CLAIMS

1. A method for suspending a Radio Resource Control (RRC) connection, comprising:

sending, by a first node, a first notification message to a second node, and negotiating with the second node about whether the RRC connection is required to be suspended, the first notification message being used for notifying the second node that the first node determines that the RRC connection is required to be suspended; and

if a result of the negotiation between the first node and the second node is that the RRC connection is required to be suspended, sending, by the first node, a first suspension command to a terminal device, the first suspension command being used for triggering the terminal device to suspend the RRC connection and to enter an RRC inactive state.

2. The method of claim 1, wherein negotiating with the second node about whether the RRC connection is required to be suspended comprises:

receiving, by the first node, a second notification message from the second node, the second notification message being used for notifying the first node that the RRC connection is disable to be suspended.

3. The method of any one of claims 1 to 2, wherein negotiating with the second node about whether the RRC connection is required to be suspended comprises:

receiving, by the first node, a third notification message from the second node, the third notification message being used for notifying the first node that the RRC connection is able to be suspended.

4. The method of any one of claims 1 to 3, wherein negotiating with the second node about whether the RRC connection is required to be suspended comprises:

receiving, by the first node, a second timer configured by the second node, and starting the second timer; and

during the running of the second timer, receiving, by the first node, a first indication message from the second node, the first indication message being used for indicating the first node to stop the second timer;

wherein if the second timer expires before being triggered to stop, sending, by the first node, the first suspension command to the terminal device.

5. The method of any one of claims 1 to 4, wherein the first node is a Master Node (MN) in a Dual Connectivity (DC) network or a Multiple Connectivity (MC) network, and the second node is a Secondary Node (SN) in the DC network or the MC network.

6. A method for suspending a Radio Resource Control (RRC) connection, comprising:

if a result of a second node negotiating with a first node is that a part of the RRC connection is required to be suspended or the second node determines that a part of the RRC connection is required to be suspended, sending, by the second node, a second suspension command to a terminal device, the second suspension command being used for triggering the terminal device to suspend the part of the RRC connection and to enter a partial RRC inactive state; wherein the suspension of the part of the RRC connection refers to the suspension of resources of Secondary Cell Group (SCG).

7. The method of claim 6, further comprising:

if a result of the second node negotiating with the first node is that entire RRC connection is required to be suspended, sending, by the second node through the first node, a third suspension command to the terminal device, the third suspension command being used for triggering the terminal device to suspend the entire RRC connection and to enter an RRC inactive state.

8. The method of claim 6 or 7, further comprising:

sending, by the second node, a fourth notification message to the first node, and negotiating with the first node about whether the RRC connection is required to be suspended, wherein the fourth notification message is used for notifying the first node that the second node determines that the RRC connection is required to be suspended.

9. The method of claim 8, wherein negotiating with the first node about whether the RRC connection is required to be suspended comprises:

determining, by the first node, that the entire RRC connection is required to be suspended; or

determining, by the first node, that a part of the RRC connection is required to be suspended, and receiving, by the second node, a fifth notification message from the first node,

the fifth notification message being used for notifying the second node that the part of the RRC connection is required to be suspended.

10. The method of any one of claims 6 to 9, further comprising:

after sending the second suspension command to the terminal device, sending, by the second node, a sixth notification message to the first node, the sixth notification message being used for notifying the first node that the terminal device enters the partial RRC inactive state.

11. The method of claim 6, wherein after the second node determines that the part of the RRC connection is required to be suspended, further comprising:

sending, by the second node, a seventh notification message to the first node, the seventh notification message being used for notifying the first node that the part of the RRC connection is required to be suspended.

12. A device for suspending a Radio Resource Control (RRC) connection, comprising:

a negotiating unit, configured to send a first notification message to a second node, and negotiate with the second node about whether the RRC connection is required to be suspended, the first notification message being used for notifying the second node that a first node determines that the RRC connection is required to be suspended; and

a controlling unit, configured to send a first suspension command to a terminal device if a result of negotiating with the second node is that the RRC connection is required to be suspended, the first suspension command being used for triggering the terminal device to suspend the RRC connection and to enter an RRC inactive state.

13. The device of claim 12, wherein the negotiating unit is configured to receive a second notification message from the second node, the second notification message being used for notifying the first node that the RRC connection is disable to be suspended; and

wherein the negotiating unit is further configured to receive a third notification message from the second node, the third notification message being used for notifying the first node that the RRC connection is able to be suspended.

14. The device of any one of claims 12 to 13, wherein the negotiating unit is further configured to:

receive a second timer configured by the second node and start the second timer; and

receive a first indication message from the second node during the running of the second timer, the first indication message being used for indicating the first node to stop the second timer;

wherein if the second timer expires before being triggered to stop, the controlling unit sends the first suspension command to the terminal device.

15. A computer storage medium having stored therein a computer executable instruction that when being executed by a processor, performs steps of the method of any one of claims 1 to 5, or steps of the method of any one of claims 6 to 11.