

What we claim is:

1. A method for calculating a Channel Quality Indicator (CQI), comprising:

determining, by a terminal device, K ports used to calculate a channel quality indicator CQI in N ports, wherein N is a number of ports in a channel state information-reference signal (CSI-RS) resource, and K is associated with a rank;

calculating, by the terminal device, the CQI for the rank based on the K ports; and

reporting, by the terminal device, the CQI and the rank to a network device, wherein the rank is equal to K, and K and N are positive integers; wherein

when the terminal device does not receive information sent by the network device,

the determining, by a terminal device, K ports used to calculate a CQI in N ports comprises:

selecting, by the terminal device, preconfigured K ports from the N ports according to the rank;

wherein before the determining, by a terminal device, K ports used to calculate a CQI in N ports, the method further comprises:

when receiving, by the terminal device, first configuration information sent by the network device, wherein the first configuration information is used to indicate a sequence comprising the port information of the K ports;

the determining, by a terminal device, K ports used to calculate a CQI in N ports comprises:

determining, by the terminal device, the K ports in the N ports according to the first configuration information.

2. The method according to claim 1, wherein port numbers of the K ports are 0 to K-1.

3. The method according to claim 1, wherein the first configuration information comprises a port configuration used to calculate the CQI, the port configuration comprises correspondences between a plurality of ranks and a plurality of port sets, and port sets corresponding to different ranks in the plurality of ranks comprise different quantities of ports; and

the determining, by the terminal device, the K ports in the N ports according to the first

configuration information comprises:

determining, by the terminal device according to the port configuration and the rank in the plurality of ranks, a first port set corresponding to the rank in the plurality of ranks, wherein the first port set comprises the K ports.

- 5 4. The method according to claim 1 or 3, wherein the receiving, by the terminal device, first configuration information sent by the network device comprises:

receiving, by the terminal device, the first configuration information sent by the network device by using Radio Resource Control (RRC) signaling.

5. The method according to claim 3, wherein the method further comprises:

- 10 receiving, by the terminal device, update configuration information sent by the network device, wherein the update configuration information comprises a second port set corresponding to the rank in the plurality of ranks in the port configuration; and

updating, by the terminal device, the first port set corresponding to the rank in the plurality of ranks in the port configuration to the second port set.

- 15 6. The method according to claim 5, wherein the receiving, by the terminal device, update configuration information sent by the network device comprises:

receiving, by the terminal device, the update configuration information sent by the network device by using RRC signaling.

7. A terminal device, comprising:

- 20 a processing unit, configured to determine K ports used to calculate a channel quality indicator CQI in N ports, wherein N is a number of ports in a channel state information-reference signal (CSI-RS) resource, and K is associated with a rank, wherein

the processing unit is further configured to calculate a Channel Quality Indicator (CQI) for the rank based on the K ports; and

- 25 a sending unit, configured to report the CQI and the rank to a network device, wherein the rank is equal to K, and K and N are positive integers; wherein,

the terminal device further comprises a receiving unit

when the receiving unit is configured not to receive information sent by the network device, and

the processing unit is further configured to:

select preconfigured K ports from the N ports according to the rank;

wherein when the receiving unit is configured to: receive first configuration information sent by the network device, wherein the first configuration information is used to indicate a sequence comprising the port information of the K ports, and

the processing unit is configured to:

determine the K ports in the N ports according to the first configuration information.

8. The terminal device according to claim 7, wherein port numbers of the K ports are 0 to K-1.

9. The terminal device according to claim 7, wherein the first configuration information comprises a port configuration used to calculate the CQI, the port configuration comprises correspondences between a plurality of ranks and a plurality of port sets, and port sets corresponding to different ranks in the plurality of ranks comprise different quantities of ports; and

the processing unit is configured to:

determine, according to the port configuration and the rank in the plurality of ranks, a first port set corresponding to the rank in the plurality of ranks, wherein the first port set comprises the K ports.

10. The terminal device according to claim 7 or 9, wherein the receiving unit is further configured to:

receive the first configuration information sent by the network device by using Radio Resource Control (RRC) signaling.

11. The terminal device according to claim 10, wherein the receiving unit is further configured to:

receive update configuration information sent by the network device, wherein the update configuration information comprises a second port set corresponding to the rank in the plurality of ranks in the port configuration, and

the processing unit is further configured to:

update the first port set corresponding to the rank in the plurality of ranks in the port

configuration to the second port set.

12. The terminal device according to claim 11, wherein the receiving unit is configured to:
receive the update configuration information sent by the network device by using RRC signaling.