CLAIMS

1. A communication method, wherein the method comprises:

receiving first indication information, wherein the first indication information indicates a first parameter configuration, the first parameter configuration is one of K parameter configurations, and K is a positive integer, wherein

any parameter configuration in the K parameter configurations comprises one or more of the following parameters:

a quantity of resource blocks RBs, a frequency domain resource offset, a quantity of time domain symbols, and a mapping manner; and

determining a time-frequency resource position of a first control resource set CORESET based on the first parameter configuration, wherein the first CORESET is a CORESET #0; and

wherein in the K parameter configurations:

a bandwidth of a CORESET corresponding to a parameter configuration with a quantity of RBs being 24 is 15 RBs or 20 RBs;

a value of a frequency domain resource offset corresponding to a parameter configuration corresponding to a CORESET whose bandwidth is 15 RBs is 0 or 2;

a value of a frequency domain resource offset corresponding to a parameter configuration corresponding to a CORESET whose bandwidth is 20 RBs is 0; and

a frequency domain resource offset corresponding to the parameter configuration with a quantity of RBs being 12 is 0.

2. The method according to claim 1, wherein at least one of the following is comprised:

the any parameter configuration in the K parameter configurations further comprises a multiplexing mode of a mode 1;

a value of the quantity of RBs is 24 or 12;

a bandwidth of a CORESET corresponding to a parameter configuration with a quantity of RBs being 12 is 12 RBs;

a value of the frequency domain resource offset is 0 or 2;

a value of the quantity of time domain symbols is 2 or 3;

a mapping manner corresponding to the parameter configuration with a quantity of RBs being 12 is interleaved;

a mapping manner corresponding to the parameter configuration with a quantity of RBs being 24 is interleaved or non-interleaved;

a mapping manner corresponding to the parameter configuration corresponding to the

CORESET whose bandwidth is 15 RBs is interleaved or non-interleaved; and

a mapping manner corresponding to the parameter configuration corresponding to the CORESET whose bandwidth is 20 RBs is interleaved.

3. The method according to claim 1 or 2, wherein

bandwidths of CORESETs correspond to the K parameter configurations each are less than 24 RBs; and/or

frequency domain resource offsets corresponding to the K parameter configurations each are a value in a first value set, wherein a quantity of values in the first value set is greater than 3.

4. The method according to any one of claims 1 to 3, wherein

the bandwidths of the CORESETs correspond to the K parameter configurations each comprise at least one of 12 RBs, 15 RBs, or 20 RBs.

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

the first indication information is of N bits, and different values of the N-bit information indicate different parameter configurations in the K parameter configurations.

6. The method according to claim 5, wherein N is 4, and K is an integer less than or equal to 2^N.

7. The method according to any one of claims 1 to 6, wherein

a quantity of time domain symbols that corresponds to the parameter configuration with a quantity of RBs being 12 and/or the parameter configuration with a quantity of RBs being 24 in the K parameter configurations is 3.

8. The method according to any one of claims 1 to 7, wherein

a quantity of time domain symbols that corresponds to the parameter configuration with a quantity of RBs being 24 and a mapping manner being interleaved in the K parameter configurations is 3.

9. The method according to any one of claims 1 to 8, wherein

one parameter configuration in the K parameter configurations corresponds to a plurality of bandwidths of a CORESET, or one parameter configuration in the K parameter configurations corresponds to values of a plurality of quantities of RBs.

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

determining a bandwidth of the first CORESET based on a synchronization raster or a frequency band number; or

determining a quantity of RBs of the first CORESET based on the synchronization raster or the frequency band number.

11. The method according to any one of claims 1 to 10, wherein

the first CORESET is a CORESET determined based on a CORESET of 24 RBs, wherein the

first CORESET is 15 RBs obtained by puncturing nine RBs with highest frequencies in the CORESET of 24 RBs, or the first CORESET is 20 RBs obtained by puncturing four RBs with highest frequencies in the CORESET of 24 RBs.

12. The method according to any one of claims 1 to 11, wherein

the frequency domain resource offset is a quantity of RBs by which a first RB is offset relative to a second RB on a frequency domain resource, wherein the first RB is an RB with a smallest number in the first CORESET, or the first RB is an RB with a smallest number in the CORESET of 24 RBs, and the second RB is an RB with a smallest number in an overlapping part between a synchronization signal block SSB of 12 RBs and a common RB, wherein the SSB of 12 RBs is an SSB determined based on an SSB of 20 RBs, or the second RB is an RB with a smallest number in an overlapping part between the SSB of 20 RBs and the common RB.

13. The method according to any one of claims 1 to 12, wherein the method further comprises:

determining the K parameter configurations based on a channel bandwidth, or determining the K parameter configurations based on the channel bandwidth and the frequency band number, wherein

the K parameter configurations are used for a minimum channel bandwidth 3 MHz, or the K parameter configurations are used for a channel bandwidth 3 MHz and/or a channel bandwidth 5 MHz.

14. The method according to any one of claims 1 to 13, wherein the first parameter configuration corresponds to a plurality of quantities of RBs or a plurality of bandwidths of a CORESET, and the method further comprises:

determining that the bandwidth of the first CORESET is 15 RBs based on a first synchronization raster, wherein the first synchronization raster is determined according to a formula 600 kHz×N+50 kHz×M+300 kHz, or determining that the bandwidth of the first CORESET is 20 RBs based on a synchronization raster of 921.45 MHz.

