WHAT IS CLAIMED IS:

1. A method for data transmission, applied to a terminal, the method comprising:

receiving a first indication message from a base station, wherein the first indication message comprises first information and the first information is for representing a Packet Data Convergence Protocol (PDCP) packet duplication function and at least two transmission entities configured for a Radio Bearer (RB) by the base station;

setting a transmission function corresponding to the RB to be the PDCP packet duplication function according to the first indication message;

setting a transmission entity corresponding to the RB according to the at least two transmission entities indicated in the first indication message;

setting a present state of the PDCP packet duplication function, the present state comprising an active state and an inactive state; and

performing data transmission according to the present state and the transmission entity,

wherein the present state is the inactive state, the transmission entity comprises a primary Radio Link Control (RLC) entity and a secondary RLC entity,

performing the data transmission according to the present state and the transmission entity comprises:

in a case that the RB is a newly established Signaling Radio Bearer (SRB) or Data Radio Bearer (DRB), performing the data transmission by use of the primary RLC entity; and

in a case that the RB is an SRB or DRB that has been established, performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and continuing the data transmission by use of the secondary RLC entity for data that has been delivered to the secondary RLC entity.

2. The method of claim 1, wherein the at least two transmission entities comprise a primary Radio Link Control (RLC) entity and a secondary RLC entity, and

setting the transmission entity corresponding to the RB according to the at least two transmission entities indicated in the first indication message comprises:

in a case that the RB is a newly established Signaling Radio Bearer (SRB) or Data Radio Bearer (DRB), constructing a first RLC entity and a second RLC entity, setting the first RLC entity as the primary RLC entity, and setting the second RLC entity as the secondary RLC entity; and

in a case that the RB is an SRB or DRB that has been established, setting one RLC entity that has been constructed as the primary RLC entity, and setting another RLC entity that has been constructed as the secondary RLC entity.

3. The method of claim 1, wherein setting the present state of the PDCP packet duplication function adopts at least one of following setting manners:

setting the present state to be a system default initial state, the system default initial state comprising the active state or the inactive state; or

in a case that the first indication message further comprises second information, the second information is for representing an initial state, configured by the base station, of the PDCP packet duplication function and the initial state is the active state or the inactive state, setting the present state to be the initial state, configured by the base station, of the PDCP packet duplication function according to the second information; or

in a case that an activation instruction for the PDCP packet duplication function is received from the base station, setting the present state to be the active state according to the activation instruction.

4. The method of claim 1, wherein performing the data transmission according to the present state and the transmission entity further comprises:

in the case that the RB is the SRB or DRB that has been established, adopting at least one of following data transmission manners:

in an Acknowledge Mode (AM), performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and data that has been delivered to the secondary RLC entity but has not yet been successfully sent, or

in an Unacknowledged Mode (UM), performing the data transmission by use of

the primary RLC entity for data that is not delivered to the RLC layer, or

in a UM, reporting, by an RLC layer, data that has been delivered to the secondary RLC entity but has not yet been sent to a PDCP layer and performing, by the PDCP layer, the data transmission by use of the primary RLC entity for data that is not delivered to the RLC layer and the data that has been delivered to the secondary RLC entity but has not yet been sent.

5. The method of claim 4, wherein performing the data transmission by use of the primary RLC entity for the data that is not delivered to the RLC layer and the data that has been delivered to the secondary RLC entity but has not yet been successfully sent further comprises:

reconstructing the secondary RLC entity that has been constructed.

6. The method of claim 1, further comprising:

receiving a third indication message from the base station, the third indication message being for representing a de-configuration instruction for the PDCP packet duplication function; and

releasing a secondary RLC entity, and performing the data transmission by use of a primary RLC entity.

7. The method of claim 1, further comprising:

receiving a fourth indication message from the base station, the fourth indication message being for representing a de-configuration instruction for the PDCP packet duplication function and representing an RLC entity specified to be released; and

releasing the RLC entity specified to be released, and performing the data transmission by use of an RLC entity not specified to be released.

8. The method of claim 1, further comprising:

receiving a fifth indication message from the base station, the fifth indication

message being for representing a bearer splitting function configured for the RB by the base station;

disabling the PDCP packet duplication function, and enabling the bearer splitting function; and

adopting at least one of following data transmission manners for data that has been delivered to an RLC layer:

continuing the data transmission by use of a primary RLC entity and a secondary RLC entity, or

in a case that the present state of the PDCP packet duplication function is the active state prior to that the PDCP packet duplication function is disabled, reconstructing the secondary RLC entity, or

in a case that the present state of the PDCP packet duplication function is the inactive state prior to that the PDCP packet duplication function is disabled, continuing the data transmission by use of the primary RLC entity and the secondary RLC entity.

