CLAIMS

1. A method of wireless communication, comprising:

activating, by a user equipment (UE), a multiple default beam configuration including a plurality of default beams to use for receiving one or more retransmissions of a downlink communication in each of a plurality of slots, wherein the plurality of default beams are selected from a first beam pattern of multiple default receive beams or a second beam pattern of multiple default receive beams, wherein the plurality of slots are in a retransmission period, wherein activating the multiple default beam configuration is based on the downlink communication being unsuccessful when using an initial default beam during an initial transmission period; and

configuring, by the UE and based on activating the multiple default beam configuration, the plurality of default beams over which to receive, in one or more of the plurality of slots, the one or more retransmissions of the downlink communication.

2. The method of claim 1, wherein receiving of the downlink communication is unsuccessful during the initial transmission period based on the downlink communication being either not received or not successfully decoded.

3. The method of claim 2, further comprising:

generating a negative acknowledgement (NACK) message for transmitting in response to receiving of the downlink communication being unsuccessful; and

transmitting the NACK to a base station, wherein activating the multiple default beam configuration is based at least in part on transmitting the NACK to the base station.

4. The method of claim 1, wherein configuring the plurality of default beams associated with the multiple default beam configuration, comprises:

configuring the plurality of default beams within each slot of the plurality of slots.

5. The method of claim 1, wherein configuring the plurality of default beams associated with the multiple default beam configuration, comprises:

configuring a first default beam of the plurality of default beams for a first slot of the plurality of slots to receive a first retransmission of the downlink communication; and

configuring a second default beam of the plurality of default beams for a second slot of the plurality of slots to receive a second retransmission of the downlink communication.

6. The method of claim 1, further comprising:

identifying the plurality of slots in the retransmission period for which to apply multiple default beam configuration; and

configuring the plurality of default beams for the plurality of slots to receive the downlink communication.

7. The method of claim 1,

wherein the first beam pattern includes both a first default beam and a second default beam included in a first slot of the plurality of slots, and

wherein the second beam pattern includes a first default beam in a first slot and a second default beam in a second slot of the plurality of slots.

8. The method of claim 7, wherein selecting between the first beam pattern or the second beam pattern is determined based on at least one of explicit signaling or implicit rule based on control resource set (CORESET) beam configuration.

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

a memory storing computer-executable instructions; and

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

activate a multiple default beam configuration including a plurality of default beams to use for receiving one or more retransmissions of a downlink communication in each of a plurality of slots, wherein the plurality of default beams are selected from a first beam pattern of multiple default receive beams or a second beam pattern of multiple default receive beams, wherein the plurality of slots are in a retransmission period, wherein the at least one processor is configured to activate the multiple default beam configuration based on the downlink communication being unsuccessful when using an initial default beam during an initial transmission period; and

configure, based on activating the multiple default beam configuration, the plurality of default beams over which to receive, in one or more of the plurality of slots, the one or more retransmissions of the downlink communication.

10. The UE of claim 9, wherein receiving the downlink communication is unsuccessful during the initial transmission period based on the downlink communication being either not received or not successfully decoded.

11. The UE of claim 10, wherein the at least one processor is further configured to:

generate a negative acknowledgement (NACK) message for transmitting in response to receiving of the downlink communication being unsuccessful; and

transmit the NACK to a base station, wherein activating the multiple default beam configuration is based at least in part on transmitting the NACK to the base station.

12. The UE of claim 9, wherein the at least one processor is configured to configure the plurality of default beams associated with the multiple default beam configuration at least in part by:

configuring the plurality of default beams within each slot of the plurality of slots.

13. The UE of claim 9, wherein the at least one processor is configured to configure the plurality of default beams associated with the multiple default beam configuration, at least in part by:

configuring a first default beam of the plurality of default beams for a first slot of the plurality of slots to receive a first retransmission of the downlink communication; and

configuring a second default beam of the plurality of default beams for a second slot of the plurality of slots to receive a second retransmission of the downlink communication.

14. The UE of claim 9, wherein the at least one processor is further configured to:

identify the plurality of slots in the retransmission period for which to apply multiple default beam configuration; and

configure the plurality of default beams for the plurality of slots to receive the downlink communication.

