CLAIMS

1. A communication method in a wireless communication system, wherein the method comprises:

receiving, by a first terminal device, first channel quality reporting information sent by a second terminal device, wherein a format of the first channel quality reporting information is one of at least two preset formats, the first channel quality reporting information comprises a channel quality parameter of at least one target channel determined by the second terminal device, and the target channel is a radio channel between the second terminal device and the first terminal device;

parsing, by the first terminal device, the first channel quality reporting information, to obtain the channel quality parameter of the at least one target channel, and

sending an updated first frequency hopping map to the second terminal device, wherein the updated first frequency hopping map is used by the second terminal device to update a second frequency hopping map, and the second frequency hopping map is used by the second terminal device to determine the at least one available channel between the first terminal device and the second terminal device.

2. The method according to claim 1, wherein the method further comprises:

updating, by the first terminal device, a first frequency hopping map based on the channel quality parameter of the at least one target channel, wherein the first frequency hopping map is used by the first terminal device to determine at least one available channel between the first terminal device and the second terminal device.

3. The method according to claim 1 or 2, wherein precision of channel quality parameters comprised in first channel quality reporting information in different formats is different.

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

sending, by the first terminal device, a channel quality assessment request to the second terminal device, wherein the channel quality assessment request comprises reporting mode indication information, and the reporting mode indication information indicates a format of the first channel quality reporting information.

5. The method according to claim 4, wherein the channel quality assessment request further comprises a first time interval and a second time interval, and the second time interval is greater than the first time interval; and

the reporting mode indication information further indicates that the second terminal device sends the first channel quality reporting information within the first time interval;

the reporting mode indication information further indicates that the second terminal device sends

the first channel quality reporting information within the second time interval; or

the reporting mode indication information further indicates that the second terminal device sends the first channel quality reporting information within the second time interval by using the first time interval as a sending interval.

6. The method according to claim 4, wherein the channel quality assessment request further comprises a target moment; and

the reporting mode indication information further indicates that the second terminal device sends the first channel quality reporting information before the target moment.

7. The method according to claim 6, wherein the channel quality assessment request further comprises target channel indication information, and the target channel indication information indicates the at least one target channel.

8. The method according to claim 7, wherein the at least one available channel indicated by the first frequency hopping map is the same as the at least one target channel indicated by the target channel indication information, the reporting mode indication information further indicates that the second terminal device updates the second frequency hopping map based on the at least one target channel, and the second frequency hopping map is used by the second terminal device to determine the at least one available channel between the first terminal device and the second terminal device.

9. The method according to any one of claims 4 to 8, wherein the method further comprises:

receiving, by the first terminal device, second channel quality reporting information from the second terminal device;

determining, by the first terminal device, at least one first channel indicated by the second channel quality indication information, wherein a channel quality parameter of the first channel is less than or equal to a first preset parameter, or a channel quality parameter of the first channel is greater than a channel quality parameter of a channel other than the first channel in all channels indicated by the second channel quality reporting information;

determining, by the first terminal device, the at least one available channel indicated by the first frequency hopping map;

determining, by the first terminal device, a first quantity of channels that do not coexist in the at least one available channel and the at least one first channel; and

determining, by the first terminal device based on the first quantity, to trigger performing an operation of sending the channel quality assessment request to the second terminal device.

10. A communication method in a wireless communication system, wherein the method comprises:

determining, by a second terminal device, first channel quality reporting information, wherein a

format of the first channel quality reporting information is one of at least two preset formats, the first channel quality reporting information comprises a channel quality parameter of at least one target channel determined by the second terminal device, and the target channel is a radio channel between the second terminal device and a first terminal device;

sending, by the second terminal device, the first channel quality reporting information to the first terminal device;

receiving, by the second terminal device, an updated first frequency hopping map sent by the first terminal device; and

updating, by the second terminal device, the second frequency hopping map based on the updated first frequency hopping map.

11. The method according to claim 10, wherein precision of channel quality parameters comprised in first channel quality reporting information in different formats is different.