9. A method for data transmission, applied to a base station, the method comprising:

configuring a Packet Data Convergence Protocol (PDCP) packet duplication function for a Radio Bearer (RB);

configuring at least two transmission entities configured to implement the PDCP packet duplication function;

adding first information into a first indication message, the first information being for representing the PDCP packet duplication function and the at least two transmission entities; sending the first indication message to a terminal to enable the terminal to set a transmission function corresponding to the RB to be the PDCP packet duplication function according to the first indication message and set a transmission entity corresponding to the RB according to the at least two transmission entities indicated in the first indication message;

configuring an initial state of the PDCP packet duplication function, the initial state being an active state or an inactive state; and

notifying second information for representing the initial state to the terminal to enable

the terminal to determine the initial state of the PDCP packet duplication function and perform data transmission according to the present state and the transmission entity,

wherein the present state is the inactive state, the transmission entity comprises a primary Radio Link Control (RLC) entity and a secondary RLC entity,

performing the data transmission according to the present state and the transmission entity comprises:

in a case that the RB is a newly established Signaling Radio Bearer (SRB) or Data Radio Bearer (DRB), performing the data transmission by use of the primary RLC entity; and

in a case that the RB is an SRB or DRB that has been established, performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and continuing the data transmission by use of the secondary RLC entity for data that has been delivered to the secondary RLC entity.

10. The method of claim 9, further comprising:

adding the second information for representing the initial state into the first indication message.

11. The method of claim 9, further comprising:

sending a second indication message to the terminal, the second indication message being for representing a deactivation instruction for the PDCP packet duplication function.

12. The method of claim 9, further comprising:

sending a third indication message to the terminal, the third indication message being for representing a de-configuration instruction for the PDCP packet duplication function.

13. The method of claim 9, further comprising:

sending a fourth indication message to the terminal, the fourth indication message being for representing a de-configuration instruction for the PDCP packet duplication function and a Radio Link Control (RLC) entity specified to be released.

14. The method of claim 9, further comprising:

sending a fifth indication message to the terminal, the fifth indication message being for representing a bearer splitting function configured for the RB by the base station.

15. A device for data transmission, applied to a terminal, the device comprising:

a first receiving module, configured to receive a first indication message from a base station, wherein the first indication message comprises first information and the first information is for representing a Packet Data Convergence Protocol (PDCP) packet duplication function and at least two transmission entities configured for a Radio Bearer (RB) by the base station;

a first setting module, configured to set a transmission function corresponding to the RB to be the PDCP packet duplication function according to the first indication message;

a second setting module, configured to set a transmission entity corresponding to the RB according to the at least two transmission entities indicated in the first indication message;

a third setting configuration module, configured to set a present state of the PDCP packet duplication function, the present state comprising an active state and an inactive state; and

a first transmitting module, configured to perform data transmission according to the present state and the transmission entity,

wherein the present state is the inactive state, the transmission entity comprises a primary Radio Link Control (RLC) entity and a secondary RLC entity,

the first transmitting module comprises:

a first transmission submodule, configured to, in a case that the RB is a newly established Signaling Radio Bearer (SRB) or Data Radio Bearer (DRB), perform the data transmission by use of the primary RLC entity; and

a second transmission submodule, configured to, in a case that the RB is an SRB or DRB that has been established, performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and continuing the data transmission by

use of the secondary RLC entity for data that has been delivered to the secondary RLC entity.

16. The device of claim 15, wherein the at least two transmission entities comprise a primary Radio Link Control (RLC) entity and a secondary RLC entity, and the second setting module comprises:

a first setting submodule, configured to, in a case that the RB is a newly established Signaling Radio Bearer (SRB) or Data Radio Bearer (DRB), construct a first RLC entity and a second RLC entity, set the first RLC entity as the primary RLC entity and set the second RLC entity as the secondary RLC entity; and

a second setting submodule, configured to, in a case that the RB is an SRB or DRB that has been established, set one RLC entity that has been constructed as the primary RLC entity and set another RLC entity that has been constructed as the secondary RLC entity.

17. The device of claim 15, wherein the third setting module comprises: a third setting submodule, configured to adopt at least one of following setting manners:

setting the present state to be a system default initial state, the system default initial state comprising the active state or the inactive state; or

in a case that the first indication message further comprises second information, the second information is for representing an initial state, configured by the base station, of the PDCP packet duplication function and the initial state is the active state or the inactive state, setting the present state to be the initial state, configured by the base station, of the PDCP packet duplication function according to the second information; or

in a case that an activation instruction for the PDCP packet duplication function is received from the base station, setting the present state to be the active state according to the activation instruction.

