

Claims:

1. A method for resource configuration, comprising:

acquiring, by a terminal, configuration information of a semi-persistent resource sent by a network side entity through a radio resource control (RRC) signaling, wherein the configuration information is used for indicating at least one piece of following information: time information of a retransmission resource, time offset position information of the retransmission resource relative to an initial transmission resource, and time information of the initial transmission resource, ~~and time information of an initial transmission resource associated with the retransmission resource~~; and

transmitting, by the terminal, data using the semi-persistent resource based on the configuration information.

2. The method of claim 1, wherein acquiring, by the terminal, the configuration information of the semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:

acquiring, by the terminal, first configuration information of a first semi-persistent resource sent by the network side entity through the RRC signaling, wherein the first configuration information comprises first time information of the initial transmission resource, and/or second time information of the retransmission resource;

~~3. The method of claim 2, wherein a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource is earlier than a time indicated by first time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0.~~

~~4. The method of claim 3, wherein that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial transmission resource is implemented by at least one of following modes:~~

~~limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or~~

~~limiting a maximum number of times of reservation of the resource used for retransmission of the Nth initial transmission resource.~~

~~5. The method of claim 2,~~ wherein the terminal transmits the data on a sidelink using the first semi-persistent resource based on the first time information and/or the second time information.

~~36.~~ The method of claim 2, wherein acquiring, by the terminal, the first configuration information of the first semi-persistent resource sent by the network side entity through the RRC signaling comprises:

acquiring, by the terminal, the first configuration information under a second radio access type (RAT) sent by the network side entity through the RRC signaling under a first radio access type.

~~47.~~ The method of claim 1, wherein acquiring, by the terminal, the configuration information of the semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:

acquiring, by the terminal, second configuration information of a first semi-persistent resource sent by the network side entity through the RRC signaling, wherein the second configuration information comprises first time information of the initial transmission resource and/or third time information of the retransmission resource, and the third time information comprises first time offset position information of the retransmission resource relative to the initial transmission resource.

~~8. The method of claim 7, further comprising:~~

~~determining, by the terminal, second time information of the retransmission resource based on the first time information and the first time offset position information, wherein the third time information further comprises the second time information.~~

~~9. The method of claim 8,~~ wherein the terminal transmits the data on a sidelink using the first semi-persistent resource based on the first time information and/or the second time information.

~~10. The method of claim 7,~~ wherein a time indicated by time information of a resource

used for retransmission of an Nth initial transmission resource is earlier than a time indicated by first time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0.

~~11. The method of claim 10, further comprising: implementing that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial transmission resource by at least one of following modes:—~~

~~limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or~~

~~limiting a maximum number of times of reservation of the resource used for retransmission of the Nth initial transmission resource.~~

~~512.~~ The method of claim ~~47~~, wherein acquiring, by the terminal, the second configuration information of the first semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:

acquiring, by the terminal, the second configuration information under a second radio access type (RAT) sent by the network side entity through the RRC signaling under a first radio access type.

~~13. The method of claim 1, wherein acquiring, by the terminal, the configuration information of the semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:~~

~~acquiring, by the terminal, third configuration information of a first semi-persistent resource and fourth configuration information of a second semi-persistent resource sent by the network side entity through the RRC signaling, wherein the third configuration information comprises first time information of the first semi-persistent resource used for initial transmission, the fourth configuration information comprises fourth time information of the second semi-persistent resource used for retransmission, and the first semi-persistent resource is associated with the second semi-persistent resource.~~

~~14. The method of claim 13, further comprising:~~

~~acquiring, by the terminal, association information of the first semi-persistent resource and the second semi-persistent resource sent by the network side entity, wherein the association information is used for indicating that the first semi-persistent resource is used for initial transmission and the second semi-persistent resource is used for retransmission.~~

5 ~~15. The method of claim 13, wherein a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource in the first semi-persistent resource is earlier than a time indicated by first time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0.~~

10 ~~16. The method of claim 15, further comprising: implementing that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial transmission resource by at least one of following modes:~~

~~limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or~~

15 ~~limiting a maximum number of times of reservation of the resource used for retransmission of the Nth initial transmission resource.~~

