CLAIMS

What is claimed is:

1. A method for handling radio link failure, applied to a first terminal and comprising:

detecting a radio link failure of a sidelink between the first terminal and a second terminal; and

reporting an indication message of the radio link failure to a serving base station of the first terminal, wherein the indication message comprises at least one of the following information:

an identifier of radio link;

an indication of radio link failure; and

a cause of the radio link failure;

wherein before the detecting a radio link failure of a sidelink between the first terminal and a second terminal, the method further comprises any one of the following:

receiving a first notification message of the second terminal, wherein the first notification message comprises information of a serving base station of the second terminal; and

sending a second notification message to the second terminal, wherein the second notification message comprises information of the serving base station of the first terminal.

2. The method for handling radio link failure according to claim 1, further comprising:

after the first terminal changes its serving base station, sending a third notification message to the second terminal, wherein the third notification message comprises the information of the serving base station of the first terminal.

3. The method for handling radio link failure according to claim 1, wherein

the first notification message further comprises an identity of the second terminal and/or information of the radio link; and

the second notification message further comprises an identity of the first terminal and/or the information of the radio link.

4. The method for handling radio link failure according to claim 1, wherein the information of the serving base station of the first terminal comprises at least one of the following:

a cell identifier of a primary cell of the first terminal;

a base station identifier of the primary cell of the first terminal;

a cell identifier of a cell on which the first terminal camps; and

a base station identifier of the cell on which the first terminal camps; and

the information of the serving base station of the second terminal comprises at least one of the following:

a cell identifier of a primary cell of the second terminal; and

a cell identifier of a cell on which the second terminal camps.

5. The method for handling radio link failure according to claim 3, wherein after the detecting a radio link failure of the sidelink between the first terminal and a second terminal, the method further comprises:

reporting information of the second terminal to the serving base station of the first terminal, wherein the information of the second terminal comprises at least one of the following:

the identity of the second terminal and the information of the serving base station of the second terminal; and

the information of the radio link.

6. The method for handling radio link failure according to claim 5, wherein the information of the second terminal comprises first information about whether the second terminal is a transmit end; or

the information of the second terminal is reported by the first terminal to the serving base station of the first terminal in a case that the second terminal is a transmit end.

7. A method for handling radio link failure, applied to a first base station and comprising:

receiving an indication message of a radio link failure reported by a first terminal, wherein the indication message comprises at least one of the following information: an identifier of radio link, an indication of radio link failure, and a cause of the radio link failure; and

releasing a resource corresponding to the radio link,

wherein the method further comprises:

receiving information of a second terminal reported by the first terminal, wherein the radio link is a sidelink between the first terminal and the second terminal, and the information of the second terminal comprises at least one of the following:

an identity of the second terminal and information of a serving base station of the second terminal; and

information of the radio link.

8. The method for handling radio link failure according to claim 7, wherein the resource corresponding to the radio link comprises at least one of the following:

a sidelink resource pool;

a periodically configured sidelink resource; and

a Uu interface resource used for assisting a sidelink.

9. The method for handling radio link failure according to claim 7, wherein after the receiving an indication message of a radio link failure reported by a first terminal, the method further comprises:

sending a first indication message to a second base station to indicate a radio link failure between the second terminal and the first terminal, wherein the first indication message is used for the second base station to release the resource corresponding to the radio link, and the second base station is the serving base station of the second terminal.

10. The method for handling radio link failure according to claim 9, wherein the sending a first indication message to a second base station comprises:

sending the first indication message to the second base station through an Xn and/or X2 interface.

11. The method for handling radio link failure according to claim 9, wherein the first indication message comprises at least one of the following information:

an indication of sidelink radio link failure;

the information of the second terminal;

the identifier of radio link; and

a destination identifier of radio link.

12. The method for handling radio link failure according to claim 9, wherein

the information of the second terminal comprises first information about whether the second terminal is a transmit end; or

the information of the second terminal is reported by the first terminal in a case that the second terminal is a transmit end.

13. An apparatus for handling radio link failure, applied to a first terminal and comprising:

a detection module, configured to detect a radio link failure of a sidelink between the first terminal and a second terminal; and

a reporting module, configured to report an indication message of the radio link failure to a serving base station of the first terminal, wherein the indication message comprises at least one of the following information:

an identifier of radio link;

an indication of radio link failure; and

a cause of the radio link failure,

wherein the apparatus further comprises:

a transceiver module, configured to, before the radio link failure of the sidelink between the first terminal and the second terminal is detected, receive a first notification message of the second terminal, wherein the first notification message comprises information of a serving base station of the second terminal; and/or send a

second notification message to the second terminal, wherein the second notification message comprises information of the serving base station of the first terminal.

14. The apparatus for handling radio link failure according to claim 13, wherein

the transceiver module is further configured to, after the first terminal changes its serving base station, send a third notification message to the second terminal, wherein the third notification message comprises the information of the serving base station of the first terminal.

15. An apparatus for handling radio link failure, applied to a first base station and comprising:

a receiving module, configured to receive an indication message of a radio link failure reported by a first terminal, wherein the indication message comprises at least one of the following information: an identifier of radio link, an indication of radio link failure, and a cause of the radio link failure; and

a releasing module, configured to release a resource corresponding to the radio link,

wherein the receiving module is further configured to receive information of a second terminal reported by the first terminal, wherein the radio link is a sidelink between the first terminal and the second terminal, and the information of the second terminal comprises at least one of the following:

an identity of the second terminal and information of a serving base station of the second terminal; and

information of the radio link.

16. A communications device, comprising a processor, a memory, and a computer program stored in the memory and running on the processor, wherein when the processor executes the computer program, the steps of the method for handling radio link failure according to any one of claims 1 to 12 are implemented.

17. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a processor, the steps of the method for handling radio link failure according to any one of claims 1 to 12 are implemented.