Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a> >
Title	Clean-up Text for HARQ Feedback A-MAP (15.3.6.3.2.3)
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Re:	Comments on IEEE P802.16m/D2 for IEEE 802.16 Working Group Letter Ballot Recirc #30a
Abstract	The contribution proposes text changes for IEEE P802.16m/D2 in Section 15.3.6.3.2.3 (HF-A-MAP)
Purpose	To be discussed and adopted by the IEEE 802.16 Working Group
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# Clean-up Text for HARQ Feedback A-MAP (15.3.6.3.2.3)

## Hyunkyu Yu

# Samsung Electronics

### Introduction

This contribution proposes editorial changes in HF-A-MAP, focusing on modulation procedure.

#### **Instructions to Editor**

[Adopt the text changes described below starting on page 338, line 12]

Begin proposed text with markup

#### 15.3.6.3.2.3 HARQ Feedback A-MAP

HARQ feedback A-MAP (HF-A-MAP) contains HARQ-feedback-IEs for ACK/NACK feedback information to uplink data transmission.

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Figure 514 - Chain of HF-A-MAP IE to HF-A-MAP symbols

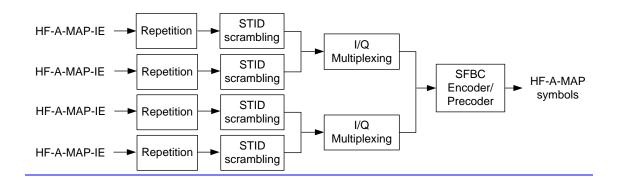


Figure xxx – Chain of HF-A-MAP IE to HF-A-MAP symbols

Figure 514 shows the construction procedure of HF-A-MAP symbols from HF-A-MAP-IE.

Each HF-A-MAP IE carries 1 bit information. Depending on the channel conditions, the modulation can be QPSK or BPSK. If QPSK is used, 2 HF-A-MAP IEs are mapped to a point in the signal constellation. If BPSK is used, each HF-A-MAP IE is mapped to a point in the signal constellation. The repetition number, N<sub>Rep,HF-A-MAP</sub>, is 8. Repeated HF-A-MAP IE bits are scrambled by the N<sub>Rep,HF-A-MAP</sub> LSBs of the STID of the associated AMS.

Each HF-A-MAP IE carries 1 bit information. Firstly, it is repeated N<sub>Rep,HF-A-MAP</sub> times, where N<sub>Rep,HF-A-MAP</sub> is 8. Then, Repeated HF-A-MAP IE bits are scrambled by the N<sub>Rep,HF-A-MAP</sub> LSBs of the STID of the associated AMS. Depending on the channel conditions, power scaling can be applied to each scrambled sequence. Before MIMO encoding, each scrambled sequence is mapped to either real part or imaginary part in the signal constellation and multiplexed with other scrambled sequence, if exist.

End proposed text with markup\_\_\_\_\_