WHAT IS CLAIMED IS:

1. A polarization indicating method, performed by a base station, and comprising:

sending first indication information to a terminal, wherein the first indication information is configured to indicate a target polarization mode for the terminal to communicate with a satellite in a non-terrestrial network, the first indication information is configured for the terminal to determine a downlink polarization mode for receiving a downlink transmission from the satellite according to the first indication information, and determine an uplink polarization mode for an uplink transmission to the satellite according to a second association relationship between polarization modes corresponding to the uplink transmission and the downlink transmission.

2. The method according to claim 1, wherein sending the first indication information to the terminal comprises:

sending the first indication information to the terminal in an explicit manner and/or an implicit manner.

3. The method according to claim 2, wherein sending the first indication information to the terminal in the explicit manner comprises:

sending downlink control information to the terminal, wherein the first indication information is carried in the downlink control information.

4. The method according to claim 3, wherein the first indication information is contained in an information field newly added in the downlink control information dedicated to indicating the target polarization mode, or is contained in an existing information field of the downlink control information for indicating other information, wherein the other information is not sent at least during a part of a communication process between the base station and the terminal.

5. The method according to claim 2, wherein sending the first indication information to the terminal in the implicit manner comprises:

determining a scrambling sequence and/or a radio network temporary identifier corresponding to the target polarization mode; and

sending a signaling to the terminal, wherein the signaling is scrambled by the scrambling sequence and/or the radio network temporary identifier.

6. The method according to any one of claims 1 to 5, further comprising:

receiving capability information sent by the terminal,

determining the polarization modes supported by the terminal according to the capability information; and

determining the target polarization mode from the polarization modes supported by the terminal.

7. The method according to any one of claims 1 to 6, wherein the base station is a base station in the non-terrestrial network, and the terminal is a terminal in the non-terrestrial network.

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

sending second indication information to the satellite in the non-terrestrial network, wherein the second indication information is configured to indicate the satellite to communicate with the terminal using the target polarization mode.

9. The method according to any one of claims 1 to 8, wherein the target polarization mode comprises at least one of: a linear polarization, a circular polarization, a left-hand circular polarization, or a right-hand circular polarization.

10. A polarization determining method, performed by a terminal, and comprising:

determining a target polarization mode for communication with a base station according to first indication information sent by the base station,

wherein determining the target polarization mode for communication with the base station according to the first indication information sent by the base station comprises:

determining a downlink polarization mode for receiving a downlink transmission from a satellite according to the first indication information sent by the base station; and determining an uplink polarization mode for an uplink transmission to the satellite according to a second association relationship between polarization modes corresponding to the uplink transmission and the downlink transmission.

11. The method according to claim 10, wherein determining the target polarization mode for communication with the base station according to the first indication information sent by the base station comprises:

receiving downlink control information sent by the base station; and

acquiring the first indication information from the downlink control information.

12. The method according to claim 11, wherein acquiring the first indication information from the downlink control information comprises:

acquiring the first indication information from an information field newly added in the downlink control information dedicated to indicating the target polarization mode; or

acquiring the first indication information from an existing information field of the downlink control information for indicating other information, wherein the other information is not sent at least during a part of a communication process between the base station and the terminal.

13. The method according to claim 10, wherein determining the target polarization mode for communication with the base station according to the first indication information sent by the base station comprises:

descrambling a signaling sent by the base station by using a descrambling sequence and/or a radio network temporary identifier;

determining a polarization mode corresponding to the descrambling sequence and/or the radio network temporary identifier that successfully descrambles the signaling as the target polarization mode.

14. The method according to any one of claims 10 to 13, further comprising:

continuing to communicate with the base station through the target polarization mode, in response to not receiving other indication information for indicating a polarization mode sent by the base station within a preset time period after receiving the first indication information.

15. The method according to claim 10, wherein determining the target polarization mode for communication with the base station according to the first indication information sent by the base station comprises:

determining the uplink polarization mode for the uplink transmission to the satellite according to the first indication information sent by the base station; and determining the downlink polarization mode for receiving the downlink transmission from the satellite according to a first association relationship between the polarization modes corresponding to the uplink transmission and the downlink transmission.

16. The method according to any one of claims 10 to 15, further comprising:

sending capability information to the base station, wherein the capability information is configured to indicate the polarization modes supported by the terminal.

17. A polarization indicating apparatus, applicable to a base station, and comprising:

one or more processors, configured to send first indication information to a terminal,

wherein the first indication information is configured to indicate a target polarization mode for the terminal to communicate with a satellite in a non-terrestrial network, the first indication information is configured for the terminal to determine a downlink polarization mode for receiving a downlink transmission from the satellite according to the first indication information, and determine an uplink polarization mode for an uplink transmission to the satellite according to a second association relationship between polarization modes corresponding to the uplink transmission and the downlink transmission.

18. A polarization determining apparatus, applicable to a terminal, and comprising:

one or more processors, configured to determine a target polarization mode for communication with a base station according to first indication information sent by the base station,

wherein the one or more processors further configured to:

determine a downlink polarization mode for receiving a downlink transmission from a

satellite according to the first indication information sent by the base station; and determine an uplink polarization mode for an uplink transmission to the satellite according to a second association relationship between polarization modes corresponding to the uplink transmission and the downlink transmission.

19. A communication apparatus, comprising:

a processor; and

a memory for storing a computer program;

wherein when the computer program is executed by the processor, the method according to any one of claims 1 to 16 is implemented.

20. A computer-readable storage medium having stored therein a computer program that, when executed by a processor, causes steps in the method according to any one of claims 1 to 16 to be implemented.