CLAIMS

What is Claimed:

1. A method for discontinuous reception (DRX) for use in 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

reporting to a base station indicating that the WTRU applied the received DRX configuration information from the peer SL WTRU.

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 setting a SL active time value.

6. The method of claim 1, wherein the WTRU is an RRC_CONNECTED mode.

7. The method of claim 1, further comprising: receiving the DRX configuration information via PC5 signaling.

8. The method of claim 1, further comprising: maintaining 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 base station is 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 report to a base station indicating that the WTRU applied the received DRX configuration information from the peer SL WTRU.

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 setting a SL active time value.

16. The WTRU of claim 11, wherein the WTRU is an RRC_CONNECTED mode.

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 base station is a gNB.