

What is claimed is:

1. An information reporting method applied to a user equipment (UE), comprising:

obtaining measurement information through measurement, wherein the measurement information includes a number of transmitted preambles;

reporting information of a frequency domain location where the UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located to the network side device; and

reporting the measurement information.

2. The information reporting method according to claim 1, wherein before the reporting information of a frequency domain location where the UE is located recorded by the UE to the network side device, the method further comprises:

reporting the recorded information of the frequency domain location where the UE is located to the network side device through uplink signaling, wherein the uplink signaling is a radio resource control (RRC) message, or a medium access control (MAC) message, or other messages other than the RRC message and the MAC message; or

reporting the recorded information of the frequency domain location where the UE is located to the network side device after the UE enters a connected state from an idle state or an inactive state, or in a procedure of transitioning to the connected state.

~~3. The information reporting method according to claim 1, wherein before the reporting information of a frequency domain location where the UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located to the network side device, the method further comprises:—~~

~~obtaining measurement information through measurement;—~~

~~the reporting information of a frequency domain location where the UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located to the network side device comprises:~~

~~reporting the information of the frequency domain location where the UE is located recorded by the UE and/or the information of the frequency domain location where the UE is currently located to the network side device, and reporting the measurement information.~~

43. The information reporting method according to claim 31, wherein the measurement information further includes at least one of: a cell identity of a current cell and/or a neighboring cell; a cell measurement result of the current cell and/or the neighboring cell; location information of the UE; a time stamp for recording the measurement information; a data packet delay; a log end time; ~~a number of transmitted preambles.~~

54. The information reporting method according to claim 1 or 2, wherein the information of the frequency domain location is at least one of:

an offset relative to a center frequency point of carrier frequencies, an offset relative to a starting ~~or lowest~~ location of the carrier frequencies, ~~an offset relative to a starting or lowest location of the bandwidth parts,~~ a sending location of the cell defining SS/PBCH block, an offset relative to the sending location of the cell defining SS/PBCH block, a sending location of other SS/PBCH block other than the cell defining SS/PBCH block, an offset relative to the sending location of other SS/PBCH block other than the cell defining SS/PBCH block, a center frequency point of a sending location of Remaining Minimal System Information (RMSI), an offset relative to the center frequency point of the sending location of RMSI, an offset relative to a start location of the sending location of RMSI, ARFCN of frequency domain location, E-ARFCN of frequency domain location, and an offset relative to a sending location of a certain CSI-RS.

65. The information reporting method according to claim 1, wherein before the reporting information of a frequency domain location where the UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located to the network side device, the method further comprises:

receiving configuration information sent by the network side device, wherein the configuration information is used to configure the UE to record and/or report the information of the frequency domain location where the UE is located.

[76](#). The information reporting method according to claim 1, wherein the reporting the information of a frequency domain location where the UE is located recorded by the UE to the network side device comprises:

receiving first report request information from the network side device, wherein the first report request information is used to notify the UE to report the information of the frequency domain location where the UE is located recorded by the UE;

sending the information of the frequency domain location where the UE is located recorded by the UE to the network side device according to the first report request information.

[87](#). The information reporting method according to claim 1, wherein the reporting the information of a frequency domain location where the UE is located recorded by the UE to the network side device comprises:

sending a notification message to the network side device, wherein the notification message is used to inform the network side device that the UE has recorded the information of the frequency domain location where the UE is located;

receiving second report request information sent by the network side device according to the notification message, wherein the second report request information is used to notify the UE to report the information of the frequency domain location where the UE is located recorded by the UE;

sending the information of the frequency domain location where the UE is located recorded by the UE to the network side device according to the second report request information.

[98](#). An information reporting method applied to a network side device, comprising:

receiving information of a frequency domain location where a UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located reported by the UE, [and receiving the measurement information reported by the UE, wherein the measurement information includes a number of transmitted preambles.](#)

~~409~~. The information reporting method according to claim [98](#), wherein the receiving the information of a frequency domain location where the UE is located recorded by the UE and reported by the UE comprises:

sending first report request information to the UE, wherein the first report request information is used to notify the UE to report the information of the frequency domain location where the UE is located recorded by the UE;

receiving the information of the frequency domain location where the UE is located recorded by the UE and reported by the UE according to the first report request information.

