

CLAIMS:

1. A communication method, comprising:

receiving, by a first primary access network device, a first message sent by a terminal device in a specific state when there is uplink data to be transmitted, wherein the specific state is a suspend state or a non-activated state; and

controlling, by the first primary access network device, a secondary connection between the terminal device and a secondary access network device according to the first message ,

characterized in that the controlling, by the first primary access network device, a secondary connection between the terminal device and a secondary access network device according to the first message comprises:

if the first message comprises link quality information of the secondary access network, controlling, by the first primary access network device, the secondary connection between the terminal device and the secondary access network device according to the link quality information of the secondary access network.

2. The method according to claim 1, wherein the first message is a radio resource control (RRC) message.

3. The method according to claim 2, wherein the first message is an RRC message used for requesting for switching the terminal device from a first state to a second state, or an RRC message used for indicating that the terminal device has been switched from the first state to the second state.

4. The method according to any one of claims 1 to 3, wherein if a second primary access network device to which the terminal device is connected before the terminal device enters the specific state is the same as the first primary access network device, the method, before the receiving, by a first primary access network device, a first message sent by a terminal device in a specific state when there is uplink data to be transmitted, further comprises:

suspending the secondary connection between the terminal device and the secondary access network device and transitioning the terminal device to the specific state by the first primary access network device.

5. The method according to claim 1, wherein the controlling, by the first primary access network device, the secondary connection between the terminal device and the secondary

access network device according to the link quality information of the secondary access network comprises:

if the link quality information of the secondary access network is indicative of a link quality value of the secondary access network, controlling, by the first primary access network device, the secondary connection between the terminal device and the secondary access network device according to the link quality value of the secondary access network.

6. The method according to claim 5, wherein the controlling, by the first primary access network device, the secondary connection between the terminal device and the secondary access network device according to the link quality value of the secondary access network comprises:

if the link quality value of the secondary access network is not less than a pre-configured link quality threshold, controlling, by the first primary access network device, to restore the secondary connection between the terminal device and the secondary access network device;
or

if the link quality value of the secondary access network is less than the pre-configured link quality threshold, controlling, by the first primary access network device, to release the secondary connection between the terminal device and the secondary access network device.

7. The method according to any one of claims 1 to 4, wherein the controlling, by the first primary access network device, the secondary connection between the terminal device and the secondary access network device according to the link quality information of the secondary access network comprises:

if the first message does not include the link quality information of the secondary access network, controlling, by the first primary access network device, to release the secondary connection between the terminal device and the secondary access network device.

8. The method according to claim 6, wherein the controlling, by the first primary access network device, to restore the secondary connection between the terminal device and the secondary access network device comprises:

sending, by the first primary access network device, to the secondary access network device, a second message used for requesting the secondary access network device to restore the secondary connection; and

receiving, by the first primary access network device, a response message of the second message sent by the secondary access network device, used for indicating that the secondary access network device has restored the secondary connection.

9. The method according to claim 8, wherein the method, after the receiving, by the first primary access network device, the response message of the second message sent by the secondary access network device, further comprises:

sending, by the first primary access network device, to the terminal device, a third message used for notifying the terminal device to restore related configuration of the secondary connection.

10. The method according to claim 9, wherein the third message is an RRC message.

11. The method according to claim 6, wherein the controlling, by the first primary access network device, to release the secondary connection between the terminal device and the secondary access network device comprises:

sending, by the first primary access network device, to the secondary access network device, a fourth message used for requesting the secondary access network device to release the secondary connection; and

receiving, by the first primary access network device, a response message of the fourth message sent by the secondary access network device, used for indicating that the secondary access network device has released the secondary connection.

12. The method according to claim 11, wherein the method, after the receiving, by the first primary access network device, a response message of the fourth message sent by the secondary access network device, further comprises:

sending, by the first primary access network device, to the terminal device, a fifth message used for notifying the terminal device that the secondary access network device has released the secondary connection.

13. The method according to claim 12, wherein the fifth message comprises second indication information used for instructing the terminal device to release configuration information related to the secondary connection.

14. The method according to any one of claims 1 to 13, wherein if a second primary access network device to which the terminal device is connected before the terminal device

enters the specific state is different from the first primary access network device, the method further comprises:

obtaining, by the first primary access network device, configuration information of the secondary connection from the second primary access network device, the configuration information of the secondary connection being used by the first primary access network device to control the secondary connection according to the configuration information of the secondary connection.

15. The method according to claim 14, wherein the obtaining, by the first primary access network device, configuration information of the secondary connection from the second primary access network device comprises:

sending, by the first primary access network device, to the second primary access network device, a sixth message used for requesting for obtaining context information of the terminal device in the second primary access network; and

receiving, by the first primary access network device, a response message of the sixth message sent by the second primary access network device comprising the configuration information of the secondary connection.

16. A communication method, comprising:

determining, by a terminal device in a specific state, that there is uplink data to be transmitted, wherein the specific state is a suspend state or a non-activated state; and

sending, by the terminal device, to a first primary access network device, a first message used by the first primary access network device to control a secondary connection between the terminal device and the secondary access network device ,

characterized in that the sending, by the terminal device, to a first primary access network device, a first message comprises:

sending, by the terminal device, the first message comprising link quality information of the secondary access network to the first primary access network device, wherein the link quality information is used by the first primary access network device for controlling the secondary connection.

17. A terminal device, comprising a unit for performing the communication method according to any one of claims 1-15.

18. An access network device, comprising a unit for performing the communication method according to claim 16.