CLAIMS

1. A method of wireless communication, comprising:

transmitting a first subframe comprising a first grant that includes information for one or more transmissions on allocated resources in the first subframe~~; and~~

, wherein the first subframe comprises more uplink symbols than downlink symbols; and

transmitting the first subframe with a second grant that allocates resources in at least a second subframe to occur after the first subframe, wherein transmitting the first subframe with the second grant comprises transmitting the second grant only when information in the second grant has changed relative to a previous transmission of the second grant.

2. The method of claim 1, further comprising configuring the first subframe to comprise an uplink centric subframe having more uplink symbols than downlink symbols.

3. The method of claim 2, further comprising configuring the second grant to comprise information for generating a reference signal in the second subframe.

4. The method of claim 3, wherein:

the reference signal comprises a demodulation reference signal (DMRS); and

the information for generating the reference signal comprises at least one of rank information or resource allocation information.

5. The method of claim 1, further comprising at least one of:

configuring the second grant to comprise information indicating at least one subframe in which to perform an uplink transmission;

or configuring the second grant to comprise information indicating an expected location to receive the first grant in at least one of the first subframe or a subsequent subframe~~; or.~~

~~transmitting the second grant only when information in the second grant has changed relative to a previous transmission of the second grant.~~

6. The method of claim 1, wherein the first grant comprises information indicating a modulation and coding scheme.

7. The method of claim 1, wherein the first grant and the second grant are transmitted in different control channels.

8. The method of claim 1, wherein:

the second grant also allocates resources in the first subframe; and

a search space of the second grant is limited to a first symbol of the first subframe.

9. The method of claim 1, further comprising:

configuring a third grant to comprise information for generating a reference signal in the second subframe; and

transmitting the third grant within a data portion of a downlink subframe having more downlink symbols than uplink symbols.

10. A method of wireless communication by a user equipment (UE), comprising:

receiving, in a first subframe, a first grant that includes information for one or more transmissions on allocated resources in the first subframe~~; and~~

, wherein the first subframe comprises more uplink symbols than downlink symbols; and receiving, in the first subframe a second grant that allocates resources in at least a second subframe to occur after the first subframe, wherein the second grant is received only when information in the second grant has changed relative to a previous transmission of the second grant.

11. The method of claim 10, wherein the first subframe comprises an uplink centric subframe having more uplink symbols than downlink symbols.

12. The method of claim 11, wherein the second grant comprises information for generating a reference signal in the second subframe.

13. The method of claim 12, wherein:

the reference signal comprises a demodulation reference signal (DMRS); and

the information for generating the reference signal comprises at least one of rank information and resource allocation information.

14. The method of claim 10, wherein at least one of:

the second grant comprises information indicating at least one subframe in which to perform an uplink transmission;

or the second grant comprises information indicating an expected location to receive the first grant in at least one of the first subframe or a subsequent subframe~~; or~~.

~~the second grant is received only when information in the second grant has changed relative to a previous transmission of the second grant.~~

15.—— The method of claim 10, wherein the first grant comprises information indicating a modulation and coding scheme.

16.—— The method of claim 10, wherein the first grant and the second grant are received in different control channels.

17.—— The method of claim 10, wherein:

the second grant also allocates resources in the first subframe; and

a search space of the second grant is limited to a first symbol of the first subframe.

18.—— The method of claim 10, further comprising receiving a third grant within a data portion of a downlink subframe having more downlink symbols than uplink symbols, wherein the third grant comprises information for generating a reference signal in the second subframe.

19.—— An apparatus for wireless communication, comprising:

at least one processor configured to:

generate a first grant that includes information for one or more transmissions on allocated resources in a first subframe~~;~~, wherein the first subframe comprises more uplink symbols than downlink symbols; generate a second grant that allocates resources in at least a second subframe to occur after the first subframe; and a transmitter configured to transmit the first grant and the second grant in the first subframe, wherein the transmitter is further configured to transmit the second grant only when information in the second grant has changed relative to a previous transmission of the second grant.

~~a transmitter configured to transmit the first grant and the second grant in the first subframe.~~

20.—— The apparatus of claim 19, wherein the first subframe comprises an uplink centric subframe having more uplink symbols than downlink symbols.

21.—— The apparatus of claim 20, wherein the second grant comprises information for generating a reference signal in the second subframe.

22.—— The apparatus of claim 21, wherein:

——— the reference signal comprises a demodulation reference signal (DMRS); and

——— the information for generating the reference signal comprises at least one of rank information or resource allocation information.

23.—— The apparatus of claim 19, wherein at least one of:

——— the second grant comprises information indicating at least one subframe in which to perform an uplink transmission;

——— or the second grant comprises information indicating an expected location to receive the first grant in at least one of the first subframe or a subsequent subframe~~; or~~.

~~the transmitter is further configured to transmit the second grant only when information in the second grant has changed relative to a previous transmission of the second grant.~~

24.—— The apparatus of claim 19, wherein the first grant comprises information indicating a modulation and coding scheme.

25.—— The apparatus of claim 19, wherein the first grant and the second grant are transmitted in different control channels.

26.—— The apparatus of claim 19, wherein:

the second grant also allocates resources in the first subframe; and

a search space of the second grant is limited to a first symbol of the first subframe.

27.—— An apparatus for wireless communications, comprising:

a receiver configured to:

receive, in a first subframe, a first grant that includes information for one or more transmissions on allocated resources in the first subframe~~; and~~

, wherein the first subframe comprises more uplink symbols than downlink symbols; and receive, in the first subframe a second grant that allocates resources in at least a second subframe to occur after the first subframe, wherein the second grant is only received when the

information in the second grant has changed relative to a previous transmission of the second grant.

28. The apparatus of claim 27, wherein the first subframe comprises an uplink centric subframe having more uplink symbols than downlink symbols.

29. The apparatus of claim 28, wherein the second grant comprises information for generating a reference signal in the second subframe.

30. The apparatus of claim 29, wherein:

the reference signal comprises a demodulation reference signal (DMRS); and

the information for generating the reference signal comprises at least one of rank information and resource allocation information.

31. The apparatus of claim 27, wherein at least one of:

the second grant comprises information indicating at least one subframe in which to perform an uplink transmission;

or the second grant comprises information indicating an expected location to receive the first grant in at least one of the first subframe or a subsequent subframe~~; or~~.

~~the second grant is only received when the information in the second grant has changed relative to a previous transmission of the second grant.~~

32. The apparatus of claim 27, wherein the first grant comprises information indicating a modulation and coding scheme.

33. The apparatus of claim 27, wherein the first grant and the second grant are received in different control channels.

34. The apparatus of claim 27, wherein:

the second grant also allocates resources in the first subframe; and

a search space of the second grant is limited to a first symbol of the first subframe.

35. The apparatus of claim 27, wherein the receiver is further configured to receive a third grant within a data portion of a downlink subframe having more downlink symbols than

uplink symbols, wherein the third grant comprises information for generating a reference signal in the second subframe.