CLAIMS

1. A communication method, wherein the method comprises:

receiving, by a first network element in an internet protocol multimedia subsystem (IMS), a first request message from a first terminal, wherein the first request message is used to request to create a session with a second terminal; and

sending, by the first network element in the IMS, a second request message to a first gateway in the IMS, wherein the second request message is used to request a transport resource, the transport resource is used for transmission of media data between the first terminal and the second terminal, the first gateway is deployed on a satellite, and both the first terminal and the second terminal use satellite access.

2. The method according to claim 1, wherein the media data between the first terminal and the second terminal does not transit through a gateway deployed on a ground in the IMS.

3. The method according to claim 1 or 2, wherein the sending, by the first network element in the IMS, the second request message to the first gateway in the IMS comprises at least one of the following:

when the first terminal uses satellite access, sending, by the first network element in the IMS, the second request message to the first gateway in the IMS; or

sending, by the first network element in the IMS, the second request message to the first gateway in the IMS based on subscription information of the first terminal or when media data of the first terminal is allowed not to transit through the gateway deployed on the ground, wherein the subscription information of the first terminal indicates that the media data of the first terminal is allowed not to transit through the ground and/or the first terminal uses satellite access.

4. The method according to claim 3, wherein the method further comprises:

receiving, by the first network element in the IMS, a registration request message from the first terminal, wherein the registration request message is used to request to register with the IMS;

sending, by the first network element in the IMS, the registration request message to a second network element in the IMS; and

receiving, by the first network element in the IMS, a registration response message from the second network element in the IMS, wherein the registration response message comprises the subscription information of the first terminal.

5. The method according to claim 3 or 4, wherein the first request message comprises an access type, and the access type indicates that the terminal device uses satellite access.

6. The method according to any one of claims 1 to 5, wherein the method further comprises:

sending, by the first network element in the IMS, a third request message to a second gateway

in the IMS, wherein the third request message is used to request a transport resource, the transport resource is used for transmission of the media data between the first terminal and the second terminal, and the second gateway is deployed on the ground.

7. The method according to any one of claims 1 to 6, wherein the method further comprises:

receiving, by the first network element in the IMS, a first response message, wherein the first response message indicates that the media data between the first terminal and the second terminal does not transit through a gateway deployed on the ground.

8. The method according to claim 7, wherein the method further comprises:

releasing the second gateway based on the first response message.

9. The method according to any one of claims 1 to 5, wherein at least one network element in the IMS is deployed in a visited network, the at least one network element comprises the first network element and a border control network element, and at least one third network element in the IMS is deployed in a home network; and the method further comprises:

sending, by the first network element in the IMS, the first request message to the border control network element, to request the border control network element to determine, for the first terminal, a gateway deployed on the ground.

10. The method according to any one of claims 1 to 9, wherein at least one network element in the IMS is deployed in a visited network, the at least one network element comprises the first network element, and at least one third network element in the IMS is deployed in a home network; and the method further comprises:

sending, by the first network element in the IMS, first indication information to a network element in the at least one third network element, wherein the first indication information indicates that visited network routing is performed on the media data between the first terminal and the second terminal.

11. The method according to any one of claims 1 to 10, wherein the method further comprises:

sending, by the first network element in the IMS, second indication information to a network element in a first network, wherein the second indication information indicates whether the media data between the first terminal and the second terminal transits through the gateway deployed on the ground.

12. The method according to claim 11, wherein the sending, by the first network element in the IMS, the second indication information to the network element in the first network comprises at least one of the following:

when the first terminal uses satellite access, sending, by the first network element in the IMS, the second indication information to the network element in the first network; or

sending, by the first network element in the IMS, the second indication information to the

network element in the first network based on the subscription information of the first terminal or when the media data of the first terminal is allowed not to transit through the gateway deployed on the ground, wherein the subscription information of the first terminal indicates that the media data of the first terminal is allowed not to transit through the ground and/or the first terminal uses satellite access; or

when the first terminal and the second terminal are served by a same policy control network element and/or session control network element, sending, by the first network element in the IMS, the second indication information to the network element in the first network.

13. The method according to any one of claims 1 to 12, wherein the method further comprises:

when transmission of the media data between the first terminal and the second terminal is performed via the first gateway, sending a second response message to the first terminal, wherein the second response message comprises an address of the first gateway.

14. The method according to any one of claims 1 to 13, wherein the first terminal and the second terminal meet any one of the following:

the first terminal and the second terminal are served by a same satellite; or

the first terminal and the second terminal are served by different satellites, and there is an inter-satellite link between the different satellites.

15. The method according to any one of claims 1 to 14, wherein the first network element in the IMS is a session control network element in the IMS, and/or the first network element in the IMS is deployed on the satellite.

16. An apparatus, wherein the apparatus is configured to perform the method according to any one of claims 1 to 15.

17. A computer readable storage medium comprising instructions, wherein which, when executed by a computer device, cause the computer device to perform the method according to any one of claims 1 to 15.

18. A computer program product, comprising instructions, wherein which, when executed by a computer device, cause the computer device to perform the method according to any one of claims 1 to 15.