CLAIMS

1. A switching method, comprising:

configuring, by a base station, a switching message for a narrow-bandwidth receiving mode, the switching message comprising time when a terminal is indicated to enter the narrow-bandwidth receiving mode and a position of a narrow bandwidth on a frequency band when the narrow-bandwidth receiving mode is entered;

sending the switching message to the terminal to indicate the terminal to switch to the narrow bandwidth specified in the switching message for information reception, the narrow bandwidth being smaller than a system bandwidth; and

sending time information of stopping narrow-band signal detection and restarting signal detection to the terminal, wherein the time information of stopping narrow-band signal detection is sent by the base station to the terminal to indicate the terminal to enter a dormant state at a moment when narrow-band signal detection is stopped.

2. The switching method of claim 1, further comprising:

sending Downlink Control Information (DCI) for the terminal in a Physical Downlink Control Channel (PDCCH) on the narrow bandwidth,

wherein the DCI is located in a User Equipment (UE)-specific search space corresponding to the terminal and is at a Control Channel Element (CCE) aggregation level corresponding to the terminal.

3. The switching method of claim 1, after the terminal is switched to the narrow bandwidth specified in the switching message for the information reception, the method further comprising:

sending a frequency band index and a switching delay to the terminal to indicate the terminal to switch to another narrow bandwidth or another system bandwidth,

wherein the frequency band index is used to indicate a bandwidth that the terminal is to be switched to at different frequency-domain positions, and the switching delay is used to indicate a time offset between a present moment and a

moment when the terminal starts signal reception on the bandwidth indicated by the frequency band index.

4. The switching method of claim 1, when the terminal is in the narrow-bandwidth receiving mode, the method further comprising:

in the PDCCH on the narrow bandwidth, scheduling for the terminal a Physical Downlink Shared Channel (PDSCH) comprising downlink data, the downlink data being less than a preset capacity.

5. The switching method of claim 4, wherein a frequency-domain resource of the PDSCH is located within the narrow bandwidth, and the DCI sent in the PDCCH on the narrow bandwidth comprises a resource index corresponding to the frequency-domain resource allocated for the PDSCH and comprises a Modulation and Coding Scheme (MCS) for the downlink data.

6. The switching method of claim 1, when the terminal is in the narrow-bandwidth receiving mode, the method further comprising:

in the PDCCH on the narrow bandwidth, sending a feedback acknowledgement signal and a Hybrid Auto Repeat Request (HARQ) process identifier for uplink transmission to the terminal.

7. A switching method, comprising:

receiving, by a terminal, a switching message for a narrow-bandwidth receiving mode, the switching message configured by a base station and comprising time when the terminal is indicated to enter the narrow-bandwidth receiving mode and a position of a narrow bandwidth on a frequency band when the narrow-bandwidth receiving mode is entered;

switching to the narrow bandwidth specified in the switching message for information reception, the narrow bandwidth being smaller than a system bandwidth; and

receiving time information of stopping narrow-band signal detection and restarting signal detection from the base station, turning off the receiver to enter a dormant state at a moment when the narrow-band signal detection is stopped and

turning on the receiver at a moment when the signal detection is restarted.

8. The switching method of claim 7, further comprising:

receiving Downlink Control Information (DCI) for the terminal in a Physical Downlink Control Channel (PDCCH) on the narrow bandwidth,

wherein the DCI is located in a User Equipment (UE)-specific search space corresponding to the terminal and is at a Control Channel Element (CCE) aggregation level corresponding to the terminal.

9. The switching method of claim 7, after the terminal is switched to the narrow bandwidth specified in the switching message for the information reception, the method further comprising:

receiving a frequency band index and a switching delay from the base station, and switching to another narrow bandwidth or another system bandwidth according to the frequency band index and the switching delay,

wherein the frequency band index is used to indicate a bandwidth that the terminal is to switch to at different frequency-domain positions, and the switching delay is used to indicate a time offset between a present moment and a moment when the terminal starts signal reception on the bandwidth indicated by the frequency band index.

10. The switching method of claim 7, when the terminal is in the narrow-bandwidth receiving mode, the method further comprising:

in the PDCCH on the narrow bandwidth, receiving a Physical Downlink Shared Channel (PDSCH) scheduled for the terminal by the base station and comprising downlink data, the downlink data being less than a preset capacity.

11. The switching method of claim 10, wherein a frequency-domain resource of the PDSCH is located within the narrow bandwidth, and the DCI received in the PDCCH on the narrow bandwidth comprises a resource index corresponding to the frequency-domain resource allocated for the PDSCH and a Modulation and Coding Scheme (MCS) for the downlink data.

12. The switching method of claim 7, when the terminal is in the narrow-bandwidth receiving mode, the method further comprising:

in the PDCCH on the narrow bandwidth, receiving from the base station a feedback acknowledgement signal and a Hybrid Auto Repeat Request (HARQ) process identifier for uplink transmission.

