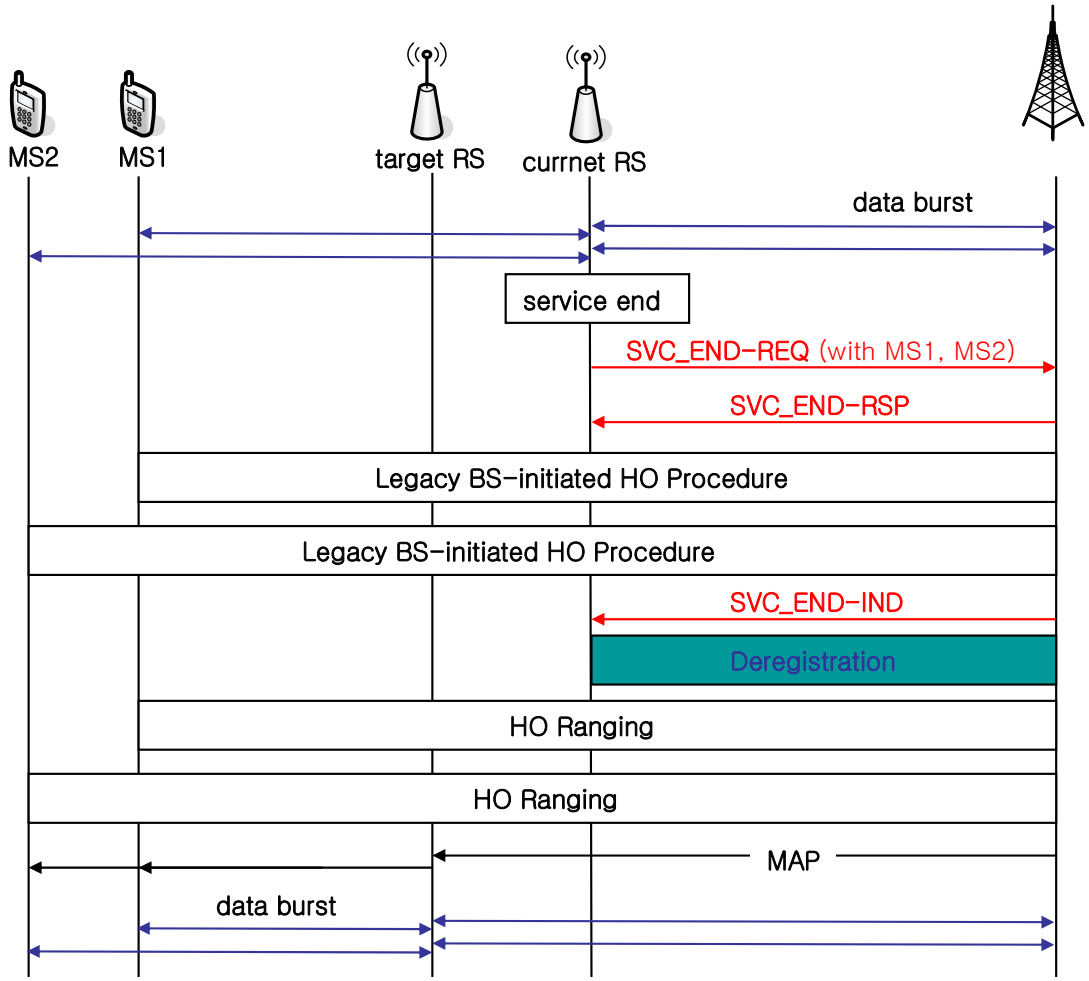

Figure 1 RS Service End procedure.

3. Text Proposals

[*Insert the following at the end of subclause 6.3.22.2.2*]

In MMR networks, an RS may end its service and be removed from the networks. During RS service end process, all MS's connected to the RS should be transferred to another RS or MR-BS before deregistering the RS. An RS requests MS handover by transmitting SVC_END-REQ. Upon receiving SVC_END-REQ, the MR-BS responses with SVC_END-RSP. After MS handover completion, the MR-BS transmits SVC_END-IND to the RS.

[*Insert the following text after 6.3.2.3.XX*]

6.3.2.3.XX SVC_END-REQ

An RS shall transmit SVC_END-REQ message to MR-BS for triggering handover of specific MS subset. After receiving this message, the MR-BS determines whether to accept the request and responds to the RS with SVC_END-RSP message. The message shall be transmitted on the basic CID.

Table XX-SVC_END-REQ message format

Syntax	Size (bits)	Notes
SVC_END-REQ_Message_Format() {		
Management Message Type=XX	**XX**	
TLV Encoding Information	**variable**	**optional**
}		

An RS shall generate SVC_END-REQ messages in the format shown in Table XX.

6.3.2.3.XX SVC_END-RSP

The BS shall transmit an SVC_END-RSP message upon reception of SVC_END-REQ message. The message shall be transmitted on the basic CID.

Table XX-SVC_END-RSP message format

Syntax	Size (bits)	Notes
SVC_END-RSP_Message_Format() {		
Management Message Type=XX	**XX**	
RSP_Type	**1**	**This parameter indicates that** **00: RS request is accepted** **01: RS request is rejected**
TLV Encoding Information	**variable**	**optional**
}		

An MR-BS shall generate SVC_END-RSP messages in the format shown in Table XX. The following parameters shall be included in the SVC_END-RSP message:

RSP_Type

Indicates the type of this response

00: RS request is accepted

01: RS request is rejected

6.3.2.3.XX SVC_END-IND

An MR-BS shall transmit an SVC_END-IND message, after RS-triggered handover is completed. The message shall be transmitted on the basic CID.

Table XX-SVC_END-IND message format

Syntax	Size (bits)	Notes
SVC_END-IND_Message_Format() {		
Management Message Type=XX	**XX**	
TLV Encoding Information	**variable**	**optional**
}		

An MR-BS shall generate SVC_END-IND messages in the format shown in Table XX.

[*Insert the following text after 10.1, table 342*]

Table 342

System	Name	Time Reference	Value		
			Minimum	default	Maximum
RS	**Txx**	**Service End re-Request timeout following the reception of SVC_END-RSP**	-	-	-

4. Reference

[1] IEEE 802.16j-06/017r2, "Table of Contents of Task Group Working Document"