### Sleep Mode Operations in MR Network for Centralized Scheduling Approach

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Purpose: This document suggests the usages of IEEE 802.16e messages and introduces new parameters in these messages to facilitate the sleep mode and idle mode operations in IEEE 802.16i

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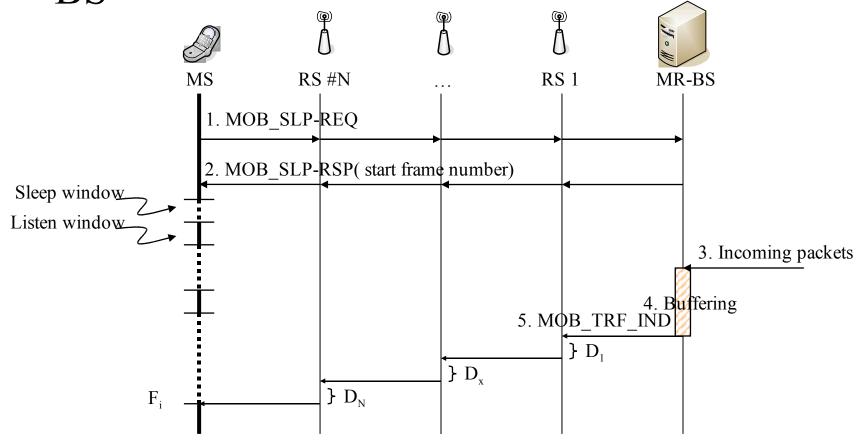
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# Relay support for MS sleep mode

- In IEEE 802.16j MR networks, the RS may use two types of scheduling
  - Centralized Scheduling
    - where MR-BS controls all the radio resource scheduling and MAP allocation
  - Distributed Scheduling
    - where some functionality of radio resource scheduling and MAP allocation are distributed to RS
- MS sleep mode should be supported in an MR network for both centralized and decentralized scheduling approaches
- This contribution proposes text to clarify the MS sleep mode for the centralized scheduling approach only

# Sleep Mode Operations in MR Network for Centralized Scheduling Approach

Centralized controlled and scheduled by MR-BS



## Proposed Text

*Insert new subclause 6.3.21.7:*6.3.21.7 Relay support for MS sleep mode

Add the following words in the first paragraph in 6.3.21.7: In MR networks, the sleep mode shall be centrally controlled by the MR-BS in the presence of centralized or distributed scheduling.

Insert new subclause 6.3.21.7.1:
6.3.21.7.1 MS sleep mode support for centralized scheduling approach

Add the following words in the first paragraph in 6.3.21.7.1:

For an MS attached to the MR-BS through an RS, MS sleep mode operates as defined in section 6.3.21. All MOB\_SLP-REQ messages generated by MSs attached to an RS shall be relayed to the MR-BS. The MR-BS shall be responsible for generating MOB\_SLP-RSP messages, which will be relayed by RSs, either in response to a MOB\_SLP-REQ or unsolicited. The MR-BS shall take the additional relay delay into account while it forwards the packets through RS.

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