CLAIMS

1. A transmission processing method, applied to a terminal and comprising:

when first transmission collides with second transmission, performing collision processing on the first transmission and the second transmission according to a collision processing policy, wherein

at least one of the first transmission and the second transmission is transmission performed based on a sidelink, and transmission modes of the first transmission and the second transmission are different;

wherein the first transmission and the second transmission correspond to different channel types or different signal types, and priorities of the different channel types or the different signal types are predefined; and the different channel types or the different signal types comprise a channel state information (CSI) feedback;

wherein the collision processing policy comprises a collision processing operation, and the collision processing operation comprises at least one of the following operations: a discarding operation of receiving, a discarding operation of sending, and transmit power reduction.

2. The transmission processing method according to claim 1, wherein the sidelink is a new radio (NR) sidelink.

3. The transmission processing method according to claim 1, wherein the collision processing policy is related to at least one of the following:

an interface type parameter, a quality of service (QoS) parameter, a service type, a channel type parameter, a signal type parameter, a transmission resource frequency parameter, a resource pool priority parameter, a resource pattern priority parameter, a data transmission type parameter, a resource allocation mode, a resource allocation object parameter, a mapping relationship between a transmission parameter and a collision weight, and a terminal capability parameter.

4. The transmission processing method according to claim 1, wherein the collision processing policy is a protocol-predefined policy, a preconfigured policy, or a control node-configured policy.

5. The transmission processing method according to claim 1, wherein a validation condition for the collision processing policy is a protocol-predefined trigger condition, a preconfigured validation condition, or a control node-configured validation condition.

6. The transmission processing method according to claim 1, wherein the collision processing policy is specifically at least one of the following policies:

when interface types of the first transmission and the second transmission are different, discarding first target transmission, or reducing a transmit power of the first target transmission, wherein the first target transmission is transmission, of the first transmission and the second transmission, that is determined based on an interface type parameter;

when quality of service (QoS) indicators corresponding to the first transmission and the second transmission are different, discarding second target transmission, or reducing a transmit power of the second target transmission, wherein the second target transmission is transmission, of the first transmission and the second transmission, that corresponds to a lower priority or a higher delay budget;

when service types corresponding to the first transmission and the second transmission are different, discarding third target transmission, or reducing a transmit power of the third target transmission, wherein the third target transmission is transmission, of the first transmission and the second transmission, that corresponds to a service type with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a service type not belonging to a preset service type;

when channel types or signal types corresponding to the first transmission and the second transmission are different, discarding fourth target transmission, or reducing a transmit power of the fourth target transmission, wherein the fourth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a channel type or a signal type with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a channel type or a signal type not belonging to a preset type;

when frequency parameters of transmission resources corresponding to the first transmission and the second transmission are different, discarding fifth target transmission, or reducing a transmit power of the fifth target transmission, wherein the fifth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a transmission resource whose frequency parameter has a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a transmission resource whose frequency parameter does not belong to a preset frequency parameter;

when transmission resource pools or transmission resource patterns corresponding to the first transmission and the second transmission are different, discarding sixth target transmission, or reducing a transmit power of the sixth target transmission, wherein the sixth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a transmission resource pool or a transmission resource pattern with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a transmission resource pool or a transmission resource pattern not belonging to a preset transmission resource pool or transmission resource pattern;

when data transmission types corresponding to the first transmission and the second transmission are different, discarding seventh target transmission, or reducing a transmit power of the seventh target transmission, wherein the seventh target transmission is transmission, of the first transmission and the second transmission, that corresponds to a data transmission type with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a data transmission type not belonging to a preset data transmission type;

when resource allocation objects corresponding to the first transmission and the second transmission are different, discarding eighth target transmission, or reducing a transmit power of the eighth target transmission, wherein the eighth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a resource allocation object with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a resource allocation object not belonging to a preset resource allocation object;

when resource allocation modes corresponding to the first transmission and the second transmission are different, discarding ninth target transmission, or reducing a transmit power of the ninth target transmission, wherein the ninth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a resource allocation mode with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a resource allocation mode not belonging to a preset resource allocation mode; and

calculating collision weights of the first transmission and the second transmission based on the mapping relationship between a transmission parameter and a collision weight, determining tenth target transmission from the first transmission and the second transmission, and discarding the tenth transmission, or reducing a transmit power of the tenth target transmission.

7. The transmission processing method according to claim 6, wherein when one of the first transmission and the second transmission is transmission performed based on a sidelink, and the other one is transmission performed based on a Uu interface, the first target transmission is the transmission performed based on the sidelink;

or

when one of the first transmission and the second transmission is transmission performed based on long term evolution (LTE), and the other one is transmission performed based on new radio (NR), the first target transmission is the transmission performed based on NR.

8. A terminal, comprising:

a collision processing module, configured to: when first transmission collides with second transmission, perform collision processing on the first transmission and the second transmission according to a collision processing policy, wherein

at least one of the first transmission and the second transmission is transmission performed based on a sidelink, and transmission modes of the first transmission and the second transmission are different;

wherein the first transmission and the second transmission correspond to different channel types or different signal types, and priorities of the different channel types or the different signal types are predefined; and the different channel types or the different signal types comprise a channel state information (CSI) feedback;

wherein the collision processing policy comprises a collision processing operation, and the collision processing operation comprises at least one of the following operations: a discarding operation of receiving, a discarding operation of sending, and transmit power reduction.

