

CLAIMS

1. A method for transmitting a signal, comprising:

generating, by a network device, beam-specific information corresponding to each of a plurality of beams, wherein first beam-specific information of a first beam of the plurality of beams is used to indicate a configuration parameter of the first beam and the configuration parameter of the first beam is used for a terminal device in coverage of the first beam to determine system information of the first beam; and

sending, by the network device, corresponding beam-specific information to terminal devices in the same cell through each beam.

2. The method of claim 1, wherein the first beam-specific information comprises a time-domain offset field, the time-domain offset field being used to indicate a time-domain offset between a first synchronization signal sent through the first beam and frame timing of the cell.

3. The method of any one of claims 1-2, wherein the first beam-specific information comprises a control channel time-frequency region indication field, the control channel time-frequency region indication field being used to indicate a size of a time-frequency region of a first control channel sent through the first beam.

4. A method for transmitting a signal, comprising:

receiving, by a first terminal device, first beam-specific information, the first beam-specific information being used to indicate a configuration parameter of a first beam of a plurality of beams, each of the plurality of beams being used to send corresponding beam-specific information to terminal devices in the same cell and the first terminal device being located in coverage of the first beam; and

determining, by the first terminal device, system information of the first beam according to the first beam-specific information.

5. The method of claim 4, wherein the first beam-specific information comprises a time-domain offset field, and

determining, by the first terminal device, the system information of the first beam according to the first beam-specific information comprises:

determining, by the first terminal device according to the first beam-specific information, a time-domain offset between a first synchronization signal received through the first beam and frame timing of the cell.

6. The method of claim 4 or 5, wherein the first beam-specific information comprises a system bandwidth indication field, and

determining, by the first terminal device, the system information of the first beam according to the first beam-specific information comprises:

determining, by the first terminal device according to the first beam-specific information, a total bandwidth occupied by a signal received through the first beam and a frequency-domain offset between a central frequency point of the total bandwidth and a central frequency point of the cell.

7. The method of any one of claims 4-6, wherein the first beam-specific information comprises a control channel time-frequency region indication field, and

determining, by the first terminal device, the system information of the first beam according to the first beam-specific information comprises:

determining, by the first terminal device according to the control channel time-frequency region indication field, a size of a time-frequency region of a first control channel received through the first beam.

8. The method of claim 7, wherein the first control channel comprises a common search space and a User Equipment (UE)-specific search space, and the method further comprising:

determining, by the first terminal device, common information of the first beam according to the common search space; and

determining, by the first terminal device, specific information of the first terminal device according to the UE-specific search space.

9. The method of claim 7 or 8, wherein different terminal devices in the coverage of the first beam have different UE-specific codes, the first terminal device

corresponding to a first UE-specific code, and the method further comprising:

descrambling, by the first terminal device, first control signaling corresponding to the first terminal device in the first control channel according to the first UE-specific code.

10. The method of any one of claims 4-6, wherein the first beam-specific information comprises a control channel time-frequency region indication field, and

determining, by the first terminal device, the system information of the first beam according to the first beam-specific information comprises:

determining, by the first terminal device according to the first beam-specific information, a size of a time-frequency region of a first control channel received through the first beam.

11. A network device, comprising:

a generation unit, configured to generate beam-specific information corresponding to each of a plurality of beams, first beam-specific information of a first beam of the plurality of beams being used to indicate a configuration parameter of the first beam and the configuration parameter of the first beam being used for a terminal device in coverage of the first beam to determine system information of the first beam; and

a sending unit, configured to send corresponding beam-specific information to terminal devices in the same cell through each beam.

12. The network device of claim 11, wherein the first beam-specific information comprises a time-domain offset field, the time-domain offset field being used to indicate a time-domain offset between a first synchronization signal sent through the first beam and frame timing of the cell.

13. The network device of any one of claims 11-12, wherein the first beam-specific information comprises a control channel time-frequency region indication field, the control channel time-frequency region indication field being used to indicate a size of a time-frequency region of a first control channel sent through the first beam.

14. A terminal device, comprising:

a receiving unit, configured to receive first beam-specific information, the first beam-specific information being used to indicate a configuration parameter of a first beam of a plurality of beams, each of the plurality of beams being used to send corresponding beam-specific information to terminal devices in the same cell and the terminal device being located in coverage of the first beam; and

a determination unit, configured to determine system information of the first beam according to the first beam-specific information.

15. The terminal device of claim 14, wherein the first beam-specific information comprises a time-domain offset field, and the determination unit is specifically configured to:

determine, according to the first beam-specific information, a time-domain offset between a first synchronization signal received through the first beam and frame timing of the cell.

16. The terminal device of claim 14 or 15, wherein the first beam-specific information comprises a system bandwidth indication field, and the determination unit is specifically configured to:

determine, according to the first beam-specific information, a total bandwidth occupied by a signal received through the first beam and a frequency-domain offset between a central frequency point of the total bandwidth and a central frequency point of the cell.

17. The terminal device of any one of claims 14-16, wherein the first beam-specific information comprises a control channel time-frequency region indication field, and the determination unit is specifically configured to:

determine, according to the control channel time-frequency region indication field, a size of a time-frequency region of a first control channel received through the first beam.

18. The terminal device of claim 17, wherein the first control channel comprises a common search space and a User Equipment (UE)-specific search space, and the

determination unit is specifically configured to:

- determine common information of the first beam according to the common search space; and

- determine specific information of the terminal device according to the UE-specific search space.

19. The terminal device of claim 17 or 18, wherein different terminal devices in the coverage of the first beam have different UE-specific codes, the terminal device corresponding to a first UE-specific code, and the determination unit is specifically configured to:

- descramble first control signaling corresponding to the terminal device in the first control channel according to the first UE-specific code.

20. The terminal device of any one of claims 14-16, wherein the first beam-specific information comprises a control channel time-frequency region indication field, and the determination unit is configured to:

- determine, according to the first beam-specific information, a size of a time-frequency region of a first control channel received through the first beam.