18. The device of claim 15, wherein the second transmission submodule is configured to, in the case that the RB is the SRB or DRB that has been established, adopt at least one of following data transmission manners:

performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and continuing the data transmission by use of the secondary RLC entity for data that has been delivered to the secondary RLC entity, or

in an Acknowledge Mode (AM), performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and data that has been delivered to the secondary RLC entity but has not yet been successfully sent, or

in an Unacknowledged Mode (UM), performing the data transmission by use of the primary RLC entity for the data that is not delivered to the RLC layer, or

in a UM, reporting, by an RLC layer, data that has been delivered to the secondary RLC entity but has not yet been sent to a PDCP layer and performing, by the PDCP layer, the data transmission by use of the primary RLC entity for data that is not delivered to the RLC layer and the data that has been delivered to the secondary RLC entity but has not yet been sent.

19. The device of claim 18, wherein the second transmission submodule further comprises:

a third transmission submodule, configured to, upon that data transmission is performed by use of the primary RLC entity for the data that is not delivered to the RLC layer and the data that has been delivered to the secondary RLC entity but has not yet been successfully sent, reconstruct the secondary RLC entity that has been constructed.

20. The device of claim 15, further comprising:

a third receiving module, configured to receive a third indication message from the base station, the third indication message being for representing a de-configuration instruction for the PDCP packet duplication function; and

a third transmitting module, configured to release a secondary RLC entity and perform the data transmission by use of the primary RLC entity.

21. The device of claim 15, further comprising:

a fourth receiving module, configured to receive a fourth indication message from

the base station, the fourth indication message being for representing a de-configuration instruction for the PDCP packet duplication function and representing an RLC entity specified to be released; and

a fourth transmitting module, configured to release the RLC entity specified to be released and perform the data transmission by use of an RLC entity not specified to be released.

22. The device of claim 15, further comprising:

a fifth receiving module, configured to receive a fifth indication message from the base station, the fifth indication message being for representing a bearer splitting function configured for the RB by the base station;

an enabling module, configured to disable the PDCP packet duplication function and enable the bearer splitting function; and

a fifth transmitting module, configured to adopt at least one of following data transmission manners for data that has been delivered to an RLC layer:

continuing the data transmission by use of a primary RLC entity and a secondary RLC entity, or

in a case that the present state of the PDCP packet duplication function is the active state prior to that the PDCP packet duplication function is disabled, reconstructing the secondary RLC entity, or

in a case that the present state of the PDCP packet duplication function is the inactive state prior to that the PDCP packet duplication function is disabled, continuing the data transmission by use of the primary RLC entity and the secondary RLC entity.

23. A device for data transmission, applied to a base station, the device comprising:

a first configuration module, configured to configure a Packet Data Convergence Protocol (PDCP) packet duplication function for a Radio Bearer (RB);

a second configuration module, configured to configure at least two transmission entities configured to implement the PDCP packet duplication function;

a first addition module, configured to add first information into a first indication message, the first information being for representing the PDCP packet duplication function and the at least two transmission entities;

a first sending module, configured to send the first indication message to a terminal to enable the terminal to set a transmission function corresponding to the RB to be the PDCP packet duplication function according to the first indication message and set a transmission entity corresponding to the RB according to the at least two transmission entities indicated in the first indication message;

a third configuration module, configured to configure an initial state of the PDCP packet duplication function, the initial state being an active state or an inactive state; and

a module, configured to notify second information for representing the initial state to the terminal to enable the terminal to determine the initial state of the PDCP packet duplication function and perform data transmission according to the present state and the transmission entity,

wherein the present state is the inactive state, the transmission entity comprises a primary Radio Link Control (RLC) entity and a secondary RLC entity,

performing the data transmission according to the present state and the transmission entity comprises:

in a case that the RB is a newly established Signaling Radio Bearer (SRB) or Data Radio Bearer (DRB), performing the data transmission by use of the primary RLC entity; and

in a case that the RB is an SRB or DRB that has been established, performing the data transmission by use of the primary RLC entity for data that is not delivered to an RLC layer and continuing the data transmission by use of the secondary RLC entity for data that has been delivered to the secondary RLC entity.

24. The device of claim 23, further comprising:

a second addition module, configured to add the second information for representing the initial state into the first indication message.

25. The device of claim 23, further comprising:

a second sending module, configured to send a second indication message to the terminal, the second indication message being for representing a deactivation instruction for the PDCP packet duplication function.

26. The device of claim 23, further comprising:

a third sending module, configured to send a third indication message to the terminal, the third indication message being for representing a de-configuration instruction for the PDCP packet duplication function.

27. The device of claim 23, further comprising:

a fourth sending module, configured to send a fourth indication message to the terminal, the fourth indication message being for representing a de-configuration instruction for the PDCP packet duplication function and a Radio Link Control (RLC) entity specified to be released.

28. The device of claim 23, further comprising:

a fifth sending module, configured to send a fifth indication message to the terminal, the fifth indication message being for representing a bearer splitting function configured for the RB by the base station.