CLAIMS

What is claimed is:

1. A capability indication method, applied to a terminal and comprising:

sending terminal capability related information; wherein the terminal capability related information includes terminal model information, and the terminal model information includes a type allocation code (TAC);

obtaining first information assigned by a communications device based on the terminal capability related information, wherein the first information comprises at least one of the following: first indication information of a terminal capability, ~~and~~ or terminal capability information mapped to the first indication information~~,~~; and the first indication information of the terminal capability includes terminal capability identification information~~; and~~

~~sending second indication information of the terminal capability based on the first information~~.

2. The method according to claim 1, wherein the first indication information of the terminal capability further comprises at least one of the following: terminal model information, or assistance information for capability indication~~, and terminal capability identification information~~; and

the terminal capability related information ~~second indication information of the terminal capability~~ further comprises at least one of the following: ~~terminal model information,~~ assistance information for capability indication, ~~and~~ or terminal capability identification information.

3. The method according to claim 2, wherein the terminal model information further comprises at least one of the following: an identifier of terminal manufacturer, ~~a type allocation code, and~~ or a software version number.

4. The method according to claim 2, wherein the assistance information for capability indication comprises at least one of the following: information of a card slot corresponding to a capability, information of a card corresponding to a capability, information of a serving network corresponding to a capability, information of a network type corresponding to a capability, ~~and~~ or capability type indication information.

5. The method according to claim 4, wherein the capability type indication information comprises at least one of the following:

radio capability indication information ~~and~~ or network capability indication information.

6. The method according to claim 4, wherein the information of a card slot corresponding to a capability comprises at least one of the following: identification information of a card slot, a serial number of a corresponding card slot, information of a first card slot, information of a second card slot, indication information indicating a primary card slot or a secondary card slot, indication

information of whether the capability is applicable to all card slots, ~~and~~ or indication information of whether the capability is indiscriminate between card slots.

7. The method according to claim 4, wherein the information of a card corresponding to a capability comprises at least one of the following: a serial number of a card, a serial number of a card slot in which a card is located, indication information indicating a primary card or a secondary card, indication information of whether the capability is applicable to all cards, ~~and~~ or indication information of whether the capability is indiscriminate between cards.

8. The method according to claim 4, wherein the information of a serving network corresponding to a capability comprises at least one of the following: network identification information of a serving network, indication information of whether the capability is applicable to all serving networks, or~~and~~ indication information of whether the capability is indiscriminate between serving networks.

9. The method according to claim 4, wherein the information of a network type corresponding to a capability comprises at least one of the following: a network type, indication information of whether the capability is applicable to all network types, ~~and~~ or indication information of whether the capability is indiscriminate between network types.

10. The method according to claim 2, wherein the terminal capability identification information comprises at least one of the following: a capability identifier ~~and~~ or applicable range information of the capability identifier.

11. The method according to claim 10, wherein the applicable range information of the capability identifier comprises at least one of the following: information of a card corresponding to the capability identifier, information of a card slot corresponding to the capability identifier, information of a serving network corresponding to the capability identifier, ~~and~~ or information of a network type corresponding to the capability identifier.

12. The method according to claim 11, wherein the information of a card corresponding to the capability identifier comprises at least one of the following: a serial number of a card, information of a card slot in which the card is located, indication information indicating a primary card or a secondary card, indication information of whether the capability is applicable to all cards, ~~and~~ or indication information of whether the capability is indiscriminate between cards.

13. The method according to claim 11, wherein the information of a card slot corresponding to the capability identifier comprises at least one of the following: identification information of a card slot, a serial number of a card slot, information of a first card slot, information of a second card slot, indication information indicating a primary card slot or a secondary card slot, indication information of whether the capability is applicable to all card slots, ~~and~~ or indication information of whether the capability is indiscriminate between card slots.

14. The method according to claim 11, wherein the information of a serving network corresponding to the capability identifier comprises at least one of the following: network identification information of a serving network, indication information of whether the capability identifier is applicable to all serving networks, ~~and~~ or indication information of whether the capability identifier is indiscriminate between serving networks.

15. The method according to claim 11, wherein the information of a network type corresponding to the capability identifier comprises at least one of the following: a network type, indication information of whether the capability identifier is applicable to all network types, ~~and~~ or indication information of whether the capability identifier is indiscriminate between network types.