~~17. The method of claim 13, wherein the terminal transmits the data on a sidelink using the first semi-persistent resource based on the first time information, and transmits the data on the sidelink using the second semi-persistent resource based on the fourth time information.~~

20 ~~18. The method of claim 13, wherein acquiring, by the terminal, the third configuration information of the first semi-persistent resource and the fourth configuration information of the second semi-persistent resource sent by the network side entity through the RRC signaling comprises:~~

25 ~~acquiring, by the terminal, the fourth configuration information under a second radio access type (RAT) sent by the network side entity through the RRC signaling under a first radio access type.~~

~~19. A method for resource configuration, comprising:—~~

~~acquiring, by a terminal, configuration information of a resource, wherein the~~

configuration information comprises time information of an initial transmission resource of the resource, and a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource is earlier than a time indicated by time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0; and

5 transmitting, by the terminal, data using the resource based on the time information.

20. The method of claim 19, wherein the resource is a semi-persistent resource configured by a network side entity or a resource reserved by the terminal.

21. The method of claim 19, wherein that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial transmission resource is implemented by at least one of following modes:

limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or

15 limiting a maximum number of times of reservation of the resource used for retransmission of the Nth initial transmission resource.

22. A terminal, comprising:—

20 a first signal receiving module, configured to enable the terminal to acquire configuration information of a semi-persistent resource sent by a network side entity through a radio resource control (RRC) signaling, wherein the configuration information is used for indicating at least one piece of following information: time information of a retransmission resource, time offset position information of the retransmission resource relative to an initial transmission resource, time information of the initial transmission resource, or time information of an initial transmission resource associated with the retransmission resource; and

25 a first signal transmitting module, configured to enable the terminal to transmit data using the semi-persistent resource based on the configuration information.

23. The terminal of claim 22, wherein the first signal receiving module comprises a first sub-signal receiving module, configured to receive first configuration information of a first semi-persistent resource sent by the network side entity through the radio resource control

(RRC) signaling, wherein the first configuration information comprises first time information of the initial transmission resource and/or second time information of the retransmission resource.

24. The terminal of claim 22, wherein the first signal receiving module comprises a second sub-signal receiving module, configured to receive second configuration information of a first semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling, wherein the second configuration information comprises the first time information of the initial transmission resource and third time information of the retransmission resource, and the third time information comprises first time offset position information of the retransmission resource relative to the initial transmission resource.

25. The terminal of claim 22, wherein the first signal receiving module comprises a third sub-signal receiving module, configured to receive third configuration information of a first semi-persistent resource and fourth configuration information of a second semi-persistent resource sent to the terminal by the network side entity through the radio resource control (RRC) signaling, wherein the third configuration information comprises first time information of the first semi-persistent resource used for initial transmission, the fourth configuration information comprises fourth time information of the second semi-persistent resource used for retransmission, and the first semi-persistent resource is associated with the second semi-persistent resource.

26. A terminal, comprising:

a second signal receiving module, configured to enable the terminal to acquire configuration information of a resource, wherein the configuration information comprises time information of an initial transmission resource of the resource, and a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource is earlier than a time indicated by time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0; and

a second signal transmitting module, configured to enable the terminal to transmit data using the resource based on the time information.

27. An apparatus for resource configuration, comprising:

a first acquiring unit, configured to enable a terminal to acquire configuration information

~~of a semi-persistent resource sent by a network side entity through a radio resource control (RRC) signaling, wherein the configuration information is used for indicating at least one piece of following information: time information of a retransmission resource, time offset position information of the retransmission resource relative to an initial transmission resource, time information of the initial transmission resource, or time information of an initial transmission resource associated with the retransmission resource; and~~

~~a first transmitting unit, configured to enable the terminal to transmit data using the semi-persistent resource based on the configuration information.~~

~~28. An apparatus for resource configuration, comprising:~~

~~a second acquiring unit, configured to enable a terminal to acquire configuration information of a resource, wherein the configuration information comprises time information of an initial transmission resource of the resource, and a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource is earlier than a time indicated by time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0; and~~

~~a second transmitting unit, configured to enable the terminal to transmit data using the resource based on the time information.~~

6. A terminal device, comprising a memory and a processor, wherein a computer program is stored in the memory, and the processor is configured to run the computer program to perform:

acquiring configuration information of a semi-persistent resource sent by a network side entity through a radio resource control (RRC) signaling, wherein the configuration information is used for indicating at least one piece of following information: time information of a retransmission resource, time offset position information of the retransmission resource relative to an initial transmission resource, and time information of the initial transmission resource; and

transmitting data using the semi-persistent resource based on the configuration information.

