

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Proposed text related to Interference Mitigation in Femto ABS for the IEEE802.16m/D2 (15.4.11)	
Date Submitted	2009-11-16	
Source(s)	Linghang Fan, Andreas Maeder, Nader Zein, Hassan Al-kanani, Tetsu Ikeda NEC	[Linghang.fan, nader.zein, hassan.alkanani]@eu.nec.com andreas.maeder@nw.neclab.eu, t-ikeda@ap.jp.nec.com
Re:	LB comment to 802.16m Amendment Working Document D2	
Abstract	This contribution is to propose detail description on IM	
Purpose	Update P802.16m/D2 by discussion and adoption	
Notice	<i>This document does not represent the agreed views of the IEEE 802.16 Working Group or any of its subgroups. It represents only the views of the participants listed in the "Source(s)" field above. It is offered as a basis for discussion. It is not binding on the contributor(s), who reserve(s) the right to add, amend or withdraw material contained herein.</i>	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy	The contributor is familiar with the IEEE-SA Patent Policy and Procedures: < http://standards.ieee.org/guides/bylaws/sect6-7.html#6 > and < http://standards.ieee.org/guides/opman/sect6.html#6.3 >. Further information is located at < http://standards.ieee.org/board/pat/pat-material.html > and < http://standards.ieee.org/board/pat >.	

Proposed text related to Interference Mitigation in Femto ABS for the IEEE802.16m/D2 (15.4.11)

Linghang Fan, Andreas Maeder, Nader Zein, Hassan Al-kanani, Tetsu Ikeda

NEC

1. Introduction

Section 15.4.11 in D2 has defined the procedures for interference avoidance and interference mitigation. The received signaling power from the adjacent cells has been classified as interference, without emphasizing on the need to distinguish the interference sources. However, in the hierarchical and dense deployed femtocell environment, the femtocell BSs must identify each major interference source, and then apply interference mitigation schemes targeting the identified interference sources. This is clearly missed in the current draft.

2. Proposed Texts

-----Text Start -----

Remedy 1 :

[Insert texts as suggested below: Page 551, Line 14]

15.4.11 Interference Avoidance and Interference Mitigation

The serving Femto ABS can request its AMS(s) to report the signal strength measurement of neighbor ABSs, including macro and/or Femto ABSs, via AAI_SCN-RSP. Based on the scanning result, the serving femto ABS should identify the interfering Femto ABS(s) and/or macro ABS(s), and can mitigate interference by reducing its transmission power, and/or blocking the interference related resource region. Cooperation between multiple ABSs may be applied.

-----Text End -----