CLAIMS

1. A communication method, wherein the method comprises:

sending, by a terminal, a first message to a first network element, wherein the first network element is located on a first satellite;

receiving, by the terminal, a second message from the first network element, wherein the second message comprises first information, and the first information is used to trigger the terminal to enter a sleep state; and

entering, by the terminal, the sleep state based on the first information.

2. The method according to claim 1, wherein the sleep state includes whether to listen to a broadcast message or no longer send a message.

3. The method according to claim 1 or 2, wherein the first message is a non-access stratum, NAS, message or uplink data.

4. The method according to any one of claims 1 to 3, wherein the second message further comprises third information, the third information is used to determine a second satellite, and the second satellite is a next satellite to serve the terminal; and

the method further comprises:

receiving, by the terminal, a broadcast message, wherein the broadcast message indicates a satellite that covers the terminal;

determining, by the terminal based on the third information, that the satellite indicated by the broadcast message is the second satellite; and

resending, by the terminal, the first message to a second network element, wherein the second network element is located on the second satellite.

5. The method according to claim 4, wherein the third information comprises an identifier of the second satelliteand the second network element supports store-and-forward.

6. The method according to claim 1, wherein the first message is an attach request, the attach request comprises capability information of the terminal, and the capability information indicates whether the terminal supports a network element having a store-and-forward function.

7. A communication method, wherein the method comprises:

receiving, by a first network element, a first message from a terminal, wherein the first network element is located on a first satellite; and

when there is no communication link between the first network element and a core network device, sending, by the first network element, a second message to the terminal, wherein the second message comprises first information, the first information is used to trigger the terminal to enter a sleep state, and the core network device is located on the ground.

8. The method according to claim 7, wherein the sleep state includes whether to listen to a broadcast message or no longer send a message.

9. The method according to claim 7 or 8, wherein the first message is a non-access stratum, NAS, message or uplink data.

10. The method according to claim 7, wherein the second message further comprises information about a first timer, and the first timer indicates a duration in which the terminal is in the sleep state.

11. The method according to any one of claims 7 to 10, wherein the second message further comprises third information, the third information is used to determine a second satellite, and the second satellite is a next satellite to serve the terminal; and

the method further comprises:

determining, by the first network element, the third information based on at least one of ephemeris information, location information of the terminal, and receive beam information of the first message.

12. The method according to claim 11, wherein the third information comprises an identifier of the second satellite, and the second network element supports store-and-forward.

13. An apparatus, wherein the apparatus is configured to perform the method according to any one of claims 1 to 6 or to perform the method according to any one of claims 7 to 12.

14. 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 6 or to perform the method according to any one of claims 7 to 12.

15. 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 6 or to perform the method according to any one of claims 7 to 12.