CLAIMS

What is claimed is:

1. A communication method, performed by a terminal device or a chip in the terminal device, the method comprising:

transmitting, first capability information, wherein the first capability information indicates a first bandwidth size which is a maximum bandwidth supported by the terminal device for sending first information, and the first information is a sounding reference signal (SRS);

transmitting, second capability information, wherein the second capability information indicates a second bandwidth size which is a maximum bandwidth supported by the terminal device for sending second information by using a maximum of a second bandwidth size of bandwidth, and the second information comprises at least one of data or control information, wherein the first bandwidth size is greater than the second bandwidth size;

obtaining, first configuration information, wherein a size of bandwidth configured for the SRS indicated by the first configuration information is not greater than the first bandwidth size; and

obtaining, by the terminal device, second configuration information, wherein a size of bandwidth configured for the data or control information indicated by the second configuration information is not greater than the second bandwidth size.

2. The method according to claim 1, wherein the first bandwidth size belongs to a first bandwidth size set, and at least one bandwidth size in the first bandwidth size set is greater than the second bandwidth size.

3. The method according to any one of claims 1 to 2, wherein the method further comprises:

sending, third capability information; and

the third capability information indicates:

whether the terminal device supports sending and/or receiving the first information in a carrier aggregation manner; and/or

the terminal device supports sending and/or receiving the first information by using a maximum of M carriers, wherein M is a positive integer.

4. The method according to any one of claims 1 to 3, wherein the method further comprises:

sending, fourth capability information ; and

the fourth capability information indicates:

the terminal device does not support sending and/or receiving the second information in a carrier aggregation manner; or

the terminal device supports sending and/or receiving the second information by using a maximum of N carriers, wherein N is a positive integer.

5. The method according to claim 4, wherein N is less than M; or

N is not greater than M.

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

the transmitting the first capability information comprises:

transmitting, first capability information to a first network device;

the transmitting the second capability information comprises:

transmitting, second capability information to a second network device.

7. The method according to 6, wherein

the first network device and the second network device are a same base station, or

the first network device is a location management function and the second network device is a base station。

8. A communication method, performed by a first network device or a chip in the first network device, the method comprising:

receiving, first capability information, wherein the first capability information indicates a first bandwidth size which is a maximum bandwidth supported by the terminal device for sending first information , and the first information is a sounding reference signal (SRS);

receiving, second capability information, wherein the second capability information indicates a second bandwidth size which is a maximum bandwidth supported by the terminal device for sending second information, and the second information comprises at least one of data or control information, wherein the first bandwidth size is greater than the second bandwidth size;

sending, first configuration information, wherein a size of bandwidth configured for the SRS indicated by the first configuration information is not greater than the first bandwidth size; and

sending, second configuration information, wherein a size of bandwidth configured for the data or control information indicated by the second configuration information is not greater than the second bandwidth size.

9. The method according to claim 8, wherein the first bandwidth size belongs to a first

bandwidth size set, and at least one bandwidth size in the first bandwidth size set is greater than the second bandwidth size.

10. The method according to any one of claims 8 to 9, wherein the method further comprises:

receiving, third capability information; and

the third capability information indicates:

whether the terminal device supports sending and/or receiving the first information in a carrier aggregation manner; and/or

the terminal device supports sending and/or receiving the first information by using a maximum of M carriers, wherein M is a positive integer.

11. The method according to any one of claims 8 to 10, wherein the method further comprises:

receiving, fourth capability information; and

the fourth capability information indicates:

the terminal device does not support sending and/or receiving the second information in a carrier aggregation manner; or

the terminal device supports sending and/or receiving the second information by using a maximum of N carriers, wherein N is a positive integer.

12. The method according to claim 11, wherein N is less than M; or

N is not greater than M.

13. A communication method, performed by a second network device or a chip in the second network device, the method comprising:

receiving, first capability information, wherein the first capability information indicates a first bandwidth size which is a maximum bandwidth supported by the terminal device for sending first information, and the first information is a sounding reference signal (SRS), wherein the first bandwidth size is greater than a second bandwidth size, the second bandwidth size is a maximum bandwidth supported by the terminal device for sending second information, and the second information comprises at least one of data or control information, wherein the first bandwidth size is greater than the second bandwidth size;

sending, first configuration information, wherein a size of bandwidth configured for the SRS indicated by the first configuration information is not greater than the first bandwidth size.

14. The method according to claim 13, wherein the first bandwidth size belongs to a first bandwidth size set, and at least one bandwidth size in the first bandwidth size set is greater than

the second bandwidth size.

