

WHAT IS CLAIMED IS:

1. A data transmission method, comprising:

generating configuration information, wherein the configuration information is configured to indicate a resource used by a first terminal device in an inactive state to perform random access, and the inactive state refers to a state in which the first terminal device is disconnected from a first network device and the first network device keeps context information of the first terminal device; and

sending the configuration information to the first terminal device.

2. The method according to claim 1, wherein the configuration information is configured to indicate a resource pool dedicated to the random access, the resource pool is used for at least one terminal device to perform the random access, and the at least one terminal device comprises the first terminal device.

3. The method according to claim 2, wherein an access level of each of the at least one terminal device is a specific access level, and/or a service type that each of the at least one terminal device uses for transmission is a specific service type.

4. The method according to claim 2 or 3, wherein sending the configuration information to the first terminal device, comprises:

sending a system message to the first terminal device, wherein the system message comprises the configuration information.

5. The method according to claim 1, wherein the configuration information is configured to indicate a dedicated resource used by the first terminal device to perform the random access.

6. The method according to claim 5, wherein before generating the configuration information, the method further comprises:

obtaining an access level of the first terminal device and/or a service type used by the

first terminal device for transmission;

wherein generating configuration information comprises:

generating the configuration information if the access level of the first terminal device is a specific access level, and/or the service type used by the first terminal device for transmission is a specific service type.

7. The method according to any one of claims 5 to 6, wherein sending the configuration information to the first terminal device, comprises:

sending to the first terminal device Radio Resource Control (RRC) connection release signaling, wherein the RRC connection release signaling comprises the configuration information.

8. The method according to any one of claims 5 to 6, wherein sending the configuration information to the first terminal device comprises:

upon receipt of downlink data for the first terminal device sent from a core network, sending Physical Downlink Control Channel (PDCCH) signaling to the first terminal device, wherein the PDCCH signaling comprises the configuration information.

9. The method according to claim 8, wherein before sending the Physical Downlink Control Channel (PDCCH) signaling to the first terminal device, the method further comprises:

determining a first Cell Radio Network Temporary Identifier (C-RNTI) by negotiating with at least one second network device in a Radio Access Network (RAN) paging area, wherein the RAN paging area is a paging area configured by the first network device for the terminal device;

wherein the PDCCH signaling is signaling scrambled by the first C-RNTI.

10. The method according to claim 9, wherein the at least one second network device reserves the first C-RNTI for the first terminal device, or the first network device and the at least one second network device allocates different C-RNTIs to the first terminal device.

11. The method according to claim 10, wherein before sending the Physical Downlink Control Channel (PDCCH) signaling to the first terminal device, the method further comprises:

sending C-RNTI information to the first terminal device;

wherein if the at least one second network device reserves the first C-RNTI for the first terminal device, the C-RNTI information comprises the first C-RNTI; if the first network device and the at least one second network device allocates different C-RNTIs to the first terminal device, the C-RNTI information comprises the first C-RNTI, a Global Cell Identifier (CGI) corresponding to the first C-RNTI, at least one second C-RNTI, and a CGI corresponding to the at least one second C-RNTI, wherein the at least one second C-RNTI is a C-RNTI which is allocated by a network device in the RAN paging area for the first terminal device.

12. The method according to claim 11, wherein before sending the C-RNTI information to the first terminal device, the method further comprises:

sending a reservation request to each of the at least one second network device, wherein the reservation request is configured to request each of the at least one second network device to reserve the first C-RNTI for the first terminal device; or, sending to each of the at least one second network device a negotiation request, wherein the negotiation request is configured to request each of the at least one second network device to allocate the second C-RNTI for the first terminal device; and

receiving a response message from each of the at least one second network device, wherein the response message is used by the first network device to determine the C-RNTI information.

13. The method according to claim 8, wherein the PDCCH signaling is signaling that is scrambled by identification information, and the identification information comprises an identifier of the context information.

14. The method according to any one of claims 5 to 6, wherein sending the configuration information to the first terminal device comprises:

    sending a paging message to the first terminal device, wherein the paging message comprises the configuration information.

15. A network device, configured to perform the method of one of claims 1-14.