~~16. The method according to claim 1, wherein the sending second indication information of the terminal capability based on the first information comprises:~~

~~sending the second indication information of the terminal capability based on the first information and access information of the terminal,~~

~~wherein the access information of the terminal comprises at least one of the following: a serving network that the terminal accesses, a location of a card for accessing a serving network by the terminal, a card slot in which the card for accessing the serving network by the terminal is located, the Nth card through which the terminal accesses the serving network, and a network type of the serving network that the terminal accesses.~~

~~17. The method according to claim 16, wherein the sending second indication information of the terminal capability comprises at least one of the following:~~

~~when the terminal accesses a first network through the Nth card, sending capability identification information corresponding to the Nth card;~~

~~when the terminal accesses a first network through the Nth card, sending capability identification information corresponding to the Nth card for the first network;~~

~~when the terminal accesses a first network through the Nth card, sending capability identification information corresponding to the Nth card for the first network, wherein the capability identification information comprises capability identification information, corresponding to one or more network types, of the terminal in the first network;~~

~~when the terminal accesses a first network, sending capability identification information corresponding to the first network;~~

~~when the terminal accesses a first network, sending capability identification information, corresponding to one or more network types, of the terminal in the first network; and~~

~~when the terminal accesses a network of a first network type, sending capability identification information corresponding to the first network type;~~

~~wherein N is a positive integer greater than or equal to 1, and the Nth card for the first network is a card for the first network installed in the Nth card slot of the terminal.~~

~~18~~16. The method according to claim 1, wherein the sending terminal capability related information ~~second indication information of the terminal capability~~ comprises:

when the terminal accesses a network, sending the terminal capability related information~~second indication information of the terminal capability~~; or,

when the network requests for terminal capability information, sending the terminal capability related information~~second indication information of the terminal capability~~.

~~19~~17. The method according to any one of claims 1 to ~~18~~16, wherein the terminal capability comprises at least one of the following: a UE core network capability ~~and~~ or a UE radio capability.

~~20. A capability indication method, applied to a first network-side network element and comprising:~~

~~obtaining second indication information of a terminal capability; and~~

~~performing at least one of the following operations based on the second indication information of the terminal capability:~~

~~mapping the terminal capability based on the second indication information of the terminal capability, saving the second indication information of the terminal capability, and sending the second indication information of the terminal capability to a first target end.~~

~~21. The method according to claim 20, wherein the second indication information of the terminal capability comprises at least one of the following: terminal model information, assistance information for capability indication, and terminal capability identification information.~~

~~22. The method according to claim 20, wherein the first target end comprises at least one of the following: a terminal and a CN network element.~~

~~23. The method according to any one of claims 20 to 22, wherein the obtaining second indication information of a terminal capability comprises: obtaining the second indication information of the terminal capability from at least one of the terminal, a radio access network RAN network element, or the core network CN network element.~~

~~24. The method according to claim 23, wherein the first network-side network element is a first CN network element, and after the second indication information of the terminal capability is obtained from the terminal, the sending the second indication information of the terminal capability to a first target end comprises: sending the second indication information of the terminal capability to at least one of a second CN network element and the RAN network element.~~

~~25~~18. A capability indication method, applied to a communications device and comprising:

obtaining terminal capability related information; wherein the terminal capability related information includes terminal model information, and the terminal model information includes a

type allocation code (TAC); and

assigning first information to a terminal based on the terminal capability related information, wherein the first information comprises at least one of the following: first indication information of a terminal capability, ~~and~~ or terminal capability information mapped to the first indication information; and the first indication information of the terminal capability includes terminal capability identification information.

~~26~~19. The method according to claim ~~25~~18, wherein the terminal capability related information further comprises at least one of the following: ~~terminal model information,~~ assistance information for capability indication, ~~and~~ or terminal capability information.

~~27~~20. The method according to claim ~~26~~19, wherein the assigning first information to a terminal based on the terminal capability related information comprises at least one of the following:

assigning the first indication information of the terminal capability to the terminal based on the terminal model information and the assistance information for capability indication;

assigning the first indication information of the terminal capability to the terminal based on the assistance information for capability indication; ~~and~~or

assigning the first indication information of the terminal capability to the terminal based on the terminal capability information.

21. A capability indication method, applied to a terminal, comprising:

obtaining first information; wherein the first information comprises at least one of the following: first indication information of a terminal capability, or terminal capability information mapped to the first indication information; and

sending second indication information of the terminal capability based on the first information;

wherein the first indication information of the terminal capability comprises terminal capability identification information; the second indication information of the terminal capability comprises terminal capability identification information; the first indication information of the terminal capability is the same as or different from the second indication information of the terminal capability;

wherein the sending second indication information of the terminal capability based on the first information, comprises:

sending the second indication information of the terminal capability based on the first information and access information of the terminal,

wherein the access information of the terminal comprises at least one of the following: a serving network that the terminal accesses, a location of a card for accessing a serving network by

the terminal, a card slot in which the card for accessing the serving network by the terminal is located, the Nth card through which the terminal accesses the serving network, or a network type of the serving network that the terminal accesses.

