

CLAIMS

1. A communication method, comprising:

receiving first information from a network device, wherein the first information is used to configure M communication parameter groups corresponding to N candidate carriers, N is an integer greater than or equal to 1, and M is greater than or equal to N;

receiving second information from the network device, wherein the second information indicates at least one communication parameter group in the M communication parameter groups; and

performing communication on at least one carrier based on the at least one communication parameter group, wherein the N candidate carriers comprise the at least one carrier.

2. The method according to claim 1, wherein the N candidate carriers belong to K frequency bands, and K is a positive integer; and

a union set of parameter values of one communication parameter in the M communication parameter groups is greater than a maximum value of the one communication parameter supported by a terminal device in the K frequency bands; and/or

a union set of parameter values of the one communication parameter in the at least one communication parameter group is less than or equal to the maximum value of the one communication parameter supported by the terminal device in the K frequency bands.

3. The method according to claim 1 or 2, wherein the method further comprises:

sending third information to the network device, wherein the third information indicates a maximum value of at least one communication parameter supported by the terminal device in the K frequency bands, and the communication parameter group comprises the at least one communication parameter.

4. The method according to any one of claims 1 to 3, wherein the communication parameter group comprises one or more of the following communication parameters:

a quantity of control resource set pools, a maximum quantity of physical downlink shared channels (PDSCHs) transmitted in each time unit, a maximum quantity of physical uplink shared channels (PUSCHs) transmitted in each time unit, a maximum quantity of transport layers of a shared channel, or a quantity of transmission configuration indicator (TCI) states.

5. The method according to any one of claims 1 to 4, wherein

the second information comprises at least one piece of indication information, and one piece of indication information indicates one communication parameter group corresponding to one carrier in the at least one carrier.

6. The method according to claim 5, wherein one communication parameter group is a

communication parameter group corresponding to one bandwidth part (BWP) of one candidate carrier, the at least one piece of indication information comprises first indication information, the first indication information indicates a first communication parameter group, and the first communication parameter group is a communication parameter group corresponding to a first BWP of a first carrier in the at least one carrier; and

the performing communication on at least one carrier based on the at least one communication parameter group comprises:

performing communication on the first BWP based on the first communication parameter group.

7. The method according to any one of claims 1 to 6, wherein the first information is carried in a radio resource control (RRC) message, and the second information is carried in a medium access control (MAC) control element (CE) or downlink control information (DCI).

8. A communication method, comprising:

sending first information to a terminal device, wherein the first information is used to configure M communication parameter groups of N candidate carriers, N is an integer greater than or equal to 1, and M is greater than or equal to N; and

sending second information to the terminal device, wherein the second information indicates at least one communication parameter group, and the at least one communication parameter group is a communication parameter group corresponding to at least one carrier in the N candidate carriers.

9. The method according to claim 8, wherein the N candidate carriers belong to K frequency bands, and K is a positive integer; and

a union set of parameter values of one communication parameter in the M communication parameter groups is greater than a maximum value of the one communication parameter supported by the terminal device in the K frequency bands; and/or

a union set of parameter values of the one communication parameter in the at least one communication parameter group is less than or equal to the maximum value of the one communication parameter supported by the terminal device in the K frequency bands.

10. The method according to claim 8 or 9, wherein the method further comprises:

receiving third information from the terminal device, wherein the third information indicates a maximum value of at least one communication parameter supported by the terminal device in the K frequency bands, and the communication parameter group comprises the at least one communication parameter.

11. The method according to any one of claims 8 to 10, wherein the communication parameter group comprises one or more of the following communication parameters:

a quantity of control resource set pools, a maximum quantity of physical downlink shared channels (PDSCHs) transmitted in each time unit, a maximum quantity of physical uplink shared channels (PUSCHs) transmitted in each time unit, a maximum quantity of transport layers of a shared channel, or a quantity of transmission configuration indicator (TCI) states.

5 12. The method according to any one of claims 8 to 11, wherein the second information comprises at least one piece of indication information, and one piece of indication information indicates one communication parameter group corresponding to one carrier in the at least one carrier.

10 13. The method according to claim 12, wherein one communication parameter group is a communication parameter group corresponding to one bandwidth part (BWP) of one candidate carrier, the at least one piece of indication information comprises first indication information, the first indication information indicates a first communication parameter group, and the first communication parameter group is a communication parameter group corresponding to a first BWP of a first carrier in the at least one carrier.

15 14. A communication apparatus, comprising means for performing the method according to any one of claims 1 to 13.

15 15. A computer-readable storage medium, storing instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 13.

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