CLAIMS

1. A transmission method, comprising:

generating, by a first satellite apparatus, a first data packet; and

sending, by the first satellite apparatus, the first data packet to a second satellite apparatus within a specified time period, wherein the first data packet is for the second satellite apparatus to generate a second data packet and send the second data packet to at least one first terminal device, and the specified time period is obtained through negotiation between the first satellite apparatus and the at least one first apparatus, or the first satellite apparatus determines the specified time period based on broadcast/multicast time information sent by a first apparatus.

2. The method according to claim 1, wherein the method further comprises:

sending, by the first satellite apparatus to the second satellite apparatus, information that indicates the second satellite apparatus to send the first data packet to the at least one first apparatus in a broadcast manner; or

sending, by the first satellite apparatus to the second satellite apparatus, information that indicates the second satellite apparatus to send the first data packet to the at least one first apparatus in a multicast manner.

3. The method according to claim 1 or 2, wherein the method further comprises:

sending, by the first satellite apparatus to the second satellite apparatus, one or more pieces of information comprising an identifier of the first data packet, broadcast/multicast time information of the first data packet, and broadcast/multicast region information of the first data packet, wherein the identifier indicates a service type of the first data packet.

4. The method according to any one of claims 1 to 3, wherein the first data packet comprises information that indicates sending time of next M first data packets sent by the first satellite apparatus, wherein M is a positive integer.

5. The method according to any one of claims 1 to 4, wherein before the sending, by the first satellite apparatus, the first data packet to a second satellite apparatus, the method further comprises:

sending, by the first satellite apparatus, a first message to the first apparatus by using the second satellite apparatus, wherein the first message comprises time information that indicates sending time of the first data packet; or

sending, by the first satellite apparatus, the time information or the first message to a third satellite apparatus.

6. The method according to claim 5, wherein before the sending, by the first satellite apparatus, a first message to the first apparatus by using the second satellite apparatus, the method further

comprises:

receiving, by the first satellite apparatus by using the second satellite apparatus, a second message sent by the first apparatus, wherein the second message indicates the first satellite apparatus to send the first message to the first apparatus.

7. The method according to claim 5, wherein before the sending, by the first satellite apparatus, the time information or the first message to a third satellite apparatus, the method further comprises:

receiving, by the first satellite apparatus, a time request or a second message sent by the third satellite apparatus, wherein the time request indicates the first satellite apparatus to send the time information to the third satellite apparatus, and the second message indicates the first satellite apparatus to send the first message to the first apparatus.

8. The method according to any one of claims 1 to 7, wherein after the sending, by the first satellite apparatus, the first data packet to a second satellite apparatus, the method further comprises:

receiving, by the first satellite apparatus, information that is sent by the second satellite apparatus and that indicates a reception status of the first data packet by the first apparatus.

9. The method according to any one of claims 1 to 8, wherein before the sending, by the first satellite apparatus, the first data packet to a second satellite apparatus, the method further comprises:

receiving, by the first satellite apparatus, content of the first data packet sent by the first apparatus; and

receiving, by the first satellite apparatus, one or more pieces of information that are sent by the first apparatus and that comprise the identifier, the broadcast/multicast time information, and the broadcast/multicast region information of the first data packet.

10. A transmission method, comprising:

receiving, by a first apparatus within a specified time period, a second data packet sent by a second satellite apparatus;

determining, by the first apparatus, that the second data packet is a broadcast data packet or a multicast data packet; and

obtaining, by the first apparatus, a first data packet based on the second data packet, wherein the first data packet is a data packet sent by a first satellite apparatus to the second satellite apparatus, and the specified time period is obtained through negotiation between the first satellite apparatus and at least one first apparatus, or the first satellite apparatus determines the specified time period based on a received second message.

11. The method according to claim 10, wherein the determining, by the first apparatus, that the second data packet is a broadcast data packet or a multicast data packet specifically comprises:

when the second data packet comprises a first version number, determining, by the first apparatus based on the first version number, that the second data packet is a broadcast data packet or a multicast data packet; or

when the second data packet comprises first information, determining, by the first apparatus based on the first information, that the second data packet is a broadcast data packet or a multicast data packet; or

determining, by the first apparatus based on a first beam through which the second data packet is received, that the second data packet is a broadcast data packet or a multicast data packet.

12. The method according to claim 11, wherein when the first information indicates that the second data packet is a broadcast data packet, the second data packet further comprises information that indicates a broadcast source of the second data packet; or when the first information indicates that the second data packet is a multicast data packet, the second data packet further comprises information that indicates a multicast source of the second data packet.

13. The method according to any one of claims 10 to 12, wherein the first data packet comprises information that indicates reception time of next M first data packets sent by the first satellite apparatus, wherein M is a positive integer.

14. The method according to any one of claims 10 to 13, wherein before the receiving, by a first apparatus, a second data packet sent by a second satellite apparatus, the method further comprises:

sending, by the first apparatus, the second message to the second satellite apparatus, wherein the second message indicates the first satellite apparatus to send sending time information of the first data packet to the first apparatus.

15. The method according to claim 14, wherein after the sending, by the first apparatus, the second message to the second satellite apparatus, the method further comprises:

receiving, by the first apparatus, a first message, wherein the first message comprises the sending time information that indicates time at which the first satellite apparatus sends the first data packet.

16. The method according to claim 14 or 15, wherein the sending, by the first apparatus, the second message to the second satellite apparatus specifically comprises:

receiving, by the first apparatus, input by a user for querying sending time of a next first data packet; and

sending, by the first apparatus, the second message to the second satellite apparatus in response to the input.

17. The method according to claim 15 or 16, wherein after the receiving, by the first apparatus, a first message, the method further comprises:

displaying, by the first apparatus, the sending time of the first data packet.

18. The method according to any one of claims 10 to 13, wherein before the first apparatus receives the first data packet sent by the second satellite apparatus, the method further comprises:

receiving, by the first apparatus, input by a user for querying sending time of a next first data packet; and

displaying, by the first apparatus in response to the input, the sending time that indicates when the first satellite apparatus sends the first data packet, wherein the sending time is obtained through negotiation between the first satellite apparatus and the at least one first apparatus.

19. A communication apparatus, which is a first satellite apparatus, comprising one or more processors and one or more memories, wherein the one or more memories are configured to store computer program code, the computer program code comprises computer instructions, and when the computer instructions are executed, the communication apparatus performs the method according to any one of claims 1 to 9.

20. A communication apparatus, which is a first apparatus, comprising one or more processors and one or more memories, wherein the one or more memories are configured to store computer program code, the computer program code comprises computer instructions, and when the computer instructions are executed, the communication apparatus performs the method according to any one of claims 10 to 18.