CLAIMS

What is claimed is:

1. A connection processing method, applied to a first communications device, wherein the first communications device comprises a terminal, and characterized by comprising:

sending a first message; wherein

the first message comprises: a service request message;

wherein the service request message comprises: first indication information; and

wherein the first indication information is used for at least one of the following:

requesting not to activate, not to establish, or not to resume a user-plane resource for a data tunnel specific to the terminal; or,

requesting to release a connection between the terminal and a first network.

2. The method according to claim 1, wherein the first message comprises at least one of the following: first cause information, MICO indication information, PSM indication information, and first valid time information; and

the first valid time information comprises at least one of the following: valid time information of the first indication information, valid time information of the first cause information, valid time information of the MICO indication information, and valid time information of the PSM indication information.

3. The method according to claim 1, wherein the first indication information is further used for at least one of the following:

indicating not transmitting data specific to a terminal;

requesting to cache data specific to the terminal;

requesting to discard data specific to the terminal;

indicating that the terminal is unreachable;

indicating that data is unable to reach the terminal;

requesting a connection between the terminal and the first network to enter a non-connected state, to enter an idle state, or to enter an inactive state;

requesting to reject activating, reject establishing, or reject resuming a connection between the terminal and the first network;

requesting to return a service reject for a service request of the terminal; and

requesting not to trigger paging the terminal.

4. The method according to claim 1, wherein the first indication information further comprises at least one of the following: indication information that indicates not transmitting control-plane data, and indication information that indicates not transmitting user-plane data; or

indication information that indicates requesting to cache control-plane data specific to a terminal, and indication information that indicates requesting to cache user-plane data specific to the terminal; or

indication information that indicates requesting to discard control-plane data specific to the terminal, and indication information that indicates requesting to discard user-plane data specific to the terminal; or

indication information indicating that the control-plane data is unable to reach the terminal, and indication information indicating that the user-plane data is unable to reach the terminal; or

indication information indicating that the control-plane data is not allowed to trigger paging the terminal, and indication information indicating that the user-plane data is not allowed to trigger paging the terminal.

5. The method according to claim 2, wherein the first valid time information comprises at least one of the following:

valid time information for not transmitting data specific to a terminal;

valid time information for caching data specific to the terminal;

valid time information for the terminal being unreachable;

valid time information for data being unable to reach the terminal;

valid time information for a connection between the terminal and a first network remaining released;

valid time information for a connection between the terminal and a first network remaining in an idle state or an inactive state; and

valid time information for not triggering paging the terminal.

6. The method according to claim 1, wherein the sending the first message comprises: in a case that a first condition is satisfied, sending the first message; wherein

the first condition comprises at least one of the following:

paging from a first network has been received;

it is determined that a connection to the first network remains released;

it is determined to discard data specific to the terminal from the first network;

it is determined to receive only control-plane data that is specific to the terminal and that comes from the first network, and it is determined to discard user-plane data that is specific to the terminal and that comes from the first network;

it is determined not to immediately receive data that is specific to the terminal and that comes from the first network;

it is determined to request the first network to continue to cache data specific to the terminal;

it is determined not to activate, establish, or resume a user-plane resource for a data tunnel specific to the terminal with the first network; and

it is determined not to perform data transmission with the first network.

7. The method according to claim 2, wherein the first cause information is used for at least one of the following:

indicating a paging response, an RRC connection being activated, an RRC connection being established, or an RRC connection being resumed;

indicating not transmitting data specific to a terminal;

requesting to establish or resume only a control-plane connection of the terminal;

requesting to cache data specific to the terminal;

requesting to discard data specific to the terminal;

indicating that the terminal is unreachable;

indicating that data is unable to reach the terminal;

requesting a connection between the terminal and the first network to enter a non-connected state, to enter an idle state, or to enter an inactive state;

requesting to reject activating, reject establishing, or reject resuming a connection between the terminal and the first network; and

requesting not to trigger paging the terminal.

