CLAIMS

1. A communication method, comprising:

determining, by a terminal device, M second switching delays, wherein a jth second switching delay is a delay for switching by the terminal device between a first frequency band group and a second frequency band group, the jth second switching delay is one of the M second switching delays, the first frequency band group and the second frequency band group each comprise at least one frequency band, and M is a positive integer; and

sending, by the terminal device, third information to a network device, wherein the third information comprises at least the jth second switching delay.

2 The method according to claim 1, wherein the third information further comprises at least a first frequency band group identifier and a second frequency band group identifier.

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

receiving, by the terminal device, frequency band group identification information from the network device, wherein the frequency band group identification information comprises at least the first frequency band group identifier and the second frequency band group identifier.

4. The method according to claim 2 or 3, wherein the third information further comprises quantities of transmit radio frequency chains supported by the terminal device in the frequency bands comprised in the first frequency band group and the second frequency band group, and the third information is used by the network device to determine scheduling of uplink data.

5. The method according to any one of claims 2 to 4, wherein the second switching delay is an item in a second switching set, and the second switching set comprises 140 microseconds, 210 microseconds, and 280 microseconds.

6. The method according to any one of claims 2 to 4, wherein the second switching delay is an item in a second switching set, and the second switching set comprises 35 microseconds.

7. The method according to any one of claims 1 to 6, wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises a frequency band #D, and the frequency band #D supports two radio frequency chains; or

wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises the frequency

band #A and a frequency band #C, the frequency band #A supports one radio frequency chain, and the frequency band #C supports one radio frequency chain.

8. A communication method, comprising:

receiving, by a network device, third information from a terminal device, wherein the third information comprises at least a jth second switching delay, the jth second switching delay is a delay for switching by the terminal device between a first frequency band group and a second frequency band group, the jth second switching delay is one of M second switching delays, the first frequency band group and the second frequency band group each comprise at least one frequency band, and M is a positive integer; and

determining, by the network device, scheduling of uplink data based on the third information.

9. The method according to claim 8, wherein the third information further comprises at least a first frequency band group identifier and a second frequency band group identifier.

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

sending, by the network device, frequency band group identification information to the terminal device, wherein the frequency band group identification information comprises at least the first frequency band group identifier and the second frequency band group identifier.

11. The method according to claim 9 or 10, wherein the third information further comprises quantities of transmit radio frequency chains supported by the terminal device in the frequency bands comprised in the first frequency band group and the second frequency band group.

12. The method according to any one of claims 9 to 11, wherein the second switching delay is an item in a second switching set, and the second switching set comprises 140 microseconds, 210 microseconds, and 280 microseconds.

13. The method according to any one of claims 9 to 11, wherein the second switching delay is an item in a second switching set, and the second switching set comprises 35 microseconds.

14. The method according to any one of claims 8 to 13, wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises a frequency band #D, and the frequency band #D supports two radio frequency chains; or

wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises the frequency band #A and a frequency band #C, the frequency band #A supports one radio frequency chain, and the frequency band #C supports one radio frequency chain.

15. An apparatus comprising:

one or more processors configured to:

determine M second switching delays, wherein a jth second switching delay is a delay for switching between a first frequency band group and a second frequency band group, the jth second switching delay is one of the M second switching delays, the first frequency band group and the second frequency band group each comprise at least one frequency band, and M is a positive integer; and

send third information, wherein the third information comprises at least the jth second switching delay.

16. The apparatus according to claim 15, wherein the third information further comprises at least a first frequency band group identifier and a second frequency band group identifier.

17. The apparatus according to claim 16, wherein the one or more processors further configured to:

receive frequency band group identification information, wherein the frequency band group identification information comprises at least the first frequency band group identifier and the second frequency band group identifier.

18. The apparatus according to claim 16, wherein the third information further comprises quantities of transmit radio frequency chains supported by the apparatus in the frequency bands comprised in the first frequency band group and the second frequency band group, and the third information is used by an network device to determine scheduling of uplink data.

19. The apparatus according to claim 16, wherein the second switching delay is an item in a second switching set, and the second switching set comprises at least one of 35 microseconds, 140 microseconds, 210 microseconds, and 280 microseconds.

20. The apparatus according to claim 15, wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises a frequency band #D, and the frequency band #D supports two radio frequency chains; or

wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises the frequency band #A and a frequency band #C, the frequency band #A supports one radio frequency chain, and the frequency band #C supports one radio frequency chain.

21. An apparatus comprising:

one or more processors configured to:

receive third information, wherein the third information comprises at least a jth second switching delay, the jth second switching delay is a delay for switching by the terminal device between a first frequency band group and a second frequency band group, the jth second switching delay is one of M second switching delays, the first frequency band group and the second frequency band group each comprise at least one frequency band, and M is a positive integer; and

determine scheduling of uplink data based on the third information.

22. The apparatus according to claim 21, wherein the third information further comprises at least a first frequency band group identifier and a second frequency band group identifier.

23. The apparatus according to claim 22, wherein the one or more processors further configured to:

send frequency band group identification information, wherein the frequency band group identification information comprises at least the first frequency band group identifier and the second frequency band group identifier.

24. The apparatus according to claim 22, wherein the third information further comprises quantities of transmit radio frequency chains supported by an terminal device in the frequency bands comprised in the first frequency band group and the second frequency band group.

25. The apparatus according to claim 22, wherein the second switching delay is an item in a second switching set, and the second switching set comprises at least one of 35 microseconds, 140 microseconds, 210 microseconds, and 280 microseconds.

26. The apparatus according to claim 21, wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises a frequency band #D, and the frequency band #D supports two radio frequency chains; or

wherein the first frequency band group comprises a frequency band #A and a frequency band #B, the frequency band #A supports one radio frequency chain, and the frequency band #B supports one radio frequency chain, and wherein the second frequency band group comprises the frequency band #A and a frequency band #C, the frequency band #A supports one radio frequency chain, and the frequency band #C supports one radio frequency chain.

27. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 7, or claims 8 to 14.

28. A computer program product, wherein the computer program product comprises instructions

used for performing the method according to any one of claims 1 to 7, or claims 8 to 14.