CLAIMS

WHAT IS CLAIMED IS:

1. A positioning method, performed by a terminal device, comprising:

receiving pre-configured first positioning assistance information; and

determining whether the first positioning assistance information is available, and using the first positioning assistance information in response to determining that the first positioning assistance information is available;

wherein determining whether the first positioning assistance information is available and using the first positioning assistance information in response to determining that the first positioning assistance information is available comprises:

receiving a message triggering the terminal device to use the first positioning assistance information, and determining whether a network device sends second positioning assistance information required for applying a current positioning technology;

determining whether the first positioning assistance information is consistent with the second positioning assistance information in response to determining that the network device sends the second positioning assistance information; and

using the first positioning assistance information or the second positioning assistance information in response to determining that the first positioning assistance information is consistent with the second positioning assistance information.

2. The method according to claim 1, further comprising:

sending a request message for positioning assistance information to a location management function (LMF) device in response to determining that the first positioning assistance information is unavailable.

3. The method according to claim 1, further comprising:

sending an error indication message to an LMF device to indicate that the first positioning assistance information is unavailable in response to determining that the first positioning assistance information is unavailable.

4. The method according to claim 1, further comprising:

sending a location providing information message to an LMF device in response to determining that the first positioning assistance information is unavailable, wherein the location providing information message contains error indication information for indicating that the first positioning assistance information is unavailable.

5. The method according to any one of claims 2 to 4, wherein determining that the first

positioning assistance information is unavailable comprises:

receiving a message triggering the terminal device to use the first positioning assistance information, and determining that the terminal device is unable to measure a positioning reference signal (PRS) based on the first positioning assistance information.

6. The method according to any one of claims 2 to 4, wherein determining that the first positioning assistance information is unavailable comprises:

determining that the first positioning assistance information has a timeliness characteristic, and determining that the first positioning assistance information is being invalid.

7. The method according to claim 6, further comprising:

sending the request message for the positioning assistance information to the LMF device in response to determining that the first positioning assistance information is invalid.

8. The method according to claim 1, further comprising:

using the second positioning assistance information in response to determining that the first positioning assistance information is inconsistent with the second positioning assistance information.

9. The method according to claim 1, further comprising:

sending a request message for positioning assistance information to an LMF device in response to determining that the first positioning assistance information is inconsistent with the second positioning assistance information.

10. The method according to any one of claims 1 to 9, wherein receiving the pre-configured first positioning assistance information comprises one of:

receiving the first positioning assistance information sent by an LMF device through a long term evolution positioning protocol (LPP) message; or

receiving the first positioning assistance information sent by a network device, the first positioning assistance information being provided by the LMF device.

11. A communication device, comprising:

a transceiver module, configured to receive pre-configured first positioning assistance information; and

a processing module, configured to determine whether the first positioning assistance information is available, and use the first positioning assistance information in response to determining that the first positioning assistance information is available,

wherein the processing module is configured to:

receive a message triggering the terminal device to use the first positioning assistance

information, and determine whether a network device sends second positioning assistance information required for applying a current positioning technology;

determine whether the first positioning assistance information is consistent with the second positioning assistance information in response to determining that the network device sends the second positioning assistance information; and

use the first positioning assistance information or the second positioning assistance information in response to determining that the first positioning assistance information is consistent with the second positioning assistance information.

12. A communication device, comprising:

a processor; and

a memory having at least one program code stored therein;

wherein the processor loads and executes the program code to perform the method according to any of claims 1 to 10.

13. A communication device, comprising: a processor and an interface circuit; wherein,

the interface circuit is configured to receive a code instruction and transmit the code instruction to the processor; and

the processor is configured to execute the code instruction to perform the method according to any of claims 1 to 10.

14. A non-transitory computer-readable storage medium having stored therein instructions that, when executed by a terminal, cause the terminal to perform the method according to any of claims 1 to 10.