9. The terminal according to claim 8, wherein the sidelink is a new radio (NR) sidelink.

10. The terminal according to claim 8, wherein the collision processing policy is related to at least one of the following:

an interface type parameter, a quality of service (QoS) parameter, a service type, a channel type parameter, a signal type parameter, a transmission resource frequency parameter, a resource pool priority parameter, a resource pattern priority parameter, a data transmission type parameter, a resource allocation mode, a resource allocation object parameter, a mapping relationship between a transmission parameter and a collision weight, and a terminal capability parameter.

11. The terminal according to claim 8, wherein the collision processing policy is a protocol-predefined policy, a preconfigured policy, or a control node-configured policy.

12. The terminal according to claim 8, wherein a validation condition for the collision processing policy is a protocol-predefined trigger condition, a preconfigured validation condition, or a control node-configured validation condition.

13. The terminal according to claim 8, wherein the collision processing policy is specifically at least one of the following policies:

when interface types of the first transmission and the second transmission are different, discarding first target transmission, or reducing a transmit power of the first target transmission, wherein the first target transmission is transmission, of the first transmission and the second transmission, that is determined based on an interface type parameter;

when quality of service (QoS) indicators corresponding to the first transmission and the second transmission are different, discarding second target transmission, or reducing a transmit power of the second target transmission, wherein the second target transmission is transmission, of the first transmission and the second transmission, that corresponds to a lower priority or a higher delay budget;

when service types corresponding to the first transmission and the second transmission are different, discarding third target transmission, or reducing a transmit power of the third target transmission, wherein the third target transmission is transmission, of the first transmission and the second transmission, that corresponds to a service type with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a service type not belonging to a preset service type;

when channel types or signal types corresponding to the first transmission and the second transmission are different, discarding fourth target transmission, or reducing a transmit power of the fourth target transmission, wherein the fourth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a channel type or a signal type with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a channel type or a signal type not belonging to a preset type;

when frequency parameters of transmission resources corresponding to the first transmission and the second transmission are different, discarding fifth target transmission, or reducing a transmit power of the fifth target transmission, wherein the fifth target transmission

is transmission, of the first transmission and the second transmission, that corresponds to a transmission resource whose frequency parameter has a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a transmission resource whose frequency parameter does not belong to a preset frequency parameter;

when transmission resource pools or transmission resource patterns corresponding to the first transmission and the second transmission are different, discarding sixth target transmission, or reducing a transmit power of the sixth target transmission, wherein the sixth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a transmission resource pool or a transmission resource pattern with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a transmission resource pool or a transmission resource pattern not belonging to a preset transmission resource pool or transmission resource pattern;

when data transmission types corresponding to the first transmission and the second transmission are different, discarding seventh target transmission, or reducing a transmit power of the seventh target transmission, wherein the seventh target transmission is transmission, of the first transmission and the second transmission, that corresponds to a data transmission type with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a data transmission type not belonging to a preset data transmission type;

when resource allocation objects corresponding to the first transmission and the second transmission are different, discarding eighth target transmission, or reducing a transmit power of the eighth target transmission, wherein the eighth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a resource allocation object with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a resource allocation object not belonging to a preset resource allocation object;

when resource allocation modes corresponding to the first transmission and the second transmission are different, discarding ninth target transmission, or reducing a transmit power of the ninth target transmission, wherein the ninth target transmission is transmission, of the first transmission and the second transmission, that corresponds to a resource allocation mode with a lower priority, or transmission, of the first transmission and the second transmission, that corresponds to a resource allocation mode not belonging to a preset resource allocation mode; and

calculating collision weights of the first transmission and the second transmission based on the mapping relationship between a transmission parameter and a collision weight, determining tenth target transmission from the first transmission and the second transmission, and discarding the tenth transmission, or reducing a transmit power of the tenth target transmission.

14. The terminal according to claim 13, wherein when one of the first transmission and the second transmission is transmission performed based on a sidelink, and the other one is transmission performed based on a Uu interface, the first target transmission is the transmission performed based on the sidelink;

or

when one of the first transmission and the second transmission is transmission performed based on long term evolution (LTE), and the other one is transmission performed based on NR, the first target transmission is the transmission performed based on new radio (NR).

15. A control node, comprising:

a first sending module, configured to send a collision processing policy, wherein the collision processing policy is used to perform collision processing on first transmission and second transmission that collide, wherein

at least one of the first transmission and the second transmission is transmission performed based on a sidelink, and transmission modes of the first transmission and the second transmission are different;

wherein the first transmission and the second transmission correspond to different channel types or different signal types, and priorities of the different channel types or the different signal types are predefined; and the different channel types or the different signal types comprise a channel state information (CSI) feedback;

wherein the collision processing policy comprises a collision processing operation, and the collision processing operation comprises at least one of the following operations: a discarding operation of receiving, a discarding operation of sending, and transmit power reduction.

16. The control node according to claim 15, wherein the collision processing policy is related to at least one of the following:

an interface type parameter, a quality of service (QoS) parameter, a service type, a channel type parameter, a signal type parameter, a transmission resource frequency parameter, a resource pool priority parameter, a resource pattern priority parameter, a data transmission type

parameter, a resource allocation mode, a resource allocation object parameter, a mapping relationship between a transmission parameter and a collision weight, and a terminal capability parameter.