

Claims:

1. A data transmission method, comprising:

receiving, by a terminal device, first indication information, wherein the first indication information comprises information of a plurality of time domain resources, wherein frequency
 5 points used for data transmission on different time domain resources in the plurality of time domain resources are different; and

performing, by the terminal device, data transmission on the plurality of time domain resources based on frequency points corresponding to the plurality of time domain resources; wherein the plurality of time domain resources comprise a first time domain resource and a
 10 second time domain resource, the first time domain resource is used for data transmission between the terminal device and a first network device based on a first frequency point, the second time domain resource is used for data transmission between the terminal device and a second network device based on a second frequency point, and there is an overlapping time domain resource between the first time domain resource maintained by the first network device
 15 and the second time domain resource maintained by the second network device,

wherein, performing, by the terminal device, the data transmission on the plurality of time domain resources based on the frequency points corresponding to the plurality of time domain resources comprises:

performing, by the terminal device, the data transmission with the first network device on
 20 the first time domain resource maintained by the first network device based on the first frequency point, and prohibiting data transmission with the second network device on the overlapping time domain resource based on the second frequency point; or

performing, by the terminal device, the data transmission with the second network device on the second time domain resource maintained by the second network device based on the
 25 second frequency point, and prohibiting data transmission with the first network device on the overlapping time domain resource based on the first frequency point .

2. The method according to claim 1, wherein the information of the plurality of time domain resources comprises starting positions of the plurality of time domain resources on time domain.

30 3. The method according to claim 1, wherein the plurality of time domain resources constitute one time domain period, and the information of the plurality of time domain resources comprises a length of the time domain period and respective relative positions of the

plurality of time domain resources in the time domain period.

4. The method according to any one of claims 1-3, wherein each time domain resource in the plurality of time domain resources comprises a plurality of time domain units, and the time domain unit comprises any one of:

5 a radio frame, a subframe, a time slot, a symbol, a transmission time interval.

5. The method according to any one of claims 1-4, wherein the plurality of time domain resources and/or the overlapping time domain resource are determined through negotiation between a plurality of network devices communicating with the terminal device.

6. A data transmission method, comprising:

10 determining, by a network device, information of a plurality of time domain resources , wherein frequency points used for data transmission on different time domain resources in the plurality of time domain resources are different; and

sending, by the network device, first indication information to a terminal device, wherein the first indication information comprises the information of the plurality of time domain resources, to enable the terminal device to perform data transmission on the plurality of time domain resources based on frequency points corresponding to the plurality of time domain resources; wherein the plurality of time domain resources comprise a first time domain resource and a second time domain resource, the first time domain resource is used for data transmission between the terminal device and a first network device based on a first frequency point, the second time domain resource is used for data transmission between the terminal device and a second network device based on a second frequency point, and there is an overlapping time domain resource between the first time domain resource maintained by the first network device and the second time domain resource maintained by the second network device,

wherein the network device is the first network device, and the method further comprises:

25 prohibiting, by the first network device, data transmission with the terminal device on the overlapping time domain resource based on the first frequency point, to enable the terminal device to perform data transmission with the second network device on the second time domain resource maintained by the second network device based on the second frequency point.

7. The method according to claim 6, wherein the information of the plurality of time domain resources comprises starting positions of the plurality of time domain resources on time domain.

8. The method according to claim 6, wherein the plurality of time domain resources constitute one time domain period, and the information of the plurality of time domain resources comprises a length of the time domain period and relative positions of the plurality of time domain resources in the time domain period.

5 9. The method according to any one of claims 6-8, wherein each time domain resource in the plurality of time domain resources comprises a plurality of time domain units, and the time domain unit comprises any one of:

a radio frame, a subframe, a time slot, a symbol, a transmission time interval.

10 10. The method according to any one of claims 6-9, wherein the plurality of time domain resources and/or the overlapping time domain resource are determined through negotiation between a plurality of network devices communicating with the terminal device, and the plurality of network devices comprises the network device.