15. A communication method, wherein the method comprises:

sending first indication information, wherein the first indication information indicates a first parameter configuration, the first parameter configuration is one of K parameter configurations, and K is a positive integer, wherein

any parameter configuration in the K parameter configurations comprises one or more of the following parameters:

a quantity of resource blocks RBs, a frequency domain resource offset, a quantity of time domain symbols, and a mapping manner; and

indicating a time-frequency resource position of a first control resource set CORESET based on the first parameter configuration, wherein the first CORESET is a CORESET #0; and

wherein in the K parameter configurations:

a bandwidth of a CORESET corresponding to a parameter configuration with a quantity of RBs being 24 is 15 RBs or 20 RBs;

a value of a frequency domain resource offset corresponding to a parameter configuration corresponding to a CORESET whose bandwidth is 15 RBs is 0 or 2;

a value of a frequency domain resource offset corresponding to a parameter configuration corresponding to a CORESET whose bandwidth is 20 RBs is 0; and

a frequency domain resource offset corresponding to the parameter configuration with a quantity of RBs being 12 is 0.

16. The method according to claim 15, wherein at least one of the following is comprised:

the any parameter configuration in the K parameter configurations further comprises a multiplexing mode of a mode 1;

a value of the quantity of RBs is 24 or 12;

a bandwidth of a CORESET corresponding to a parameter configuration with a quantity of RBs being 12 is 12 RBs;

a value of the frequency domain resource offset is 0 or 2;

a value of the quantity of time domain symbols is 2 or 3;

a mapping manner corresponding to the parameter configuration with a quantity of RBs being 12 is interleaved;

a mapping manner corresponding to the parameter configuration with a quantity of RBs being 24 is interleaved or non-interleaved;

a mapping manner corresponding to the parameter configuration corresponding to the CORESET whose bandwidth is 15 RBs is interleaved or non-interleaved; and

a mapping manner corresponding to the parameter configuration corresponding to the CORESET whose bandwidth is 20 RBs is interleaved.

17. The method according to claim 15 or 16, wherein

bandwidths of CORESETs correspond to the K parameter configurations each are less than 24 RBs; and/or

frequency domain resource offsets corresponding to the K parameter configurations each are a value in a first value set, wherein a quantity of values in the first value set is greater than 3.

18. The method according to any one of claims 15 to 17, wherein

the bandwidths of the CORESETs correspond to the K parameter configurations each comprise at least one of 12 RBs, 15 RBs, or 20 RBs.

19. The method according to any one of claims 15 to 18, wherein

the first indication information is of N bits, and different values of the N-bit information

indicate different parameter configurations in the K parameter configurations.

20. The method according to any one of claims 15 to 19, wherein N is 4, and K is an integer less than or equal to 2^N.

21. The method according to any one of claims 15 to 20, wherein

a quantity of time domain symbols that corresponds to the parameter configuration with a quantity of RBs being 12 and/or the parameter configuration with a quantity of RBs being 24 in the K parameter configurations is 3.

22. The method according to any one of claims 15 to 21, wherein

a quantity of time domain symbols that corresponds to the parameter configuration with a quantity of RBs being 24 and a mapping manner being interleaved in the K parameter configurations is 3.

23. The method according to any one of claims 15 to 22, wherein

one parameter configuration in the K parameter configurations corresponds to a plurality of bandwidths of a CORESET, or one parameter configuration in the K parameter configurations corresponds to values of a plurality of quantities of RBs.

24. The method according to claim 23, wherein

a bandwidth of the first CORESET is associated with a synchronization raster or a frequency band number; or

a quantity of RBs of the first CORESET is associated with the synchronization raster or the frequency band number.

25. The method according to any one of claims 15 to 24, wherein

the first CORESET is a CORESET determined based on a CORESET of 24 RBs, wherein the first CORESET is 15 RBs obtained by puncturing nine RBs with highest frequencies in the CORESET of 24 RBs, or the first CORESET is 20 RBs obtained by puncturing four RBs with highest frequencies in the CORESET of 24 RBs.

26. The method according to any one of claims 15 to 25, wherein

the frequency domain resource offset is a quantity of RBs by which a first RB is offset relative to a second RB on a frequency domain resource, wherein the first RB is an RB with a smallest number in the first CORESET, or the first RB is an RB with a smallest number in the CORESET of 24 RBs, and the second RB is an RB with a smallest number in an overlapping part between a synchronization signal block SSB of 12 RBs and a common RB, wherein the SSB of 12 RBs is an SSB determined based on an SSB of 20 RBs, or the second RB is an RB with a smallest number in an overlapping part between the SSB of 20 RBs and the common RB.

27. The method according to any one of claims 15 to 26, comprising:

the K parameter configurations are associated with a channel bandwidth, or the K parameter

configurations are associated with the channel bandwidth and the frequency band number; and

the K parameter configurations are used for a minimum channel bandwidth 3 MHz, or the K parameter configurations are used for a channel bandwidth 3 MHz and/or a channel bandwidth 5 MHz.

28. The method according to any one of claims 15 to 27, wherein the first parameter configuration corresponds to a plurality of quantities of RBs or a plurality of bandwidths of a CORESET, and a bandwidth that is of the first CORESET and that corresponds to a first synchronization raster is 15 RBs, wherein the first synchronization raster is determined according to a formula 600 kHz×N+50 kHz×M+300 kHz, or a bandwidth that is of the first CORESET and that corresponds to a synchronization raster of 921.45 MHz is 20 RBs.

29. A communication apparatus, comprising a unit configured to perform the method according to any one of claims 1 to 14, or the method according to any one of claims 15 to 28.

30. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions or a program, and when the computer instructions or the program is run on a communication apparatus, the method according to any one of claims 1 to 14 or the method according to any one of claims 15 to 28 is performed.