CLAIMS

What is claimed is:

1. A communication method, comprising:

generating, by a first device, first control information, wherein the first control information comprises a first field and a second field, the first field is used to indicate a channel state of a first subchannel in a first channel segment, and the second field is used to indicate a channel state of a second subchannel in a second channel segment; and

sending, by the first device, the first control information to a second device; wherein that the first field is used to indicate a channel state of a first subchannel in a first channel segment comprises: a first bitmap in the first field is used to indicate a channel state of each first subchannel in the first channel segment; and

that the second field is used to indicate a channel state of a second subchannel in a second channel segment comprises: a second bitmap in the second field is used to indicate a channel state of each second subchannel in the second channel segment;

wherein the first control information is an A-control subfield, the first channel segment is a primary 160 MHZ, and the second channel segment is a secondary 160 MHZ; and

wherein the first field and the second field are bandwidth query report (BQR) control subfields.

2. A communication method, comprising:

receiving, by a second device, first control information from a first device, wherein the first control information comprises a first field and a second field, the first field is used to indicate a channel state of a first subchannel in a first channel segment, and the second field is used to indicate a channel state of a second subchannel in a second channel segment; and

determining, by the second device, the channel state of the first subchannel and the channel state of the second subchannel;

wherein that the first field is used to indicate a channel state of a first subchannel in a first channel segment comprises: a first bitmap in the first field is used to indicate a channel state of each first subchannel in the first channel segment; and

that the second field is used to indicate a channel state of a second subchannel in a second channel segment comprises: a second bitmap in the second field is used to indicate a channel state

of each second subchannel in the second channel segment.

wherein

the first control information is an A-control subfield, the first channel segment is a primary 160 MHZ, and the second channel segment is a secondary 160 MHZ; and

wherein the first field and the second field are bandwidth query report (BQR) control subfields.

3. A communication method, comprising:

generating, by a first device, first control information, wherein a first bitmap in the first control information is used to indicate a channel state of a first subchannel in a first channel segment, and a first bit in the first control information is used to indicate a channel state of a second channel segment; and

sending, by the first device, the first control information to a second device;

wherein the first bit is one or more reserved bits;

wherein the first control information is an A-control subfield, the first channel segment is a primary 160 MHZ, and the second channel segment is a secondary 160 MHZ.

4. The method according to claim 3, wherein a second bit in the first control information is used to indicate the first channel segment.

5. The method according to claim 3 or 4, wherein that a first bit is used to indicate a channel state of a second channel segment comprises:

a value of the first bit is a first value, and the first value indicates that a channel state of a subchannel in the second channel segment is available; or

a value of the first bit is a second value, and the second value indicates that a channel state of a subchannel in the second channel segment is busy or unavailable.

6. A communication method, comprising:

receiving, by a second device, first control information from a first device, wherein a first bitmap in the first control information is used to indicate a channel state of a first subchannel in a first channel segment, and a first bit in the first control information is used to indicate a channel state of a second channel segment; and

determining, by the second device, the channel state of the first subchannel and the channel state of the second subchannel;

wherein the first bit is one or more reserved bits;

wherein the first control information is an A-control subfield, the first channel segment is a primary 160 MHZ, and the second channel segment is a secondary 160 MHZ.

7. The method according to claim 6, wherein a second bit in the first control information is used to indicate the first channel segment.

8. The method according to claim 6 or 7, wherein that a first bit is used to indicate a channel state of a second channel segment comprises:

a value of the first bit is a first value, and the first value indicates that a channel state of a subchannel in the second channel segment is available; or

a value of the first bit is a second value, and the second value indicates that a channel state of a subchannel in the second channel segment is busy or unavailable.

9. A communication apparatus, comprising a processor and a transceiver, wherein the transceiver is configured to: receive a signal from another communication apparatus other than the communication apparatus and transmit the signal to the processor, or send a signal from the processor to another communication apparatus other than the communication apparatus; and the processor is configured to implement the method according to any one of claims 1 to 8 by using a logic circuit or executing code instructions.

10. A computer-readable storage medium, wherein the storage medium stores a program or instructions, and when the program or the instructions is/are run, the method according to any one of claims 1 to 8 is implemented.

11. A computer program product, comprising a computer program, wherein when the computer program is run on a computer, the computer is enabled to perform the communication method according to any one of claims 1 to 8.