CLAIMS

What is claimed is:

1. A multicast service implementation method, ~~applied to~~ performed by a first network function of a communications device and comprising:

receiving from a terminal a request carrying multicast service information; and

executing a unicast session establishment procedure to establish a unicast session connection to the terminal.

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

sending a first invocation parameter to a second network function, wherein the first invocation parameter is used for invoking a multicast session context service operation of the second network function; and

receiving a first invocation result from the second network function, wherein the first invocation result indicates that a multicast session connection has failed to be established.

3. The multicast service implementation method according to claim 2, wherein the first invocation parameter comprises a user identifier of the terminal and the multicast service information.

4. The multicast service implementation method according to claim 1, wherein the request comprises any one of the following:

a multicast session establishment request;

a first data packet for requesting to join a multicast group; and

a unicast session establishment request.

5. The multicast service implementation method according to claim 1, wherein the multicast service information comprises at least one of the following: a multicast address, a multicast group identifier, and first indication information for indicating a multicast session.

6. The multicast service implementation method according to claim 1, wherein

the request is sent to the first network function through a signaling path; or

the request is sent to the first network function through a user-plane path.

7. The multicast service implementation method according to claim 2, wherein the first invocation result further comprises at least one of the following:

second indication information indicating whether a user is in a multicast service group; and

a failure cause.

8. The multicast service implementation method according to claim 7, further comprising:

sending the failure cause and/or the second indication information to the terminal.

9. A multicast service implementation method, ~~applied to~~ performed by a second network function of a communications device and comprising:

receiving a first invocation parameter from a first network function, wherein the first invocation parameter is used for invoking a multicast session context service operation of the second network function; and

sending a first invocation result to the first network function, wherein the first invocation result indicates that a multicast session connection has failed to be established.

10. The multicast service implementation method according to claim 9, further comprising:

sending a second invocation parameter to a third network function, wherein the second invocation parameter is used for invoking an authorization service operation of the third network function; and

receiving a second invocation result from the third network function, wherein the second invocation result indicates that an error has occurred.

11. The multicast service implementation method according to claim 10, wherein the second invocation parameter comprises a user identifier of a terminal and multicast service information.

12. The multicast service implementation method according to claim 10, wherein the second invocation result comprises at least one of the following:

third indication information indicating that a user is in a multicast service group or that a user is not in a multicast service group;

a multicast service group identifier; and

a failure cause.

13. A multicast service implementation method, ~~applied to~~ performed by a third network function of a communications device and comprising:

receiving a second invocation parameter from a second network function, wherein the second invocation parameter is used for invoking an authorization service operation of the third network function; and

returning a second invocation result to the second network function, wherein the second invocation result indicates that an error has occurred.

14. The multicast service implementation method according to claim 13, wherein the returning a second invocation result to the second network function comprises at least one of the following:

returning the second invocation result to the second network function based on a user identifier of a terminal and multicast service information that are in the second invocation parameter; or

receiving event operation information from a fourth network function, sending a decision request to the fourth network function, and receiving a third result from the fourth network function, wherein the third result indicates that an error has occurred.

15. A multicast service implementation method, ~~applied to~~ performed by a terminal and comprising:

sending to a first network function a request carrying multicast service information; and

executing a unicast session establishment procedure.

16. The multicast service implementation method according to claim 15, wherein the request comprises any one of the following:

a multicast session establishment request;

a first data packet for requesting to join a multicast group; and

a unicast session establishment request.

17. The multicast service implementation method according to claim 15, wherein the executing a unicast session establishment procedure comprises any one of the following:

receiving a notification for establishing a unicast session connection;

initiating establishment of a unicast session connection; and

completing a unicast session establishment procedure.

18. The multicast service implementation method according to claim 15, wherein

the request is sent to the first network function through a signaling path; or

the request is sent to the first network function through a user-plane path.

19. The multicast service implementation method according to claim 15, further comprising receiving at least one of the following information from the first network function:

second indication information indicating whether a user is in a multicast service group; and

a failure cause.

~~20. A multicast service implementation apparatus, applied to a first network function of a communications device and comprising:~~

~~a first receiving module, configured to receive from a terminal a request carrying multicast service information; and~~

~~a first execution module, configured to execute a unicast session establishment procedure to establish a unicast session connection to the terminal.~~

~~21. A multicast service implementation apparatus, applied to a second network function of a communications device and comprising:~~

~~a second receiving module, configured to receive a first invocation parameter from a first network function, wherein the first invocation parameter is used for invoking a multicast session context service operation of the second network function; and~~

~~a first sending module, configured to send a first invocation result to the first network function, wherein the first invocation result indicates that a multicast session connection has failed to be established.~~

~~22. A multicast service implementation apparatus, applied to a third network function of a communications device and comprising:~~

~~a third receiving module, configured to receive a second invocation parameter from a second network function, wherein the second invocation parameter is used for invoking an authorization service operation of the third network function; and~~

~~a second sending module, configured to return a second invocation result to the second network function, wherein the second invocation result indicates that an error has occurred.~~

~~23. A multicast service implementation apparatus, applied to a terminal and comprising:~~

~~a third sending module, configured to send to a first network function a request carrying multicast service information; and~~

~~a second execution module, configured to execute a unicast session establishment procedure.~~

~~24~~20. A communications device, comprising a processor, a memory, and a computer program stored in the memory and running on the processor, wherein when the processor executes the computer program, the steps of the multicast service implementation method according to any one of claims 1 to 19 are implemented.

~~25~~21. A computer-readable storage medium storing a computer program thereon, wherein ~~when~~ the computer program is executed to implement any one of the following:

when being executed by a processor of a first network function, the steps of the multicast service implementation method according to any one of claims 1 to ~~19~~ 8 are implemented;

when being executed by a processor of a second network function, the steps of the multicast service implementation method according to any one of claims 9 to 12 are implemented;

when being executed by a processor of a third network function, the steps of the multicast service implementation method according to claim 13 or claim 14 are implemented; or,