CLAIMS

1. A first apparatus comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the first apparatus to:

transmit, to a second apparatus, a configuration message comprising an indication to perform one or more of sidelink positioning reference signal (SL-PRS) or SL positioning data message transmission, the configuration message comprising one or more SL positioning parameters; and

receive, from the second apparatus, a resource configuration message comprising a set of time-frequency resources in which to perform the one or more of the SL-PRS or SL positioning data message transmission.

2. The first apparatus of claim 1, wherein the at least one processor is configured to cause the first apparatus to receive a higher-layer trigger to perform the one or more of the SL-PRS or SL positioning data message transmission.

3. The first apparatus of claim 2, wherein the higher-layer trigger comprises one or more of sidelink positioning protocol (SLPP) layer, vehicle to everything (V2X) layer, ProSe layer, ranging layer, SL positioning layer, or sidelink positioning application layer.

4. The first apparatus of claim 2, wherein the at least one processor is configured to cause the first apparatus to receive the higher-layer trigger from a UE via one or more of:

higher-layer signaling comprising one or more of sidelink positioning protocol layer (SLPP), PC5 radio resource control (RRC), or PC5-S; or

lower layer signaling comprising one or more of first stage sidelink control information (SCI), first stage medium access control (MAC) control element (CE), second stage SCI, or second stage MAC CE.

5. The first apparatus of claim 1, wherein the configuration message comprises one or more of a SL positioning quality of service (QoS) profile, at least one transport QoS profile

indicating SL positioning transport QoS parameters, a SL positioning session identifier, SL-PRS transmission characteristics, or one or more UE discovered for SL positioning.

6. The first apparatus of claim 1, wherein the at least one processor is configured to cause the first apparatus to receive a system information message comprising one or more common SL positioning configurations, the one or more common SL positioning configurations comprising at least one of a SL positioning radio bearer configuration list, SL-PRS priority, positioning message priority, SL positioning frequency information list, SL-PRS/SL positioning area validity information or SL positioning measurement common information.

7. The first apparatus of claim 1, wherein the first apparatus comprises one or more of a target user equipment (UE), an anchor UE, a server UE, or an apparatus configured to perform one or more of SL-PRS or SL positioning data message transmission.

8. The first apparatus of claim 1, wherein the configuration message comprises one or more of:

a SL positioning transmission resource request;

at least one of a SL positioning receiver unicast, groupcast, or broadcast destination list;

one or more of a SL positioning transmitter or receiver frequency list;

SL positioning user equipment (UE) type;

one or more SL positioning capabilities;

a SL positioning transmission resource discovery request;

a SL positioning destination identifier;

a SL positioning cast type; or

a coverage status of a discovered UE.

9. The first apparatus of claim 1, wherein the configuration message comprises one or more of SL-PRS dedicated shared pools for at least one of mode 1 and Scheme 1 transmission or mode 2 and scheme 2 transmission.

10. The first apparatus of claim 1, wherein the configuration message comprises one or more SL-PRS and SL communication data dedicated resource pools for at least one of mode 1 and Scheme 1 transmission or mode 2 and scheme 2 transmission.

11. The first apparatus of claim 1, wherein the configuration message comprises a coverage status indication of a set of discovered user equipment (UE), and wherein the coverage status indication comprises whether each discovered UE is in coverage or out of coverage.

12. A user equipment (UE) for wireless communication, comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the UE to:

transmit, to a second apparatus, a configuration message comprising an indication to perform one or more of sidelink positioning reference signal (SL-PRS) or SL positioning data message transmission, the configuration message comprising one or more SL positioning parameters; and

receive, from the second apparatus, a resource configuration message comprising a set of time-frequency resources in which to perform the one or more of the SL-PRS or SL positioning data message transmission.

13. A network equipment for wireless communication, comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the network equipment to:

receive, from a second apparatus, a configuration message comprising an indication to perform one or more of sidelink positioning reference signal (SL-PRS) or SL positioning data message transmission, the configuration message comprising one or more SL positioning parameters; and

transmit, to the second apparatus, a resource configuration message comprising a set of time-frequency resources in which to perform the one or more of the SL-PRS or SL positioning data message transmission.