

CLAIMS

1. A wireless communication method, comprising:
receiving, by a wireless communication device from a network, a positioning request, wherein the positioning request comprises reporting measurement information or a period of reporting measurement information; and
reporting, by the wireless communication device to the network, the measurement information, wherein the measurement information comprises an association relationship between sounding reference signal (SRS) resources and User Equipment (UE) Transmission (Tx) Timing Error Groups (TEGs).
2. The wireless communication method of claim 1, wherein a SRS signaling comprises the SRS resources.
3. The wireless communication method of claim 1, comprising:
reporting, by the wireless communication device to the network, the measurement information periodically.
4. The wireless communication method of claim 1, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional reference signal time difference (RSTD) measurements for each TRP pair for downlink time difference of arrival (DL-TDOA) is larger than 3.
5. The wireless communication method of claim 1, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional Rx-Tx time difference measurements for each TRP pair for multi round trip time (RTT) is larger than 3.

6. A wireless communication method, comprising:
 - sending, by a network to a wireless communication device, a positioning request, wherein the positioning request comprises reporting measurement information or a period of reporting measurement information; and
 - receiving, by the network from the wireless communication device, the measurement information, wherein the measurement information comprises an association relationship between sounding reference signal (SRS) resources and User Equipment (UE) Transmission (Tx) Timing Error Groups (TEGs).
7. The wireless communication method of claim 6, wherein a SRS signaling comprises the SRS resources.
8. The wireless communication method of claim 6, comprising:
 - receiving, by the network from the wireless communication device, the measurement information periodically.
9. The wireless communication method of claim 6, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional reference signal time difference (RSTD) measurements for each TRP pair for downlink time difference of arrival (DL-TDOA) is larger than 3.
10. The method of claim 6, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional Rx-Tx time difference measurements for each TRP pair for multi round trip time (RTT) is larger than 3.
11. A wireless communication device, comprising:

at least one processor configured to:

receive, via a transceiver from a network, a positioning request, wherein the positioning request comprises reporting measurement information or a period of reporting measurement information; and

report, via the transceiver to the network, the measurement information, wherein the measurement information comprises an association relationship between sounding reference signal (SRS) resources and User Equipment (UE) Transmission (Tx) Timing Error Groups (TEGs).

12. The wireless communication device of claim 11, wherein a SRS signaling comprises the SRS resources.

13. The wireless communication device of claim 11, wherein the at least one processor is configured to:

report, via the transceiver to the network, the measurement information periodically.

14. The wireless communication device of claim 11, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional reference signal time difference (RSTD) measurements for each TRP pair for downlink time difference of arrival (DL-TDOA) is larger than 3.

15. The wireless communication device of claim 11, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional Rx-Tx time difference measurements for each TRP pair for multi round trip time (RTT) is larger than 3.

16. A network node, comprising:
at least one processor configured to:

send, via a transceiver to a wireless communication device, a positioning request, wherein the positioning request comprises reporting measurement information or a period of reporting measurement information; and

receive, via the transceiver from the wireless communication device, the measurement information, wherein the measurement information comprises an association relationship between sounding reference signal (SRS) resources and User Equipment (UE) Transmission (Tx) Timing Error Groups (TEGs).

17. The network node of claim 16, wherein a SRS signaling comprises the SRS resources.

18. The network node of claim 16, wherein the at least one processor is configured to: receive, via the transceiver from the wireless communication device, the measurement information periodically.

19. The network node of claim 16, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional reference signal time difference (RSTD) measurements for each TRP pair for downlink time difference of arrival (DL-TDOA) is larger than 3,

20. The network node of claim 16, wherein if a positioning reference signal (PRS) of a transmission-reception point (TRP) is received by different UE reception (Rx) TEGs, a maximum number of additional Rx-Tx time difference measurements for each TRP pair for multi round trip time (RTT) is larger than 3.