7. The terminal device of claim 6, wherein acquiring the configuration information of the

semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:

5 acquiring first configuration information of a first semi-persistent resource sent by the network side entity through the RRC signaling, wherein the first configuration information comprises first time information of the initial transmission resource, and second time information of the retransmission resource;

wherein the processor is further configured to run the computer program to perform:

transmitting the data on a sidelink using the first semi-persistent resource based on the first time information and the second time information.

10 8. The terminal device of claim 7, wherein acquiring the first configuration information of the first semi-persistent resource sent by the network side entity through the RRC signaling comprises:

acquiring the first configuration information under a second radio access type (RAT) sent by the network side entity through the RRC signaling under a first radio access type.

15 9. The terminal device of claim 6, wherein acquiring the configuration information of the semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:

20 acquiring second configuration information of a first semi-persistent resource sent by the network side entity through the RRC signaling, wherein the second configuration information comprises first time information of the initial transmission resource and/or third time information of the retransmission resource, and the third time information comprises first time offset position information of the retransmission resource relative to the initial transmission resource.

25 10. The terminal device of claim 9, wherein acquiring the second configuration information of the first semi-persistent resource sent by the network side entity through the radio resource control (RRC) signaling comprises:

acquiring the second configuration information under a second radio access type (RAT) sent by the network side entity through the RRC signaling under a first radio access type.

1129. A method for resource configuration, comprising:

sending, by a network side entity, configuration information of a semi-persistent resource to a terminal through a radio resource control (RRC) signaling, wherein the configuration information is used for enabling the terminal to transmit data using the semi-persistent resource,
5 and the configuration information is used for indicating at least one piece of following information:

time information of a retransmission resource, time offset position information of the retransmission resource relative to an initial transmission resource, and time information of the initial transmission resource, ~~or time information of an initial transmission resource associated~~
10 ~~with the retransmission resource.~~

1230. The method of claim 1129, wherein sending, by the network side entity, the configuration information of the semi-persistent resource to the terminal through the radio resource control (RRC) signaling comprises:

sending, by the network side entity, first configuration information of a first
15 semi-persistent resource to the terminal through the RRC signaling, wherein the first configuration information comprises first time information of the initial transmission resource and/or second time information of the retransmission resource;

~~31. The method of claim 30, wherein a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource is earlier than a time indicated by~~
20 ~~time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0.~~

~~32. The method of claim 31, further comprising: implementing that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial~~
25 ~~transmission resource by at least one of following modes:—~~

~~limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or~~

~~limiting a maximum number of times of reservation of the resource used for~~

~~retransmission of the Nth initial transmission resource.~~

~~33. The method of claim 30, wherein the first time information and/or the second time information is used for enabling the terminal to transmit the data on a sidelink using the first semi-persistent resource.~~

5 ~~1334. The method of claim 1230, wherein sending, by the network side entity, the first configuration information of the first semi-persistent resource to the terminal through the RRC signaling comprises:~~

10 ~~sending, by the network side entity, the first configuration information under a second radio access type (RAT) to the terminal through the RRC signaling under a first radio access type.~~

~~1435. The method of claim 1129, wherein sending, by the network side entity, the configuration information of the semi-persistent resource to the terminal through the radio resource control (RRC) signaling comprises:~~

15 ~~sending, by the network side entity, second configuration information of a first semi-persistent resource to the terminal through the RRC signaling, wherein the second configuration information comprises first time information of the initial transmission resource and third time information of the retransmission resource, and the third time information comprises first time offset position information of the retransmission resource relative to the initial transmission resource.~~

