

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	CR on SDD Section 18: Procedure of Interference Mitigation among multiple cells
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Re:	Change request to Project 802.16m System Description Document (SDD) (IEEE 802.16m-08/003r7)
Abstract	This contribution provides text addition to SDD to facilitate the interference mitigation among multiple cells in SON.
Purpose	For discussion and approval by IEEE 802.16m TG
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Procedure of Interference Mitigation among Multiple Cells

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1 Introduction

Binary or multiple-discrete-level power control can be performed at base stations to control the interference and optimize the network throughput. The procedure in this contribution is introduced to mitigate inference among multiple cells.

2 Interference mitigation

Source BSs can continuously monitor its own interference situation, decide to mitigate interference, and then collect interference information and related parameters from the MSs and the neighbor cells. Then the source BS decides which neighbor BSs are the target BSs which need to control its transmission power and sends them the power update request or necessary information to compute appropriate transmission power for interference mitigation. Each target BS receives the requests, analyzes its own interference situation, and decides whether to change its power settings, and sends back the response to the source BSs. After receiving the response or not receiving the response after a pre-specified period, Source BS can continue to send interference mitigation request or cease interference mitigation.

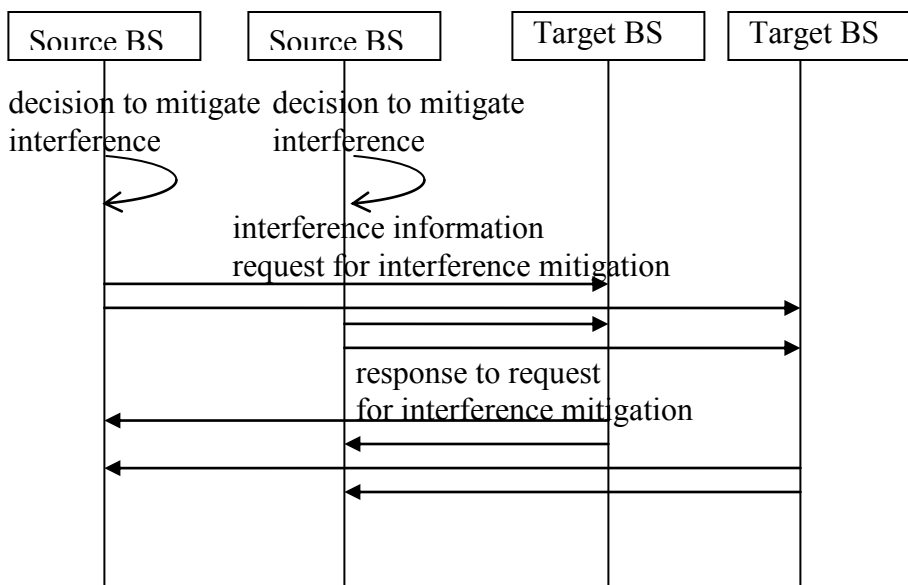


Figure 1 Procedure of Interference Mitigation

Insert the following text into the “Support for Self-organization” clause (IEEE 802.16m-08/003r7):

----- Proposed text -----
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18. Support for Self-organization

18.2.2 Interference Management and Optimization

Source BSs can continuously monitor its own interference situation, decide to mitigate interference, and then collect interference information and related parameters from the MSs and the neighbor cells. Then the source BS decides which neighbor BSs are the target BSs which need to control its transmission power and sends them the power update request or necessary information to compute appropriate transmission power for interference mitigation. Each target BS receives the requests, analyzes its own interference situation, and decides whether to change its power settings, and sends back the response to the source BSs. After receiving the response or not receiving the response after a pre-specified period, Source BS can continue to send interference mitigation request or cease interference mitigation.

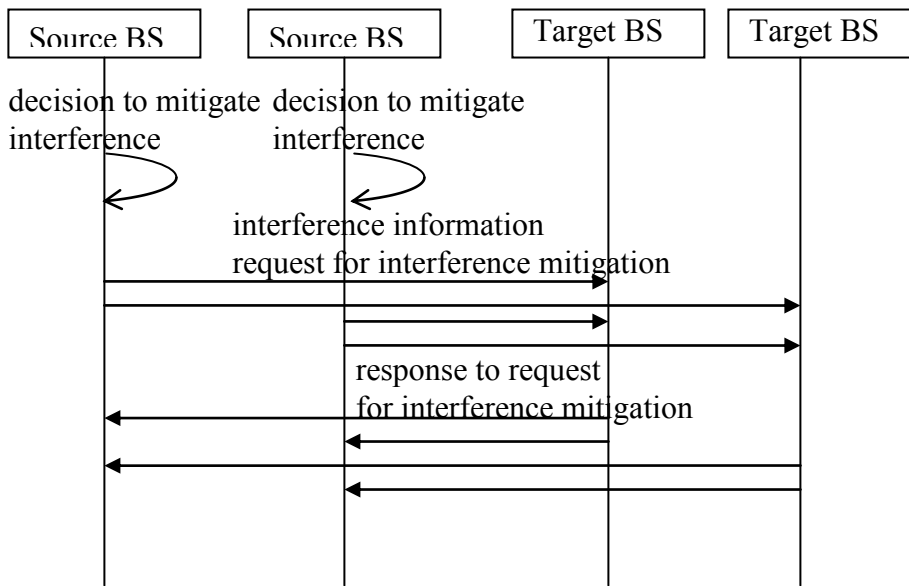


Figure 1 Procedure of Interference Mitigation

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