12. The method according to claim 10 or 11, wherein the method further comprises:

receiving, by the second terminal device, a channel quality assessment request from the first terminal device, wherein the channel quality assessment request comprises reporting mode indication information, and the reporting mode indication information indicates a format of the first channel quality reporting information.

13. The method according to claim 12, wherein the channel quality assessment request further comprises a first time interval and a second time interval, and the second time interval is greater than the first time interval; and

the sending, by the second terminal device, the first channel quality reporting information to the first terminal device comprises:

determining, by the second terminal device, the first time interval or the second time interval based on the reporting mode indication information; and

sending, by the second terminal device, the first channel quality reporting information to the first terminal device within the first time interval or the second time interval.

14. The method according to claim 13, wherein the channel quality assessment request comprises the first time interval and the second time interval, and the second time interval is greater than the first time interval; and

the sending, by the second terminal device, the first channel quality reporting information to the first terminal device comprises:

determining, by the second terminal device, the first time interval and the second time interval based on the reporting mode indication information; and

sending, by the second terminal device, the first channel quality reporting information to the first

terminal device within the second time interval by using the first time interval as a sending interval.

15. The method according to claim 13, wherein the channel quality reporting requests a target moment; and

the sending, by the second terminal device, the first channel quality reporting information to the first terminal device comprises:

determining, by the first terminal device, the target moment based on the reporting mode indication information; and

sending, by the second terminal device, the first channel quality reporting information to the first terminal device before the target moment.

16. The method according to claim 15, wherein the channel quality assessment request further comprises target channel indication information, and the target channel indication information indicates the at least one target channel.

17. The communication apparatus according to claim 16, wherein the first channel quality reporting information is used by the first terminal device to update a first frequency hopping map, and the first frequency hopping map is used by the first terminal device to determine at least one available channel between the first terminal device and the second terminal device.

18. The method according to claim 17, wherein the at least one available channel indicated by the first frequency hopping map is the same as the at least one target channel indicated by the target channel indication information; and

the method further comprises:

determining, by the second terminal device, based on the reporting mode indication information, to update the second frequency hopping map by using the at least one target channel, wherein the second frequency hopping map is used by the second terminal device to determine the at least one available channel between the first terminal device and the second terminal device.

19. The method according to any one of claims 16 to 18, wherein the determining first channel quality reporting information comprises:

determining, by the second terminal device, the at least one target channel based on the target channel indication information;

performing, by the second terminal device, channel quality assessment on the at least one target channel to obtain a channel quality parameter of each target channel in the at least one target channel; and

generating, by the second terminal device based on the channel quality parameter of the target channel, first channel quality reporting information in a format indicated by the reporting mode indication information.

20. The method according to claim 19, wherein the method further comprises:

determining, by the second terminal device, the at least one available channel based on the second frequency hopping map;

performing, by the second terminal device, channel quality assessment on all channels between the second terminal device and the first terminal device, to obtain channel quality parameters of all the channels;

determining, by the second terminal device, at least one second channel from all the channels based on the channel quality parameters of the channels, wherein a channel quality parameter of the second channel is less than or equal to a second preset parameter, or the channel quality parameter of the second channel is greater than a channel quality parameter of a channel other than the second channel in all the channels;

determining, by the second terminal device, a second quantity of channels that do not coexist in at least one available channel indicated by the second frequency hopping map and the at least one second channel, wherein the second frequency hopping map is used by the second terminal device to determine the at least one available channel between the first terminal device and the second terminal device; and

determining, by the second terminal device based on the second quantity, to perform an operation of determining the first channel quality reporting information.

21. A communication apparatus in a wireless communication system, comprising a processor and a memory, wherein the memory is configured to store instructions, and when the processor runs the instructions, the communication apparatus is enabled to perform the method according to any one of claims 1 to 9 or claims 10 to 20.

22. A computer-readable storage medium, wherein the computer-readable storage medium stores program instructions, and when the program instructions are run, the method according to any one of claims 1 to 9 or claims 10 to 20 is performed.