20 ~~36. The method of claim 35, wherein the first time information and the first time offset position information are used for enabling the terminal to determine second time information of the retransmission resource, and the third time information further comprises the second time information.~~

25 ~~37. The method of claim 36, wherein the first time information and/or the second time information are used for enabling the terminal to transmit the data on a sidelink using the first semi-persistent resource.~~

~~38. The method of claim 35, wherein a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource is earlier than a time indicated by~~

~~first time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0.~~

~~39. The method of claim 38, further comprising: implementing that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial transmission resource by at least one of following modes:~~

~~limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or~~

~~limiting a maximum number of times of reservation of the resource used for retransmission of the Nth initial transmission resource.~~

1540. The method of claim 1435, wherein sending, by the network side entity, the second configuration information of the first semi-persistent resource to the terminal through the radio resource control (RRC) signaling comprises:

sending, by the network side entity, the second configuration information under a second radio access type (RAT) to the terminal through the RRC signaling under a first radio access type.

~~41. The method of claim 29, wherein sending, by the network side entity, the configuration information of the semi-persistent resource to the terminal through the radio resource control (RRC) signaling comprises:~~

~~sending, by the network side entity, third configuration information of a first semi-persistent resource and fourth configuration information of a second semi-persistent resource to the terminal through the RRC signaling, wherein the third configuration information comprises first time information of the first semi-persistent resource used for initial transmission, the fourth configuration information comprises fourth time information of the second semi-persistent resource used for retransmission, and the first semi-persistent resource is associated with the second semi-persistent resource.~~

~~42. The method of claim 41, further comprising:~~

~~sending, the network side entity, association information of the first semi-persistent~~

~~resource and the second semi-persistent resource to the terminal, wherein the association information is used for indicating that the first semi-persistent resource is used for initial transmission and the second semi-persistent resource is used for retransmission.~~

5 ~~43. The method of claim 42, wherein a time indicated by time information of a resource used for retransmission of an Nth initial transmission resource in the semi-persistent resource is earlier than a time indicated by first time information of an (N+1)th initial transmission resource, wherein the N is a natural number greater than 0.~~

10 ~~44. The method of claim 43, further comprising: implementing that the time indicated by the time information of the resource used for retransmission of the Nth initial transmission resource is earlier than the time indicated by the time information of the (N+1)th initial transmission resource by at least one of following modes:—~~

~~limiting a maximum time range of reservation of the resource used for retransmission of the Nth initial transmission resource; or~~

15 ~~limiting a maximum number of times of reservation of the resource used for retransmission of the Nth initial transmission resource.~~

~~45. The method of claim 41, wherein the first time information is used for enabling the terminal to transmit the data on a sidelink using the first semi-persistent resource, and the fourth time information is used for enabling the terminal to transmit the data on the sidelink using the second semi-persistent resource.~~

20 ~~46. The method of claim 41, wherein sending, by the network side entity, the third configuration information of the first semi-persistent resource and the fourth configuration information of the second semi-persistent resource to the terminal through the radio resource control (RRC) signaling comprises:~~

25 ~~sending, by the network side entity, the third configuration information and the fourth configuration information under a second radio access type (RAT) to the terminal through the RRC signaling under a first radio access type.~~

~~47. An apparatus for resource configuration, comprising:~~

~~a sending unit, configured to enable a network side entity to send configuration~~

information of a semi-persistent resource to a terminal through a radio resource control (RRC) signaling, wherein the configuration information is used for enabling the terminal to transmit data using the semi-persistent resource, and the configuration information is used for indicating at least one piece of following information:

- 5 ~~time information of a retransmission resource, time offset position information of the retransmission resource relative to an initial transmission resource, time information of the initial transmission resource, or time information of an initial transmission resource associated with the retransmission resource.~~

- 10 ~~48. A non-transitory storage medium, comprising a stored program, wherein, when the program is run, a device with the non-transitory storage medium thereon is controlled to perform the method for resource configuration of any one of claims 1 to 21 or claims 29 to 46.~~

- 15 ~~49. A terminal device, comprising a memory and a processor, wherein a computer program is stored in the memory, and the processor is configured to run the computer program to execute the method for resource configuration of any one of claims 1 to 21 or claims 29 to 46.~~