

Appendix D Sensor Node States Energy and Weight Calculation

D.1 Sensor Node Sleep and Awake Operation

During the transmission between nodes and cluster head (CH) energy is consumed. In addition, nodes consume more energy in the transmission (TX) state than receiving (RX). Figure D.1 shows the Transmitting (TX) and Receiving (RX) operation of sensor node.

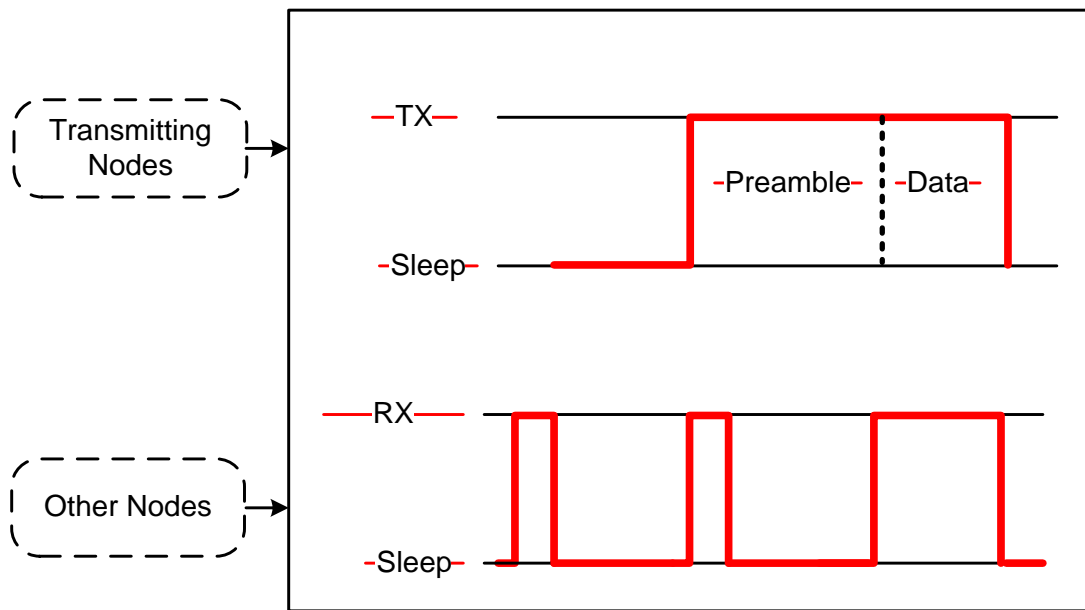


Figure D.1: Sensor Node TX and RX States

During the Transmission (TX) sending node switch its status from sleep to awake and transmit or relay the data to next node. Similarly, after receiving (RX) the data the node turns its state to sleep or idle mode. The switching between (TX) and (RX) states preserves node energy level.