CLAIMS

1. A bearer control method, applied to a terminal, wherein a target radio bearer RB corresponding to the terminal is configured with a data duplication function, the target RB is configured with N transmission paths, N is an integer greater than 2, and the method comprises:

receiving an indication message sent by a network side device, wherein the indication message is used to ~~indicate to activate or deactivate the data duplication function of the target RB, and/or is used to~~ indicate to activate or deactivate a transmission path duplication function of the target RB; and

determining an available transmission path of the target RB according to the indication message;

wherein the indication message comprises second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB;

wherein the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or

the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;

wherein i is an integer greater than or equal to 0 and less than or equal to N.

2. The method according to claim 1, wherein the indication message is:

radio resource control RRC signaling; or

first media access control control element MAC CE signaling, wherein the first MAC CE signaling is used to indicate to activate or deactivate the data duplication function of the target RB~~; or~~

~~second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB~~.

~~3. The method according to claim 2, wherein~~

~~the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or~~

~~the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;~~

~~wherein i is an integer greater than or equal to 0 and less than or equal to N.~~

43. The method according to claim 31, wherein when the target RB is a split bearer, the second MAC CE further comprises a split bearer indicator field, used to indicate whether the target RB falls back to a split bearer mode.

54. The method according to any one of claims 1 to 43, wherein the determining an available transmission path of the target RB according to the indication message comprises:

sending, by an entity receiving the indication message in the terminal, indication information to a PDCP entity corresponding to the target RB, wherein the indication information is determined according to the indication message; and

determining, by the PDCP entity, the available transmission path of the target RB according to the indication information.

65. The method according to claim 54, wherein when the indication message is RRC signaling and the RRC signaling indicates to deactivate the data duplication function of the target RB, the entity receiving the indication message is an RRC entity, and the indication information is used to indicate that the data duplication function of the target RB is already deactivated; and

the determining, by the PDCP entity, the available transmission path of the target RB according to the indication information comprises:

determining a transmission path of the target RB preconfigured by the network side device as the available transmission path of the target RB according to the indication information; or

when the target RB is a split bearer, controlling, according to the indication information, the target RB to switch to a split bearer mode, and determining a transmission path in the split bearer mode as the available transmission path of the target RB.

76. The method according to claim 54, wherein when the indication message is RRC signaling and the RRC signaling indicates to activate j transmission paths of the target RB, the entity receiving the indication message is an RRC entity, the indication information comprises the j transmission paths, and j is a positive integer less than or equal to N; and

the determining, by the PDCP entity, the available transmission path of the target RB according to the indication information comprises:

determining the j transmission paths as the available transmission path of the target RB.

87. The method according to claim 54, wherein when the indication message is first MAC CE signaling and the first MAC CE signaling indicates to deactivate the data duplication function of the target RB, the entity receiving the indication message is a MAC entity, and the indication information is used to indicate that the data duplication function of the target RB is already deactivated; and

the determining, by the PDCP entity, the available transmission path of the target RB according to the indication information comprises:

determining a transmission path of the target RB preconfigured by the network side device as the available transmission path of the target RB according to the indication information; or

when the target RB is a split bearer, controlling, according to the indication information, the target RB to switch to a split bearer mode, and determining a transmission path in the split bearer mode as the available transmission path of the target RB.

~~9~~8. The method according to claim ~~5~~4, wherein when the indication message is second MAC CE signaling, the entity receiving the indication message is a MAC entity, the indication message is used to indicate activation or deactivation the transmission path duplication function, the indication information comprises: m transmission paths in a deactivated state and/or n transmission paths in an activated state, m and n are positive integers, m+n≤N, and the m transmission paths in the deactivated state and/or the n transmission paths in the activated state are determined according to the second MAC CE signaling; and

the determining, by the PDCP entity, the available transmission path of the target RB according to the indication information comprises:

when the indication information comprises the n transmission paths in the activated state, determining the n transmission paths in the activated state as the available transmission path of the target RB; or

when the indication information comprises only the m transmission paths in the deactivated state, determining a transmission path among the N transmission paths of the target RB other than the m transmission paths in the deactivated state as the available transmission path.

~~10~~9. A bearer control method, applied to a network side device, wherein the method comprises:

sending an indication message to a terminal, wherein the indication message ~~is used to indicate to activate or deactivate the data duplication function of the target radio bearer RB corresponding to the terminal, and/or~~ is used to indicate to activate or deactivate a transmission path duplication function of the target RB;

wherein the target RB is configured with a data duplication function, the target RB is configured with N transmission paths, and N is an integer greater than 2;

wherein the indication message comprises:

second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB;

wherein the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or

the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;

wherein i is an integer greater than or equal to 0 and less than or equal to N.

