Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >
Title	Support of Long Data in Extended IE
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Re:	
Abstract	Extended IE fragmentation scheme
Purpose	Adoption of proposed changes into P802.16e /D5-2004
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1 Introduction

The length of the payload of extended IE is limited to 15 Bytes (120 bits) in both DL and UL MAP Message. However, some extended IE (*Ex: HO Active Anchor UL MAP IE, HO CID Translation MAP IE, MIMO in another BS IE, and etc.*) defined in 16e may have a large payload because of the loop inside the payload itself. The best way to eliminate this limitation is to increase the size of length filed in the extended IE. But, in 802.16e standard, it's not possible to change the size because of the backward compatibility problem.

Hence, this contribution presents a mechanism to support a large payload in extended IE without backward compatibility problem.



Figure 1 Fragmentation of long payload in Extended IE

When the size of payload exceeds 15 Bytes, the payload shall be divided into several fragmented payloads which has a size of 15 Bytes. Then each fragmented payload will have a Extended DIUC header with a same extended DIUC value.

This payload fragmentation mechanism is applied only on specific extended IE. And the IE which adopt the payload fragmentation shall specify that BS can apply payload fragmentation on it.

2 Text Change

Add new section

[Add a text in section 8.4.5.3.2 as follows]

8.4.5.3.2 DL-MAP extended IE format

A DL-MAP IE entry with a DIUC value of 15, indicates that the IE carries special information and conforms to the structure shown in Table 275. A station shall ignore an extended IE entry with an extended DIUC value for which the station has no knowledge. In the case of a known extended DIUC value but with a length field longer than expected, the station shall process information up to the known length and ignore the remainder of the IE.

For a some extended IE which have a fragmentable and variable size data, if the size of data is exceeds 15 Bytes, the data shall be divided into several fragmentation. Each fragmented data will have a Extended DIUC <u>header with a same extended DIUC value. This data fragmentation mechanism shall be applied only on specific extended IE. And the IE which adopt the payload fragmentation shall specify that BS can apply payload fragmentation on it.</u>

When a MSS finds sequential extended IE which is adopting the data fragmentation, MSS shall decode the data after it merge the data in each extended IE into one.

To support fragmentation, the definition of the IE shall includes a text "This IE support a fragmentation of data."