

CLAIMS

What is claimed is:

1. A positioning method, applied to a terminal and comprising:

obtaining positioning information, wherein the positioning information comprises

5 priority information related to a positioning signal, and/or measurement time information of the positioning signal; and

determining the positioning signal based on the positioning information;

wherein the determining the positioning signal based on the positioning information comprises:

10 measuring a positioning reference signal (PRS) based on measurement time information in configuration information of the PRS and configuration information of a target priority of the PRS;

wherein, priority information related to a positioning signal comprises the priority relation between the positioning signal and another signal or between the positioning
15 signal and data service;

wherein a high-priority positioning signal is preferentially measured.

2. The positioning method according to claim 1, wherein before the obtaining positioning information, the method further comprises:

20 sending a positioning request, wherein the positioning request comprises a request for positioning the terminal, and/or a positioning assistance data request.

3. The positioning method according to claim 1, wherein the positioning information comprises at least one of the following:

configuration information of a positioning signal with a target priority;

25 configuration information of a positioning signal configured based on a geographical location;

configuration information related to cancellation of repeated signal transmission;

configuration information related to cancellation of a measurement gap;

configuration information related to reduction of a quantity of measurements;

configuration information of a default positioning signal;

configuration information of a preconfigured positioning signal;
configuration information of an aperiodic positioning signal; and
measurement time information.

4. The positioning method according to claim 1 or 3, wherein the measurement
5 time information comprises configuration information of at least one measurement time
window.

5. The positioning method according to claim 4, wherein the configuration
information of the at least one measurement time window further comprises start time
information of the at least one measurement time window; and

10 the start time is determined based on the following:

an offset relative to a system frame number or a slot number of a serving cell or
base station.

6. The positioning method according to claim 1, wherein the priority information
related to the positioning signal comprises priority information of the positioning signal;

15 and

a time-frequency resource corresponding to a positioning signal with a target
priority satisfies at least one of the following conditions:

the time-frequency resource corresponding to the positioning signal with the target
priority is allowed to be occupied by a data service whose priority is the target priority;

20 the time-frequency resource corresponding to the positioning signal with the target
priority is not allowed to be occupied by a data service whose priority is lower than the
target priority; and

the time-frequency resource corresponding to the positioning signal with the target
priority is not allowed to be occupied by a signal whose priority is lower than the target
25 priority.

7. The positioning method according to claim 1, wherein the positioning
information comprises configuration information of the positioning signal, and the
configuration information of the positioning signal comprises at least one of the
following:

a quantity of orthogonal frequency division multiplexing OFDM symbols of the positioning signal is 1 or 2; and

the positioning signal supports a cyclic shift greater than 12.

8. The positioning method according to claim 1, wherein in a case in which the
5 positioning information comprises the priority information related to the positioning signal, after validity of a positioning signal with a target priority expires, a default configuration or another configuration is restored.

9. The positioning method according to claim 1, wherein the positioning information comprises uplink resource configuration information;

10 wherein a configuration mode of the uplink resource configuration information comprises one of the following:

the uplink resource configuration information is configured based on configuration information of the positioning signal and/or the measurement time information of the positioning signal;

15 the uplink resource configuration information is configured based on the uplink resource request; and

the uplink resource configuration information is preconfigured by a protocol or a higher layer.

10. The positioning method according to claim 1, wherein the determining the
20 positioning signal based on the positioning information comprises:

determining a to-be-measured positioning signal based on the positioning information; or

determining a to-be-sent positioning signal based on the positioning information.

11. The positioning method according to claim 1, wherein the positioning signal
25 is an aperiodic sounding reference signal SRS with a target priority; and

after the determining the positioning signal based on the positioning information, the method further comprises:

sending the aperiodic sounding reference signal SRS to a network device based on the positioning information.

12. A positioning method, applied to a network device and comprising:

determining positioning information, wherein the positioning information comprises priority information related to a positioning signal, and/or measurement time information of the positioning signal; and

5 sending the positioning information to a terminal;

wherein the positioning information is for the terminal to measure a PRS based on measurement time information in configuration information of the PRS and configuration information of a target priority of the PRS;

10 wherein, priority information related to a positioning signal comprises the priority relation between the positioning signal and another signal or between the positioning signal and data service;

wherein a high-priority positioning signal is preferentially measured.

13. A terminal, comprising:

15 a first obtaining module, configured to obtain positioning information, wherein the positioning information comprises priority information related to a positioning signal, and/or measurement time information of a positioning signal; and

a first determining module, configured to determine the positioning signal based on the positioning information;

wherein the first determining module is specifically configured to:

20 measure a positioning reference signal (PRS) based on measurement time information in configuration information of the PRS and configuration information of a target priority of the PRS;

25 wherein, priority information related to a positioning signal comprises the priority relation between the positioning signal and another signal or between the positioning signal and data service;

wherein a high-priority positioning signal is preferentially measured.

14. A network device, comprising:

a second determining module, configured to determine positioning information, wherein the positioning information comprises priority information related to a positioning signal, and/or measurement time information of a positioning signal; and

a first sending module, configured to send the positioning information to a terminal;

5 wherein the positioning information is for the terminal to measure a PRS based on measurement time information in configuration information of the PRS and configuration information of a target priority of the PRS;

wherein, priority information related to a positioning signal comprises the priority relation between the positioning signal and another signal or between the positioning

10 signal and data service;

wherein a high-priority positioning signal is preferentially measured.