~~410~~. The information reporting method according to claim [98](#), wherein the receiving the information of a frequency domain location where the UE is located recorded by the UE and reported by the UE comprises:

receiving a notification message sent by the UE, wherein the notification message is used to inform the network side device that the UE has recorded the information of the frequency domain location where the UE is located;

sending second report request information to the UE according to the notification message, wherein the second report request information is used to notify the UE to report the information of the frequency domain location recorded by the UE;

receiving the information of the frequency domain location recorded by the UE and sent by the UE according to the second report request information.

~~12. The information reporting method according to claim 9, wherein the receiving the information of a frequency domain location where the UE is located recorded by the UE and reported by the UE and/or the information of a frequency domain location where the UE is currently located comprises:—~~

~~receiving the information of the frequency domain location where the UE is located recorded by the UE and reported by the UE and/or the information of the frequency domain location where the UE is currently located, and the measurement information reported by the UE.~~

~~4311~~. The information reporting method according to any one of claims ~~98-4410~~, wherein the information of the frequency domain location is at least one of:

an offset relative to a center frequency point of carrier frequencies, an offset relative to a starting ~~or lowest~~ location of the carrier frequencies, ~~an offset relative to a starting or lowest location of the bandwidth parts~~, a sending location of the cell defining SS/PBCH block, an offset relative to the sending location of the cell defining SS/PBCH block, a sending location of other SS/PBCH block other than the cell defining SS/PBCH block, an offset relative to the sending location of other SS/PBCH block other than the cell defining SS/PBCH block, a center frequency point of a sending location of RMSI, an offset relative to the center frequency point of the sending location of RMSI, an offset relative to a start location of the sending location of RMSI, ARFCN of frequency domain location, E-ARFCN of frequency domain location, and an offset relative to a sending location of a certain CSI-RS.

~~4412~~. An information reporting configuration method applied to a network side device, comprising:

sending configuration information to a UE, wherein the configuration information is used to configure the UE to record and/or report information of a frequency domain location where the UE is located;

wherein the configuration information is further used to configure the UE to record and/or report measurement information obtained by the UE through measurement, and the measurement information includes a number of transmitted preambles.

~~4513~~. The information reporting configuration method according to claim ~~4412~~, wherein the information of the frequency domain location is at least one of:

an offset relative to a center frequency point of carrier frequencies, an offset relative to a starting location of the carrier frequencies, a sending location of the cell defining SS/PBCH block, an offset relative to the sending location of the cell defining SS/PBCH block, a sending location of other SS/PBCH block other than the cell defining SS/PBCH block, an offset relative to the sending location of other SS/PBCH block other than the cell defining SS/PBCH block, a center frequency point of a sending location of RMSI, an offset relative to the center frequency point of the sending location of RMSI, an offset relative to a start location of the sending location

of RMSI, ARFCN of frequency domain location, E-ARFCN of frequency domain location, and an offset relative to a sending location of a certain CSI-RS.

~~16. The information reporting configuration method according to claim 14, wherein the configuration information is further used to configure the UE to record and/or report measurement information obtained by the UE through measurement.~~

~~17~~14. The information reporting configuration method according to claim ~~16~~12, wherein the measurement information further comprises at least one of:

- a cell identity of a current cell and/or a neighboring cell;
- a cell measurement result of the current cell and/or the neighboring cell;
- location information of the UE;
- a time stamp for recording the measurement information;
- a data packet delay;
- a log end time;~~—~~
- ~~a number of transmitted preambles.~~

~~18~~15. A user equipment (UE), comprising:
a processor, configured to obtain measurement information through measurement, wherein the measurement information includes a number of transmitted preambles;

a transceiver, configured to report information of a frequency domain location where the UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located to the network side device; and
report the measurement information.

~~19~~16. A network side device, comprising:
a transceiver, configured to receive information of a frequency domain location where a UE is located recorded by the UE and/or information of a frequency domain location where the UE is currently located reported by the UE, and receive the measurement information reported by the UE, wherein the measurement information includes a number of transmitted preambles.

2017. A network side device, comprising:

a transceiver, configured to send configuration information to a UE, wherein the configuration information is used to configure the UE to record and/or report information of a frequency domain location where the UE is located;

wherein the configuration information is further used to configure the UE to record and/or report measurement information obtained by the UE through measurement, and the measurement information includes a number of transmitted preambles.