11. A terminal device, comprising:

15 a transmission unit, used for receiving first indication information, wherein the first indication information comprises information of a plurality of time domain resources, wherein frequency points used for data transmission on different time domain resources in the plurality of time domain resources are different;

20 wherein the transmission unit is further used for performing data transmission on the plurality of time domain resources based on frequency points corresponding to the plurality of time domain resources; wherein the plurality of time domain resources comprise a first time domain resource and a second time domain resource, the first time domain resource is used for data transmission between the terminal device and a first network device based on a first frequency point, the second time domain resource is used for data transmission between the terminal device and a second network device based on a second frequency point, and there is an
25 overlapping time domain resource between the first time domain resource maintained by the first network device and the second time domain resource maintained by the second network device,

30 wherein the transmission unit is specifically used for performing the data transmission with the first network device on the first time domain resource maintained by the first network device based on the first frequency point, and prohibiting data transmission with the second network device on the overlapping time domain resource based on the second frequency point;
or

performing the data transmission with the second network device on the second time domain resource maintained by the second network device based on the second frequency point, and prohibiting data transmission with the first network device on the overlapping time domain resource based on the first frequency point.

5 12. The terminal device according to claim 11, wherein the information of the plurality of time domain resources comprises starting positions of the plurality of time domain resources on time domain.

10 13. The terminal device according to claim 11, wherein the plurality of time domain resources constitute one time domain period, and the information of the plurality of time domain resources comprises a length of the time domain period and relative positions of the plurality of time domain resources in the time domain period.

14. The terminal device according to any one of claims 11-13, wherein each time domain resource in the plurality of time domain resources comprises a plurality of time domain units, and the time domain unit comprises any one of:

15 a radio frame, a subframe, a time slot, a symbol, a transmission time interval.

15. The terminal device according to any one of claims 11-14, wherein the plurality of time domain resources are determined through negotiation between a plurality of network devices communicating with the terminal device.

16. A network device, comprising:

20 a determination unit, used for determining information of a plurality of time domain resources, wherein frequency points used for data transmission on different time domain resources in the plurality of time domain resources are different; and

25 a transmission unit, used for sending first indication information to a terminal device, wherein the first indication information comprises the information of the plurality of time domain resources, to enable the terminal device to perform data transmission on the plurality of time domain resources based on frequency points corresponding to the plurality of time domain resources; wherein the plurality of time domain resources comprise a first time domain resource and a second time domain resource, the first time domain resource is used for data transmission between the terminal device and a first network device based on a first frequency point, the
30 second time domain resource is used for data transmission between the terminal device and a second network device based on a second frequency point, and there is an overlapping time domain resource between the first time domain resource maintained by the first network device

and the second time domain resource maintained by the second network device,

wherein the network device is the first network device, and the transmission unit is further used for prohibiting data transmission with the terminal device on the overlapping time domain resource based on the first frequency point, to enable the terminal device to perform data transmission with the second network device on the second time domain resource maintained by the second network device based on the second frequency point.

17. The network device according to claim 16, wherein the information of the plurality of time domain resources comprises starting positions of the plurality of time domain resources on time domain.

10 18. The network device according to claim 16, wherein the plurality of time domain resources constitute one time domain period, and the information of the plurality of time domain resources comprises a length of the time domain period and relative positions of the plurality of time domain resources in the time domain period.

15 19. The network device according to any one of claims 16-18, wherein each time domain resource in the plurality of time domain resources comprises a plurality of time domain units, and the time domain unit comprises any one of:

a radio frame, a subframe, a time slot, a symbol, a transmission time interval.

20 20. The network device according to any one of claims 16-19, wherein the plurality of time domain resources and/or the overlapping time domain resource are determined through negotiation between a plurality of network devices communicating with the terminal device, and the plurality of network devices comprise the network device.