

corresponding to the transmission mode T_1 is a symbol numbered 0, and the frequency domain resource is a bandwidth of 55-75 MHz; the time domain resource included in the initial resource area corresponding to the transmission mode T_2 is a symbol numbered 0, and the frequency domain resource is a bandwidth of 30-50 MHz; and the time domain resource included in the initial resource area corresponding to the transmission mode T_3 is a symbol numbered 0, and the frequency domain resource is a bandwidth of 5-25 MHz. Assuming that the time domain resource included in the initial resource area of the first resource area indicated by the first indication information is a symbol numbered 0, and the frequency domain resource is a bandwidth of 55-75 MHz, the terminal device can determine, according to the first indication information, a transmission mode T_1 from the plurality of transmission modes.

[00117] Optionally, the initial resource area corresponding to the transmission mode can be specified according to the time domain resource and/or the frequency domain resource. For example, it can be agreed that the resource area where the first symbol is located is the initial resource area.

[00118] Optionally, if the first indication information is used to indicate an initial resource area of the first resource area, and the terminal device determines that the initial resource area of the first resource area is not used for transmission of downlink control information by detecting the initial resource area of the first resource area, the terminal device can determine that the scheduling unit does not perform downlink control information transmission. The terminal device can continue to detect the first downlink control information on the subsequent scheduling unit.

[00119] FIG. 5 is another schematic diagram of a method for transmitting information according to an embodiment of the present disclosure. As shown in FIG. 5, the first indication information is used to indicate an initial resource area P_{target1} of the first resource area, and the

least one scheduling unit, wherein the second indication information is used to indicate that the first resource area has changed or the second indication information is used to indicate a change result of the first resource area.

[00163] Optionally, the frequency domain resource included in the resource area is part of the system bandwidth.

[00164] Optionally, the receiving unit 310 is further configured to receive first configuration information and/or second configuration information that is sent by the network device, wherein the first configuration information is used to configure a plurality of transmission modes for transmitting downlink control information, and the second configuration information is used to configure the second resource area for transmitting downlink control information.

[00165] Optionally, the first indication information is used to indicate at least one of a first resource area for transmitting downlink control information, a location of a frequency domain resource included in the first resource area for transmitting downlink control information, a starting location of the frequency domain resource included in the first resource area for transmitting the downlink control information, a granularity of the frequency domain resource included in the first resource area for transmitting the downlink control information, a location of the time domain resource included in the first resource area for transmitting downlink control information, a starting location of the time domain resource included in the first resource area for transmitting downlink control information, a granularity of the time domain resource included in the first resource area for transmitting downlink control information, and a transmission mode corresponding to the downlink control information. The transmission mode corresponding to the downlink control information corresponds to the first resource area for transmitting downlink control information.

[00188] In the implementation process, each step of the above method can be completed by an integrated logic circuit of hardware in a processor or instructions in a form of software. The steps of the method disclosed in the embodiment of the present disclosure can be directly implemented as to be performed by a hardware processor, or can be performed by a combination of hardware and software in a processor. The software can be stored in a random storage medium, a flash memory, a read only memory, a programmable read only memory or an electrically erasable programmable memory, a register, and other medium well known in the art. The storage medium is disposed in the memory, and the processor reads the information in the memory and performs the steps of the above method in cooperation with the hardware. To avoid repetition, it will not be described in detail here.

[00189] An embodiment of the present disclosure also provide a computer readable storage medium storing one or more programs, the one or more programs including instructions that, when executed by a portable electronic device including a plurality of applications, enable the portable electronic device to perform the method of the embodiments illustrated in FIGS. 3-6.

[00190] Those of ordinary skill in the art will appreciate that the units and algorithm steps of the various examples described in connection with the embodiments disclosed herein can be implemented in electronic hardware or a combination of computer software and electronic hardware. Whether these functions are performed in hardware or software depends on the specific application and design constraints of the solution. A person skilled in the art can use different methods to implement the described functions for each particular application, but such implementation should not be considered to go beyond the scope of the embodiments of the present disclosure.

[00191] A person skilled in the art can clearly understand that for the convenience and

CLAIMS:

1. A method for transmitting information, comprising:
receiving, by a terminal device, first indication information sent by a network device;
and
receiving, by the terminal device, first downlink control information sent by the network device, according to the first indication information.
2. The method according to claim 1, wherein receiving, by the terminal device, first downlink control information sent by the network device, according to the first indication information comprises:
determining, by the terminal device, a first resource area for transmitting downlink control information according to the first indication information; and
receiving, by the terminal device, first downlink control information by detecting the first downlink control information sent by the network device on the first resource area.
3. The method according to claim 2, wherein the first indication information is used to indicate the first resource area.
4. The method according to claim 1 or 2, wherein the first indication information is directed to the terminal device, or a plurality of terminal devices including the terminal device.
5. The method according to claim 2, wherein the first indication information is configured to indicate an initial resource area of the first resource area.
6. The method according to claim 2, wherein determining, by the terminal device, a first resource area for transmitting downlink control information according to the first indication information comprises:
determining, by the terminal device, a first transmission mode from a plurality of transmission modes according to the first indication information, wherein a resource area

corresponding to each of the plurality of transmission modes is different; and

determining, by the terminal device, the resource area corresponding to the first transmission mode as the first resource area.