22. The method according to claim 21, wherein the sending second indication information of the terminal capability comprises at least one of the following:

when the terminal accesses a first network through the Nth card, sending capability identification information corresponding to the Nth card;

when the terminal accesses a first network through the Nth card, sending capability identification information corresponding to the Nth card for the first network;

when the terminal accesses a first network through the Nth card, sending capability identification information corresponding to the Nth card for the first network, wherein the capability identification information comprises capability identification information, corresponding to one or more network types, of the terminal in the first network;

when the terminal accesses a first network, sending capability identification information corresponding to the first network;

when the terminal accesses a first network, sending capability identification information, corresponding to one or more network types, of the terminal in the first network; or

when the terminal accesses a network of a first network type, sending capability identification information corresponding to the first network type;

wherein N is a positive integer greater than or equal to 1, and the Nth card for the first network is a card for the first network installed in the Nth card slot of the terminal.

23. The method according to claim 21, wherein the first indication information of the terminal capability further comprises at least one of the following: terminal model information or assistance information for capability indication; and

the second indication information of the terminal capability further comprises at least one of the following: terminal model information or assistance information for capability indication.

24. The method according to claim 23, wherein the terminal model information comprises at least one of the following: an identifier of terminal manufacturer, a type allocation code, or a software version number.

25. The method according to claim 23, wherein the assistance information for capability indication comprises at least one of the following: information of a card slot corresponding to a capability, information of a card corresponding to a capability, information of a serving network corresponding to a capability, information of a network type corresponding to a capability, or capability type indication information.

26. The method according to claim 25, wherein the capability type indication information

comprises at least one of the following: radio capability indication information or network capability indication information.

27. The method according to claim 25, wherein the information of a card slot corresponding to a capability comprises at least one of the following: identification information of a card slot, a serial number of a corresponding card slot, information of a first card slot, information of a second card slot, indication information indicating a primary card slot or a secondary card slot, indication information of whether the capability is applicable to all card slots, or indication information of whether the capability is indiscriminate between card slots.

28. A terminal, comprising:

a sending module, configured to send terminal capability related information; wherein the terminal capability related information includes terminal model information, and the terminal model information includes a type allocation code (TAC);

a first obtaining module, configured to obtain first information assigned by a communications device based on the terminal capability related information, wherein the first information comprises at least one of the following: first indication information of a terminal capability, ~~and~~ or terminal capability information mapped to the first indication information; and the first indication information of the terminal capability includes terminal capability identification information

~~a sending module, configured to send second indication information of the terminal capability based on the first information~~.

~~29. A first network-side network element, comprising:~~

~~a second obtaining module, configured to obtain second indication information of a terminal capability; and~~

~~an execution module, configured to perform at least one of the following operations based on the second indication information of the terminal capability:~~

~~mapping the terminal capability based on the second indication information of the terminal capability, saving the second indication information of the terminal capability, and sending the second indication information of the terminal capability to a first target end.~~

~~30~~29. A communications device, comprising:

a third obtaining module, configured to obtain terminal capability related information; wherein the terminal capability related information includes terminal model information, and the terminal model information includes a type allocation code (TAC); and

an assigning module, configured to assign first information to a terminal based on the terminal capability related information, wherein the first information comprises at least one of the following: first indication information of a terminal capability, ~~and~~ or terminal capability information mapped

to the first indication information; and the first indication information of the terminal capability includes terminal capability identification information.

30. A terminal, comprising:

a first obtaining module, configured to obtain first information, wherein the first information comprises at least one of the following: first indication information of a terminal capability, or terminal capability information mapped to the first indication information; and

a sending module, configured to send second indication information of the terminal capability based on the first information;

wherein the first indication information of the terminal capability comprises terminal capability identification information; the second indication information of the terminal capability comprises terminal capability identification information; the first indication information of the terminal capability is the same as or different from the second indication information of the terminal capability;

wherein the sending module is further configured to:

send the second indication information of the terminal capability based on the first information and access information of the terminal,

wherein the access information of the terminal comprises at least one of the following: a serving network that the terminal accesses, a location of a card for accessing a serving network by the terminal, a card slot in which the card for accessing the serving network by the terminal is located, the Nth card through which the terminal accesses the serving network, or a network type of the serving network that the terminal accesses.

31. A communications device, comprising a memory, a processor, and a computer program stored in the memory and capable of running on the processor, wherein when the computer program is executed by the processor, the steps of the capability indication method according to any one of claims 1 to ~~19~~ 17 are implemented, or the steps of the capability indication method according to any one of claims ~~20~~ 18 to ~~24~~ 20 are implemented, or the steps of the capability indication method according to any one of claims ~~25~~ 21 to 27 are implemented.

32. 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 capability indication method according to any one of claims 1 to ~~19~~ 17 are implemented, or the steps of the capability indication method according to any one of claims ~~20~~ 18 to ~~24~~ 20 are implemented, or the steps of the capability indication method according to any one of claims ~~25~~ 21 to 27 are implemented.