Project	**IEEE 802.16 Broadband Wireless Access Working Group <**http://ieee802.org/16**>**
Title	**Multicarrier Operation for Femtocell ABS in IEEE 802.16m Amendment**
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Re:	802.16m Amendment Working Document Call for contributions on "Support for Femtocell BS"
Abstract	This contribution proposes the multicarrier operation for Femtocell ABS**.**
Purpose	For discussion and approval by IEEE 802.16m TG
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Multicarrier Operation for Femtocell ABS in IEEE 802.16m Amendment

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NEC

1 Introduction

Multicarrier operation for Femto is supported in the current SDD [1]. In this contribution, we propose the text to support the multicarrier operation for femtocell ABS in AWD.

2 Proposed Text

[Insert a new subclause 15.4.x as follows]

---Start of the Text---

15.4 Support for Femto ABS

15.4.X Multicarrier Operation

Multi-carrier operation shall be supported by the Femtocell ABS. The Femtocell ABS can assign a secondary carrier to an AMS in addition to the primary carrier. when assigning the secondary carrier, the Femtocell ABS should mitigate interference so that the highest priority should be avoiding increase of the interference on macro cell rather than adding the secondary carrier.

The procedure for interference avoidance in multi-carrier operation for Femtocell is as follows:
1. Macro BSs measure uplink or doenlink interference for each carrier.
2. If the interference for a carrier exceeds certain threshold, the macro ABS broadcasts interference status information, which prohibits the use of this carrier as the secondary carrier to Femtocell ABSs overlapping the macro cell via SFH or baulhaul.
3. The Femtocell ABSs receive the information and avoid using this carrier, which is indicated by the macro BS as the secondary carrier.

---End of the Text---

References

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