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Re:	IEEE P802.16e-2005 and IEEE P802.16-2004 In response to call for maintenance change request
Abstract	
Purpose	Adopt proposed changes
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Clarification of the unsolicited sleep mode control

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1. Motivation

The creation of power saving classes (PSC) is similar to SF creation. However support for true transactions is missing:

- 1) There is no acknowledgement for BS spontaneous creations, leading to possible PSC state desynchronisation between MS and BS;
- 2) In case of using the unsolicited MOB_SLP-RSP or DL Sleep control extended subheader to deactivate Power Saving Class, BS should be confirmed from MS about the deactivation of Power Saving Class after transmitting the unsolicited MOB_SLP-RSP or DL Sleep control extended subheader.

2. Details

- 1) The unsolicited message related to sleep mode can be used only to activate/deactivate PSC.
- 2) After deactivating PSC via unsolicited sleep mode message, BS is acknowledged by BR message.

3. Text changes

[Modify the first paragraph of section 6.3.2.3.45 on the page 114, as indicated:]

The MOB_SLP-RSP message shall be sent from BS to an MS on Broadcast CID or on the MS's basic CID in response to an MOB_SLP-REQ message, ~~or~~ The BS may send the unsolicited [MOB_SLP-RSP message for the purpose of activation or deactivation only](#). If Definition bit is set, the message contains the definition of a new Power Saving Class together with an assigned Power_Saving_Class_ID that shall be unique per MS if only unicast traffic connections are included and unique per cell if only multicast connections are included. Mixture of multicast and unicast connections in a single class is not allowed.

[Modify description after table 109d on the page 116, as indicated:]

Sleep_Approved

1 = Indicates that BS approves the MS' Activation/Deactivation Request of the Power Saving Class.

0 = Indicates that BS disapproves the MS' Activation/Deactivation Request of the Power Saving Class.

~~For a MOB_SLP-RSP transmitted in an unsolicited manner including Definition of one or more Power Saving Class IDs, the BS shall set Sleep_Approved = 0 for each Power Saving Class ID defined in the message.~~

~~In case of the MOB_SLP-RSP transmitted from the BS in an unsolicited manner, the BS shall set "Sleep approved" = 1 for each Power Saving Class ID that is not defined in the message.~~

[For a MOB_SLP-RSP transmitted in an unsolicited manner, the BS shall set 'Sleep approved' = 1 and 'Definition' = 0 for each Power Saving Class.](#)

[Modify the text in '6.3.21.1 Introduction' on the page 230 as follows :]

The Serving BS may verify MS exit from sleep mode by making a UL allocation for MS at any time subsequent to supposed waking event (for example, positive indication in MOB_TRF-IND message or deactivation indicated by the unsolicited MOB_SLP-RSP message or DL Sleep control extended subheader) by transmitting at least BR message. ~~(If there is no data to transmit, BR field of the BR PDU shall be set to 0).~~

When receiving the MOB_SLP-RSP or DL Sleep control extended subheader in sleep mode, the MS shall follow the latest configuration and operation instruction which BS requested.

[Modify the text in '6.3.21.2 Power Saving Classes of type 1' on the page 231 as follows :]

When an MS receives an UL allocation after receiving a positive MOB_TRF-IND message indication or deactivation indicated by the unsolicited MOB_SLP-RSP message or DL Sleep control extended subheader, the MS shall transmit at least BR message. ~~(If there is no data to transmit, BR field of the BR PDU shall be set to 0).~~