CLAIMS

What is Claimed:

1. A method for discontinuous reception (DRX) implemented by a wireless transmit/receiver unit (WTRU) configured for sidelink (SL) communication, the method comprising:

receiving DRX configuration information from a peer SL WTRU;

applying the received DRX configuration information; and

on a condition that the WTRU has a connection to a network, reporting to the network that the WTRU applied the received DRX configuration information.

2. The method of claim 1, further comprising:
transmitting a message to the peer SL WTRU in response to the applied DRX configuration information, wherein the message indicates that the WTRU applied the received DRX configuration information.

3. The method of claim 1, wherein the DRX configuration information comprises timer information, wherein the timer information comprises at least one of: a SL on-duration timer, a SL inactivity timer, a SL HARQ RTT timer, or a SL HARQ retransmission timer.

4. The method of claim 1, wherein the DRX configuration information is SL DRX configuration information.

5. The method of claim 1, wherein the applying the received DRX configuration information comprises changing a SL active time value.

6. The method of claim 1, wherein the connection to a network is an RRC_CONNECTED connection.

7. The method of claim 1, wherein the WTRU receives the DRX configuration information via PC5 signaling.

8. The method of claim 1, wherein the WTRU maintains independent timers related to Uu DRX and SL DRX.

9. The method of claim 1, wherein the reporting that the WTRU applied the DRX configuration information is sent in a SL information element.

10. The method of claim 1, wherein the network comprises a gNB.

11. A wireless transmit/receive unit (WTRU) configured for sidelink (SL) communication, the WTRU comprising:

a transceiver; and

a processor, wherein:

the transceiver is configured to receive DRX configuration information from a peer SL WTRU;

the processor is configured to apply the received DRX configuration information; and

the transceiver is further configured to, on a condition that the WTRU has a connection to a network, report to the network that the WTRU applied the received DRX configuration information.

12. The WTRU of claim 11, wherein:
the transceiver is further configured to transmit a message to the peer SL WTRU in response to the applied DRX configuration information, wherein the message indicates that the WTRU applied the received DRX configuration information.

13. The WTRU of claim 11, wherein the DRX configuration information comprises timer information, wherein the timer information comprises at least one of: a SL on-duration timer, a SL inactivity timer, a SL HARQ RTT timer, or a SL HARQ retransmission timer.

14. The WTRU of claim 11, wherein the DRX configuration information is SL DRX configuration information.

15. The WTRU of claim 11, wherein the processor is further configured to apply the received DRX configuration information by changing a SL active time value.

16. The WTRU of claim 11, wherein the connection to a network is an RRC_CONNECTED connection.

17. The WTRU of claim 11, wherein the transceiver is further configured to receive the DRX configuration information via PC5 signaling.

18. The WTRU of claim 11, wherein the WTRU maintains independent timers related to Uu DRX and SL DRX.

19. The WTRU of claim 11, wherein the transceiver is further configured to report that the WTRU applied the DRX configuration information in a SL information element.

20. The WTRU of claim 11, wherein the network comprises a gNB.