Claims

1. A dual-channel network connection method, comprising a step of:

selecting one card, as a target SIM card, from a SIM card list according to a preset priority rule and a current state of a terminal,

wherein the SIM card list comprises at least a group of packet cards, each of which is a SIM card that is usable in several particular countries, and a group of emergency cards, each of which is a SIM card that is usable in any country, and the preset priority rule defines that a priority of a channel card is higher than that of each of the packet cards whose priority is higher than that of each of the emergency cards,

wherein if the packet card or the emergency card is selected as the target SIM card, the method further comprises steps of:

establishing a first communication path by use of relevant data of the target SIM card;

accessing a cloud through the first communication path to acquire a target VSIM card shared at the cloud, wherein the target VSIM card is a VSIM card matching with the current state of the terminal; and

establishing a second communication path by use of relevant data of the target VSIM card so as to perform network connection through the second communication path.

2. The method according to claim 1, wherein the step of the selecting one card, as a target SIM card, from a SIM card list according to a preset priority rule and a current state of a terminal comprises steps of:

detecting whether there are relevant data of the channel card stored in the SIM card list,

if there are the relevant data of the channel card, determining whether the channel card is valid,

if there are no relevant data of the channel card in the SIM card list or the channel card is determined as invalidity, selecting the packet card or the emergency card, as the target SIM card, from the SIM card list according to the preset priority rule and the current state of the terminal, and

if the channel card is determined as validity, selecting the channel card as the target card.

3. The method according to claim 1 or 2, wherein if the channel card is selected as the target card, the method further comprises establishing a first communication path by use of relevant data of the target SIM card so as to perform network connection through the first communication path.

4. The method according to claim 2, wherein the step of determining whether the channel card is valid comprises steps of:

reading network-accessing data by use of a carrier server which the channel card most recently accesses, and accessing the network by use of the network-accessing data;

if a feedback message indicating that the network is connected is received within a preset time, determining the channel card as validity;

if the feedback message is not received within the preset time, determining whether the channel card is usable in a location where the terminal is; and

if it is determined that the channel card is not usable in the location of the terminal, determining the channel card as invalidity.

5. The method according to claim 2, wherein the step of selecting the packet card or the emergency card, as a target SIM card, from a SIM card list according to a preset priority rule and a current state comprises steps of:

screening out, from the SIM card list, packet cards as candidate packet cards, that are usable in a location where the terminal is, to acquire a first candidate packet card set;

invoking service attributes of the respective candidate packet cards in the first candidate packet card set, for the location of the terminal, and screening out a candidate packet card with an optimal service attribute as a to-be-accessed packet card;

accessing a network by use of relevant data of the to-be-accessed packet card; and

if a feedback message indicating that the network is connected is received within a preset time, determining the to-be-accessed packet card as the target SIM card.

6. The method according to claim 5, further comprising:

if the feedback message is not received within the preset time, removing the candidate packet card with the optimal service attribute out of the first candidate packet card set, to acquire a second candidate packet card set;

counting a number of the candidate packet cards in the second candidate packet card set, and determining whether the number is greater than zero;

if the number is greater than zero, going through the second candidate packet card set to screen out a candidate packet card with an optimal service attribute as a to-be-accessed packet card; and

if the number is equal to zero, invoking any one of the emergency cards in the SIM card list as the target SIM card.

7. The method according to claim 6, wherein the step of invoking any one of the emergency cards from the SIM card list as the target SIM card comprises steps of:

invoking any one of the emergency cards in the SIM card list as a to-be-accessed emergency card;

accessing the network by use of relevant data of the to-be-accessed emergency card; and

if a feedback information indicating that the to-be-accessed emergency card is occupied is received, releasing the to-be-accessed emergency card, and re-invoking any one of the emergency cards in the SIM card list as the target SIM card.

8. The method according to claim 1, wherein the group of emergency cards comprises 2-3 emergency cards, and each of which provides services for 1000-2000 terminals; and any two of the terminals share at most one emergency card.

9. The method according to claim 8, wherein

the 2-3 emergency cards are randomly selected as the group of emergency cards. [0019]

10. The method according to claim 1, wherein

the relevant data of the target SIM card is pre-stored in the SIM card list within the terminal.

11. The method according to claim 2, wherein

the relevant data of the channel card is written into the SIM card list after requesting the channel card from a cloud by the terminal.

12. The method according to claim 1, wherein if the packet card or the emergency card is selected as the target SIM card, the method further comprises the steps of

releasing the target SIM card after establishing the second communication path; and

requesting another channel card from the cloud for establishing another first communication path.

13. The method according to claim 1, further comprising a step of

retaining the channel card in the SIM card list within a preset retention duration of the channel card.

14. A dual-channel network connection terminal, wherein the terminal is configured to select one card, as a target SIM card, from a SIM card list according to a preset priority rule and a current state of the terminal, so as to perform network connection,

wherein the SIM card list comprises at least a group of packet cards, each of which is a SIM card that is usable in several particular countries, and a group of emergency cards, each of which is a SIM card that is usable in any country, and the preset priority rule defines that a priority of a channel card is higher than that of each of the packet cards whose priority is higher than that of each of the emergency cards,

wherein if the packet card or the emergency card is selected as the target SIM card, the method further comprises steps of:

establishing a first communication path by use of relevant data of the target SIM card;

accessing a cloud through the first communication path to acquire a target VSIM card shared at the cloud, wherein the target VSIM card is a VSIM card matching with the current state of the terminal; and

establishing a second communication path by use of relevant data of the target VSIM card so as to perform network connection through the second communication path.

15. The dual-channel network connection terminal according to claim 14, wherein

the SIM card list comprises first relevant data of the packet cards and second relevant data of the emergency cards.

16. The dual-channel network connection terminal according to claim 14, further comprising

- a main control module configured to store the SIM card list;
- a secondary card channel module configured to establish a first communication path by the target SIM card; and
- a SIM card virtualizer configured to establish a second communication path by a target VSIM card, wherein the wherein the target VSIM card is a VSIM card matching with the current state of the terminal,

17. The dual-channel network connection terminal according to claim 16, wherein

the main control module further comprises

- a selection module for selecting a most appropriate target SIM card for the terminal according to the current state thereof and the present priority rule;
- a VSIM card acquirement module configured to access the cloud through the first communication path for acquiring the target VSIM card shared at the cloud; and
- a state analysis module configured to acquire the current state of the terminal in a real time manner and sending the current state to the selection module.

18. The dual-channel network connection terminal according to claim 16 or 17 further comprising a RJ45 interface communication module configured between the main control module and the cloud for establishing access to an Internet.

19. A dual-channel network connection system, comprising

a cloud; and

a terminal according to any of the claims 14 to 18.