

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Comments on Sleep Window Duration During Sleep Mode Operation
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Re:	Reply to Call for comment (IEEE 80216m-08/040) on SDD 80216m-08/003r5
Abstract	Proposal to determine the duration of sleep window during sleep mode operation in 802.16m system
Purpose	Discuss and adopt
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Comments on Sleep Window Duration During Sleep Mode Operation

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Nokia Siemens Networks**1 Introduction**

The current SDD text in SDD 80216m-08/003r5 for sleep mode operation does not describe the method to determine the duration of sleep window at a particular time during the sleep mode operation of an MS. This contribution proposes an efficient algorithm to determine the duration of sleep window during sleep mode operation.

The sleep window starts from an initial value and may be incremented exponentially until the maximum sleep window duration is reached.

2 SDD Text Proposal

-----Start of the text-----

[Insert following text at the end of Section 10.4.1.3.2]

The duration of the first sleep window is denoted as *Initial Sleep Window* and the duration of the Sleep Window interval at a particular time is given by

$$\text{Sleep Window} = \min (2 * (\text{Previous Sleep Window}), \text{Final Sleep Window base} * 2^{(\text{Final Sleep Window exponent})}) \text{-----} (xx)$$

Where *Final Sleep Window base* is the final Sleep Window base and *Final Sleep Window exponent* is the final Sleep Window exponent. It may be noted that when *Final Sleep Window base* = *Initial Sleep Window* and *Final Sleep Window exponent* = 0, the duration of Sleep Window is constant. When traffic is exchanged in the extended listening window, the duration of sleep window is reset to Initial Sleep Window.

-----End of the text-----

Reference

[1] IEEE C802.16m-08/003r4, "Project 802.16m System Description Document (SDD)".