CLAIMS

1. A method for wireless communications by a user equipment (UE), comprising: providing an indication to a base station (BS) of a number of aperiodic trigger states supported by the UE, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and receiving an activation of one or more aperiodic trigger states from the BS in accordance with the indication of the number of aperiodic trigger states.

2. The method of claim 1, wherein the indication of the number of aperiodic trigger states comprises an indication of a number of active aperiodic trigger states supported by the UE.

3. The method of claim 1, wherein the number of aperiodic trigger states is equal to 64.

4. The method of claim 1, wherein the plurality of trigger types comprise aperiodic trigger states triggering aperiodic channel state information reference signals (A-CSI-RS) that update quasi-colocation (QCL) information for one or more downlink resources, aperiodic trigger states triggering A-CSI-RS that update one or more spatial relations for one or more uplink resources, or both.

5. The method of claim 1, further comprising: providing another indication to the BS that indicates a number of supported report configurations per aperiodic trigger state, number of total supported triggered aperiodic channel state information reference signal (A-CSI-RS) resources, a number of supported A-CSI-RS resources per resource set, a maximum number of transmission configuration indicator (TCI) states per A-CSI-RS resource, a number of supported TCI states for all A-CSI-RS resources triggered by different active aperiodic trigger states, or a combination thereof.

6. The method of claim 5, wherein the other indication is provided per aperiodic trigger state or for all of the aperiodic trigger states.

7. The method of claim 1, wherein the indication of the number of aperiodic trigger states is provided with UE capability information.

8. The method of claim 1, wherein the indication of the number of aperiodic trigger states is provided via radio resource control (RRC) signaling or a medium access control (MAC) control element.

9. The method of claim 1, wherein: each aperiodic trigger state triggers transmission of at least one aperiodic channel state information reference signal (A-CSI-RS) resource set.

10. The method of claim 1, wherein: the activation of the one or more aperiodic trigger states activates a subset of aperiodic trigger states of a set of aperiodic trigger states configured at the

UE, and the subset of aperiodic trigger states is equal to or less than the indicated number of aperiodic trigger states supported by the UE.

11. The method of claim 1, wherein the number of aperiodic trigger states is less than 64.

12. A method for wireless communications by base station (BS), comprising: receiving an indication from a user equipment (UE) of a number of aperiodic trigger states supported by the UE, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and providing an activation of one or more aperiodic trigger states to the UE in accordance with the indication of the number of aperiodic trigger states.

13. The method of claim 12, wherein: the indication of the number of aperiodic trigger states comprises an indication of a number of active aperiodic trigger states supported by the UE; and providing the activation of the one or more aperiodic trigger states comprises activating a subset of aperiodic trigger states, from a set of configured aperiodic trigger states, that is equal to or less than the indicated number of aperiodic trigger states supported by the UE.

14. The method of claim 12, wherein the indicated number of aperiodic trigger states is equal to 64.

15. The method of claim 12, wherein the plurality of trigger types comprise aperiodic trigger states triggering aperiodic channel state information reference signals (A-CSI-RS) that update quasi-colocation (QCL) information for one or more downlink resources, aperiodic trigger states triggering A-CSI-RS that update one or more spatial relations for one or more uplink resources, or both.

16. The method of claim 12, further comprising: receiving another indication from the UE that indicates a number of supported report configurations per aperiodic trigger state, a number of total supported triggered aperiodic channel state information reference signal (A-CSI-RS) resources, a number of A-CSI-RS resources supported per resource set, a number of supported transmission configuration indicator (TCI) states per A-CSI-RS resource, a number of supported TCI states for all A-CSI-RS resources triggered by different active aperiodic trigger states, or a combination thereof.

17. The method of claim 16, wherein the other indication is per aperiodic trigger state or for all of the aperiodic trigger states.

18. The method of claim 12, wherein the indication of the number of aperiodic trigger states is received with UE capability information.

19. The method of claim 12, wherein the indication of the number of aperiodic trigger states is received via radio resource control (RRC) signaling or a medium access control (MAC) control

element.

20. The method of claim 12, wherein each aperiodic trigger state triggers transmission of at least one aperiodic channel state information reference signal (A-CSI-RS) resource set.

21. The method of claim 12, wherein the indicated number of aperiodic trigger states is less than 64.

22. An apparatus for wireless communications, comprising: means for providing an indication to a base station (BS) of a number of aperiodic trigger states supported by the apparatus, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and means for receiving an activation of one or more aperiodic trigger states from the BS in accordance with the indication of the number of aperiodic trigger states.

23. An apparatus for wireless communications, comprising: means for receiving an indication from a user equipment (UE) of a number of aperiodic trigger states supported by the UE, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and means for providing an activation of one or more aperiodic trigger states to the UE in accordance with the indication of the number of aperiodic trigger states.

24. An apparatus for wireless communications, comprising: a memory; and at least one processor coupled with the memory, the memory and the processor configured to: provide an indication to a base station (BS) of a number of aperiodic trigger states supported by the apparatus, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and receive an activation of one or more aperiodic trigger states from the BS in accordance with the indication of the number of aperiodic trigger states.

25. An apparatus for wireless communications, comprising: a memory; and at least one processor coupled with the memory, the memory and the processor configured to: receive an indication from a user equipment (UE) of a number of aperiodic trigger states supported by the UE, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and provide an activation of one or more aperiodic trigger states to the UE in accordance with the indication of the number of aperiodic trigger states.

26. A non-transitory computer readable medium having computer executable code stored for wireless communications, comprising: code for providing an indication to a base station (BS) of a number of aperiodic trigger states supported by a user equipment (UE), wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and code for receiving an

activation of one or more aperiodic trigger states from the BS in accordance with the indication of the number of aperiodic trigger states.

27. A non-transitory computer readable medium having computer executable code stored for wireless communications, comprising: code for receiving an indication from a user equipment (UE) of a number of aperiodic trigger states supported by the UE, wherein the indication of the number of aperiodic trigger states includes an indication of a number of supported aperiodic trigger states per trigger type for a plurality of trigger types; and code for providing an activation of one or more aperiodic trigger states to the UE in accordance with the indication of the number of aperiodic trigger states.

28. A method for wireless communications by a user equipment (UE), comprising: providing an indication to a base station (BS) of a number of aperiodic trigger states supported by the UE; and receiving a configuration of one or more aperiodic trigger states from the BS in accordance with the indication.

29. A method for wireless communications by base station (BS), comprising: receiving an indication from a user equipment (UE) of a number of aperiodic trigger states supported by the UE; and providing a configuration of one or more aperiodic trigger states to the UE in accordance with the indication.