Claims

What is claimed is:

1. A method of operation of a User Equipment (UE) in a wireless network to perform System Frame Number (SFN) Frame Time Difference (SFTD) measurements between a Primary Cell (PCell) of the UE and one or more other cells, the method comprising:

receiving an RRCConnectionResume message or an RRCConnectionReconfiguration message from a network node in the wireless network, the RRCConnectionResume message or the RRCConnectionReconfiguration message comprising a list of cells, wherein the list of cells comprises one or more New Radio (NR) cells;

determining the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises an indication to perform SFTD measurements between the PCell and one or more NR neighbor cells;

based on the determination, performing SFTD measurements between the PCell and the one or more NR cells included in the list of cells; and

reporting, to the network node, the SFTD measurements in accordance with the list of cells for which the UE can report SFTD measurements.

2. The method of claim 1, further comprising determining no NR cell is configured as a Primary Secondary Cell (PSCell) of the UE.

3. The method of claim 1, further comprising determining the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises a second field that specifies whether a PSCell is applicable.

4. The method of claim 3, wherein the determining the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises the indication to perform SFTD measurements between the PCell and one or more NR neighbor cells is in response to the PSCell not being applicable.

5. The method of claim 1, wherein the RRCConnectionResume message or the RRCConnectionReconfiguration message further specifies whether the one or more NR neighbor cells are applicable.

6. The method of claim 5, wherein the reporting the SFTD measurements is in response to the one or more NR neighbor cells being applicable.

7. The method of claim 1, wherein the list of cells is specified by a field in a configuration report information element.

8. The method of claim 1, wherein the PCell comprises a NR cell.

9. The method of claim 1, wherein the PCell comprises a Long Term Evolution (LTE) cell.

10. A User Equipment (UE) for performing System Frame Number (SFN) Frame Time Difference (SFTD) measurements between a Primary Cell (PCell) of the UE and one or more other cells in a wireless network, the UE comprising:

an interface comprising radio front-end circuitry; and

processing circuity associated with the interface, the processing circuitry configured to cause the UE to:

receive an RRCConnectionResume message or an RRCConnectionReconfiguration message, from a network node in the wireless network, the RRCConnectionResume message or the RRCConnectionReconfiguration message comprising a list of cells, wherein the list of cells comprises one or more New Radio (NR) cells;

determine the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises a field that provides an indication to perform SFTD measurements between the PCell and one or more NR neighbor cells;

based on the determination, perform SFTD measurements between the PCell and the one or more NR cells included in the list of cells; and

report, to the network node, the SFTD measurements in accordance with the list of cells for which the UE can report SFTD measurements.

11. The UE of claim 10, the processing circuitry further configured to determine no NR cell is configured as a Primary Secondary Cell (PSCell) of the UE.

12. The UE of claim 10, the processing circuitry further configured to determine the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises a second field that specifies whether a PSCell is applicable.

13. The UE of claim 12, the processing circuitry further configured to determine the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises the indication to perform SFTD measurements between the PCell and the one or more NR neighbor cells in response to the PSCell not being applicable.

14. The UE of claim 10, the processing circuitry further configured to determine the RRCConnectionResume message or the RRCConnectionReconfiguration message comprises a second field that specifies whether the one or more NR neighbor cells are applicable.

15. The UE of claim 14, the processing circuitry further configured to report the SFTD measurements in response to the one or more NR neighbor cells being applicable.

16. The UE of claim 10, wherein the list of cells comprises the one or more NR neighbor cells.

17. The UE of claim 10, wherein the list of cells is specified by a field in a configuration report information element.

18. The UE of claim 10, wherein the PCell comprises a NR cell.

19. The UE of claim 10, wherein the PCell comprises a Long Term Evolution (LTE) cell.