Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	Reply contribution on the comment #496
Date Submitted	**2006-09-27**
Source(s)	Kiseon Ryu LG Electronics Voice: +82-31-450-2067 mailto: ksryu@lge.com
Re:	IEEE802.16e-2005
Abstract	Reply to comment #496
Purpose	Adopt proposed changes
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.
Patent Policy and Procedures	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>.

Reply contribution on the comment #496

Kiseon Ryu
LG Electronics
Aeri Lim
Samsung Electronics

Problem statement

There are 2 bits related to transmission of unsolicited management message (i.e. SBC-RSP, REG-RSP) in HO Process Optimization TLV.
Bit #8 indicates that BS shall transmit the unsolicited SBC-RSP in case capabilities of Target BS are different from the ones of Serving BS. However, current standard does not restrict that BS transmits unsolicited SBC-RSP when capabilities are the same between Serving BS and Target BS.
If MS does not receive the unsolicited SBC-RSP message when bit #8 in HO Process Optimization TLV is set to 0, the MS can not distinguish the reason why between the message is lost or Target BS does not transmit message due to the same capabilities with Serving BS.
In case of the unsolicited REG-RSP message, the same problem exists.

Proposed remedy

- Remove the condition to transmit the unsolicited SBC-RSP and REG-RSP in HO Process Optimization TLV so as that bit #8 and bit #10 just indicate whether unsolicited management messages are transmitted or not.

Proposed remedy

[Modify the text in Table 367—RNG-RSP message encodings on page 681, as follows:]

Table 367—RNG-RSP message encodings *(continued)*

Name	Type (1 byte)	Length	Value (variable-length)	PHY Scope
HO Process Optimization	21	2	For each Bit location, a value of '0' indicates the associated re-entry management messages shall be required, a value of '1' indicates the re-entry management message may be omitted. Bit #0: Omit SBC-REQ management messages during current re-entry processing Bit #1: Omit PKM Authentication phase except TEK phase during current re-entry processing Bit #2: Omit PKM TEK creation phase during re-entry processing Bit #3: Omit Network Address Acquisition management messages during current reentry processing Bit #4: Omit Time of Day Acquisition management messages during current reentry processing Bit #5: Omit TFTP management messages during current re-entry processing. Bit #6: Full service and operational state transfer or sharing between Serving BS and Target BS (ARQ, timers, counters, MAC state machines, etc.) Bit #7: post-HO re-entry MS DL data pending at target BS Bit #8: BS shall send an unsolicited SBC-RSP management message ~~with updated capabilities information in case capabilities of Target BS are different from the ones of Serving BS~~ Bit #9: Omit REG-REQ management message during current re-entry processing Bit #10: BS shall send an unsolicited REG-RSP management message ~~with updated capabilities information~~ Bit #11: (Target) BS supports virtual SDU SN. If Bit#11=1 and MS supports SDU SN, it shall issue SN_REPORT upon completion of HO to this BS. Bit #12: MS shall send Bandwidth Request header with zero BR as a notification of MS's success full re-entry registration. Bit #13: If this bit is set to 1, MS shall trigger a higher layer protocol required to refresh its traffic IP address (e.g. DHCP Discover [IETF RFC 2131] or Mobile IPv4 re-registration [IETF RFC 3344]). #14–15: *Reserved*	All