

CLAIMS

1. A method for transmission of a Channel State Information Reference Signal (CSI-RS), comprising:
 - receiving, by a first device, Downlink Control Information (DCI) signaling sent by a second device, wherein the DCI signaling indicates the first device to receive the CSI-RS and comprises resource configuration information of the CSI-RS, and is further configured to schedule data transmitted from the first device to the second device, and the resource configuration information comprises time-domain resource configuration information of the CSI-RS, the time-domain resource configuration information indicates time-domain physical resource information adopted for transmission of the CSI-RS, and the time-domain physical resource information indicates an index of each of time-domain resource units adopted for transmission of the CSI-RS in a predetermined time and a total number of the time-domain resource units; and
 - receiving, by the first device, the CSI-RS sent by the second device according to the resource configuration information comprised in the DCI signaling.
2. The method of claim 1, wherein receiving, by the first device, the CSI-RS sent by the second device comprises:
 - receiving the CSI-RS sent by the second device in a time-domain resource unit transmitting the DCI signaling.
3. The method of claim 1 or 2, wherein the resource configuration information further comprises at least one of frequency-domain resource configuration information or sequence configuration information of the CSI-RS.
4. The method of claim 1, wherein the time-domain resource configuration information further indicates timing information of the CSI-RS.
5. The method of claim 4, wherein the timing information indicates a time-domain location of the CSI-RS relative to the DCI signaling or a time-domain location of the CSI-RS relative to data transmission scheduled by the DCI signaling.
6. The method of any one of claims 3-5, wherein the frequency-domain resource configuration information indicates at least one of a transmission bandwidth of the CSI-RS, a transmission density of the CSI-RS, a frequency-domain starting location for transmission of the CSI-RS or a subcarrier spacing adopted for transmission of the CSI-RS.
7. The method of any one of claims 3-6, wherein the sequence configuration information indicates at least one of information about a scrambling sequence used in generating the CSI-RS or information about a root sequence used in generating the CSI-RS.
8. The method of any one of claims 1-7, wherein the first device is a terminal device and the second device is a network device.

9. A method for transmission of a Channel State Information Reference Signal (CSI-RS), comprising:

sending, by a second device, Downlink Control Information (DCI) signaling to a first device, wherein the DCI signaling indicates the first device to receive the CSI-RS and comprises resource configuration information of the CSI-RS, and is further configured to schedule data transmitted from the first device to the second device, and the resource configuration information comprises time-domain resource configuration information of the CSI-RS, the time-domain resource configuration information indicates time-domain physical resource information adopted for transmission of the CSI-RS, and the time-domain physical resource information indicates an index of each of time-domain resource units adopted for transmission of the CSI-RS in a predetermined time and a total number of the time-domain resource units; and

sending, by the second device, the CSI-RS to the first device according to the resource configuration information comprised in the DCI signaling.

10. A communication device, comprising:

a first transceiver unit, configured to receive Downlink Control Information (DCI) signaling sent by a second device, wherein the DCI signaling indicates the communication device to receive a Channel State Information Reference Signal (CSI-RS) and comprises resource configuration information of the CSI-RS, and is further configured to schedule data transmitted from the first device to the second device, and the resource configuration information comprises time-domain resource configuration information of the CSI-RS, the time-domain resource configuration information indicates time-domain physical resource information adopted for transmission of the CSI-RS, and the time-domain physical resource information indicates an index of each of time-domain resource units adopted for transmission of the CSI-RS in a predetermined time and a total number of the time-domain resource units; and

a second transceiver unit, configured to receive the CSI-RS sent by the second device according to the resource configuration information comprised in the DCI signaling.

11. The communication device of claim 10, wherein the second transceiver unit is specifically configured to:

receive the CSI-RS sent by the second device in a time-domain resource unit transmitting the DCI signaling.

12. The communication device of claim 10 or 11, wherein the resource configuration information further comprises at least one of frequency-domain resource configuration information or sequence configuration information of the CSI-RS.

13. The communication device of claim 10, wherein the time-domain resource configuration information further indicates timing information of the CSI-RS.

14. The communication device of claim 13, wherein the timing information indicates a time-domain location of the CSI-RS relative to the DCI signaling or a time-domain location of the CSI-RS relative to data transmission scheduled by the DCI signaling.

15. The communication device of any one of claims 12-14, wherein the frequency-

domain resource configuration information indicates at least one of a transmission bandwidth of the CSI-RS, a transmission density of the CSI-RS, a frequency-domain starting location for transmission of the CSI-RS or a subcarrier spacing adopted for transmission of the CSI-RS.

16. The communication device of any one of claims 12-15, wherein the sequence configuration information indicates at least one of information about a scrambling sequence used in generating the CSI-RS or information about a root sequence used in generating the CSI-RS.

17. A communication device, comprising:

a first transceiver unit, configured to send Downlink Control Information (DCI) signaling to a first device, wherein the DCI signaling indicates the first device to receive a Channel State Information Reference Signal (CSI-RS) and comprises resource configuration information of the CSI-RS, and is further configured to schedule data transmitted from the first device to the second device, and the resource configuration information comprises time-domain resource configuration information of the CSI-RS, the time-domain resource configuration information indicates time-domain physical resource information adopted for transmission of the CSI-RS, and the time-domain physical resource information indicates an index of each of time-domain resource units adopted for transmission of the CSI-RS in a predetermined time and a total number of the time-domain resource units; and

a second transceiver unit, configured to send the CSI-RS to the first device according to the resource configuration information comprised in the DCI signaling.