CLAIMS

What is claimed is:

1. A data transmission method, applied to user equipment UE, wherein the method comprises:

in a dual-connectivity mobility management procedure,

in a case that the first information is used to indicate that a first path is capable of transmitting uplink data, transmitting a first uplink data on the first path, wherein a data type of the first uplink data comprises any one of the following: a Packet Data Convergence Protocol (PDCP) layer data packet, a PDCP layer control packet, or PDCP layer data,

wherein in a case that a PDCP entity of the UE buffers second data and third data, that the second data is data transmitted through the first path, and that the third data is data transmitted through a second path, the method further comprises:

transmitting second information to a Media Access Control (MAC) entity corresponding to the first path and transmitting third information to a MAC entity corresponding to the second path; or

transmitting second information to a MAC entity corresponding to the first path; wherein

the second information is used to indicate a data amount of the second data, and the third information is used to indicate a data amount of the third data,

the first path is a target path of a handover procedure or an Secondary Cell Group SCG change procedure, and the second path is a source path of a handover procedure or an SCG change procedure.

2. The method according to claim 1, wherein the method further comprises:

in a case that the first information is used to indicate that the second path is incapable of transmitting the target uplink data, skipping transmitting the first uplink data on the second path, wherein the first information is specifically used to

indicate that no uplink resources can be allocated to a target channel for the second path.

3. The method according to claim 2, wherein, the target channel comprises a logical channel for a data bearer of the source path of the handover procedure or the SCG change procedure and/or a logical channel for a signaling bearer of the source path of the handover procedure or the SCG change procedure.

4. The method according to claim 2 or 3, wherein before transmitting the first uplink data on the first path, the method further comprises:

in a case that a transmission path for the first uplink data has changed to the first path, allocating no uplink resources to a target channel for the second path according to a target uplink grant; wherein

the target uplink grant is used to indicate an uplink resource for the second path.

5. The method according to claim 4, wherein the allocating no uplink resources to a target channel for the second path according to a target uplink grant comprises:

allocating, by the MAC entity of the UE, no uplink resources to a target channel for the second path according to a target uplink grant.

6. The method according to claim 1, wherein before transmitting the first uplink data on the first path, the method further comprises:

in a case that the UE receives a mobility management command, marking the first path as a path capable of transmitting uplink data, and/or marking the second path as a path incapable of transmitting the target uplink data; wherein

the first path is a path capable of transmitting uplink data by default, and the second path is a path incapable of transmitting the target uplink data by default.

7. The method according to claim 1, wherein before transmitting the first uplink data on the first path, the method further comprises:

in a case that a transmission path for the target uplink data has changed, marking the first path as a path capable of transmitting uplink data, and/or

marking the second path as a path incapable of transmitting the target uplink data; wherein

the first path is a path previously incapable of transmitting uplink data, and the second path is a path previously capable of transmitting target uplink data.

8. The method according to claim 6 or 7, wherein

the marking the first path as a path capable of transmitting uplink data comprises:

marking, by the PDCP entity of the UE, the first path as a path capable of transmitting uplink data; and

the marking the second path as a path incapable of transmitting the target uplink data comprises:

marking, by the PDCP entity of the UE, the second path as a path incapable of transmitting the target uplink data.

9. The method according to claim 1, wherein the transmitting the first uplink data on the first path comprises:

after the PDCP entity of the UE receives an uplink data transmission indication from an lower layer entity, transmitting the first uplink data on the first path.

10. The method according to claim 1, wherein after the dual-connectivity mobility management procedure, the method further comprises:

in a case that the PDCP entity of the UE receives no uplink data transmission indication from an lower layer entity, transmitting the first uplink data on the first path; wherein

the after the dual-connectivity mobility management procedure comprises any one of the following: successful completion of a random access to the target cell of the handover procedure or the SCG change procedure, completion of a handover, completion of an SCG change, and release by the UE of a connection with the source cell of the handover procedure or the SCG change procedure.

11. The method according to claim 1, wherein the PDCP layer data packet is a PDCP layer data packet of a data bearer; and/or the PDCP layer data packet is a

PDCP layer control packet of a data bearer; and/or the PDCP layer data packet is PDCP layer data of a data bearer.

12. User equipment UE, comprising:

an execution module, configured to: in a dual-connectivity mobility management procedure in a case that first information is used to indicate that a first path is capable of transmitting uplink data, transmit first uplink data on the first path, wherein a data type of the target uplink data comprises any one of the following: Packet Data Convergence Protocol (PDCP) layer data packet, PDCP layer control packet, and PDCP layer data; and

wherein the transmission module is configured to: in a case that a PDCP entity of the UE buffers second data and third data, that the second data is data transmitted through the first path, and that the third data is data transmitted through the second path, transmit second information to a Media Access Control (MAC) entity corresponding to the first path and transmit third information to a MAC entity corresponding to the second path, or

transmit second information to a MAC entity corresponding to the first path; wherein

the second information is used to indicate a data amount of the second data, and the third information is used to indicate a data amount of the third data

the first path is a target path of a handover procedure or a Secondary Cell Group (SCG) change procedure, and the second path is a source path of a handover procedure or an SCG change procedure.

13. The UE according to claim 12, wherein the execution module is further configured to:

in a case that the first information is used to indicate that the second path is incapable of transmitting the target uplink data, skip transmitting the first uplink data on the second path, wherein the first information is specifically used to indicate that no uplink resources are allocated to a target channel for the second path.

14. The UE according to claim 13, wherein the target channel comprises a logical channel for a data bearer of the source path of the handover procedure or the SCG change procedure and/or a logical channel for a signaling bearer of the source path of the handover procedure or the SCG change procedure.

15. The UE according to claim 13, wherein the execution module is further configured to: in a case that a transmission path for the first uplink data has changed to the first path, allocate no uplink resources to a target channel for the second path according to a target uplink grant; wherein the target uplink grant is used to indicate an uplink resource for the second path.

16. The UE according to claim 12, wherein the execution module is further configured to: in a case that the UE receives a mobility management command, mark the first path as a path capable of transmitting uplink data, and/or mark the second path as a path incapable of transmitting the target uplink data; wherein

the first path is a path capable of transmitting uplink data by default, and the second path is a path incapable of transmitting the target uplink data by default.

17. A terminal device, comprising a processor, a memory, and a computer program stored in the memory and capable of running on the processor, wherein when the computer program is executed by the processor, the steps of the data transmission method according to any one of claims 1 to 11 are implemented.

18. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a processor, the steps of the data transmission method according to any one of claims 1 to 11 are implemented.