CLAIMS

What is claimed is:

1. A method for reporting a channel state information CSI report, applied to a terminal device, wherein the method comprises:

receiving first information from a network device, wherein

the first information is used to indicate signal to interference plus noise ratio L1-SINR;

reporting a CSI report to the network device according to the first information, wherein the CSI report comprises a measurement quantity indicated by the first information;

wherein an L1-SINR of a first resource is a ratio of a linear average value of signal received powers of resource elements measured on the first resource to a linear average value of noise and interference powers of resource elements measured on a third resource corresponding to the first resource, the first resource is resource elements REs of a channel state information reference signal CSI-RS resource; and

when the network device configures an interference measurement resource for the terminal device, using the interference measurement resource as the third resource; otherwise, using the REs of the CSI-RS resource as the third resource.

2. The method according to claim 1, wherein the first information is further used to indicate at least one of the following measurement quantities: reference signal received quality L1-RSRQ or reference signal received power RSRP;

in a case in which the first information is used to indicate at least two of the following measurement quantities: RSRP, L1-RSRQ, and L1-SINR, the first information is used to indicate the terminal device to report second information corresponding to a first measurement quantity and third information corresponding to at least one second measurement quantity; and

the CSI report comprises the second information and the third information, wherein

the first measurement quantity is one of at least two measurement quantities, and the at least one second measurement quantity is a measurement quantity other than the first measurement quantity in the at least two measurement quantities.

3. The method according to claim 2, wherein

the second information comprises resource indexes of N first resources and first values corresponding to the N first resources, and the first values are used to indicate first measurement quantities corresponding to the N first resources;

third information of any one second measurement quantity comprises resource indexes of Y first resources and second values corresponding to the Y first resources, or the second values; and

the second values are used to indicate the any one second measurement quantities corresponding to the Y first resources;

the N first resources or the Y first resources are at least one of M first resources configured by the network device for the terminal device; and

the M first resources comprise M channel state information reference signal CSI-RS resources or M synchronization signal block SSB resources, wherein M and N are greater than or equal to 1, Y is greater than or equal to 0, M is greater than or equal to N, M is greater than or equal to Y, and N is greater than or equal to Y.

4. The method according to claim 3, wherein the Y first resources are the same as a part of or all of the N first resources.

5. The method according to claim 4, wherein a sequence of the resource indexes of the Y first resources in the third information and/or a sequence of the second values corresponding to the Y first resources in the third information corresponds to a sequence of the resource indexes of the Y first resources in the N first resources of the second information.

6. The method according to claim 3, wherein

the N first resources are first resources corresponding to top N first measurement quantities in first measurement quantities of the M first resources that are ranked in descending order; and

the Y first resources are first resources whose first measurement quantities are greater than a set threshold in the N first resources.

7. The method according to claim 1, wherein

the first information is used to indicate the terminal device to report fourth information, and the CSI report comprises the fourth information;

the fourth information comprises indexes of N first resources and third values corresponding to the N first resources, and the third values are used to indicate the any one measurement quantities of the N first resources;

the N first resources are at least one of M first resources configured by the network device for the terminal device; and

the M first resources comprise: M channel state information reference signal CSI-RS resources or M synchronization signal block SSB resources, wherein M and N are greater than or equal to 1, and M is greater than or equal to N.

8. The method according to any one of claims 2 to 7, wherein an L1-RSRQ of a first resource is a ratio of an RSRP measured on the first resource to a received signal strength RSSI measured on a second resource corresponding to the first resource; and

one second resource corresponds to at least one first resource, and/or one third resource corresponds to at least one first resource.

9. The method according to claim 8, wherein the second resource is a protocol default resource, or the second resource is a resource configured by the network device for the terminal device; and

the third resource is a protocol default resource, or the third resource is a resource configured by the network device for the terminal device.

10. A method for reporting a channel state information CSI report, applied to a network device, wherein the method comprises:

transmitting first information to a terminal device, wherein

the first information is used to indicate signal to interference plus noise ratio L1-SINR; and the first information is used to indicate the terminal device to report a CSI report to the network device according to the first information, wherein the CSI report comprises a measurement quantity indicated by the first information;

wherein an L1-SINR of a first resource is a ratio of a linear average value of signal received powers of resource elements measured on the first resource to a linear average value of noise and interference powers of resource elements measured on a third resource corresponding to the first resource, the first resource is resource elements REs of a channel state information reference signal CSI-RS resource; and

when the network device configures an interference measurement resource for the terminal device, using the interference measurement resource as the third resource; otherwise, using the REs of the CSI-RS resource as the third resource.

