Project	IEEE 802.16 Broadband Wireless Access Working Group < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	Sleep Mode Support in Relay	
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Re:	SDD Change Request	
Abstract	This contribution specifies sleep mode support in the RS.	
Purpose	For consideration and adoption into the 16m SDD document.	
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## Sleep Mode Support in Relay

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## Introduction

In 16m, the granularity of the sleep operation is expected to be a frame. For optimized power saving, the MS is expected to go into micro-sleeps for a few frames at a time. Also the MS may extend its listening window based on traffic patterns. Having the sleep negotiation at the BS, for an MS that is attached to a RS will increase the RTT and will consequently hamper the power saving of the MS. For this reason, we propose that in 16m, ARSs that perform distributed scheduling handle sleep mode requests directly, maintaining the sleep state of the AMSs which they serve.

## **Text Proposal**

[Insert the following text into section 15 of the SDD.]

## 15.4.x Relay Support for Sleep Mode

When distributed scheduling is used, the AMS negotiates sleep mode parameters with the access ARS. Sleep mode messages are not forwarded on to the ABS and decisions concerning sleep mode entry, exit as well as dynamic extension of listen windows or change in sleep cycles are made by the ARS. A flow control protocol is used between the ARS and ABS to ensure that the buffers of the ARS do not overflow due to its inability to send downlink data to an AMS.