Project	**IEEE 802.16 Broadband Wireless Access Working Group <**http://ieee802.org/16**>**
Title	**Extendibility of the Assignment A-MAP IE (16.3.6.5.2.4)**
Date Submitted	**2009-12-31**
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Re:	IEEE 802.16 Working Group Letter Ballot #30b on P802.16m/D3
Abstract	The contribution addresses the extendibility issue in the Assignment A-MAP IE design (16.3.6.5.2.4)
Purpose	To be discussed and adopted by TGm for the 802.16m DRAFT amendment.
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Extendibility of the Assignment A-MAP IE (16.3.6.5.2.4)

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1   Introduction

As shown Table 811 on page 395 in 802.16m/D3, we have used 14 out 16 possible Assignment A-MAP IE type code points so far. The extendibility of our Assignment A-MAP IE type should be discussed and considered now.

This contribution addresses the extendibility issue of the Assignment A-MAP IE type design.

2   Proposed Solutions

We propose the following to address the extendibility issue of the Assignment A-MAP IE Type:

  a) Use the A-MAP IE type = 0b1111 to introduce an Extended Assignment A-MAP IE;
  b) Define the format of the proposed Extended Assignment A-MAP IE, including the following fields:
    i.   Extended type
    ii. Length of the Extended Assignment A-MAP IE Body (in unit of bytes)
    iii. Extended Assignment A-MAP Body

Note that the Length field is proposed here, instead of using the idea of type-indicated length, for the purpose of forward compatibility, i.e., when a new Extended Assignment A-MAP IE is added to a new release of 802.16m standard, it can be skipped properly by an AMS that only supports the previous release of the 802.16 spec.

3   Suggested changes in the 802.16m/D3

Based on the above discussion, we propose the following changes in the 802.16m/D3. Note that the new text is marked with blue and underline; the deleted text are marked with red and strikethrough.

Suggested change #1: on page 395, line 35

In Table 802, row 0b1111, change the text in the Usage box as follows:

~~Reserved~~ Extended Assignment A-MAP IE, see definition in Table 811a.

Suggested change #2: on page 395, line 37

Insert the following text and Table:

The Extended Assignment A-MAP IE is defined in Table 811a.

Table 811a—Extended Assignment A-MAP IE format

Syntax	Size (bits)	Notes
Extended_Assignment_A-MAP IE() {		
A-MAP IE Type	4	0b1111: Extended Assignment A-MAP IE
Extended Assignment A-MAP IE Type	6	Extended Assignment A-MAP IE Type
Length of Extended Assignment A-MAP IE Body	6	Length in bytes of the Extended A-MAP IE Body
Extended A-MAP IE Body	variable	
}		

4   References

[1] IEEE Std 802.16-2009

[2] IEEE P802.16m/D3, "DRAFT Amendment to IEEE Standard for Local and metropolitan area networks"