CLAIMS

What is claimed is:

1. A method for connection failure recovery, applied to a terminal device, wherein the method comprises:

determining a cause of a master cell group MCG failure; and

performing corresponding connection failure recovery processing and/or reporting information related to the MCG failure based on the cause of the MCG failure;

wherein the performing corresponding connection failure recovery processing and/or reporting information related to the MCG failure based on the cause of the MCG failure comprises:

in EUTRA-NR Dual Connectivity EN-DC or in NG-RAN EUTRA-NR Dual Connectivity NGEN-DC, when the cause of the MCG failure is a second cause, skipping initiating an MCG re-establishment procedure or a re-establishment procedure of the terminal device, performing a suspend operation on the MCG, and sending the information related to the MCG failure to a network device serving a secondary cell group SCG;

wherein the second cause comprises at least one of the following: radio link failure; and failure of handover based on a second handover command, wherein the second handover command does not comprise SCG configuration.

2. The method according to claim 1, wherein the performing corresponding connection failure recovery processing based on the cause of the MCG failure comprises:

when the cause of the MCG failure is a first cause, initiates an MCG re-establishment procedure or a re-establishment procedure of the terminal device, wherein

the first cause comprises at least one of the following:

signaling radio bearer SRB integrity check failure;

radio resource control RRC reconfiguration failure;

failure of handover based on a first handover command, wherein the first handover command comprises secondary cell group SCG configuration;

a quantity of uplink transmissions exceeding a threshold; and

random access channel RACH transmission failure.

3. The method according to claim 1, wherein, the skipping initiating the MCG re-establishment procedure or the re-establishment procedure of the terminal device, performing the suspend operation on the MCG, and sending the information related to the MCG failure to the

network device serving the SCG, when the cause of the MCG failure is the second cause, comprises:

in EUTRA-NR Dual Connectivity (EN-DC) or in NG-RAN EUTRA-NR Dual Connectivity (NGEN-DC), when the cause of the MCG failure is the second cause, skipping initiating the MCG re-establishment procedure or the re-establishment procedure of the terminal device, performing the suspend operation on the MCG, and sending the information related to the MCG failure to the network device serving the SCG.

4. The method according to claim 1, wherein the information related to the MCG failure comprises a cause value of the MCG failure.

5. The method according to claim 4, wherein the cause value comprises at least one of the following: a first value, a second value, and a third value, wherein the first value indicates a radio link failure, the second value indicates a handover failure, and the third value indicates at least one of the following: T304 timer expiry, T301 timer expiry, a maximum quantity of uplink transmissions reached, and RACH transmission failure.

6. A terminal device, comprising:

a determining module, configured to determine a cause of a master cell group MCG failure; and

a processing module, configured to perform corresponding connection failure recovery processing and/or report information related to the MCG failure based on the cause of the MCG failure;

wherein performing corresponding connection failure recovery processing and/or reporting information related to the MCG failure based on the cause of the MCG failure comprises:

in EUTRA-NR Dual Connectivity EN-DC or in NG-RAN EUTRA-NR Dual Connectivity NGEN-DC, when the cause of the MCG failure is a second cause, skipping initiating an MCG re-establishment procedure or a re-establishment procedure of the terminal device, performing a suspend operation on the MCG, and sending the information related to the MCG failure to a network device serving a secondary cell group SCG;

wherein the second cause comprises at least one of the following: radio link failure; and failure of handover based on a second handover command, wherein the second handover command does not comprise SCG configuration.

7. The terminal device according to claim 6, wherein, the skipping initiating the MCG re-

establishment procedure or the re-establishment procedure of the terminal device, performing the suspend operation on the MCG, and sending the information related to the MCG failure to the network device serving the SCG, when the cause of the MCG failure is the second cause, comprises:

in EUTRA-NR Dual Connectivity (EN-DC) or in NG-RAN EUTRA-NR Dual Connectivity (NGEN-DC), when the cause of the MCG failure is the second cause, skipping initiating the MCG re-establishment procedure or the re-establishment procedure of the terminal device, performing the suspend operation on the MCG, and sending the information related to the MCG failure to the network device serving the SCG.

8. 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 method for connection failure recovery according to any one of claims 1 to 5 are implemented.

9. 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 method for connection failure recovery according to any one of claims 1 to 5 are implemented.