8. The method according to claim 1, in a case that a second condition is satisfied, controlling a connection related to a first network to enter a non-connected state, enter an idle state, or enter an inactive state; wherein

the second condition comprises any one of the following:

the first message is sent to a first-network network element;

the first message is sent to a first-network network element, and authentication with the first network has been completed;

a second NAS message is received from the first-network network element;

a service request accept message is received from the first-network network element;

a service request accept message is received from the first-network network element, wherein the service request accept message comprises any one of the following: indication information for connection release, indication information for connection suspension;

a service reject message, an RRC setup reject message, or an RRC resume reject message is received from the first-network network element; and

a reject cause is received from the first-network network element, wherein the reject cause is that a connection is released.

9. A connection processing method, applied to a second communications device, wherein the second communications device comprises a first CN network element and characterized by comprising:

obtaining a first message; and

performing a first operation according to the first message that is obtained; wherein

the first message comprises: a service request message;

the service request message comprises: first indication information, first cause information;

wherein the first indication information is used for at least one of the following:

requesting not to activate, not to establish, or not to resume a user-plane resource for a data tunnel specific to the terminal; or,

requesting to release a connection between the terminal and a first network; and

the first operation comprises at least one of the following:

skipping activating a user-plane resource for a data tunnel specific to a terminal, skipping establishing a user-plane resource for a data tunnel specific to a terminal, or skipping resuming a user-plane resource for a data tunnel specific to a terminal;

releasing a connection specific to the terminal.

10. The method according to claim 9, wherein the first operation further comprises at least one of the following:

skipping transmitting, to the terminal, user-plane data specific to the terminal, but transmitting, to the terminal, control-plane data specific to the terminal;

discarding or continuing to cache control-plane data specific to the terminal;

returning, to the second CN network element, a data transfer failure cause being that the terminal does not transmit data, the terminal does not respond, a service is rejected, or the terminal is unreachable;

sending, to the second CN network element, a request for caching data specific to the terminal and/or valid time information of data caching;

requesting the second CN network element to discard data specific to the terminal;

requesting the second CN network element not to send a data notification any longer;

returning to a third CN network element that the terminal does not transmit data, the terminal is unreachable, or data is unable to reach the terminal;

rejecting activating a connection between the terminal and a first network, rejecting establishing a connection between the terminal and a first network, or rejecting resuming a connection between the terminal and a first network; and

returning a reject cause, wherein the cause is that the first information is accepted, or a connection is released.

11. The method according to claim 9, wherein before the obtaining the first message, the method further comprises:

initiating a paging to the terminal.

12. A communications device, wherein the communications device is a first communications device, wherein the first communications device comprises a terminal, characterized by comprising:

a sending module, configured to send a first message; wherein

the first message comprises: a service request message;

the service request message comprises: first indication information; and

wherein the first indication information is used for at least one of the following:

requesting not to activate, not to establish, or not to resume a user-plane resource for a data tunnel specific to the terminal; or,

requesting to release a connection between the terminal and a first network.

13. A communications device, wherein the communications device is a second communications device, wherein the second communications device comprises a first CN network element, characterized by comprising:

a first obtaining module, configured to obtain a first message; and

a first execution module, configured to perform a first operation according to the first message that is obtained; wherein

the first message comprises: a service request message;

the service request message comprises: first indication information;

wherein the first indication information is used for at least one of the following:

requesting not to activate, not to establish, or not to resume a user-plane resource for a data tunnel specific to the terminal; or,

requesting to release a connection between the terminal and a first network; and

the first operation comprises at least one of the following:

skipping activating a user-plane resource for a data tunnel specific to a terminal, skipping establishing a user-plane resource for a data tunnel specific to a terminal, or skipping resuming a user-plane resource for a data tunnel specific to a terminal;

releasing a connection specific to the terminal.

14. A communications device, characterized by comprising a processor, a memory, and a computer program stored in the memory and capable of running on the processor, wherein when the computer program is executed by the processor, the steps of the connection processing method according to any one of claims 1 to 8 are implemented.

15. A communications device, characterized by comprising a processor, a memory, and a computer program stored in the memory and capable of running on the processor, wherein when the computer program is executed by the processor, the steps of the connection processing method according to any one of claims 9 to 11 are implemented.