CLAIMS

1. A method for reporting a terminal capability, performed by a terminal, comprising:

reporting terminal capability information to a base station, wherein the terminal capability information is configured to indicate a maximum number of measurement gaps supported by the terminal;

wherein the method further comprising:

receiving pieces of measurement gap configuration information corresponding to measurement objects sent by the base station; and

measuring a corresponding measurement object based on a measurement gap indicated by the measurement gap configuration information;

wherein receiving the pieces of measurement gap configuration information corresponding to the measurement objects sent by the base station comprises:

receiving one of the pieces of corresponding measurement gap configuration information configured by the base station for each of first measurement objects, and one piece of shared measurement gap configuration information configured for all of second measurement objects, wherein a priority level of the first measurement objects is higher than a priority level of the second measurement objects;

measuring the corresponding measurement object based on the measurement gap indicated by the measurement gap configuration information comprises:

measuring each of corresponding first measurement objects based on a measurement gap indicated by the measurement gap configuration information corresponding to each of the first measurement objects; and

measuring each of second measurement object based on a measurement gap indicated by the measurement gap configuration information shared by all of the second measurement objects.

2. The method according to claim 1, wherein the terminal capability information is configured to indicate one of:

a maximum number of measurement gaps supported by the terminal at a same

frequency range; or

a maximum number of measurement gaps supported by the terminal in each of a first frequency range and a second frequency range.

3. The method according to claim 1, wherein reporting the terminal capability information to the base station comprises:

reporting the terminal capability information to the base station through a first signaling for reporting a terminal mobility measurement parameter,

wherein the first signaling is at least one of:

a measurement and mobility parameter information unit signaling; or

a measurement and mobility parameter information unit of multi-radio access technology (RAT) dual connectivity signaling.

4. The method according to claim 1, wherein receiving the pieces of measurement gap configuration information corresponding to the measurement objects sent by the base station comprises:

receiving pieces of measurement gap configuration information corresponding to the measurement objects sent by the base station through a second signaling;

the method further comprises:

determining the first measurement objects with a priority level higher than the second measurement objects based on first measurement object configuration information comprised in the second signaling.

5. The method according to any one of claims 1 to 4, wherein the measurement objects comprise at least one of:

different measurement objects corresponding to a same RAT;

measurement objects corresponding to different RATs;

measurement objects based on synchronization signal blocks or channel state information reference signals; or

measurement objects based on positioning reference signals.

6. A method for reporting a terminal capability, performed by a base station, comprising:

receiving terminal capability information reported by a terminal, wherein the terminal capability information is configured to indicate a maximum number of measurement gaps supported by the terminal;

wherein reporting the terminal capability information to the base station comprises:

configuring pieces of measurement gap configuration information corresponding to measurement objects for the terminal based on the terminal capability information and measurement configuration information at least configured to indicate the measurement objects; and

sending the pieces of measurement gap configuration information corresponding to the measurement objects to the terminal;

wherein configuring the pieces of measurement gap configuration information corresponding to the measurement objects for the terminal based on the terminal capability information and the measurement configuration information at least configured to indicate the measurement objects comprises:

determining first measurement objects and second measurement objects in the measurement objects indicated by the measurement configuration information, wherein the maximum number of measurement gaps is less than the total number of the measurement objects indicated by the measurement configuration information, and a priority level of the first measurement objects is higher than a priority level of the second measurement objects; and

configuring one of pieces of measurement gap configuration information corresponding to each of the first measurement objects, and configuring one of pieces of measurement gap configuration information shared by all of the second measurement objects.

7. The method according to claim 6, wherein the terminal capability information is configured to indicate one of:

a maximum number of measurement gaps supported by the terminal at a same frequency range; or

a maximum number of measurement gaps supported by the terminal in each of a first frequency range and a second frequency range.

8. The method according to claim 6, wherein sending the pieces of measurement gap configuration information corresponding to the measurement objects to the terminal comprises:

sending the pieces of measurement gap configuration information corresponding to the measurement objects to the terminal through a second signaling.

9. The method according to claim 8, wherein the second signaling comprises first measurement object configuration information, and the first measurement objects are measurement objects with a priority level higher than the second measurement objects.

10. The method according to claim 8, wherein the second signaling is a measurement configuration information unit signaling.

11. The method according to any one of claims 6 to 10, wherein the measurement objects comprise at least one of:

different measurement objects corresponding to a same RAT;

measurement objects corresponding to different RATs;

measurement objects based on synchronization signal blocks or channel state information reference signals; and/or

measurement objects based on positioning reference signals.

12. A terminal, comprising:

a reporting module, configured to report terminal capability information to a base station, wherein the terminal capability information is configured to indicate a maximum number of measurement gaps supported by the terminal;

wherein the terminal further comprises:

a second receiving module, configured to receive pieces of measurement gap configuration information corresponding to measurement objects sent by the base station; and

measuring module, configured to measure the corresponding measurement object based on a measurement gap indicated by the measurement gap configuration information;

wherein the second receiving module is further configured to:

receive one of the pieces of corresponding measurement gap configuration information configured by the base station for each of first measurement objects, and one piece of shared measurement gap configuration information configured for all of second measurement objects, wherein a priority level of the first measurement objects is higher than a priority level of the second measurement objects;

the measuring module is further configured to measure each of corresponding first measurement objects based on a measurement gap indicated by the measurement gap configuration information corresponding to each of the first measurement objects; and measure each of second measurement object based on a measurement gap indicated by the measurement gap configuration information shared by all of the second measurement objects.

13. A base station, comprising:

a first receiving module, configured to receive terminal capability information reported by a terminal, wherein the terminal capability information is configured to indicate a maximum number of measurement gaps supported by the terminal;

wherein the base station further comprises:

a second processing module, configured to configure pieces of measurement gap configuration information corresponding to measurement objects for the terminal based on the terminal capability information and measurement configuration information at least configured to indicate the measurement objects; and

a sending module, configured to send the pieces of measurement gap configuration information corresponding to the measurement objects to the terminal;

wherein the second processing module is further configured to:

determine first measurement objects and second measurement objects in the measurement objects indicated by the measurement configuration information if the maximum number of measurement gaps is less than the total number of the measurement objects indicated by the measurement configuration information, wherein a priority level of the first measurement objects is higher than a priority level of the second measurement objects, and configure one of the pieces of measurement gap configuration information corresponding to each of the first measurement objects, and configure one of the pieces of measurement gap configuration information shared by all of the second measurement object.

14. A computer-readable storage medium having a computer program stored thereon which, when executed by a processor of a terminal, causes the terminal to perform the method of any of claims 1 to 5, and which, when executed by a processor of a base station, causes the base station to perform the method of any of claims 6 to 11.