15. The UE of claim 9,

wherein the first beam pattern includes both a first default beam and a second default beam included in a first slot of the plurality of slots, and

wherein the second beam pattern includes a first default beam in a first slot and a second default beam in a second slot of the plurality of slots.

16. The UE of claim 15, wherein the at least one processor is configured to select between the first beam pattern or the second beam pattern based on at least one of explicit signaling or implicit rule based on control resource set (CORESET) beam configuration.

17. A method of wireless communication, comprising:

activating, by a base station, a multiple default beam configuration including a plurality of default beams for a user equipment (UE) to use to receive one or more retransmissions of a downlink communication transmitted by the base station in each of a plurality of slots, wherein the plurality of default beams are selected from a first beam pattern of multiple default receive beams or a second beam pattern of multiple default receive beams, wherein the plurality of slots are in a retransmission period, wherein activating the multiple default beam configuration is based on the downlink communication being unsuccessful when using an initial default beam at the UE during an initial transmission period; and

transmitting, by a base station and based on activating the multiple default beam configuration, the one or more retransmissions of the downlink communication using the plurality of default beams in each of the plurality of slots.

18. The method of claim 17, further comprising transmitting, by the base station and to the UE, a configuration indicating one or more parameters for activating the multiple default beam configuration.

19. The method of claim 18, wherein the one or more parameters indicate resources for receiving the plurality of default beams within each slot of the plurality of slots.

20. The method of claim 18, wherein the one or more parameters indicate resources for receiving a first default beam of the plurality of default beams for a first slot of the plurality of slots to receive a first retransmission of the downlink communication and a second default beam of the plurality of default beams for a second slot of the plurality of slots to receive a second retransmission of the downlink communication.

21. The method of claim 18, wherein transmitting the configuration includes transmitting the configuration to the UE in radio resource control (RRC) signaling or a media access control (MAC) control element (CE).

22. The method of claim 18, wherein the configuration indicates the one or more parameters as the first beam pattern or the second beam pattern,

wherein the first beam pattern includes both a first default beam and a second default beam included in a first slot of the plurality of slots, and

wherein the second beam pattern includes a first default beam in a first slot and a second default beam in a second slot of the plurality of slots.

23. A base station for wireless communication, comprising:

a memory storing computer-executable instructions; and

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

activate a multiple default beam configuration including a plurality of default beams for a user equipment (UE) to use to receive one or more retransmissions of a downlink communication transmitted by the base station in each of a plurality of slots, wherein the plurality of default beams are selected from a first beam pattern of multiple default receive beams or a second beam pattern of multiple default receive beams, wherein the plurality of slots are in a retransmission period, wherein the at least one processor is configured to activate the multiple default beam configuration based on the downlink communication being unsuccessful when using an initial default beam at the UE during an initial transmission period; and

transmit, based on activating the multiple default beam configuration, the one or more retransmissions of the downlink communication using the plurality of default beams in each of the plurality of slots.

24. The base station of claim 23, wherein the at least one processor is further configured to transmit, to the UE, a configuration indicating one or more parameters for activating the multiple default beam configuration.

25. The base station of claim 24, wherein the one or more parameters indicate resources for receiving the plurality of default beams within each slot of the plurality of slots.

26. The base station of claim 24, wherein the one or more parameters indicate resources for receiving a first default beam of the plurality of default beams for a first slot of the plurality of slots to receive a first retransmission of the downlink communication and a second default beam of the plurality of default beams for a second slot of the plurality of slots to receive a second retransmission of the downlink communication.

27. The base station of claim 24, wherein the at least one processor is configured to transmit the configuration to the UE in radio resource control (RRC) signaling or a media access control (MAC) control element (CE).

28. The base station of claim 24, wherein the configuration indicates the one or more parameters as the first beam pattern or the second beam pattern for the plurality of default beams associated with the multiple default beam configuration,

wherein the first beam pattern includes both a first default beam and a second default beam included in a first slot of the plurality of slots, and

wherein the second beam pattern includes a first default beam in a first slot and a second default beam in a second slot of the plurality of slots.