CLAIMS:

1. A resource allocation method for use in a terminal device, characterized by comprising:

sending a message carrying a terminal type and an identity of the terminal device to a network device; and

receiving resource allocation information of the terminal device, sent by the network device, the resource allocation information being obtained by the network device according to the terminal type.

2. The method according to claim 1, characterized in that content in a cell structure of the terminal type comprises bits of a high-end phone, a low-end phone, a high-end wear, a low-end wear, and an industrial sensor, or the content in the cell structure of the terminal type comprises bits of a low-rate terminal, a mid-rate terminal, and a high-rate terminal.

3. The method according to claim 1 or 2, characterized in that the sending a message carrying a terminal type of a terminal device to a network device comprises:

sending a radio resource control (RRC) setup request message carrying the terminal type of the terminal device to the network device when the terminal device accesses to a network;

or, sending terminal capability information carrying the terminal type of the terminal device to the network device in a process that the terminal device applies to the network device for network registration;

or, sending a registration request message carrying the terminal type of the terminal device to the network device in the process that the terminal device applies to the network device for network registration;

or, sending terminal assistance information carrying the terminal type of the terminal device to the network device.

4. A resource allocation method for use in a network device, characterized by comprising:

receiving a message carrying a terminal type and an identity of a terminal device, sent by the terminal device;

obtaining resource allocation information of the terminal device according to the terminal type; and

sending the resource allocation information to the terminal device.

5. The method according to claim 4, characterized in that content in a cell structure of the terminal type comprises bits of a high-end phone, a low-end phone, a high-end wear, a low-end wear, and an industrial sensor, or the content in the cell structure of the terminal type comprises bits of a low-rate terminal, a mid-rate terminal, and a high-rate terminal.

6. The method according to claim 4 or 5, characterized in that the receiving a message carrying a terminal type of a terminal device, sent by the terminal device, comprises:

receiving an RRC setup request message carrying the terminal type of the terminal device, sent by the terminal device, when the terminal device accesses to a network;

or, receiving terminal capability information carrying the terminal type of the terminal device, sent by the network device, in a process that the terminal device applies to the network device for network registration;

or, receiving a registration request message carrying the terminal type of the terminal device, sent by the network device, in the process that the terminal device applies to the network device for network registration;

or, receiving terminal assistance information carrying the terminal type of the terminal device, sent by the network device.

7. The method according to claim 6, characterized in that after the receiving a message carrying a terminal type of a terminal device, sent by the terminal device, the method further comprises:

establishing an association relationship between the terminal type and a device identity of the terminal device, and saving the association relationship;

the obtaining resource allocation information of the terminal device according to the terminal type comprises:

searching for a target terminal identity corresponding to the terminal type according to the association relationship, and obtaining the resource allocation information of the terminal device corresponding to the target terminal identity according to the terminal type.

8. A terminal device, characterized by comprising:

a sending module configured to send a message carrying a terminal type and an identity of the terminal device to a network device; and

a receiving module configured to receive resource allocation information of the terminal device, sent by the network device, the resource allocation information being obtained by the network device according to the terminal type.

9. The terminal device according to claim 8, characterized in that content in a cell structure of the terminal type comprises bits of a high-end phone, a low-end phone, a high-end wear, a low-end wear, and an industrial sensor, or the content in the cell structure of the terminal type comprises bits of a low-rate terminal, a mid-rate terminal, and a high-rate terminal.

10. The terminal device according to claim 8 or 9, characterized in that

the sending module is specifically configured to send an RRC setup request message carrying the terminal type of the terminal device to the network device when the terminal device accesses to a network;

or, to send terminal capability information carrying the terminal type of the terminal device to the network device in a process that the terminal device applies to the network device for network registration;

or, to send a registration request message carrying the terminal type of the terminal device to the network device in the process that the terminal device applies to the network device for network registration;

or, to send terminal assistance information carrying the terminal type of the terminal device to the network device.

11. A network device, characterized by comprising:

a receiving module configured to receive a message carrying a terminal type and an identity of a terminal device, sent by the terminal device; and

a sending module configured to obtain resource allocation information of the terminal device according to the terminal type and to send the resource allocation information to the terminal device.

12. The network device according to claim 11, characterized in that content in a cell structure of the terminal type comprises bits of a high-end phone, a low-end phone, a high-end wear, a low-end wear, and an industrial sensor, or the content in the cell structure of the terminal type comprises bits of a low-rate terminal, a mid-rate terminal, and a high-rate

terminal.

13. The network device according to claim 11 or 12, characterized in that the process that a receiving module is configured to receive a message carrying a terminal type of a terminal device, sent by the terminal device, specifically comprises:

receiving an RRC setup request message carrying the terminal type of the terminal device, sent by the terminal device, when the terminal device accesses to a network;

or, receiving terminal capability information carrying the terminal type of the terminal device, sent by the network device, in a process that the terminal device applies to the network device for network registration;

or, receiving a registration request message carrying the terminal type of the terminal device, sent by the network device, in the process that the terminal device applies to the network device for network registration;

or, receiving terminal assistance information carrying the terminal type of the terminal device, sent by the network device.

14. The network device according to claim 13, characterized by further comprising:

a saving module configured to establish an association relationship between the terminal type and a device identity of the terminal device and to save the association relationship after the receiving module receives the message carrying the terminal type of the terminal device, sent by the terminal device; and

the process that a sending module is configured to obtain resource allocation information of the terminal device according to the terminal type specifically comprises:

searching for a target terminal identity corresponding to the terminal type according to the association relationship, and obtaining the resource allocation information of the terminal device corresponding to the target terminal identity according to the terminal type.

15. A resource allocation system, characterized by comprising:

the terminal device according to any one of claims 8 to 10, and the network device according to any one of claims 11 to 14.

16. An electronic device, characterized by comprising:

a memory having executable program codes stored thereon; and

a processor coupled to the memory,

the processor being configured to call the executable program codes stored in the memory to perform the resource allocation method according to any one of claims 1 to 3 or the resource allocation method according to any one of claims 4 to 7.

17. A computer readable storage medium, characterized in that the computer readable storage medium stores a computer program, and the computer program causes a computer to perform the method according to any one of claims 1 to 3 or the method according to any one of claims 4 to 7.