15. The method according to any one of claims 13 to 14, wherein the method further comprises:

receiving, third capability information; and

the third capability information indicates:

whether the terminal device supports sending and/or receiving the first information in a carrier aggregation manner; and/or

the terminal device supports sending and/or receiving the first information by using a maximum of M carriers, wherein M is a positive integer.

16. The method according to any one of claims 13 to 15, wherein the method further comprises:

receiving, fourth capability information; and

the fourth capability information indicates:

the terminal device does not support sending and/or receiving the second information in a carrier aggregation manner; or

the terminal device supports sending and/or receiving the second information by using a maximum of N carriers, wherein N is a positive integer.

17. The method according to claim 16, wherein N is less than M; or

N is not greater than M.

18. A communication apparatus, comprising:

a transceiver module, configured to transmit first capability information, wherein the first capability information indicates a first bandwidth size which is a maximum bandwidth supported by the terminal device for sending first information, and the first information is a sounding reference signal (SRS);

the transceiver module is configured to transmit second capability information, wherein the second capability information indicates a second bandwidth size which is a maximum bandwidth supported by the terminal device for sending second information, and the second information comprises at least one of data or control information, wherein the first bandwidth size is greater than the second bandwidth size; and

a processing module, configured to obtain first configuration information, wherein a size of bandwidth configured for the SRS indicated by the first configuration information is not greater

than the first bandwidth size;

the processing module is configured to obtain second configuration information, wherein a size of bandwidth configured for the data or control information indicated by the second configuration information is not greater than the second bandwidth size.

19. A communication apparatus, wherein the communication apparatus comprises a processing module and a transceiver module;

the processing module is configured to receive, by using the transceiver module, first capability information, wherein the first capability information indicates a first bandwidth size which is a maximum bandwidth supported by the terminal device for sending first information, and the first information comprises is sounding reference signal (SRS);

the processing module is configured to receive, by using the transceiver module, second capability information, wherein the second capability information indicates a second bandwidth size which is a maximum bandwidth supported by the terminal device for sending second information, and the second information comprises at least one of data or control information, wherein the first bandwidth size is greater than the second bandwidth size;

the processing module is configured to send first configuration information by using the transceiver module, wherein a size of bandwidth configured for the SRS indicated by the first configuration information is not greater than the first bandwidth size; and

the processing module is configured to send second configuration information by using the transceiver module, wherein a size of bandwidth configured for the data or control information indicated by the second configuration information is not greater than the second bandwidth size.

20. A communication apparatus, wherein the communication apparatus comprises a processing module and a transceiver module;

the processing module is configured to receive, by using the transceiver module, first capability information, wherein the first capability information indicates a first bandwidth size which is a maximum bandwidth supported by the terminal device for sending first information, and the first information comprises is sounding reference signal (SRS), wherein the first bandwidth size is greater than a second bandwidth size, the second bandwidth size is a maximum bandwidth supported by the terminal device for sending second information, and the second information comprises at least one of data or control information, wherein the first bandwidth size is greater than the second bandwidth size;

the processing module is configured to send first configuration information by using the transceiver module, wherein a size of bandwidth configured for the SRS indicated by the first configuration information is not greater than the first bandwidth size.

21. A communication system, wherein the communication system comprises a terminal device and a network device;

the terminal device is configured to perform the method according to any one of claims 1 to 7; and

the network device is configured to perform the method according to any one of claims 8 to 17.

22. A communication system, wherein the communication system comprises a terminal device, a first network device, and a second network device;

the terminal device is configured to perform the method according to any one of claims 1 to 7;

the first network device is configured to receive first capability information from the terminal device, wherein the first capability information indicates that the terminal device supports sending first information by using a maximum of a first bandwidth size of bandwidth, and the first information is a sounding reference signal (SRS);

the second network device is configured to receive second capability information from the terminal device, wherein the second capability information indicates that the terminal device supports sending second information by using a maximum of a second bandwidth size of bandwidth, and the second information comprises at least one of data or control information;

the first network device is configured to send first configuration information to the terminal device, wherein the first configuration information indicates that a size of bandwidth configured for the first information is not greater than the first bandwidth size; and

the second network device is configured to send second configuration information to the terminal device, wherein the second configuration information indicates that a size of bandwidth configured for the second information is not greater than the second bandwidth size.

23. A computer-readable storage medium, wherein the storage medium stores at least one instruction, and when the instructions are run on a computer, the computer is enabled to perform the communication method according to any one of claims 1 to 7 or claims 8 to 17.

24. A computer program product, wherein the computer program product comprises one or

more computer program instructions, and when the computer program instructions are loaded and run on a computer, the computer is enabled to perform the communication method according to any one of claims 1 to 7 or claims 8 to 17.