CLAIMS

What is claimed is:

1. A user equipment UE capability information reporting method, comprising:

receiving, UE capability enquiry information, wherein the UE capability enquiry information is used to query a capability of the UE; and

sending, UE capability information based on the UE capability enquiry information, wherein the UE capability information is used to indicate that the UE supports a first-type band combination, wherein the first-type band combination comprises a band combination consisting of an intra-band evolved universal terrestrial radio access–new radio dual connectivity intra-band ENDC band combination and new radio carrier aggregation NRCA, wherein

the UE capability information comprises first information and second information, the first information comprises a first bandwidth combination set of the intra-band ENDC of the first-type band combination supported by the UE, and the second information comprises a second bandwidth combination set of the NRCA of the first-type band combination supported by the UE.

2. The method according to claim 1, wherein the second information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

3. The method according to claim 1 or 2, wherein

the second information further comprises the first-type band combination supported by the UE, the first-type band combination comprises n band combinations supported by the UE, and the second bandwidth combination set is all bandwidth combination sets of the NRCA corresponding to the n band combinations;

the first bandwidth combination set is all bandwidth combination sets of the intra-band ENDC corresponding to the n band combinations.

4. The method according to claim 1 or 2, wherein the first information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

5. The method according to claim 4, wherein if the i^{th} bit in the m bits is 0, the i^{th} bit indicates that the UE does

not support the bandwidth combination set corresponding to the i^{th} bit; or if the i^{th} bit in the m bits is 1, the i^{th} bit indicates that the UE supports the bandwidth combination set corresponding to the i^{th} bit.

6. The method according to claim 1 or 2, wherein the second information further comprises at least one of a band list that is supported by the UE, and/or an NRCA parameter that is supported by the UE or an evolved universal terrestrial radio access carrier aggregation EUTRA CA parameter that is supported by the UE.

7. A user equipment UE capability information reporting method, comprising:

sending UE capability enquiry information, wherein the UE capability enquiry information is used to query a capability of the UE; and

receiving UE capability information, wherein the UE capability information is used to indicate that the UE supports a first-type band combination, wherein the first-type band combination comprises a band combination consisting of an intra-band evolved universal terrestrial radio access–new radio dual connectivity intra-band ENDC band combination and new radio carrier aggregation NRCA, wherein

the UE capability information comprises first information and second information, the first information comprises a first bandwidth combination set of the intra-band ENDC of the first-type band combination supported by the UE, and the second information comprises a second bandwidth combination set of the NRCA of the first-type band combination supported by the UE.

8. The method according to claim 7, wherein the second information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

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

the second information further comprises the first-type band combination supported by the UE, the first-type band combination comprises n band combinations supported by the UE, and the second bandwidth combination set is all bandwidth combination sets of the NRCA corresponding to the n band combinations;

the first bandwidth combination set is all bandwidth combination sets of the intra-band ENDC corresponding to the n band combinations.

10. The method according to claim 7 or 8, wherein the first information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal

to m, and m is an integer greater than or equal to 1.

11. The method according to claim 10, wherein if the i^{th} bit in the m bits is 0, the i^{th} bit indicates that the UE does not support the bandwidth combination set corresponding to the i^{th} bit; or if the i^{th} bit in the m bits is 1, the i^{th} bit indicates that the UE supports the bandwidth combination set corresponding to the i^{th} bit.

12. The method according to claim 7 or 8, wherein the second information further comprises at least one of a band list that is supported by the UE, and/or an NRCA parameter that is supported by the UE or an evolved universal terrestrial radio access carrier aggregation EUTRA CA parameter that is supported by the UE.

13. The method according to claim 7 or 8, wherein the method further comprises:

allocating, by the network device, a resource to the UE based on the UE capability information.

14. A communication apparatus, wherein the communication apparatus comprises a receiving module and a sending module, wherein

the receiving module is configured to receive UE capability enquiry information, wherein the UE capability enquiry information is used to query a capability of a UE; and

the sending module is configured to send UE capability information based on the UE capability enquiry information, wherein the UE capability information is used to indicate that the UE supports a first-type band combination, wherein the first-type band combination comprises a band combination consisting of an intra-band evolved universal terrestrial radio access–new radio dual connectivity intra-band ENDC band combination and new radio carrier aggregation NRCA, wherein

the UE capability information comprises first information and second information, the first information comprises a first bandwidth combination set of the intra-band ENDC of the first-type band combination supported by the UE, and the second information comprises a second bandwidth combination set of the NRCA of the first-type band combination supported by the UE.

