

What is claimed is:

1. A method for signal transmission, comprising:

obtaining, by a terminal device, a plurality of candidate time-frequency resources of a first SSB, Synchronization signal/PBCH block, within a first period, wherein the first SSB is in a SSB group on a first carrier;

monitoring, by the terminal device, the first SSB in at least one of the plurality of candidate time-frequency resources, to determine that the terminal device receives the first SSB in a first time-frequency resource, wherein the first time-frequency resource is one of the plurality of candidate time-frequency resources, wherein the first SSB is in a SSB group;

receiving, by the terminal device, the first SSB in the first time-frequency resource;
wherein the plurality of candidate time-frequency resources comprises M time-frequency resources, the first period comprises M sub-periods, each of the M sub-periods comprises one time-frequency resource in the M time-frequency resources, and the M sub-periods corresponds to the M time-frequency resources one by one; wherein each SSB in the SSB group is configured with a time-frequency resource for transmitting the each SSB in each sub-period.

2. The method according to claim 1, wherein the terminal device assumes that a maximum quantity of transmission times of each SSB in the SSB group is 1 within the first period.

3. The method according to claim 1 or 2, further comprising:

monitoring, by the terminal device, the first SSB not in a time-frequency resource later than the first time-frequency resource within the plurality of candidate time-frequency resources, wherein the first time-frequency resource is a time-frequency resource, where the terminal device detects the first SSB for a first time, within the plurality of candidate time-frequency resources.

~~4. The method according to any one of claims 1 to 3, wherein the plurality of candidate time-frequency resources comprises M time-frequency resources, the first period comprises M sub-periods, each of the M sub-periods comprises one time-frequency resource in the M time-frequency resources, and the M sub-periods corresponds to the M time-frequency resources one by one.~~

54. The method according to claim 41, wherein all of the M time-frequency resources share a same position in sub-periods of the M sub-periods.

65. The method according to any one of claims 1 to 54, wherein the terminal device receives an indication information sent from a network device, the indication information being configured for indicating information about transmission of at least one SSB in the SSB group by the network device within the first period.

76. The method according to claim 65, wherein the indication information is configured for indicating a beam identifier of the at least one SSB in the SSB group.

87. The method according to claim 76, wherein spatial reception parameters of two SSBs with a same beam identifier are quasi co-located.

98. The method according to any one of claims 65 to 87, further comprising:
performing, by the terminal device, rate-matching on at least one SSB in the SSB group based on the indication information for data reception.

109. A method for signal transmission, comprising:
sensing, by a network device, on a channel of a first carrier, to obtain the availability of a first time-frequency resource based on a sensing result, wherein the first time-frequency resource is one time-frequency resource in a plurality of candidate time-frequency resources of a first SSB, Synchronization signal/PBCH block, within a first period, wherein the first SSB is in a SSB group on the first carrier; and

sending, by the network device to a terminal device, the first SSB through the first time-frequency resource, wherein the first SSB is in a SSB group;

wherein the plurality of candidate time-frequency resources comprises M time-frequency resources, the first period comprises M sub-periods, each of the M sub-periods comprises one time-frequency resource in the M time-frequency resources, and the M sub-periods corresponds to the M time-frequency resources one by one; wherein each SSB in the SSB group is configured with a time-frequency resource for transmitting the each SSB in each sub-period.

110. The method according to claim 109, wherein the network device determines that a maximum quantity of transmission times of each SSB in the SSB group is 1 within the first

period.

[1211](#). The method according to claim [10-9](#) or [1110](#), further comprising:

sending, by the network device, the first SSB not in a time-frequency resource later than the first time-frequency resource within the plurality of candidate time-frequency resources, wherein the first time-frequency resource is a time-frequency resource, where the network device sends the first SSB for a first time, within the plurality of candidate time-frequency resources.

~~13. The method according to any one of claims 10 to 12, wherein the plurality of candidate time-frequency resources comprises M time-frequency resources, the first period comprises M sub-periods, each of the M sub-periods comprises one time-frequency resource in the M time-frequency resources, and the M sub-periods corresponds to the M time-frequency resources one by one.~~

[1412](#). The method according to claim [139](#), wherein all of the M time-frequency resources share a same position in sub-periods of the M sub-periods.

[1513](#). The method according to any one of claims [10-9](#) to [1412](#), wherein the network device sends an indication information to the terminal device, the indication information being configured for indicating information about transmission of at least one SSB in the SSB group by the network device within the first period.

[1614](#). The method according to claim [1513](#), wherein the indication information is configured for indicating a beam identifier of the at least one SSB in the SSB group.

[1715](#). The method according to claim [1614](#), wherein spatial reception parameters of two SSBs with a same beam identifier are quasi co-located.

[1816](#). The method according to any one of claims [15-13](#) to [1715](#), further comprising:

performing, by the network device, rate-matching on at least one SSB in the SSB group based on the indication information for data reception.

[1917](#). A terminal device, comprising modules for performing the method of any one of claims 1 to [98](#).

[2018](#). A network device, comprising modules for performing the method of any one of claims [10-9](#) to [1816](#).