

WHAT IS CLAIMED IS:

1. A positioning method, performed by a core network device and applied to positioning preparation, comprising:

receiving a positioning request message, wherein the positioning request message comprises a predetermined position time at which positioning measurement needs to be performed;

determining, according to the predetermined position time, time information configured to indicate when to return response information; and

sending a positioning message, wherein the positioning message comprises the time information.

2. The method according to claim 1, wherein sending the positioning message comprises: sending the positioning message to an access network device; or sending the positioning message to a terminal device.

3. The method according to claim 1, wherein the time information is any one of: a moment or a time duration.

4. The method according to claim 1, wherein the positioning message is one of: a terminal device capability request message; a positioning measurement result request message; a positioning information request message; or a positioning activation request message.

5. The method according to claim 1, wherein determining the time information according to the predetermined position time comprises:

determining the time information according to the predetermined position time and a moment when the positioning request message is received.

6. The method according to claim 1, wherein determining the time information according to the predetermined position time comprises:

determining the time information according to the predetermined position time and a type of the positioning message.

7. A positioning method, performed by an access network device and applied to positioning preparation, comprising:

receiving a positioning message, wherein the positioning message comprises time information configured to indicate when to return response information,

wherein the time information is determined according to a predetermined position time at which positioning measurement needs to be performed.

8. The method according to claim 7, wherein the time information is a moment or a time duration.

9. The method according to claim 8, wherein the time information is the moment, and the method further comprises:

returning the response information before the moment; or

wherein the time information is the time duration, and the method comprises:

in response to receiving the positioning message, starting a first timer; and

returning the response information before a timing value of the first timer reaches the time duration.

10. The method according to any one of claims 7 to 9, wherein the positioning message is one of: a positioning information request message, a positioning measurement result request message, or a positioning activation request message.

11. The method according to claim 10, wherein the positioning message is the positioning information request message, and the method further comprises:

within a time indicated by the time information, returning uplink positioning reference signal configuration information corresponding to a specified terminal device, wherein the specified terminal device is a terminal device indicated in the positioning information request message.

12. The method according to claim 10, wherein the positioning message is the positioning activation request message, and the method further comprises:

within a time indicated by the time information, returning a positioning activation response message.

13. A positioning method, performed by a terminal device and applied to positioning preparation, comprising:

sending a positioning request message, wherein the positioning request message comprises a predetermined position time at which positioning measurement needs to be performed;

receiving a positioning message, wherein the positioning message comprises time information configured to indicate when to return response information,

wherein the time information is determined according to the predetermined position time.

14. The method according to claim 13, wherein the time information is a moment or a time duration.

15. The method according to claim 14, wherein the time information is the moment, and the method further comprises:

returning the response information before the moment; or

wherein the time information is the time duration, and the method comprises:

in response to receiving the positioning message, starting a first timer; and

returning the response information before a timing value of the first timer reaches the time duration.

16. The method according to any one of claims 13 to 15, wherein the positioning message is a terminal device capability request message, and the method further comprises:

within a time indicated by the time information, returning positioning capability information of the terminal device.

17. A communication device, comprising:

a processor; and

a memory having stored therein a computer program,

wherein the processor executes the computer program stored in the memory, to cause the device to implement the method according to any one of claims 1 to 6.

18. A communication device, comprising:

a processor; and

a memory having stored therein a computer program,

wherein the processor executes the computer program stored in the memory, to cause the device to implement the method according to any one of claims 7 to 9.

19. A communication device, comprising:

a processor; and

a memory having stored therein a computer program,

wherein the processor executes the computer program stored in the memory, to cause the device to implement the method according to any one of claims 13 to 16.