CLAIMS

1. A communication method, comprising:

receiving, by a terminal device in a radio resource control RRC non-connected mode, a group paging message from a network device, wherein the group paging message comprises first information, the first information is used to page a group of terminal devices to receive a first multicast service, and the group of terminal devices comprise the terminal device; and

performing, by the terminal device, at least one of the following based on the first information and second information, wherein the second information indicates whether the network device provides the first multicast service for the group of terminal devices in the RRC non-connected mode:

receiving the first multicast service in the RRC non-connected mode; or

performing an RRC connection control procedure.

2. The method according to claim 1, wherein the determining, by the terminal device based on the first information and second information, to receive the first multicast service in the RRC non-connected mode comprises:

receiving, by the terminal device, the first multicast service in the RRC non-connected mode if the second information indicates that the network device provides the first multicast service for the group of terminal devices in the RRC non-connected mode; or

initiating, by the terminal device, an access control procedure based on the first information, and

receiving, by the terminal device, the first multicast service in the RRC non-connected mode if the terminal device is not allowed to access the network device, and the second information indicates that the network device provides the first multicast service for the group of terminal devices in the RRC non-connected mode.

3. The method according to claim 1, wherein the performing, by the terminal device, an RRC connection control procedure based on the first information and second information comprises:

performing, by the terminal device, the RRC connection control procedure if the second information indicates that the network device does not provide the first multicast service for the group of terminal devices in the RRC non-connected mode; or

initiating, by the terminal device, an access control procedure based on the first information, and performing, by the terminal device, the RRC connection control procedure if the terminal device is allowed to access the network device.

4. The method according to any one of claims 1 to 3, wherein

the second information is carried in the group paging message; or

the second information is carried on a multicast control channel.

5. The method according to claim 2, wherein if the terminal device is not allowed to access the network device, the method further comprises:

monitoring, by the terminal device within running time of a first timer, a physical downlink control channel PDCCH corresponding to a multicast control channel, to obtain the second information, wherein the running time of the first timer is duration that the terminal device needs to wait before initiating the access control procedure again after the terminal device is not allowed to access the network device; and

exiting, by the terminal device, the access control procedure, or stopping, by the terminal device, initiating the access control procedure after the first timer expires; or

when the group paging message comprises the second information, exiting, by the terminal device, the access control procedure, or skipping, by the terminal device, starting the first timer, or stopping, by the terminal device, initiating the access control procedure after the first timer expires, wherein the running time of the first timer is the duration that the terminal device needs to wait before initiating the access control procedure again after the terminal device is not allowed to access the network device.

6. A communication method, comprising:

sending, by a network device, a group paging message to a terminal device in a radio resource control RRC non-connected mode, wherein the group paging message comprises first information, the first information is used to page a group of terminal devices to receive a first multicast service, and the group of terminal devices comprise the terminal device; and

sending, by the network device, second information to the terminal device, wherein the second information indicates whether the network device provides the first multicast service for the group of terminal devices in the RRC non-connected mode.

7. The method according to claim 6, wherein

the second information is carried in the group paging message; or

the second information is carried on a multicast control channel.

8. A communication apparatus, comprising:

a receiving unit, configured to receive a multicast service from a network device when a terminal device is in a radio resource control RRC connected mode, wherein

the receiving unit is further configured to receive first information from the network device when the terminal device is in the RRC connected mode, wherein the first information indicates a multicast radio bearer MRB configuration, and the MRB configuration is an MRB configuration used by the

terminal device to receive the multicast service in an RRC non-connected mode; and

a processing unit, configured to determine the MRB configuration based on the first information.

9. The apparatus according to claim 8, wherein

the receiving unit is further configured to receive second information from the network device when the terminal device is in the RRC connected mode, wherein the second information indicates the terminal device to receive the multicast service in the RRC non-connected mode;

the processing unit is further configured to enable the terminal device to enter the RRC non-connected mode; and

the receiving unit is further configured to receive, when the terminal device is in the RRC non-connected mode, the multicast service by using the MRB configuration.

10. The apparatus according to claim 8 or 9, wherein the first information is used to trigger the terminal device to obtain the MRB configuration, and the processing unit is specifically configured to:

monitor, based on the first information, a physical downlink control channel PDCCH corresponding to a multicast control channel; and

determine the MRB configuration carried on the multicast control channel.

11. The apparatus according to claim 8 or 9, wherein the first information indicates the terminal device to receive, when the terminal device is in the RRC non-connected mode, the multicast service by using an MRB configuration used by the terminal device to receive the multicast service in the RRC connected mode, and the processing unit is specifically configured to:

determine, based on the first information, that the MRB configuration used by the receiving unit to receive the multicast service in the RRC connected mode is the MRB configuration.

12. A communication apparatus, comprising:

a sending unit, configured to send a multicast service to a terminal device in a radio resource control RRC connected mode, wherein

the sending unit is further configured to send first information to the terminal device in the RRC connected mode, wherein the first information indicates a multicast radio bearer MRB configuration, and the MRB configuration is an MRB configuration used by the terminal device to receive the multicast service in an RRC non-connected mode.

13. The apparatus according to claim 12, wherein the sending unit is further configured to send second information to the terminal device, wherein the second information indicates the terminal device to enter the RRC non-connected mode to receive the multicast service.

14. The apparatus according to claim 12 or 13, wherein the first information is used to trigger

the terminal device to obtain the MRB configuration; and

the sending unit is further configured to send the MRB configuration to the terminal device, wherein the MRB configuration is carried on a multicast control channel.

15. The apparatus according to claim 12 or 13, wherein the apparatus further comprises:

a processing unit, configured to determine that the MRB configuration is an MRB configuration used by the terminal device to receive the multicast service in the RRC connected mode; and

the sending unit is further configured to send the first information to the terminal device in the connected mode, wherein the first information indicates the terminal device to receive, when the terminal device is in the RRC non-connected mode, the multicast service by using the MRB configuration used by the terminal device to receive the multicast service in the RRC connected mode.

16. The apparatus according to any one of claims 12 to 15, wherein the apparatus further comprises:

a receiving unit, configured to receive first indication information from a core network device, wherein the first indication information indicates priorities of one or more terminal devices; and

the processing unit is further configured to determine, based on the first indication information, a terminal device that needs to be released to the non-connected mode to receive the multicast service.

17. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions; and when the computer instructions are run on a computer, the method according to any one of claims 1 to 5 is performed.

18. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions; and when the computer instructions are run on a computer, the method according to claim 6 or 7 is performed.

19. A computer program product, wherein the computer program product comprises computer program code; and when the computer program code is run on a computer, the method according to any one of claims 1 to 5 is performed.

20. A computer program product, wherein the computer program product comprises computer program code; and when the computer program code is run on a computer, the method according to claim 6 or 7 is performed.