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| Project | **IEEE 802.16 Broadband Wireless Access Working Group <**<http://ieee802.org/16>**>** |
| Title | **Proposed Modifications to DC Assignment A-MAP IE for BS-Controlled DC in IEEE 802.16.1a** |
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| Re: | In response to Sponsor Ballot sb010a on P802.16.1a/D5 |
| Abstract | This contribution proposes modification to link creation in IEEE 802.16.1a. |
| Purpose | To discuss and adopt the proposed texts in the IEEE 802.16.1a Draft Standard. |
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Proposed Modifications to DC Assignment A-MAP IE for BS-Controlled DC in IEEE 802.16.1a

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# Introduction

In the current draft standard [1], DC Assignment A-MAP IE is used to inform of resource allocation information to both transmit and receive HR-MSs commonly, and the way of transmitting DC Assignment A-MAP IE in the A-MAP group is specified. It follows the rules for UL Basic Assignment A-MAP IE, but DC Assignment A-MAP IE should be correctly decoded by both transmit and receive HR-MSs to create their link reliably. Two types of channel coding rate is supported to transmit A-MAP IEs in the baseline standard [2], so it may be possible that applicable channel coding rates for those two HR-MSs can be different. Therefore, it needs to specify which channel coding rate for DC Assignment A-MAP IE shall be used for its reliable transmission.

# References

[1] IEEE P802.16.1a/D5, WirelessMAN-Advanced Air Interface for Broadband Wireless Access Systems - Draft Amendment: Higher Reliability Networks, Aug. 2012.

[2] IEEE Std 802.16.1-2012, IEEE Standard for WirelessMAN-Advanced Air Interface for Broadband Wireless Access Systems, Sept. 2012.

# Proposed Texts on the IEEE 802.16.1a Amendment Draft Standard

The proposed texts are written in three different types of fonts according to each change purpose as follows.

The same texts in the current draft: black

The texts to be deleted by this contribution: ~~red strikeout~~

The texts to be added by this contribution: blue underline

[-----------------------------------------------------Start of Text Proposal------------------------------------------------------]

*[Remedy #1: Modify the current texts in Section 6.12.2.2.2.2 on Line 8, Page 136 in the IEEE P802.16.1a/D5 Draft Standard as follows.]*

HR-BS/RS transmits a DC Assignment A-MAP IE to a particular HR-MS in the same way it would transmit a UL Basic Assignment A-MAP IE to such an HR-MS except that channel coding rate is selected based on the worst link condition among transmit and receive HR-MSs. This means the same set of rules for UL Basic Assignment A-MAP IE symbol to subcarrier pair mapping in 6.3.4.3, power control in 6.3.5.4.1, and location within A-MAP group/region in 6.3.5.2.2, apply to DC Assignment A-MAP IE. Furthermore, if in the A-MAP group that a DC Assignment A-MAP IE is located in, there are any unicast assignment A-MAP IEs, then this DC Assignment A-MAP shall come after those unicast assignment A-MAP IEs.

[------------------------------------------------------End of Text Proposal------------------------------------------------------]