CLAIMS

What is claimed is:

1. An information transmission method based on Resource Allocation Mode 2 in New Radio (NR) Vehicle-to-Everything (V2X) communication, applied to a first device, wherein the method comprises:

sending first information to at least one second device, wherein the first information is used to trigger the second device to transmit assistance information;

wherein the first information comprises:

time domain resource indication information;

frequency domain resource indication information;

identification information of a first information sender; and

identification information of a first information receiver;

wherein the first information further comprises at least one of the following information:

first information type indication information;

time information for transmitting the assistance information; or

information about a to-be-transmitted service of the first device.

2. The method according to claim 1, wherein the information about the to-be-transmitted service of the first device comprises at least one of the following:

a data volume of the to-be-transmitted service;

delay information of the to-be-transmitted service;

a priority of the to-be-transmitted service;

a data rate of the to-be-transmitted service;

reliability of the to-be-transmitted service;

a service period of the to-be-transmitted service; and

a communication range requirement corresponding to the to-be-transmitted service.

3. The method according to claim 1, wherein the first information is carried in target information, and the target information comprises at least one of the following:

sidelink control information;

downlink control information;

radio resource control information;

direct link radio resource control information; and

sidelink feedback control information, wherein

the sidelink control information further comprises first-stage sidelink control information and second-stage sidelink control information.

4. The method according to claim 1, wherein the first information type indication information is used to indicate at least one of the following:

the first information is not trigger information for triggering transmission of the assistance information; and

the first information is trigger information for triggering transmission of the assistance information.

5. An information transmission method based on Resource Allocation Mode 2 in New Radio (NR) Vehicle-to-Everything (V2X) communication, applied to a second device, wherein the method comprises:

receiving first information sent by a first device, wherein the first information is used to trigger the second device to transmit assistance information;

wherein the first information comprises:

time domain resource indication information;

frequency domain resource indication information;

identification information of a first information sender; and

identification information of a first information receiver;

wherein the first information further comprises at least one of the following information:

first information type indication information;

time information for transmitting the assistance information; or

information about a to-be-transmitted service of the first device.

6. The method according to claim 5, wherein the information about the to-be-transmitted service of the first device comprises at least one of the following:

a data volume of the to-be-transmitted service;

delay information of the to-be-transmitted service;

a priority of the to-be-transmitted service;

a data rate of the to-be-transmitted service;

reliability of the to-be-transmitted service;

a service period of the to-be-transmitted service; and

a communication range requirement corresponding to the to-be-transmitted service.

7. The method according to claim 5, wherein the first information is carried in target information, and the target information comprises at least one of the following:

sidelink control information;

downlink control information;

radio resource control information;

direct link radio resource control information; and

sidelink feedback control information, wherein

the sidelink control information further comprises first-stage sidelink control information and second-stage sidelink control information.

8. The method according to claim 5, wherein the first information type indication information is used to indicate at least one of the following:

the first information is not trigger information for triggering transmission of the assistance information; and

the first information is trigger information for triggering transmission of the assistance information.

9. An information transmission apparatus based on Resource Allocation Mode 2 in New Radio (NR) Vehicle-to-Everything (V2X) communication, applied to a first device and comprising:

a first sending module, configured to send first information to at least one second device, wherein the first information is used to trigger the second device to transmit assistance information;

wherein the first information comprises:

time domain resource indication information;

frequency domain resource indication information;

identification information of a first information sender; and

identification information of a first information receiver;

wherein the first information further comprises at least one of the following information:

first information type indication information;

time information for transmitting the assistance information; or

information about a to-be-transmitted service of the first device.

10. The apparatus according to claim 9, wherein the information about the to-be-transmitted service of the first device comprises at least one of the following:

a data volume of the to-be-transmitted service;

delay information of the to-be-transmitted service;

a priority of the to-be-transmitted service;

a data rate of the to-be-transmitted service;

reliability of the to-be-transmitted service;

a service period of the to-be-transmitted service; and

a communication range requirement corresponding to the to-be-transmitted service.

11. The apparatus according to claim 9, wherein the first information is carried in target information, and the target information comprises at least one of the following:

sidelink control information;

downlink control information;

radio resource control information;

direct link radio resource control information; and

sidelink feedback control information, wherein

the sidelink control information further comprises first-stage sidelink control information and second-stage sidelink control information.

12. The apparatus according to claim 9, wherein the first information type indication information is used to indicate at least one of the following:

the first information is not trigger information for triggering transmission of the assistance information; and

the first information is trigger information for triggering transmission of the assistance information.

13. An information transmission apparatus based on Resource Allocation Mode 2 in New Radio (NR) Vehicle-to-Everything (V2X) communication, applied to a second device and comprising:

a first receiving module, configured to receive first information sent by a first device, wherein the first information is used to trigger the second device to transmit assistance information;

wherein the first information comprises:

time domain resource indication information;

frequency domain resource indication information;

identification information of a first information sender; and

identification information of a first information receiver;

wherein the first information further comprises at least one of the following information:

first information type indication information;

time information for transmitting the assistance information; or

information about a to-be-transmitted service of the first device.

14. The apparatus according to claim 13, wherein the information about the to-be-transmitted service of the first device comprises at least one of the following:

a data volume of the to-be-transmitted service;

delay information of the to-be-transmitted service;

a priority of the to-be-transmitted service;

a data rate of the to-be-transmitted service;

reliability of the to-be-transmitted service;

a service period of the to-be-transmitted service; and

a communication range requirement corresponding to the to-be-transmitted service.

15. The apparatus according to claim 13, wherein the first information is carried in target information, and the target information comprises at least one of the following:

sidelink control information;

downlink control information;

radio resource control information;

direct link radio resource control information; and

sidelink feedback control information, wherein

the sidelink control information further comprises first-stage sidelink control information and second-stage sidelink control information.

16. The apparatus according to claim 13, wherein the first information type indication information is used to indicate at least one of the following:

the first information is not trigger information for triggering transmission of the assistance information; and

the first information is trigger information for triggering transmission of the assistance information.