13. A base station, comprising:

a processor, a memory, a transceiver and a bus, the processor, the memory and the transceiver being connectable through the bus, wherein the transceiver is configured to send and receive a signal and communicate with a terminal, the memory is configured to store a set of program codes, and the processor is configured to call the program codes stored in the memory to execute the following operations:

configuring a switching message for a narrow-bandwidth receiving mode, the switching message comprising time when a terminal is indicated to enter a narrow-bandwidth receiving mode and a position of a narrow bandwidth on a frequency band when the narrow-bandwidth receiving mode is entered;

sending, through the transceiver, the switching message to the terminal to indicate the terminal to switch to the narrow bandwidth specified in the switching message for information reception, the narrow bandwidth being smaller than a system bandwidth; and

send, through the transceiver, time information of stopping narrow-band signal detection and restarting signal detection to the terminal, wherein the time information of stopping narrow-band signal detection is sent by the base station to the terminal to indicate the terminal to enter a dormant state at a moment when narrow-band signal detection is stopped.

14. The base station of claim 13, wherein the processor is further configured to send, through the transceiver, Downlink Control Information (DCI) for the terminal in a Physical Downlink Control Channel (PDCCH) on the narrow bandwidth; and

the DCI is located in a User Equipment (UE)-specific search space corresponding to the terminal and is at a Control Channel Element (CCE) aggregation level corresponding to the terminal.

15. The base station of claim 13, wherein the processor is further configured to, after the terminal is switched to the narrow bandwidth specified in the switching message for the information reception, send a frequency band index and a switching delay to the terminal to indicate the terminal to switch to another narrow bandwidth or another system bandwidth; and

the frequency band index is used to indicate a bandwidth that the terminal is to be switched to at different frequency-domain positions, and the switching delay is used to indicate a time offset between a present moment and a moment when the terminal starts signal reception on the bandwidth indicated by the frequency band index.

16. The base station of claim 13, wherein the processor is further configured to, when the terminal is in the narrow-bandwidth receiving mode, in the PDCCH on the narrow bandwidth, schedule for the terminal a Physical Downlink Shared Channel (PDSCH) comprising downlink data, the downlink data being less than a preset capacity.

17. The base station of claim 16, wherein a frequency-domain resource of the PDSCH is located within the narrow bandwidth, and the DCI sent in the PDCCH on the narrow bandwidth comprises a resource index corresponding to the frequency-domain resource allocated for the PDSCH and a Modulation and Coding Scheme (MCS) for the downlink data.

18. The base station of claim 13, wherein the processor is further configured to, when the terminal is in the narrow-bandwidth receiving mode, send in the PDCCH on the narrow bandwidth, through the transceiver, a feedback acknowledgement signal and a Hybrid Auto Repeat Request (HARQ) process identifier for uplink transmission to the terminal.

19. A terminal, comprising:

a processor, a memory, a transmitter, a receiver and a bus, the processor, the memory, the transmitter and the receiver being connected through the bus, wherein the transmitter is configured to transmit a signal, the receiver is configured to receive the signal, the transmitter and the receiver are independently arranged respectively or integrated, the memory is configured to store a set of program codes, and the

processor is configured to call the program codes stored in the memory to execute the following operations:

receiving, through the receiver, a switching message, configured by a base station, in a narrow-bandwidth receiving mode, the switching message comprising time when the terminal is indicated to enter the narrow-bandwidth receiving mode and a position of a narrow bandwidth on a frequency band when the narrow-bandwidth receiving mode is entered;

executing switching to the narrow bandwidth specified in the switching message for information reception, the narrow bandwidth being smaller than a system bandwidth; and

receiving, through the receiver, time information of stopping narrow-band signal detection and restarting signal detection from the base station, turn off the receiver to enter a dormant state at a moment when the narrow-band signal detection is stopped and turn on the receiver at a moment when the signal detection is restarted.

20. The terminal of claim 19, wherein the processor is further configured to receive, through the receiver, Downlink Control Information (DCI) for the terminal in a Physical Downlink Control Channel (PDCCH) on the narrow bandwidth; and

the DCI is located in a User Equipment (UE)-specific search space corresponding to the terminal and is at a Control Channel Clement (CCE) aggregation level corresponding to the terminal.

21. The terminal of claim 19, wherein the processor is further configured to, after the terminal is switched to the narrow bandwidth specified in the switching message for the information reception, receive, through the receiver, a frequency band index and a switching delay from the base station and execute switching to another narrow bandwidth or another system bandwidth according to the frequency band index and the switching delay; and

the frequency band index is used to indicate a bandwidth that the terminal is to be switched to at different frequency-domain positions, and the switching delay is used to indicate a time offset between a present moment and a moment when the terminal starts signal reception on the bandwidth indicated by the frequency band

index.

22. The terminal of claim 19, wherein the processor is further configured to, when the terminal is in the narrow-bandwidth receiving mode, receive, in the PDCCH on the narrow bandwidth and through the receiver, a Physical Downlink Shared Channel (PDSCH) scheduled for the terminal by the base station and comprising downlink data, the downlink data being less than a preset capacity.

23. The terminal of claim 22, wherein a frequency-domain resource of the PDSCH is located within the narrow bandwidth, and the DCI received in the PDCCH on the narrow bandwidth comprises a resource index corresponding to the frequency-domain resource allocated for the PDSCH and a Modulation and Coding Scheme (MCS) for the downlink data.

24. The terminal of claim 19, wherein the processor is further configured to, when the terminal is in the narrow-bandwidth receiving mode, receive, in the PDCCH on the narrow bandwidth and through the receiver, a feedback acknowledgement signal and Hybrid Auto Repeat Request (HARQ) process identifier for uplink transmission from the base station.