CLAIMS

What is claimed is:

1. A communication method, comprising:

determining, by a terminal device, first indication information based on states of a plurality of universal subscriber identity modules USIMs, wherein a state of a USIM includes a connected state or an idle/inactive state, and wherein the first indication information indicates to enable or disable a paging enhancement function, and/or enable or disable a paging occasion collision avoidance function, and the terminal device comprises the plurality of USIMs;

wherein the paging enhancement function is used to indicate, to the terminal device, service information that triggers paging or filters paging of the terminal device based on service information that triggers paging;

wherein the paging occasion collision avoidance function is used to avoid a paging occasion collision between USIMs of the terminal device; and

sending, by the terminal device, the first indication information to an access and mobility management function AMF.

2. The method according to claim 1, wherein the first indication information indicates to enable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in a connected state, and the second USIM is in an idle/inactive state; and

the sending, by the terminal device, the first indication information to an AMF comprises:

sending, by the terminal device, the first indication information to an AMF corresponding to the second USIM.

3. The method according to claim 1, wherein the first indication information indicates to disable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, and the second USIM is in an idle/inactive state; and

the sending, by the terminal device, the first indication information to an AMF comprises:

sending, by the terminal device, the first indication information to an AMF corresponding to the first USIM and/or an AMF corresponding to the second USIM.

4. The method according to claim 1, wherein the first indication information indicates to enable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in an idle/inactive state, and a paging occasion PO of the first USIM is the same as a PO of the second USIM; and

the sending, by the terminal device, the first indication information to an AMF comprises:

sending, by the terminal device, the first indication information to an AMF corresponding to the first USIM or an AMF corresponding to the second USIM.

5. The method according to claim 1, wherein the first indication information indicates to disable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, and the second USIM is in a connected state; and

the sending, by the terminal device, the first indication information to an AMF comprises:

sending, by the terminal device, the first indication information to an AMF corresponding to the first USIM.

6. A communication method, comprising:

receiving, by an access and mobility management function AMF, first indication information from a terminal device, wherein the terminal device comprises a plurality of universal subscriber identity modules USIMs, and the first indication information is determined based on states of the plurality of USIMs, wherein a state of a USIM includes a connected state or an idle/inactive state, and wherein the first indication information indicates to enable or disable a paging enhancement function, and/or enable or disable a paging occasion collision avoidance function, and the terminal device comprises the plurality of USIMs; and

enabling or disabling, by the AMF, a paging enhancement function based on the first indication information, wherein the paging enhancement function is used to indicate, to the terminal device, service information that triggers paging or filters paging of the terminal device based on service information that triggers paging; and/or

enabling or disabling, by the AMF, a paging occasion collision avoidance function based on the first indication information, wherein the paging occasion collision avoidance function is used to avoid a paging occasion collision between USIMs of the terminal device.

7. The method according to claim 6, wherein the first indication information indicates to enable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in a connected state, the second USIM is in an idle/inactive state, and the AMF is an AMF corresponding to the second USIM.

8. The method according to claim 7, wherein the method further comprises:

sending, by the AMF, a first notification message to a session management function SMF of the second USIM, wherein the first notification message notifies the SMF to enable the paging enhancement function.

9. The method according to claim 6, wherein the first indication information indicates to disable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in an idle/inactive state, and the AMF is an AMF corresponding to the first USIM and/or an AMF corresponding to the second USIM.

10. The method according to claim 9, wherein the method further comprises:

sending, by the AMF, a second notification message to an SMF corresponding to the first USIM or an SMF corresponding to the second USIM, wherein the second notification message notifies the SMF to disable the paging enhancement function.

11. The method according to claim 6, wherein the first indication information indicates to enable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in an idle/inactive state, a paging occasion PO of the first USIM is the same as a PO of the second USIM, and the AMF is an AMF corresponding to the first USIM or an AMF corresponding to the second USIM.

12. The method according to claim 11, wherein the enabling, by the AMF, a paging occasion collision avoidance function comprises:

sending, by the AMF, a paging message to an access network device, wherein the paging message indicates to enable the paging occasion collision avoidance function.

13. The method according to claim 6, wherein the first indication information indicates to disable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in a connected state, and the AMF is an AMF corresponding to the first USIM.

14. The method according to claim 13, wherein the disabling, by the AMF, a paging occasion collision avoidance function comprises:

sending, by the AMF, a paging message to an access network device, wherein the paging message indicates to disable the paging occasion collision avoidance function.