~~11~~10. The method according to claim ~~10~~9, wherein the indication message is:

radio resource control RRC signaling; or

first media access control control element MAC CE signaling, wherein the first MAC CE signaling is used to indicate to activate or deactivate the data duplication function of the target RB~~; or~~

~~second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB~~.

~~12. The method according to claim 11, wherein~~

~~the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or~~

~~the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;~~

~~wherein i is an integer greater than or equal to 0 and less than or equal to N.~~

~~13~~11. The method according to claim 9~~12~~, wherein when the target RB is a split bearer, the second MAC CE further comprises a split bearer indicator field, used to indicate whether the target RB falls back to a split bearer mode.

~~14~~12. A terminal, wherein a target radio bearer RB corresponding to the terminal is configured with a data duplication function, the target RB is configured with N transmission paths, N is an integer greater than 2, and the terminal comprises:

a receiving module, configured to receive an indication message sent by a network side device, wherein the indication message ~~is used to indicate to activate or deactivate the data duplication function of the target RB, and/or~~ is used to indicate to activate or deactivate a transmission path duplication function of the target RB; and

a determining module, configured to determine an available transmission path of the target RB according to the indication message;

wherein the indication message comprises:

second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB;

wherein the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or

the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;

wherein i is an integer greater than or equal to 0 and less than or equal to N.

~~15~~13. The terminal according to claim ~~14~~12, wherein the indication message is:

radio resource control RRC signaling; or

first media access control control element MAC CE signaling, wherein the first MAC CE signaling is used to indicate to activate or deactivate the data duplication function of the target RB~~; or~~

~~second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB~~.

~~16. The terminal according to claim 15, wherein~~

~~the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or~~

~~the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;~~

~~wherein i is an integer greater than or equal to 0 and less than or equal to N.~~

~~17~~14. The terminal according to ~~any one of~~ claim~~s 14~~ 12~~to 16~~, wherein the determining module comprises:

a sending unit, configured to send, by an entity receiving the indication message in the terminal, indication information to a PDCP entity corresponding to the target RB, wherein the indication information is determined according to the indication message; and

a determining unit, configured to determine, by the PDCP entity, the available transmission path of the target RB according to the indication information.

~~18~~15. The terminal according to claim ~~17~~14, wherein when the indication message is second MAC CE signaling, the entity receiving the indication message is a MAC entity, the indication information comprises: m transmission paths in a deactivated state and/or n transmission paths in an activated state, m and n are positive integers, $m+n \leq N$, and the m transmission paths in the deactivated state and/or the n transmission paths in the activated state are determined according to the second MAC CE signaling; and

the determining unit is specifically configured to:

when the indication information comprises the n transmission paths in the activated state, determine the n transmission paths in the activated state as the available transmission path of the target RB; or

when the indication information comprises only the m transmission paths in the deactivated state, determine a transmission path among the N transmission paths of the target RB other than the m transmission paths in the deactivated state as the available transmission path.

~~19~~16. A network side device, comprising:

a sending module, configured to send an indication message to a terminal, wherein the indication message ~~is used to indicate to activate or deactivate the data duplication function of the target radio bearer RB corresponding to the terminal, and/or~~ is used to indicate to activate or deactivate a transmission path duplication function of the target RB;

wherein the target RB is configured with a data duplication function, the target RB is configured with N transmission paths, and N is an integer greater than 2;

wherein the indication message comprises:

second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB;

wherein the second MAC CE signaling comprises: a cell group identifier and/or a logical channel identifier; or

the second MAC CE signaling comprises: a first field used to identify the target RB, and a second field used to indicate a status of a transmission path whose sequence number is i among the N transmission paths of the target RB;

wherein i is an integer greater than or equal to 0 and less than or equal to N.

~~20~~17. The network side device according to claim ~~19~~16, wherein the indication message is:

radio resource control RRC signaling; or

first media access control control element MAC CE signaling, wherein the first MAC CE signaling is used to indicate to activate or deactivate the data duplication function of the target RB~~; or~~

~~second MAC CE signaling, wherein the second MAC CE signaling is used to indicate to activate or deactivate a transmission path of the target RB~~.