

CLAIMS

1. A handover method, comprising:

receiving, by a target base station, a handover request message sent by a source base station, wherein the source base station is a Master Node (MN) corresponding to a serving cell which currently provides service for a terminal and has a control and decision-making right, the target base station is a Second Node (SN) corresponding to at least one Secondary Cell which is controlled by the serving cell and currently provides service for the terminal, and the handover request message is configured to request to handover the control and decision-making right to the target base station; and

sending, by the target base station, a handover acknowledgement message to the source base station, wherein the handover acknowledgement message is to acknowledge the handover request message;

wherein before receiving, by the target base station, the handover request message sent by the source base station, user data sent to the terminal is simultaneously sent by the serving cell corresponding to the source base station and the Secondary Cell corresponding to the target base station.

2. The method according to claim 1, further comprising:

establishing, by the target base station, a Radio Resource Control (RRC) connection control with the terminal; and

sending, by the target base station, a release message to the terminal, wherein the release message is to indicate the terminal to release the source base station.

3. The method according to claim 1 or 2, after sending, by the target base station, the handover acknowledgement message to the source base station, further comprising:

sending, by the target base station, an indication message to the terminal, the indication message comprising information indicating that RRC of the source base station is released and/or information indicating that RRC of the target base station is established.

4. The method according to claim 3, wherein sending, by the target base station, the indication message to the terminal comprises:

sending, by the target base station, the indication message to the terminal through the source base station.

5. The method according to claim 1 or 2, after receiving, by the target base station, the handover request message sent by the source base station and before sending, by the target base station, the handover acknowledgement message to the source base station, further comprising:

receiving, by the target base station, an indication message sent by the source base station, the indication message comprising information indicating that RRC of the source base station is released and/or information indicating that RRC of the target base station is established; and

forwarding, by the target base station, the indication message to the terminal.

6. The method according to any one of claims 1-5, after receiving, by the target base station, the handover request message sent by the source base station, further comprising:

sending, by the target base station, a path switching request to core network equipment according to the handover request message.

7. The method according to any one of claims 1-6, wherein the handover request message comprises at least one of following information comprising context information of the terminal, system information of the serving cell and radio resource configuration information for the terminal.

8. A handover method, comprising:

sending, by a source base station, a handover request message to a target base station, wherein the source base station is a Master Node (MN) corresponding to a serving cell which currently provides service for a terminal and has a control and decision-making right, the target base station is a Second Node (SN) corresponding to at least one Secondary Cell which is controlled by the serving cell and currently provides service for the terminal, and the handover request message is configured to request to handover the control and decision-making right to the target base station; and

receiving, by the source base station, a handover acknowledgement message sent by the target base station, wherein the handover acknowledgement message is to acknowledge the handover request message;

wherein before sending, by the source base station, the handover request message to the target base station, user data sent to the terminal is simultaneously sent by the serving cell corresponding to the source base station and the Secondary Cell corresponding to the target base station.

9. The method according to claim 8, after sending, by the source base station, the handover request message to the target base station and before receiving, by the source base station, the handover acknowledgement message sent by the target base station, further comprising:

sending, by the source base station, an indication message to the terminal, the indication message comprising information indicating that Radio Resource Control (RRC) of the source base station is released and/or information indicating that RRC of the target base station is established.

10. The method according to claim 9, wherein sending, by the source base station, the indication

message to the terminal comprises:

sending, by the source base station, the indication message to the terminal through the target base station.

11. The method according to claim 8, after receiving, by the source base station, the handover acknowledgement message sent by the target base station, further comprising:

receiving, by the source base station, an indication message sent by the target base station, the indication message comprising information indicating that RRC of the source base station is released and/or information indicating that RRC of the target base station is established; and

forwarding, by the source base station, the indication message to the terminal.

12. The method according to any one of claims 8-11, before sending, by the source base station, the handover request message to the target base station, further comprising:

receiving, by the source base station, a signal strength measurement result reported by the terminal, the signal strength measurement result comprising strength of a signal which is currently received by the terminal from the cell of the source base station and strength of a signal which is currently received by the terminal from the cell of the target base station; and

when the source base station determines that the terminal needs to handover to the target base station according to the signal strength measurement result, adding, by the source base station, the target base station as the Secondary node comprising at least one secondary cell to enable the source base station and the target base station to simultaneously send user data to the terminal.

13. The method according to any one of claims 8-12, after receiving, by the source base station, the handover acknowledgement message sent by the target base station, further comprising:

sending, by the source base station, a path switching request to core network equipment according to the handover acknowledgement message.

14. The method according to any one of claims 8-13, wherein the handover request message comprises at least one of following information comprising context information of the terminal, system information of the serving cell and radio resource configuration information for the terminal.

15. A handover method, comprising:

receiving, by a terminal, an indication message sent by a source base station or a target base station, the indication message comprising information indicating that Radio Resource Control (RRC) of the source base station is released and/or information indicating that RRC of the target base station is established, wherein the source base station is a Master Node (MN) corresponding to a serving cell which currently provides service for the terminal and has a control and decision making right, and the target base station is a Second Node (SN) corresponding to at least one

Secondary Cell which is controlled by the serving cell and currently provides service for the terminal;
and

establishing, by the terminal, an RRC connection control with the target base station;

wherein before receiving, by the terminal, the indication message sent by the source base station or the target base station, the method further comprises: receiving, by the terminal, user data simultaneously sent by the serving cell corresponding to the source base station and the Secondary Cell corresponding to the target base station.

16. The method according to claim 15, further comprising:

receiving, by the terminal, a release message sent by the target base station, the release message indicating the terminal to release the source base station; and

releasing, by the terminal, the source base station according to the release message.

17. The method according to claim 15 or 16, before receiving, by the terminal, the indication message sent by the source base station or the target base station, further comprising:

reporting, by the terminal, a signal strength measurement result to the source base station, the measurement result comprising strength of a signal which is currently received by the terminal from the cell of the source base station and strength of a signal which is currently received by the terminal from the cell of the target base station.

18. A terminal, comprising:

a receiving module, configured to receive an indication message sent by a source base station or a target base station, the indication message comprising information indicating that Radio Resource Control (RRC) of the source base station is released and/or information indicating that RRC of the target base station is established, wherein the source base station is a Master Node (MN) corresponding to a serving cell which currently provides service for the terminal and has a control and decision making right, and the target base station is a Second Node (SN) corresponding to at least one Secondary Cell which is controlled by the serving cell and currently provides service for the terminal; and

a processing module, configured to establish an RRC connection control link with the target base station;

wherein the receiving module is further configured to receive user data simultaneously sent by the serving cell corresponding to the source base station and the Secondary Cell corresponding to the target base station.

19. The terminal according to claim 18, wherein the receiving module is further configured to:

receive a release message sent by the target base station, wherein the release message is to indicate the terminal to release the source base station; and

the processing module is further configured to:

release the source base station according to the release message received by the receiving module.

20. The terminal according to claim 18 or 19, further comprising:

a sending module, configured to, before the receiving module receives the indication message sent by the source base station or the target base station, report a signal strength measurement result to the source base station, the measurement result comprising strength of a signal which is currently received by the terminal from the cell of the source base station and strength of a signal which is currently received by the terminal from the cell of the target base station.