11. The method according to claim 10, wherein the first information is further used to indicate at least one of the following measurement quantities: reference signal received quality L1-RSRQ or reference signal received power RSRP;

in a case in which the first information is used to indicate at least two of the following measurement quantities: RSRP, L1-RSRQ, and L1-SINR, the first information is used to indicate the terminal device to report second information corresponding to a first measurement quantity and third information corresponding to at least one second measurement quantity; and

the CSI report comprises the second information and the third information, wherein

the first measurement quantity is one of at least two measurement quantities, and the at least one second measurement quantity is a measurement quantity other than the first measurement quantity in the at least two measurement quantities.

12. The method according to claim 11, wherein

the second information comprises resource indexes of N first resources and first values corresponding to the N first resources, and the first values are used to indicate first measurement quantities corresponding to the N first resources;

third information of any one second measurement quantity comprises resource indexes of Y first resources and second values corresponding to the Y first resources, or the second values; and the second values are used to indicate the any one second measurement quantities corresponding to the Y first resources;

the N first resources or the Y first resources are at least one of M first resources configured by the network device for the terminal device; and

the M first resources comprise M channel state information reference signal CSI-RS resources or M synchronization signal block SSB resources, wherein M and N are greater than or equal to 1, Y is greater than or equal to 0, M is greater than or equal to N, M is greater than or equal to Y, and N is greater than or equal to Y.

13. The method according to claim 12, wherein the Y first resources are the same as a part or all of the N first resources.

14. The method according to claim 13, wherein a sequence of the resource indexes of the Y first resources in the third information and/or a sequence of the second values corresponding to the Y first resources in the third information corresponds to a sequence of the resource indexes of the Y first resources in the N first resources of the second information.

15. The method according to claim 12, wherein

the N first resources are first resources corresponding to top N first measurement quantities in first measurement quantities of the M first resources that are ranked in descending order; and

the Y first resources are first resources whose first measurement quantities are greater than a set threshold in the N first resources.

16. The method according to claim 10, wherein

the first information is used to indicate the terminal device to report fourth information, and the CSI report comprises the fourth information;

the fourth information comprises indexes of N first resources and third values corresponding to the N first resources, and the third values are used to indicate the any one measurement quantities of the N first resources;

the N first resources are at least one of M first resources configured by the network device for the terminal device; and

the M first resources comprise: M channel state information reference signal CSI-RS resources or M synchronization signal block SSB resources, wherein M and N are greater than or equal to 1, and M is greater than or equal to N.

17. The method according to any one of claims 11 to 16, wherein an L1-RSRQ of a first resource is a ratio of an RSRP measured on the first resource to a received signal strength RSSI measured on a second resource corresponding to the first resource; and

one second resource corresponds to at least one first resource, and/or one third resource corresponds to at least one first resource.

18. The method according to claim 17, wherein the second resource is a protocol default resource, or the second resource is a resource configured by the network device for the terminal device; and

the third resource is a protocol default resource, or the third resource is a resource configured by the network device for the terminal device.

19. A terminal device, comprising:

a receiving module, configured to receive first information from a network device, wherein

the first information is used to indicate signal to interference plus noise ratio L1-SINR; and

a transmitting module, configured to report a CSI report to the network device according to the first information received by the receiving module, wherein the CSI report comprises a measurement quantity indicated by the first information;

wherein an L1-SINR of a first resource is a ratio of a linear average value of signal received powers of resource elements measured on the first resource to a linear average value of noise and interference powers of resource elements measured on a third resource corresponding to the first resource, the first resource is resource elements REs of a channel state information reference signal CSI-RS resource; and

when the network device configures an interference measurement resource for the terminal device, using the interference measurement resource as the third resource; otherwise, using the REs of the CSI-RS resource as the third resource.

20. A network device, comprising:

a transmitting module, configured to transmit first information to a terminal device, wherein

the first information is used to indicate signal to interference plus noise ratio L1-SINR; and the first information is used to indicate the terminal device to report a CSI report to the network device according to the first information, wherein the CSI report comprises a measurement quantity indicated by the first information;

wherein an L1-SINR of a first resource is a ratio of a linear average value of signal received powers of resource elements measured on the first resource to a linear average value of noise and interference powers of resource elements measured on a third resource corresponding to the first resource, the first resource is resource elements REs of a channel state information reference signal CSI-RS resource; and

when the network device configures an interference measurement resource for the terminal device, using the interference measurement resource as the third resource; otherwise, using the REs of the CSI-RS resource as the third resource.