

CLAIMS

What is claimed is:

1. A synchronization signal/physical broadcast channel block SSB transmission indication method, applied to a terminal and comprising:

receiving SSB transmission indication information, wherein the SSB transmission indication information is used to indicate a candidate time position of an SSB,

wherein the SSB transmission indication information is used to indicate at least one group of candidate time positions, and each group of candidate time positions is used for at least one SSB transmission; the SSB transmission indication information comprises a bitmap, a value of a bit in the bitmap comprises a first value and/or a second value, the first value indicates that a group of time positions corresponding to the bit is a group of candidate time positions, and the second value indicates that a group of time positions corresponding to the bit is a group of time positions in which SSB transmission is not performed,

wherein each bit in the bitmap corresponds to a quasi co-location index, and each quasi co-location index corresponds to a group of time positions,

the method further comprises:

obtaining a mapping relationship between an RO and a group of candidate time positions based on each group of candidate time positions in the at least one group of candidate time positions,

wherein the mapping relationship is obtained based on an order of quasi co-location indexes corresponding to the groups of candidate time positions.

2. The method according to claim 1, wherein if an SSB transmission window is configured, each group of candidate time positions indicated by the SSB transmission indication information is limited within the SSB transmission window; if no SSB transmission window is configured, an SSB transmission window is a maximum transmission window specified in a protocol.

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

performing, based on downlink transmission information, rate matching on the candidate time position indicated by the SSB transmission indication information.

4. The method according to claim 1, further comprising:

for a physical downlink control channel PDCCH candidate, if at least one resource element RE of the PDCCH candidate overlaps a resource element of a candidate SSB, skipping monitoring the PDCCH candidate, wherein the candidate SSB is an SSB that may be transmitted in the candidate time position indicated by the SSB transmission indication information.

5. The method according to claim 1, further comprising:

determining a slot used for physical uplink control channel PUCCH repetition transmission, wherein

the slot used for PUCCH repetition transmission comprises N consecutive flexible symbols starting from a first symbol, the N flexible symbols do not overlap the candidate time position indicated by the SSB transmission indication information, and N is a positive integer.

6. A synchronization signal/physical broadcast channel block SSB transmission indication method, applied to a network device and comprising:

sending SSB transmission indication information, wherein the SSB transmission indication information is used to indicate a candidate time position of an SSB,

wherein the SSB transmission indication information is used to indicate at least one group of candidate time positions, and each group of candidate time positions is used for at least one SSB transmission; the SSB transmission indication information comprises a bitmap, a value of a bit in the bitmap comprises a first value and/or a second value, the first value indicates that a group of time positions corresponding to the bit is a group of candidate time positions, and the second value indicates that a group of time positions corresponding to the bit is a group of time positions in which SSB transmission is not performed,

wherein each bit in the bitmap corresponds to a quasi co-location index, and each quasi co-location index corresponds to a group of time positions,

the method further comprises:

establishing a mapping relationship between an RO and a group of candidate time positions based on each group of candidate time positions in the at least one group of

candidate time positions,

wherein the mapping relationship is established based on an order of quasi co-location indexes corresponding to the groups of candidate time positions.

7. A synchronization signal/physical broadcast channel block SSB transmission indication apparatus, applied to a terminal and comprising:

an information receiving module, configured to receive SSB transmission indication information, wherein the SSB transmission indication information is used to indicate a candidate time position of an SSB,

wherein the SSB transmission indication information is used to indicate at least one group of candidate time positions, and each group of candidate time positions is used for at least one SSB transmission; the SSB transmission indication information comprises a bitmap, a value of a bit in the bitmap comprises a first value and/or a second value, the first value indicates that a group of time positions corresponding to the bit is a group of candidate time positions, and the second value indicates that a group of time positions corresponding to the bit is a group of time positions in which SSB transmission is not performed,

wherein each bit in the bitmap corresponds to a quasi co-location index, and each quasi co-location index corresponds to a group of time positions,

the SSB transmission indication apparatus further comprises:

a first mapping establishment module, configured to obtain a mapping relationship between an RO and a group of candidate time positions based on each group of candidate time positions in the at least one group of candidate time positions,

wherein the mapping relationship is obtained based on an order of quasi co-location indexes corresponding to the groups of candidate time positions.

8. The SSB transmission indication apparatus according to claim 7, wherein if an SSB transmission window is configured, each group of candidate time positions indicated by the SSB transmission indication information is limited within the SSB transmission window; if no SSB transmission window is configured, an SSB transmission window is a maximum transmission window specified in a protocol.

9. The SSB transmission indication apparatus according to claim 7, further

comprising:

a rate matching module, configured to perform, based on downlink transmission information, rate matching on the candidate time position indicated by the SSB transmission indication information.

10. The SSB transmission indication apparatus according to claim 7, further comprising:

a monitoring module, configured to: for a physical downlink control channel PDCCH candidate, if at least one resource element RE of the PDCCH candidate overlaps a resource element of a candidate SSB, skip monitoring the PDCCH candidate, wherein the candidate SSB is an SSB that may be transmitted in the candidate time position indicated by the SSB transmission indication information.

11. The SSB transmission indication apparatus according to claim 7, further comprising:

a slot determining module, configured to determine a slot used for physical uplink control channel PUCCH repetition transmission, wherein

the slot used for PUCCH repetition transmission comprises N consecutive flexible symbols starting from a first symbol, the N flexible symbols do not overlap the candidate time position indicated by the SSB transmission indication information, and N is a positive integer.

12. A synchronization signal/physical broadcast channel block SSB transmission indication apparatus, applied to a network device and comprising:

an information sending module, configured to send SSB transmission indication information, wherein the SSB transmission indication information is used to indicate a candidate time position of an SSB,

wherein the SSB transmission indication information is used to indicate at least one group of candidate time positions, and each group of candidate time positions is used for at least one SSB transmission; the SSB transmission indication information comprises a bitmap, a value of a bit in the bitmap comprises a first value and/or a second value, the first value indicates that a group of time positions corresponding to the bit is a group of candidate time positions, and the second value indicates that a group of time

positions corresponding to the bit is a group of time positions in which SSB transmission is not performed,

wherein each bit in the bitmap corresponds to a quasi co-location index, and each quasi co-location index corresponds to a group of time positions,

the SSB transmission indication apparatus is configured to establish a mapping relationship between an RO and a group of candidate time positions based on each group of candidate time positions in the at least one group of candidate time positions,

wherein the mapping relationship is established based on an order of quasi co-location indexes corresponding to the groups of candidate time positions.

13. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a processor, the steps of the SSB transmission indication method according to any one of claims 1 to 6 are implemented.