Project	IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16 >	
Title	Clarification on Low Duty operation mode	
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Source(s)	Masato Okuda, Keiichi Nakatsugawa, Kevin Power Fujitsu	E-mail: okuda@jp.fujitsu.com
		* <http: affiliationfaq.html="" faqs="" standards.ieee.org=""></http:>
Re:	Change Request on SDD Target topic: "Femtocell BS".	
Abstract	This contribution proposes a femtocell BS to send information about low-duty operation to AMSs .	
Purpose	To be discussed and adopted by TGm for 802.16m System Description Document.	
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Clarification on Low Duty Operation mode

Masato Okuda, Keiichi Nakatsugawa, Kevin Power Fujitsu

Introduction

During unavailable interval, a femtocell BS does not transmit on the air interface. Therefore, it is assumed that the unavailable interval should be aligned with AMS's sleep window and panging unavailable interval when AMS exists within the femtocell BS's coverage.

However, AMS in sleep mode or idle mode can wake up any time and send a bandwidth request or a ranging code during the sleep window or paging unavailable window. Therefore, if AMS has no knowledge that the femtocell BS is in low duty operation mode, it may perform handover upon detecting no femtocell BS signal when the AMS wakes up during the sleep window or paging unavailable window.

To avoid this problem, ABS should notify AMS of its operation in low duty mode.

Proposed Text

Add the text at the end of the second paragraph of the subclause 15.8 as indicated below;

The Femtocell BS may enter low-duty operation mode either if all MSs attached to the Femtocell BS are in idle or sleep mode, or if no MS is in the service range of the Femtocell BS at all. The femtocell BS in the low duty operation mode should unicast or broadcast information regarding the low duty operation mode.