

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >
Title	<b>Fragmantation of MIH-MSG</b>
Date Submitted	<b>2006-09-12</b>
Source(s)	Peretz Feder - Lucent Technologies <a href="mailto:pfeder@lucent.com">[mailto: pfeder@lucent.com]</a>  Ronny Yongho Kim <a href="mailto:ronnykim@lge.com">[mailto:ronnykim@lge.com]</a>
Re:	
Abstract	This contribution proposes operator ID bit mapping
Purpose	Adoption
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 (Version 1.0) < <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing 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 < <a href="mailto:r.b.marks@ieee.org">mailto:r.b.marks@ieee.org</a> > as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site < <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> >.

3

1

# Fragmentation of MIH-MSG

2

Peretz Feder - Lucent Technologies

3

4

Ronny Yongho Kim – LG Electronics

5

## Problem Definition

6

The 802.16 MAC doesn't provide fragmentation mechanism for Management MAC message.

7

8

MIH function in 802.16 compliant device uses the MOB\_MIH-MSG for MIH Information Server query and response. As the retrieved data from the IS function (in the MIH PoS) may be long, fragmentation may be required. Packing can also be used for the transport of small MIH frames.

9

10

11

12

13

## Remedy

14

15

MOB\_MIH-MSG to include fragmentation and packing indicator in order for the 802.16 MAC to manage correct payload size for a MAC management message.

16

17

18

19

## Proposed Text Changes

20

21

Change Modify table 108aa in section 6.3.2.3.62. See below:

22

23

Syntax	Length	Description
MOB_MIH-MSG_Message_Format() {		
Management Message Type=67	8 bits	
TLV Encoded Information	variable	TLV specific
Fragmentation and Packing Indicator	4 bits	
Sequence Number	4 bits	
TLV Encoded Information	variable	TLV specific
}		

The MOB\_MIH-MSG shall include the following paramteres as encoded TLV tuples:

Fragmentation and Packing Indicator:

- Bit 0: indicates whether packing is used (when there are more than one MIH frame0
- Bit 1: indicates whether one MIH frame is fragmented or not
- Bit 2, 3: indicate no fragmentation, last fragment, first fragment, continuing (middle) fragment

Sequence Number : randomly assigned from transmission side.

The MOB\_MIH-MSG shall include the following paramteres as TLV tuples”

- MIHF\_Frame-paket (see 11.20)
- HMAC/CMAC Tuple (see 11.1.2)

The HMAC/CMAC Tuple shall be the last attribute in the message