

Claims:

1. A wireless communication method, comprising:

receiving, by a terminal device, first information sent by a network device, wherein the first information is used for indicating to the terminal device a resource position of a
5 synchronization signal block, the first information comprises a physical broadcast channel (PBCH) and a resource position and/or sequence information of a demodulation reference signal (DMRS);

receiving, by the terminal device, second information sent by the network device, wherein the second information is used for indicating resource positions and a quantity of
10 synchronization signal blocks sent by the network device, wherein the synchronization signal blocks sent by the network device comprise the synchronization signal block in which the first information is sent;

determining, by the terminal device, the resource positions and the quantity of synchronization signal blocks sent by the network device to the terminal device through the first
15 information and the second information sent by the network device; and

receiving, by the terminal device, the synchronization signal blocks at the resource positions of the quantity.

2. The method according to claim 1, wherein receiving, by the terminal device, the synchronization signal blocks at the resource positions of the quantity, comprises:

receiving the synchronization signal blocks of the quantity only at the indicated resource
20 positions, and stopping detection on a possible synchronization signal block at another position.

3. The method according to claim 1 or 2, wherein the second information indicates the resource positions of the quantity of the synchronization signal blocks sent to the terminal device through indicating whether each preset transmittable synchronization signal block is
25 sent.

4. The method according to claim 3, wherein information for indicating whether the each synchronization signal block is sent in the second information is sequenced according to resource position indices of the synchronization signal blocks or identifiers of the synchronization signal blocks.

5. The method according to any one of claims 1-4, wherein the method further comprises:

receiving, by the terminal device, third information sent by the network device, wherein the third information comprises configuration information, of resources for random access or random access preambles, corresponding to the synchronization signal blocks sent by the network device; and

5 performing, by the terminal device, random access according to the configuration information.

6. The method according to any one of claims 1-5, wherein at least one bit is sent by the network device, wherein the at least one bit indicates whether a synchronization signal block is sent on a resource position corresponding to the at least one bit.

10 7. The method according to claim 6, wherein each of the at least one bit indicates whether a synchronization signal block is sent on a corresponding resource position.

8. The method according to claim 6, wherein each of the at least one bit of 1 indicates that a synchronization signal block is sent on a corresponding resource position, and each of the at least one bit of 0 indicates that a synchronization signal block is not sent on a corresponding
15 resource position.

9. A terminal device, comprising: a processing unit and a communication unit; wherein the processing unit is configured to receive first information sent by a network device, wherein the first information is used for indicating to the terminal device a resource position of a synchronization signal block, the first information comprises a physical broadcast channel (PBCH) and a resource position and/or sequence information of a demodulation reference
20 signal (DMRS);

receive second information sent by the network device, wherein the second information is used for indicating resource positions and a quantity of synchronization signal blocks sent by the network device, wherein the synchronization signal blocks sent by the network device
25 comprise the synchronization signal block in which the first information is sent;

the processing unit is further configured to determine the resource positions and the quantity of synchronization signal blocks sent by a network device to the terminal device through information sent by the network device; and

the communication unit is configured to receive the synchronization signal blocks at the
30 resource positions of the quantity.

10. The terminal device according to claim 9, wherein the communication unit is further

configured to:

receive the synchronization signal blocks of the quantity only at the indicated resource positions, and stop detection on a possible synchronization signal block at another position.

11. The terminal device according to claim 9 or 10, wherein the second information
5 indicates the resource positions of the quantity of the synchronization signal blocks sent to the terminal device through indicating whether each preset transmittable synchronization signal block is sent.

12. The terminal device according to claim 11, wherein information for indicating whether
10 the each synchronization signal block is sent in the second information is sequenced according to resource position indices of the synchronization signal blocks or identifiers of the synchronization signal blocks.

13. The terminal device according to any one of claims 9-12, wherein the communication unit is further configured to:

receive third information sent by the network device, wherein the third information
15 comprises configuration information, of resources for random access or random access preambles, corresponding to the synchronization signal blocks sent by the network device; and the processing unit is further configured to:

perform random access according to the configuration information.

14. The terminal device according to any one of claims 9-13, wherein the processing unit
20 is further configured to:

select a synchronization signal block from received synchronization signal blocks;

determine a resource for random access or a random access preamble according to the selected synchronization signal block; and

perform random access by using the determined resource or random access preamble.

15. The terminal device according to any one of claims 9-14, wherein the synchronization
25 signal blocks at different resource positions are sent through different beams.