15. The communication apparatus according to claim 14, wherein the second information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

16. The communication apparatus according to claim 14 or 15, wherein

the second information further comprises the first-type band combination supported by the UE, the first-type band combination comprises n band combinations supported by the UE, and the second bandwidth combination set is all bandwidth combination sets of the NRCA corresponding to the n band combinations;

the first bandwidth combination set is all bandwidth combination sets of the intra-band ENDC corresponding to the n band combinations.

17. The communication apparatus according to claim 14 or 15, wherein the first information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

18. The communication apparatus according to claim 17, wherein if the i^{th} bit in the m bits is 0, the i^{th} bit indicates that the UE does not support the bandwidth combination set corresponding to the i^{th} bit; or if the i^{th} bit in the m bits is 1, the i^{th} bit indicates that the UE supports the bandwidth combination set corresponding to the i^{th} bit.

19. The communication apparatus according to claim 14 or 15, wherein the second information further at least one of comprises a band list that is supported by the UE, and/or an NRCA parameter that is supported by the UE or an evolved universal terrestrial radio access carrier aggregation EUTRA CA parameter that is supported by the UE.

20. A communication apparatus, comprising a sending module and a receiving module, wherein

the sending module is configured to send UE capability enquiry information, wherein the UE capability enquiry information is used to query a capability of a UE; and

the receiving module is configured to receive UE capability information, wherein the UE capability information is used to indicate that the UE supports a first-type band combination, wherein the first-type band combination comprises a band combination consisting of an intra-band evolved universal terrestrial radio access–new radio dual connectivity intra-band ENDC band combination and new radio carrier aggregation NRCA, wherein

the UE capability information comprises first information and second information, the first information comprises a first bandwidth combination set of the intra-band ENDC of the first-type band combination supported by the UE, and the second information comprises a second bandwidth combination set of the NRCA of the first-type band combination supported by the UE.

21. The communication apparatus according to claim 20, wherein the second information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

22. The communication apparatus according to claim 20 or 21, wherein

the second information further comprises the first-type band combination supported by the UE, the first-type

band combination comprises n band combinations supported by the UE, and the second bandwidth combination set is all bandwidth combination sets of the NRCA corresponding to the n band combinations;

the first bandwidth combination set is all bandwidth combination sets of the intra-band ENDC corresponding to the n band combinations.

23. The communication apparatus according to claim 20 or 21, wherein the first information comprises m bits, and the m bits are corresponding to m different bandwidth combination sets, wherein

an i^{th} bit in the m bits is used to indicate whether the UE supports a bandwidth combination set corresponding to the i^{th} bit, the bandwidth combination set is predefined, i is an integer greater than or equal to 0 and less than or equal to m, and m is an integer greater than or equal to 1.

24. The communication apparatus according to claim 23, wherein if the i^{th} bit in the m bits is 0, the i^{th} bit indicates that the UE does not support the bandwidth combination set corresponding to the i^{th} bit; or if the i^{th} bit in the m bits is 1, the i^{th} bit indicates that the UE supports the bandwidth combination set corresponding to the i^{th} bit.

25. The communication apparatus according to claim 20 or 21, wherein the second information further comprises at least one of a band list that is supported by the UE, and/or an NRCA parameter that is supported by the UE or an evolved universal terrestrial radio access carrier aggregation EUTRA CA parameter that is supported by the UE.

26. The communication apparatus according to claim 20 or 21, wherein the network device further comprises an allocation module, wherein

the allocation module is configured to allocate a resource to the UE based on the UE capability information.

27. A communication apparatus, comprising at least one processor and a memory, wherein

the memory stores program instructions, and the program instructions are executed in the at least one processor, to implement a function of the user equipment in the method according to any one of claims 1 to 2.

28. A communication apparatus, comprising at least one processor and a memory, wherein

the memory stores program instructions, and the program instructions are executed in the at least one processor, to implement a function of the network device in the method according to any one of claims 7 to 8.

29. A computer-readable computer storage medium, wherein the computer-readable storage medium stores program instructions; and when the program instructions are run, a function of the user equipment in the method according to any one of claims 1 to 2 is implemented.

30. A computer-readable computer storage medium, wherein the computer-readable storage medium stores program instructions; when the program instructions are run, a function of the network device in the method according to any one of claims 7 to 8 is implemented.