CLAIMS

1. A beam failure recovery method performed by a terminal device or a chip of the terminal device, wherein the method comprises:

receiving configuration information of a first cell, wherein the configuration information of the first cell comprises two beam failure detection resource groups and two candidate beam resource groups, and the two beam failure detection resource groups are in a one-to-one correspondence with the two candidate beam resource groups;

if a beam failure occurs in at least one of the two beam failure detection resource groups, sending, by the terminal device by using a first medium access control control element (MAC CE), beam failure recovery information corresponding to the first cell;

wherein the first MAC CE comprises a bitmap, a first bit in the bitmap corresponds to the first cell, and the first bit indicates that a beam failure occurs in the first cell; and

a first field comprised in the first MAC CE indicates that the beam failure recovery information corresponding to the first cell is included in one or two octets.

2. The method according to claim 1, wherein each octet in the one or two octets comprises a second field, and

the second field indicates information about a beam failure detection resource group in which the beam failure occurs.

3. The method according to claim 1, wherein the bitmap comprises multiple bits, each of the multiple bits corresponds to one cell, and each of the multiple bits is used to indicate whether a beam failure occurs in a corresponding cell.

4. The method according to claim 2, wherein when the first field indicates that one bit corresponds to one octet, the second field indicates the information about the beam failure detection resource group in which the beam failure occurs; or

wherein the second field is reserved when the first field indicates that one bit corresponds to a plurality of octets.

5. The method according to any one of claims 1 to 4, wherein each octet of the one or two octets further comprises a third field, and the third field indicates a beam failure detection resource group corresponding to the each octet or a candidate beam resource group corresponding to the each octet.

6. The method according to any one of claims 1 to 5, wherein each octet of the one or two octets further comprises a fourth field, and

the fourth field indicates whether there is a candidate beam or candidate beam resource meeting a quality requirement in the candidate beam resource group corresponding to the each

octet.

7. The method according to any one of claims 1 to 6, wherein each octet of the one or two octets further comprises a fifth field, and

the fifth field indicates information about the candidate beam or candidate beam resource that meets the quality requirement and that is determined in the candidate beam resource group corresponding to the each octet.

8. The method according to any one of claims 1 to 7, wherein a logical channel identifier corresponding to the first MAC CE is any one of the following logical channel identifiers: 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, or 47.

9. A terminal device, comprising:

a receiving unit, configured to receive configuration information of a first cell, wherein the configuration information of the first cell comprises two beam failure detection resource groups and two candidate beam resource groups, and the two beam failure detection resource groups are in a one-to-one correspondence with the two candidate beam resource groups,;

a sending unit, configured to: when a beam failure occurs in at least one of the two beam failure detection resource groups, send, by using a first medium access control control element (MAC CE), beam failure recovery information corresponding to the first cell,

wherein the first MAC CE comprises a bitmap, a first bit in the bitmap corresponds to the first cell, and the first bit indicates that a beam failure occurs in the first cell; and

a first field comprised in the first MAC CE indicates that the beam failure recovery information corresponding to the first cell is included in one or two octets.

10. The terminal device according to claim 9, wherein each octet in the one or two octets comprises a second field, and

the second field indicates information about a beam failure detection resource group in which the beam failure occurs.

11. The terminal device according to claim 9, wherein the bitmap comprises multiple bits, each of the multiple bits corresponds to one cell, and each of the multiple bits is used to indicate whether a beam failure occurs in a corresponding cell.

12. The terminal device according to claim 10, wherein when the first field indicates that one bit corresponds to one octet, the second field indicates the information about the beam failure detection resource group in which the beam failure occurs; or

wherein the second field is reserved when the first field indicates that one bit corresponds to a plurality of octets.

13. The terminal device according to any one of claims 9-12, wherein each octet of the one or two octets further comprises a third field, and the third field indicates a beam failure detection

resource group corresponding to the each octet or a candidate beam resource group corresponding to the each octet.

14. The terminal device according to any one of claims 9-13, wherein each octet of the one or two octets further comprises a fourth field, and

the fourth field indicates whether there is a candidate beam or candidate beam resource meeting a quality requirement in the candidate beam resource group corresponding to the each octet.

15. The terminal device according to any one of claims 9-14, wherein each octet of the one or two octets further comprises a fifth field, and

the fifth field indicates information about the candidate beam or candidate beam resource that meets the quality requirement and that is determined in the candidate beam resource group corresponding to the each octet.

16. The terminal device according to any one of claims 9-15, wherein a logical channel identifier corresponding to the first MAC CE is any one of the following logical channel identifiers: 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, or 47.

17. A communication apparatus, comprising at least one processor and a communication interface, wherein the at least one processor is configured to execute a computer program or instructions, so that the communication apparatus performs the method according to any one of claims 1 to 8.

18. The communication apparatus according to claim 17, wherein the apparatus further comprises at least one memory, the at least one memory is coupled to the at least one processor, and the computer program or instructions are stored in the at least one memory.

19. A computer-readable storage medium, configured to store computer instructions, wherein when the computer instructions are executed, the method according to any one of claims 1 to 8 is implemented.

20. A chip, comprising a processor and an interface, and being configured to invoke, from a memory, a computer program stored in the memory, and run the computer program, to perform the method according to any one of claims 1 to 8.