

CLAIMS

1. A communication method, performed by a terminal device or a chip for the terminal device, comprising:

accessing a third cell of a first network device; and

5 sending connection failure information and an identifier of a first cell to the first network device via a radio resource control, RRC, message, wherein the first cell is a cell from which the terminal device receives a reconfiguration message or a handover command message, a handover failure occurs in a procedure in which the terminal device attempts to be handed over from the first cell of a source network device to a second cell of a target network device, the first cell uses
10 a first radio access technology, the second cell and the third cell use a second radio access technology different from the first radio access technology; and wherein

the connection failure information is in a form of a container in the RRC message and the identifier of the first cell is outside the container.

2. A communication method, performed by a terminal device or a chip for the terminal device,
15 comprising:

accessing a third cell of a first network device; and

sending connection failure information and an identifier of a first cell to the first network device via a radio resource control, RRC, message, wherein the first cell is a cell in which a radio link failure, RLF, occurs on the terminal device, wherein

20 the first cell uses a first radio access technology, the third cell uses a second radio access technology different from the first radio access technology and the connection failure information is in a form of a container in the RRC message and the identifier of the first cell is outside the container.

3. The method according to claim 1 or 2, wherein the second radio access technology is new
25 radio NR, and the first radio access technology is evolved universal terrestrial radio access E-UTRA.

4. The method according to any one of claims 1 to 3, wherein one of the following is carried in the RRC message and outside the container:

a tracking area code, TAC, of the first cell,

type information of the first cell, or,
the TAC of the first cell and the type information of the first cell;
wherein the type information indicates that the first cell is a long term evolution, LTE, cell,
an eLTE cell, or, a new radio, NR, cell.

5 5. The method according to any one of claims 1 to 4, wherein the identifier of the first cell is
a cell global identifier.

6. The method according to claim 1 or any one of claims 3 to 5 when dependent on claim 1,
wherein the connection failure information indicates the handover failure occurs in the procedure
in which the terminal device attempts to be handed over from the first cell of the source network
10 device to the second cell of the target network device.

7. The method according to claim 2 or any one of claims 3 to 5 when dependent on claim 2,
wherein the connection failure information indicates the RLF occurs in the first cell of the source
network device.

8. A communication method, performed by a first network device or a chip for the first
15 network device, comprising:

receiving a radio resource control, RRC, message from a terminal device, wherein the RRC
message comprises connection failure information and an identifier of a first cell, wherein the first
cell is a cell from which the terminal device receives a reconfiguration message or a handover
command message is received by the terminal device, a handover failure occurs in a procedure in
20 which the terminal device attempts to be handed over from the first cell of a source network device
to a second cell of a target network device, the first cell uses a first radio access technology, the
second cell and the third cell use a second radio access technology different from the first radio
access technology; and

determining the identifier of the first cell based on the RRC message, wherein
25 the connection failure information is in a form of a container in the RRC message and the
identifier of the first cell is outside the container.

9. A communication method, performed by a first network device or a chip for the first
network device, comprising:

receiving a radio resource control, RRC, message from a terminal device, wherein the RRC
30 message comprises connection failure information and an identifier of a first cell, wherein the first
cell is a cell in which a radio link failure, RLF, occurs on the terminal device, the first cell uses a

first radio access technology, a third cell of the first network device uses a second radio access technology different from the first radio access technology; and

determining the identifier of the first cell based on the RRC message, wherein

the connection failure information is in a form of a container in the RRC message and the

5 identifier of the first cell is outside the container.

10. The method according to claim 8 or 9, further comprising:

sending, to a second network device through an interface between the first network device and the second network device, the connection failure information and information indicating a radio access technology of an RRC format of the connection failure information, wherein the
10 second network device is a network device which manages the first cell .

11. The method according to claim 8 or 9, further comprising:

sending, to a second network device through a core network device, the connection failure information and information indicating a radio access technology of an RRC format of the connection failure information, wherein the second network device is a network device which
15 manages the first cell.

12. The method according to any one of claims 8 to 11, wherein the second radio access technology is new radio NR, and the first radio access technology is evolved universal terrestrial radio access E-UTRA.

13. The method according to any one of claims 8 to 12, wherein one of the following is carried
20 in the RRC message and outside the container:

a tracking area code, TAC, of the first cell,

type information of the first cell, or,

the TAC of the first cell and the type information of the first cell;

wherein the type information indicates that the first cell is a long term evolution, LTE, cell,
25 an eLTE cell, or, a new radio, NR, cell.

14. The method according to any one of claims 8 to 13, wherein the identifier of the first cell is a cell global identifier.

15. The method according to claim 8 or any one of claims 10 to 14 when dependent on claim 8, wherein the connection failure information indicates the handover failure occurs in the
30 procedure in which the terminal device attempts to be handed over from the first cell of the source network device to the second cell of the target network device.

16. The method according to claim 9 or any one of claims 10 to 14 when dependent on claim 9, wherein the connection failure information indicates the RLF occurs in the first cell of the source network device.

17. A communication method, performed by a second network device or a chip for the second network device, comprising:

receiving, from a first network device through an interface between the second network device and the first network device or via a core network device, connection failure information and information indicating a radio access technology of an RRC format of the connection failure information; and

determining, based on the information indicating the radio access technology of the RRC format of the connection failure information, the radio access technology of the RRC format of the connection failure information; wherein a first cell of the second network device is a cell from which a terminal device receives a reconfiguration message or a handover command message, a handover failure occurs in a procedure in which the terminal device attempts to be handed over from the first cell of the second network device to a second cell of a target network device, or, the first cell of the second network device is a cell in which a connection failure occurs;

the connection failure information is in a form of a container in a RRC message from the terminal device to the first network device and an identifier of the first cell of the second network device is outside the container; and

the first cell of the second network device uses a first radio access technology, and the second cell of the target network device and a third cell which the first network device manages use a second radio access technology different from the first radio access technology.

18. An apparatus, wherein the apparatus is a terminal device or a chip or a circuit disposed in the terminal device, and the apparatus comprises a unit or a module configured to perform the method according to any one of claims 1 to 7.

19. An apparatus, wherein the apparatus is a terminal device or a chip or a circuit disposed in the terminal device, and comprises a processor and a memory, wherein the memory is configured to store a computer program, the computer program comprises program instructions, and when the processor runs the program instructions, the apparatus is enabled to perform the method according to any one of claims 1 to 7.

20. An apparatus, wherein the apparatus is a network device or a chip or a circuit disposed in

the network device, and the apparatus comprises a unit or a module configured to perform the method according to any one of claims 8 to 16.

21. An apparatus, wherein the apparatus is a network device or a chip or a circuit disposed in the network device, and comprises a processor and a memory, wherein the memory is configured
5 to store a computer program, the computer program comprises program instructions, and when the processor runs the program instructions, the apparatus is enabled to perform the method according to any one of claims 8 to 16.

22. An apparatus, wherein the apparatus is a network device or a chip or a circuit disposed in the network device, and the apparatus comprises a unit or a module configured to perform the
10 method according to any one of claims 17.

23. A communications system, comprising the apparatus according to claim 18 or 19 and the apparatus according to claim 20 or 21, or comprising the apparatus according to claim 20 or 21 and the apparatus according to claim 22.

24. A readable storage medium or a program product, wherein the readable storage medium
15 or the program product stores program instructions, and when the program instructions are run, the method according to any one of claims 1 to 7, any one of claims 8 to 16, or claim 17 is performed.