

CLAIMS

1. A wireless communication method, comprising:

measuring, by a terminal device, multiple reference signals;

determining, by the terminal device, reporting information corresponding to each reference signal of the multiple reference signals and comprising a Rank Indicator (RI) according to a measurement result; and

transmitting, by the terminal device, the reporting information corresponding to the each reference signal and comprising the RI to a network side,

wherein the method further comprises:

receiving, by the terminal device, first configuration information from the network side, the first configuration information being configured to indicate:

a maximum value of the RI in the reporting information corresponding to the each reference signal; and/or

a maximum value of a sum of values of the RIs in the reporting information corresponding to the multiple reference signals.

2. The method of claim 1, wherein transmitting, by the terminal device, the reporting information corresponding to the each reference signal and comprising the RI to the network side comprises:

transmitting, by the terminal device, the reporting information corresponding to the each reference signal and comprising the RI to a transmitter of the each reference signal.

3. The method of claim 1 or 2, wherein transmitting, by the terminal device, the reporting information corresponding to the each reference signal and comprising the RI to the network side comprises:

transmitting a first message to a transmitter of at least one first reference signal of the multiple reference signals, wherein

the first message comprises reporting information comprising an RI and corresponding to the first reference signal, and

the first message further comprises an RI in reporting information corresponding to at least one second reference signal of the multiple reference signals.

4. A terminal device, comprising a processing unit and a communication unit, wherein
the processing unit is configured to measure multiple reference signals and determine reporting information corresponding to each reference signal of the multiple reference signals and comprising a Rank Indicator (RI) according to a measurement result; and
the communication unit is configured to transmit the reporting information corresponding to the each reference signal and comprising the RI to a network side,
wherein the communication unit is further configured to:
receive first configuration information from the network side, the first configuration information being configured to indicate:
a maximum value of the RI in the reporting information corresponding to the each reference signal; and/or
a maximum value of a sum of values of the RIs in the reporting information corresponding to the multiple reference signals.
5. The terminal device of claim 4, wherein the multiple reference signals are from multiple transmission nodes for jointly serving the terminal device or from multiple downlink transmission beams.
6. The terminal device of claim 4 or 5, wherein the communication unit is further configured to:
transmit the reporting information corresponding to the each reference signal and comprising the RI to a transmitter of the reference signal.
7. The terminal device of any one of claims 4-6, wherein a value of the RI in the reporting information corresponding to the each reference signal is smaller than or equal to a value corresponding to a capability of the terminal device and/or smaller than or equal to the number of a port of the each reference signal configured for the terminal device.
8. The terminal device of any one of claims 4-7, wherein the sum of the values of the RIs in the reporting information corresponding to the multiple reference signals is smaller than or equal to a value corresponding to a capability of the terminal device.
9. The terminal device of any one of claims 4-7, wherein the communication unit is further

configured to:

transmit a first message to a transmitter of at least one first reference signal of the multiple reference signals, wherein

the first message comprises reporting information corresponding to the first reference signal and comprising an RI, and

the first message further comprises an RI in reporting information corresponding to at least one second reference signal of the multiple reference signals.

10. The terminal device of claim 9, wherein the sum of the values of the RIs in the reporting information corresponding to the multiple reference signals is greater than a value corresponding to a capability of the terminal device.

11. The terminal device of any one of claims 4-9, wherein a value of the RI in the reporting information corresponding to the each reference signal is smaller than or equal to the maximum value of the RI in the reporting information corresponding to the each reference signal; or,

the sum of the values of the RIs in the reporting information corresponding to the multiple reference signals is smaller than or equal to the maximum value of the sum of the values of the RIs in the reporting information corresponding to the multiple reference signals.

12. The terminal device of claim 4, wherein the first configuration information of different reference signals is distinguished through indexes of the different reference signals, wherein the first configuration information is carried in setting configurations of the different reference signals, or carried in a triggering signal for triggering the terminal device to measure the different reference signals, or carried in Downlink Control Information (DCI) dedicated to the first configuration information;

or,

the first configuration information of different reference signals is distinguished through indexes of the reporting information, wherein the first configuration information is carried in a setting configuration of the reporting information, or carried in a triggering signal for triggering the terminal device for reporting, or carried in DCI dedicated to the first configuration information.

13. The terminal device of any one of claims 4-12, wherein the communication unit is further configured to:

receive second configuration information from the network side, the second configuration information comprising the number of a port for the each reference signal, and a sum of the numbers of ports for the multiple reference signals being smaller than or equal to a value corresponding to a capability of the terminal device;

or,

receive third configuration information from the network side, the third configuration information being configured to indicate that reference signals to be measured are the multiple reference signals.