

CLAIMS

1. A wireless communication method, comprising:

determining, by a network device, a supplementary uplink (SUL) carrier, wherein the

5 SUL carrier is one of a plurality of uplink carriers that can be used for a terminal device and respectively belong to a plurality of different frequency bands, and a frequency band to which the SUL carrier belongs is lower than frequency bands to which other uplink carriers belong; and

10 sending, by the network device, first information to the terminal device, wherein the first information indicates that the terminal device uses the SUL carrier to transmit sounding reference signal (SRS),

wherein the first information is carried in SRS configuration information used for semi-statically configuring the SRS; or the first information is carried in a trigger message for dynamically triggering the SRS.

15 2. The method according to claim 1, wherein the sending, by the network device, first information to the terminal device comprises:

sending, by the network device, the first information to a single terminal device by using high layer signaling.

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

20 sending, by the network device, second information to the terminal device, wherein the second information is used to configure the SUL carrier for the terminal device.

4. A wireless communication method, comprising:

25 receiving, by a terminal device, first information sent by a network device, wherein the first information indicates that the terminal device uses a supplementary uplink (SUL) carrier to transmit a sounding reference signal (SRS), and the SUL carrier is one of a plurality of uplink carriers that can be used for the terminal device; and

based on the first information, using the SUL carrier to transmit the SRS,

wherein the plurality of uplink carriers that can be used for the terminal device respectively belong to a plurality of different frequency bands, a frequency band to which the SUL carrier belongs is lower than frequency bands to which other uplink carriers belong; and

5 wherein the first information is carried in SRS configuration information used for semi-statically configuring the SRS; or the first information is carried in a trigger message for dynamically triggering the SRS.

5. The method according to claim 4, wherein the receiving, by a terminal device, first information sent by a network device comprises:

10 receiving, by the terminal device, the first information sent by the network device by using high layer signaling.

6. The method according to any one of claims 4 to 5, wherein the method further comprises:

receiving, by the terminal device, second information sent by the network device, wherein the second information is used to configure the SUL carrier for the terminal device; and

configuring, by the terminal device, the SUL carrier.

15 7. A network device, comprising a processing unit and a communications unit, wherein

the processing unit is configured to determine a supplementary uplink (SUL) carrier, wherein the SUL carrier is one of a plurality of uplink carriers that can be used for a terminal device and respectively belong to a plurality of different frequency bands, and a frequency band to which the SUL carrier belongs is lower than frequency bands to which other uplink carriers

20 belong; and

the communications unit is configured to send first information to the terminal device, wherein the first information indicates that the terminal device uses the SUL carrier to transmit sounding reference signal (SRS),

25 wherein the first information is carried in SRS configuration information used for semi-statically configuring the SRS; or the first information is carried in a trigger message for dynamically triggering the SRS.

8. The network device according to claim 7, wherein the communications unit is further configured to:

send the first information to the terminal device by using high layer signaling.

9. The network device according to claim 7 or 8, wherein the communications unit is further configured to:

send second information to the terminal device, wherein the second information is used to configure the SUL carrier for the terminal device.

10. A terminal device, comprising a communications unit and a processing unit, wherein the communications unit is configured to receive first information sent by a network device, wherein the first information indicates that the terminal device uses a supplementary uplink (SUL) carrier to transmit a sounding reference signal (SRS), and the SUL carrier is one of a plurality of uplink carriers that can be used for the terminal device; and

the processing unit is configured to: based on the first information, use the SUL carrier to transmit the SRS,

15 wherein the plurality of uplink carriers that can be used for the terminal device respectively belong to a plurality of different frequency bands, a frequency band to which the SUL carrier belongs is lower than frequency bands to which other uplink carriers belong; and

20 wherein the first information is carried in SRS configuration information used for semi-statically configuring the SRS; or the first information is carried in a trigger message for dynamically triggering the SRS.

11. The terminal device according to claim 10, wherein the communications unit is further configured to:

receive the first information sent by the network device by using high layer signaling.

12. The terminal device according to any one of claims 10 to 11, wherein the communications unit is further configured to receive second information sent by the network device, wherein the second information is used to configure the SUL carrier for the terminal

device; and

the processing unit is further configured to configure the SUL carrier.