CLAIMS

1. A network access method, comprising:

sending, by a first terminal, a first message to an access management network element in a first non-public network, wherein the first message is used to request to register the first terminal with the first non-public network;

receiving, by the first terminal, a second message from the access management network element, wherein the second message is used to indicate that registration of the first terminal with the first non-public network is rejected, the second message comprises first indication information, and the first indication information indicates that access of the first terminal to the first non-public network is forbidden; and

updating, by the first terminal, a forbidden network list of the first terminal based on the first indication information, wherein an updated forbidden network list comprises information about the first non-public network;

wherein the method further comprises:

starting, by the first terminal, a timer based on the first indication information; and when the timer expires, deleting, by the first terminal, the information about the first non-public network from the updated forbidden network list.

2. The method according to claim 1, wherein the first non-public network supports interworking with a first public network.

3. The method according to claim 1 or 2, wherein the method further comprises:

selecting, by the first terminal based on the updated forbidden network list, a network other than the first non-public network for registration.

4. The method according to any one of claims 1 to 3, wherein the second message comprises a timer time value, and the method further comprises:

setting, by the first terminal, the timer based on the timer time value.

5. A network access method, comprising:

receiving, by an access management network element in a first non-public network, a first message from a first terminal, wherein the first message is used to request to register the first terminal with the first non-public network;

obtaining, by the access management network element, a third message from a unified data

management network element in a first public network; and

sending, by the access management network element, a second message to the first terminal based on the third message, wherein the second message is used to indicate that registration of the first terminal with the first non-public network is rejected, the second message comprises first indication information, and the first indication information indicates that access of the first terminal to the first non-public network is forbidden;

wherein the first indication information is used to start a timer.

6. The method according to claim 5, wherein the third message comprises subscription data of the first terminal, the subscription data comprises second indication information, and the second indication information is used to indicate that the first terminal can access only a public network, or the second indication information is used to indicate that the first terminal cannot access a non-public network.

7. The method according to claim 6, wherein the second indication information comprises a supported network list of the first terminal, and the network list does not comprise information about the first non-public network.

8. The method according to claim 5, wherein the third message comprises third indication information, and the third indication information is used to indicate that subscription data of the first terminal is not successfully obtained.

9. The method according to claim 8, wherein the third message further comprises a cause value of unsuccessful obtaining of the subscription data of the first terminal, and the cause value indicates that the first terminal is not allowed to access the first non-public network.

10. The method according to any one of claims 5 to 9, wherein the method further comprises:

determining, by the access management network element based on the third message, to reject the registration of the first terminal with the first non-public network.

11. A communication apparatus, wherein the communication apparatus is a first terminal or a chip used in the first terminal, and the apparatus comprises:

a communication unit, configured to send a first message to an access management network element in a first non-public network, wherein the first message is used to request to register the first terminal with the first non-public network, wherein

the communication unit is further configured to receive a second message from the access

management network element, wherein the second message is used to indicate that registration of the first terminal with the first non-public network is rejected, the second message comprises first indication information, and the first indication information indicates that access of the first terminal to the first non-public network is forbidden; and

a processing unit, configured to update a forbidden network list of the first terminal based on the first indication information, wherein an updated forbidden network list comprises information about the first non-public network;

wherein the processing unit is configured to start a timer based on the first indication information; and when the timer expires, delete the information about the first non-public network from the updated forbidden network list.

12. The apparatus according to claim 11, wherein the first non-public network supports interworking with a first public network.

13. The apparatus according to claim 11 or 12, wherein the processing unit is further configured to select, based on the updated forbidden network list, a network other than the first non-public network for registration.

14. A communication apparatus, wherein the communication apparatus is an access management network element or a chip used in the access management network element, and the apparatus comprises:

a communication unit, configured to receive a first message from a first terminal, wherein the first message is used to request to register the first terminal with a first non-public network, wherein

the communication unit is further configured to obtain a third message from a unified data management network element in a first public network; and

the communication unit is further configured to send a second message to the first terminal based on the third message, wherein the second message is used to indicate that registration of the first terminal with the first non-public network is rejected, the second message comprises first indication information, and the first indication information indicates that access of the first terminal to the first non-public network is forbidden;

wherein the first indication information is used to start a timer.

15. The apparatus according to claim 14, wherein the third message comprises subscription

data of the first terminal, the subscription data comprises second indication information, and the second indication information is used to indicate that the first terminal can access only a public network, or the second indication information is used to indicate that the first terminal cannot access the first non-public network.

16. The apparatus according to claim 15, wherein the second indication information comprises a supported network list of the first terminal, and the network list does not comprise information about the first non-public network.

17. The apparatus according to claim 16, wherein the third message comprises third indication information, and the third indication information is used to indicate that subscription data of the first terminal is not successfully obtained.

18. A computer-readable storage medium, wherein the readable storage medium stores instructions; and when the instructions are executed, the method according to any one of claims 1 to 4, or the method according to any one of claims 5 to 10 is performed.

19. A chip, wherein the chip comprises a processor and a communication interface; the communication interface is coupled to the processor; the processor is configured to run a computer program or instructions, to implement the method according to any one of claims 1 to 4, or the method according to any one of claims 5 to 10, and the communication interface is configured to communicate with another module outside the chip.

20. A communication apparatus, comprising at least one processor, wherein the at least one processor is coupled to a memory; and the at least one processor is configured to run instructions stored in the memory, to perform the method according to any one of claims 1 to 4, or the method according to any one of claims 5 to 10.