

CLAIMS

1. A method for determining an occupancy time of a channel state information CSI processing unit, performed by a terminal device and comprising:

for a CSI report with CSI report configuration with report Quantity set to 'none' and a CSI-RS resource is not used for TRS measurement, determining an occupancy time of the CSI processing unit based on a time-domain characteristic of the CSI report;

wherein determining an occupancy time of the CSI processing unit based on a time-domain characteristic of the CSI report comprises:

when the time-domain characteristic of the CSI report is periodic or semi-persistent, the occupancy time of the CSI processing unit starts from the 1st OFDM symbol of a CSI resource until Z' OFDM symbols after the last OFDM symbol of the CSI resource;

when the time-domain characteristic of the CSI report is aperiodic, the occupancy time of the CSI processing unit starts from the 1st OFDM symbol after a PDCCH triggering the CSI report until a later one between the first OFDM symbol and the second OFDM symbol, the first OFDM symbol is Z OFDM symbols after the 1st OFDM symbol that is after the PDCCH triggering the CSI report, and the second OFDM symbol is Z' OFDM symbols after the last OFDM symbol of a CSI resource.

2. The method according to claim 1, wherein the method further comprises:

for the CSI information to be reported to the network device is the beam measurement information, determining the occupancy time of the CSI processing unit based on a time-domain characteristic of a CSI report.

3. The method according to claim 2, wherein the determining the occupancy time of the CSI processing unit based on a time-domain characteristic of a CSI report comprises:

when the time-domain characteristic of the CSI report is periodic or semi-persistent, the occupancy time of the CSI processing unit starts from the 1st orthogonal frequency division multiplexing OFDM symbol of a CSI resource until the last OFDM symbol of a physical uplink shared channel PUSCH or physical uplink control channel PUCCH used for transmitting the CSI report, wherein

the CSI resource is a most-recently-transmitted CSI resource that is Z' OFDM symbols prior to the 1st OFDM symbol of the PUSCH or the PUCCH, and Z' is a quantity of OFDM symbols required for calculating the beam measurement information.

4. The method according to claim 2, wherein the determining the occupancy time of the CSI processing unit based on a time-domain characteristic of a CSI report comprises:

when the time-domain characteristic of the CSI report is aperiodic, the occupancy time of the CSI processing unit starts from the 1st OFDM symbol after a physical downlink control channel PDCCH triggering the CSI report until the last OFDM symbol of a PUSCH transmitting the CSI report.

5. The method according to claim 1, wherein Z' is a quantity of OFDM symbols required for calculating the beam measurement information; and

the CSI resource is an earliest CSI resource in at least one CSI resource transmitted each time, or the CSI resource is an earliest CSI resource in at least one most-recently-transmitted CSI resource that is not later than a CSI reference resource corresponding to the CSI report.

6. The method according to claim 1 or 5, wherein the CSI reference resource is related to a CSI-RS resource that is transmitted periodically or semi-persistently.

7. The method according to claim 1, wherein

the first OFDM symbol is Z OFDM symbols after the 1st OFDM symbol that is after the PDCCH triggering the CSI report, and the second OFDM symbol is Z' OFDM symbols after the last OFDM symbol of a CSI resource, wherein Z' is a quantity of OFDM symbols required for calculating the beam measurement information, Z is related to Z' , and n is an integer greater than or equal to 0.

8. The method according to claim 3, 5 or 7, wherein

the CSI resource comprises at least one SSB resource or at least one CSI-RS resource in a CSI resource configuration associated with the CSI report configuration; or

the CSI resource comprises at least one SSB resource or at least one CSI-RS resource in a CSI resource configuration associated with the CSI report configuration, and at least one interference measurement resource or at least one received signal strength indicator RSSI measurement resource.

9. A terminal device, comprising:

a determining module, configured to: for a CSI report with CSI report configuration with report Quantity set to 'none' and a CSI-RS resource is not used for TRS measurement, determine an occupancy time of the CSI processing unit based on a time-domain characteristic of the CSI report;

wherein that the determining module (151) determines the occupancy time of the CSI processing unit based on the time-domain characteristic of the CSI report comprises:

when the time-domain characteristic of the CSI report is periodic or semi-persistent, the occupancy time of the CSI processing unit starts from the 1st OFDM symbol of a CSI resource until Z' OFDM symbols after the last OFDM symbol of the CSI resource;

when the time-domain characteristic of the CSI report is aperiodic, the occupancy time of the CSI processing unit starts from the 1st OFDM symbol after a PDCCH triggering the CSI report until a later one between the first OFDM symbol and the second OFDM symbol, the first OFDM symbol is Z OFDM symbols after the 1st OFDM symbol that is after the PDCCH triggering the CSI report, and the second OFDM symbol is Z' OFDM symbols after the last OFDM symbol of a CSI resource.

10. The terminal device according to claim 9, wherein Z' is a quantity of OFDM symbols required for calculating the beam measurement information; and

the CSI resource is an earliest CSI resource in at least one CSI resource transmitted each time, or the CSI resource is an earliest CSI resource in at least one most-recently-transmitted CSI resource that is not later than a CSI reference resource corresponding to the CSI report.

11. The terminal device according to claim 9 or 10, wherein

the CSI reference resource is related to a CSI-RS resource that is transmitted periodically or semi-persistently.

12. The terminal device according to claim 9, wherein the first OFDM symbol is Z OFDM symbols after the 1st OFDM symbol that is after the PDCCH triggering the CSI report, and the second OFDM symbol is Z' OFDM symbols after the last OFDM symbol of a CSI resource, wherein Z' is a quantity of OFDM symbols required for calculating the beam measurement information, Z is related to Z' , and n is an integer greater than or equal to 0.

13. The terminal device according to claim 9, 10 or 12, wherein

the CSI resource comprises at least one SSB resource or at least one CSI-RS resource in a CSI resource configuration associated with the CSI report configuration; or

the CSI resource comprises at least one SSB resource or at least one CSI-RS resource in a CSI resource configuration associated with the CSI report configuration, and at least one interference measurement resource or at least one received signal strength indicator RSSI measurement resource.

14. A computer-readable storage medium, wherein a computer program is stored in the computer-readable storage medium, and when the computer program is executed by a processor, the steps of the method according to any one of claims 1 to 8 are implemented.