

CLAIMS

What is claimed is:

1. A method for mode switching, ~~applied to~~performed by a first network function, wherein the method comprises:

5 invoking a mode switch operation towards a second network function, wherein a parameter of the mode switch operation comprises first information, and the first information comprises a mode switch command; and

 the mode switch command is used to notify a target party to perform a mode switch operation.

10 2. The method according to claim 1, wherein before the invoking a mode switch operation towards a second network function, the method further comprises:

 determining, based on a user count of multicast service, or a user count in a multicast service area, or a service operation being invoked, whether to perform the invoking a mode switch operation towards a second network function.

15 3. The method according to claim 1, wherein the first information further comprises one or more of the following: user information, and information about an access and mobility management function serving a user terminal.

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

20 querying a unified data management function for information about an access and mobility management function.

 5. The method according to claim 1, wherein the target party is a user terminal or a radio access network node.

 6. The method according to claim 5, wherein the mode switch command comprises: service information or session information;

25 the service information is used to indicate ~~for~~ at least one of the following:

~~for the user terminal to send a first message to a network side, wherein the first message is used for the user terminal to establish a unicast channel or a multicast channel for service data transmission with~~ between the user terminal and the a network-side device, and the network-side device comprises the first network function; and

~~for the user terminal to send~~ a second message to an application server, wherein the second message is used to notify the application server to send service data to the user terminal;

wherein, the session information is used ~~for~~ to indicate at least one of the following:

5 ~~for the radio access network node to send~~ a third message to a core network, wherein the third message is used ~~for the radio access network node to establish or maintain a multicast channel for service data transmission with~~ between the radio access network node and a third network function, or ~~for the radio access network node to establish a unicast channel for service data transmission with~~ between the radio access
10 network node and a fourth network function; and

~~for the radio access network node to send~~ no message to maintain a multicast channel for service data transmission between the radio access network node and ~~with~~ the third network function.

7. The method according to claim 5, wherein the mode switch command comprises
15 one or more of the following:

information about a third network function;
a temporary mobile group identity TMGI;
a multicast address; and
a protocol data unit session identifier.

20 8. A method for mode switching, ~~applied to~~ performed by a second network function, wherein the method comprises:

determining whether a mode switch operation is invoked by a first network function, wherein a parameter of the mode switch operation comprises first information, and the first information comprises a mode switch command; and

25 when the mode switch operation is invoked by the first network function, invoking a service operation towards a fifth network function, wherein a parameter of the service operation comprises content of the mode switch command; or sending the mode switch command to a user terminal; or sending the mode switch command to a radio access network node.

9. The method according to claim 8, wherein the first information further comprises one or more of the following: user information, and information about an access and mobility management function serving the user terminal.

10. The method according to claim 8, further comprising:

5 querying a unified data management function for information about an access and mobility management function serving the user terminal.

11. A method for mode switching, ~~performed by~~applied to a user terminal, wherein the method comprises:

 receiving a mode switch command from a network side; and

10 sending a first message to the network side, wherein the first message is used ~~for~~for ~~the user terminal to~~ establish a unicast channel or a multicast channel for service data transmission ~~with~~between the user terminal and the network side, or for the user terminal to send a second message to an application server, and the second message is used to notify the application server to send service data to the user terminal.

15 12. The method according to claim 11, wherein the mode switch command comprises: service information; and

 the service information is used ~~for~~to indicate at least one of the following:

 for the user terminal to send the first message to the network side, wherein the first message is used ~~for the user terminal to~~ establish a unicast channel or a multicast
20 channel for service data transmission between the user terminal and ~~with~~ the network side; and

 for the user terminal to send the second message to the application server, wherein the second message is used to notify the application server to send service data to the user terminal.

25 13. The method according to claim 11, wherein the mode switch command comprises one or more of the following:

 a TMGI; and

 a multicast address.

14. A network function, which is a first network function, comprising:

a first invocation module, configured to invoke a mode switch operation towards a second network function, wherein a parameter of the mode switch operation comprises first information, the first information comprises a mode switch command, and the mode switch command is used to notify a target party to perform a mode switch operation.

15 15. A network function, which is a second network function, comprising:

a second invocation module, configured to determine whether a mode switch operation is invoked by a first network function, wherein a parameter of the mode switch operation comprises first information, and the first information comprises a mode switch command; and

a first sending module, configured to: when the mode switch operation is invoked by the first network function, invoke a service operation towards a fifth network function, wherein a parameter of the service operation comprises content of the mode switch command; or send the mode switch command to a user terminal; or send the mode switch command to a radio access network node.

16. A user terminal, comprising:

a receiving module, configured to receive a mode switch command from a network side; and

a second sending module, configured to send a first message to the network side, wherein the first message is used to establish a unicast channel or a multicast channel for service data transmission with the network side, or to send a second message to an application server, wherein the second message is used to notify the application server to send service data to the user terminal.

17. A communications device, comprising: a processor, a memory, and a program stored on the memory and capable of running on the processor, wherein when the program is executed by the processor, the steps of the method for mode switching according to any one of claims 1 to 13 are implemented.

18. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a

processor, the steps of the method for mode switching according to any one of claims 1 to 13 are implemented.

19. A computer program product, wherein the program product is executed by at least one processor to implement the method for mode switching according to any one of claims 1 to 13.

20. A network function, configured to perform the method for mode switching according to any one of claims 1 to 7.

~~21. A network function, configured to perform the method for mode switching according to any one of claims 8 to 10.~~

~~22. A user terminal, configured to perform the method for mode switching according to any one of claims 11 to 13.~~