WHAT IS CLAIMED IS:

1. A method for determining a default beam, performed by a terminal device, comprising:

receiving first downlink control information (DCI) carried on a first physical downlink control channel (PDCCH); and

~~in response to~~ determining that a transmission beam is unable to be determined according to the first DCI, and determining a default beam according to one or more transmission configuration indication (TCI) states corresponding to a second PDCCH.

2. The method of claim 1, further comprising:

~~wherein, in response to~~determining an absence of a TCI field in the first DCI, and determining that the transmission beam is unable to be determined according to the first DCI.

3. The method of claim 1, wherein determining the default beam according to the one or more TCI states corresponding to the second PDCCH comprises:

determining one or more default TCI states according to the one or more TCI states corresponding to the second PDCCH; and

determining the default beam according to the one or more default TCI states.

4. The method of any of claims 1 to 3, wherein the second PDCCH corresponds to one TCI state, and the one TCI state is a TCI state corresponding to a control resource set (CORESET) corresponding to the second PDCCH.

5. The method of any of claims 1 to 3, wherein the second PDCCH corresponds to a plurality of TCI states, comprising at least one of:

the second PDCCH corresponding to at least one of one CORESET ~~and/~~or one search space (SS) set associated with the CORESET, wherein the CORESET corresponds to a plurality of TCI states, and the plurality of TCI states corresponding to the second PDCCH are the plurality of TCI states corresponding to the CORESET;

the second PDCCH corresponding to at least one of one CORESET ~~and/~~or a plurality of SS sets associated with the CORESET, wherein the CORESET corresponds to a plurality of TCI states, and the plurality of TCI states corresponding to the second PDCCH are the plurality of TCI states corresponding to the CORESET; or

the second PDCCH corresponding to at least one of a plurality of CORESETs ~~and/~~or a plurality of SS sets, wherein each of the plurality of CORESETs corresponds to one

TCI state, and the plurality of TCI states corresponding to the second PDCCH are the plurality of TCI states corresponding to the plurality of CORESETs.

6. The method of claim 3, wherein determining the one or more default TCI states according to the plurality of TCI states corresponding to the second PDCCH comprises:

determining the one or more default TCI states according to IDs of the plurality of TCI states corresponding to the second PDCCH.

7. The method of claim 3, wherein determining the one or more default TCI states according to the plurality of TCI states corresponding to the second PDCCH comprises:

obtaining an attribute value of a CORESET corresponding to the second PDCCH; and

determining the one or more default TCI states according to the attribute value of the CORESET corresponding to the second PDCCH.

8. The method of claim 7, wherein the attribute value of the CORESET comprises at least one of:

a CORESET ID;

an ID of a SS set associated with the CORESET; or

a CORESETPoolindex of the CORESET.

9. The method of claim 3, wherein the one or more default TCI states comprise a plurality of default TCI states, and the method further comprises:

mapping a plurality of default beams on a plurality of transmission occasions using sequence mapping or cyclic mapping.

10. The method of any one of claims 1-9, wherein the second PDCCH is the first PDCCH.

11. The method of any one of claims 1-9, wherein a CORESET corresponding to the second PDCCH is a CORESET with a minimum ID in a latest time unit in which a SS set is monitored, and the one or more TCI states corresponding to the second PDCCH are one or more TCI states corresponding to the CORESET with the minimum ID.

12. The method of claim 11, further comprising at least one of:

a CORESETPoolindex of the CORESET with the minimum ID being identical to a CORESETPoolindex of a CORESET corresponding to the first PDCCH; or,

the CORESET with the minimum ID being a CORESET with a minimum ID in a plurality of CORESETs each corresponding to one TCI state.

13. The method of any one of claims 1-9, wherein the one or more TCI states corresponding to the second PDCCH comprise:

one or more TCI states corresponding to a designated codepoint of a TCI state field contained in a DCI format corresponding to the first DCI.

14. The method of claim 13, wherein the designated codepoint comprises one of:

a minimum codepoint in a plurality of codepoints;

a minimum codepoint in a plurality of codepoints each corresponding to one TCI state; and

a minimum codepoint in a plurality of codepoints each corresponding to two TCI states.

15. The method of any one of claims 1-9, wherein the one or more TCI states corresponding to the second PDCCH comprise:

one or more TCI states indicated by a second DCI latest used to indicate the TCI state, wherein the second DCI is carried by the second PDCCH.

16. A method for determining a default beam, performed by a network device, comprising:

sending first downlink control information (DCI) to a terminal device, wherein the first DCI is carried on a first physical downlink control channel (PDCCH); wherein

the terminal device determines ~~a transmission beam according to the first DCI, and in response to determining~~ that ~~the~~ a transmission beam is unable to be determined according to the first DCI, and the terminal device determines a default beam according to one or more transmission configuration indication (TCI) states corresponding to a second PDCCH.

17. An apparatus for determining a default beam, performed by a terminal device, comprising:

a receiving module, configured to receive first downlink control information (DCI) carried on a first physical downlink control channel (PDCCH); and

a determining module, configured to, in response to determining that a transmission beam is unable to be determined according to the first DCI, determine a default beam according to one or more transmission configuration indication (TCI) states corresponding to a second PDCCH.

18. An apparatus for determining a default beam, performed by a network device,

comprising:

a sending module, configured to send first downlink control information (DCI) to a terminal device, wherein the first DCI is carried on a first physical downlink control channel (PDCCH); wherein

the terminal device determines ~~a transmission beam according to the first DCI, and in response to determining~~ that ~~the~~ a transmission beam is unable to be determined according to the first DCI, and the terminal device determines a default beam according to one or more transmission configuration indication (TCI) states corresponding to a second PDCCH.

19. A communication device, comprising:

a transceiver~~,~~;

a memory~~,~~; and

a processor connected to the transceiver and the memory, respectively, wherein the processor is configured to ~~control transmitting and receiving of wireless signals of the transceiver by executing computer-executable instructions on the memory, and the processor is capable of~~ perform~~ing~~ the method for determining a default beam of any one of claims 1 to 15, or perform~~ing~~ the method for determining a default beam of claim 16.

20. A non-transitory computer storage medium having ~~computer executable instructions~~ stored thereon instructions that, ~~wherein when the computer executable instructions are~~ executed by a processor of a communication device, cause the communication device to perform~~,~~ the method for determining a default beam of any one of claims 1 to 15 or the method for determining a default beam of claim 16 is performed.