

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Proposed text related to Signalling Exchange between Femtocell and Macrocell BSs over-the-air for the IEEE802.16m/D2 (15.4.1)	
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Re:	LB comment to 802.16m Amendment Working Document D2	
Abstract	This contribution provides text addition to AWD to facilitate over-the-air signalling exchange between femtocell and macrocell BSs in IEEE 802.16m	
Purpose	For discussion and approval by IEEE 802.16m TG	
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Proposed text related to Signalling Exchange between Femtocell and Macrocell BSs over-the-air for the IEEE802.16m/D2 (15.4.1)

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1 Introduction

A WiMAX femtocell BS needs to carefully balance its transmit power, which should be high enough to ensure good signal strengths for its subscribers, but not too high to avoid severe inference to other mobile station (MS)s, other femtocells and macrocell BS. To address this problem, quick signaling exchange between femtocells and macrocell BSs is essential.

Signalling exchange between Femtocell and Macrocell BSs over-the-air leads to efficient resource management (e.g. quick response to interference conditions, exchange of resource allocation parameters, etc.). It is also beneficial to synchronisation and ranging. Because of the above mentioned advantages, it is supported in the current SDD [1]. In this contribution, we propose the text to support signalling exchange between Femtocell and Macrocell BSs over-the-air in AWD.

2 Proposed Text

[Insert text in subclause 15.4.1 as follows]

-----Start of the Text-----

15.4 Support for Femto ABS

15.4.1 General Description

A Femto ABS is an ABS with low transmit power, typically installed by a subscriber in the home or SOHO to provide the access to closed or open group of users as configured by the subscriber and/or the access provider. A Femto ABS is typically connected to the service provider's network via a broadband connection. **The femtocell BSs may communicate with the overlapped macrocell BS for exchanging control messages over the air-interface**

-----End of the Text-----

References

- [1] IEEE 802.16m-09/0034r2, "IEEE 802.16m System Description Document (SDD)"