15. A communication apparatus, wherein the apparatus is a terminal device, and the apparatus comprises:

a processing unit, configured to determine first indication information based on states of a plurality of universal subscriber identity modules USIMs, wherein a state of a USIM includes a connected state or an idle/inactive state, and wherein the first indication information indicates to enable or disable a paging enhancement function, and/or enable or disable a paging occasion collision avoidance function, and the terminal device comprises the plurality of USIMs;

wherein the paging enhancement function is used to indicate, to the terminal device, service information that triggers paging or filters paging of the terminal device based on service information that triggers paging;

wherein the paging occasion collision avoidance function is used to avoid a paging occasion collision between USIMs of the terminal device; and

a transceiver unit, configured to send the first indication information to an access and mobility management function AMF.

16. The apparatus according to claim 15, wherein the first indication information indicates to enable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in a connected state, and the second USIM is in an idle/inactive state; and

that the transceiver unit is configured to send the first indication information to the AMF comprises:

sending the first indication information to an AMF corresponding to the second USIM.

17. The apparatus according to claim 15, wherein the first indication information indicates to disable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, and the second USIM is in an idle/inactive state; and

that the transceiver unit is configured to send the first indication information to the AMF comprises:

sending the first indication information to an AMF corresponding to the first USIM and/or an AMF corresponding to the second USIM.

18. The apparatus according to claim 15, wherein the first indication information indicates to enable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in an idle/inactive state, and a paging occasion PO of the first USIM is the same as a PO of the second USIM; and

that the transceiver unit is configured to send the first indication information to the AMF comprises:

sending the first indication information to an AMF corresponding to the first USIM or an AMF corresponding to the second USIM.

19. The apparatus according to claim 15, wherein the first indication information indicates to disable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, and the second USIM is in a connected state; and

that the transceiver unit is configured to send the first indication information to the AMF comprises:

sending the first indication information to an AMF corresponding to the first USIM.

20. A communication apparatus, wherein the apparatus is an access and mobility management function AMF, and the apparatus comprises:

a transceiver unit, configured to receive first indication information from a terminal device, wherein the terminal device comprises a plurality of universal subscriber identity modules USIMs, and the first indication information is determined based on states of the plurality of USIMs, wherein a state of a USIM includes a connected state or an idle/inactive state, and wherein the first indication information indicates to enable or disable a paging enhancement

function, and/or enable or disable a paging occasion collision avoidance function, and the terminal device comprises the plurality of USIMs; and

a processing unit, configured to: enable or disable a paging enhancement function based on the first indication information, wherein the paging enhancement function is used to indicate, to the terminal device, service information that triggers paging or filters paging of the terminal device based on service information that triggers paging; and/or enable or disable a paging occasion collision avoidance function based on the first indication information, wherein the paging occasion collision avoidance function is used to avoid a paging occasion collision between USIMs of the terminal device.

21. The apparatus according to claim 20, wherein the first indication information indicates to enable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in a connected state, the second USIM is in an idle/inactive state, and the AMF is an AMF corresponding to the second USIM.

22. The apparatus according to claim 21, wherein the transceiver unit is further configured to send a first notification message to a session management function SMF of the second USIM, wherein the first notification message notifies the SMF to enable the paging enhancement function.

23. The apparatus according to claim 20, wherein the first indication information indicates to disable the paging enhancement function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in an idle/inactive state, and the AMF is an AMF corresponding to the first USIM and/or an AMF corresponding to the second USIM.

24. The apparatus according to claim 23, wherein the transceiver unit is further configured to send a second notification message to an SMF corresponding to the first USIM or an SMF corresponding to the second USIM, wherein the second notification message notifies the SMF to disable the paging enhancement function.

25. The apparatus according to claim 20, wherein the first indication information indicates to enable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in an idle/inactive state, a paging occasion PO of the first USIM is the same as a PO of the second USIM, and the AMF is an AMF corresponding to the first USIM or an AMF corresponding to the second USIM.

26. The apparatus according to claim 25, wherein that the processing unit is configured to enable the paging occasion collision avoidance function comprises:

sending a paging message to an access network device, wherein the paging message indicates to enable the paging occasion collision avoidance function.

27. The apparatus according to claim 20, wherein the first indication information indicates to disable the paging occasion collision avoidance function, the plurality of USIMs comprise a first USIM and a second USIM, the first USIM is in an idle/inactive state, the second USIM is in a connected state, and the AMF is an AMF corresponding to the first USIM.

28. The apparatus according to claim 27, wherein that the processing unit is configured to disable the paging occasion collision avoidance function comprises:

invoking the transceiver unit to send a paging message to an access network device, wherein the paging message indicates to disable the paging occasion collision avoidance function.

29. A communication apparatus, comprising a processor, wherein the processor is configured to: be coupled to a memory, and read and execute instructions in the memory, to enable the processor to perform the method according to any one of claims 1 to 14.

30. A computer-readable storage medium, comprising a program or instructions, wherein when the program or the instructions is/are executed, a computer is enabled to perform the method according to any one of claims 1 to 14.