7. The method according to claim 6, wherein the first indication information is used to indicate the first transmission mode.

8. The method according to claim 6, wherein starting resource areas corresponding to respective transmission modes are different;

the first indication information is used to indicate a starting resource area in the first resource area; and

determining, by the terminal device, a first transmission mode from a plurality of transmission modes according to the first indication information comprises:

determining, by the terminal device, a first transmission mode corresponding to the starting resource area in the first resource area, from the plurality of transmission modes, according to the first indication information.

9. The method according to any one of claims 6 to 8, wherein the plurality of transmission modes are previously configured, or the plurality of transmission modes are configured through configuration information.

10. The method according to any one of claims 2 to 9, wherein receiving, by the terminal device, first downlink control information by detecting the first downlink control information sent by the network device on the resource area comprises:

after the first indication information is received by the terminal device, and before second indication information is received by the terminal device,

receiving, by the terminal device, the first downlink control information by detecting the first downlink control information on the first resource area in each scheduling unit of at least one scheduling unit;

wherein the second indication information is used to indicate that the first resource area has changed or the second indication information is used to indicate a change result of the first resource area.

11. The method according to claim 1, wherein the first indication information is used to indicate that a first resource area for transmitting downlink control information has changed.

12. The method according to claim 11, wherein receiving, by the terminal device, first downlink control information sent by the network device, according to the first indication information, comprises:

receiving, by the terminal device, the first downlink control information by detecting the first downlink control information on all or part of second resource area for transmitting downlink control information configured previously or in configuration information, according to the first indication information.

13. The method according to claim 12, further comprising:

determining, by the terminal device, the first resource area for transmitting downlink control information by detecting downlink control information on all or part of the second resource area.

14. The method according to claim 13, wherein determining, by the terminal device, the first resource area for transmitting downlink control information by detecting downlink control information on all or part of the second resource area comprises:

determining, by the terminal device, the first resource area by detecting downlink control information on all or part of the second resource area in an initial scheduling unit after the first indication information is received.

15. The method according to any one of claims 12-14, wherein the configuration information is carried in system information or in dedicated signaling.

16. A terminal device, comprising:
a receiving unit configured to:
receive first indication information sent by a network device; and
receive first downlink control information sent by the network device, according to the first indication information.

17. The terminal device according to claim 16, further comprising:
a processing unit configured to determine a first resource area for transmitting downlink control information, according to the first indication information;
wherein the receiving unit is specifically configured to receive first downlink control information by detecting the first downlink control information sent by the network device on the first resource area.

18. The terminal device according to claim 17, wherein the first indication information is used to indicate the first resource area.

19. The terminal device according to claim 16 or 17, wherein the first indication information is directed to the terminal device, or a plurality of terminal devices including the terminal device.

20. The terminal device according to claim 17, wherein the first indication information is configured to indicate an initial resource area of the first resource area.

21. The terminal device according to claim 17, wherein the processing unit is specifically configured to:

determine a first transmission mode from a plurality of transmission modes according to the first indication information, wherein a resource area corresponding to each of the plurality of transmission modes is different; and

determine the resource area corresponding to the first transmission mode as the first resource area.

22. The terminal device according to claim 21, wherein the first indication information is used to indicate the first transmission mode.

23. The terminal device according to claim 21, wherein starting resource areas corresponding to respective transmission modes are different;

the first indication information is used to indicate a starting resource area in the first resource area; and;

the processing unit is specifically configured to determine a first transmission mode corresponding to the starting resource area in the first resource area, from the plurality of transmission modes, according to the first indication information.

24. The terminal device according to any one of claims 21 to 23, wherein the plurality of transmission modes are previously configured, or the plurality of transmission modes are configured through configuration information.

25. The terminal device according to any one of claims 17 to 24, wherein the receiving unit is specifically configured to:

after the first indication information is received by the receiving unit, and before second indication information is received by the receiving unit,

receive the first downlink control information by detecting the first downlink control information on the first resource area in each scheduling unit of at least one scheduling unit;

wherein the second indication information is used to indicate that the first resource area has changed or the second indication information is used to indicate a change result of the first resource area.

26. The terminal device according to claim 16, wherein the first indication information is used to indicate that a first resource area for transmitting downlink control information has changed.

27. The terminal device according to claim 26, wherein the receiving unit is

specifically configured to receive the first downlink control information by detecting the first downlink control information on all or part of second resource area for transmitting downlink control information configured previously or in configuration information, according to the first indication information.

28. The terminal device according to claim 27, further comprising:

a processing unit configured to determine the first resource area for transmitting downlink control information by detecting downlink control information on all or part of the second resource area.

29. The terminal device according to claim 28, wherein the processing unit is specifically configured to: determine the first resource area by detecting downlink control information on all or part of the second resource area in an initial scheduling unit after the first indication information is received.

30. The terminal device according to any one of claims 27-29, wherein the configuration information is carried in system information or in dedicated signaling.