CLAIMS

1. A method for dual network backup, ~~characterized by~~ comprising:

generating (21), by a device (40) for dual network backup, a one-to-one correspondence between an active cell and a standby cell, wherein coverage areas of the active cell and the standby cell are the same, the active cell is one of a plurality of cells managed by an active base station that is managed by an active base station controller, and the standby cell is one of a plurality of cells managed by a standby base station that is managed by a standby base station controller;

enabling (22), ~~by a device (40) for dual network backup,~~by the device (40) for dual network backup, according to whether a current network is an active network or a standby network, corresponding carriers of the active cell and corresponding carriers of the standby cell to separately work; and

querying (23), by the device (40) for dual network backup, a network availability status, and performing (23), by the device (40) for dual network backup, when it is determined that the network availability status meets a designated condition, a switchover between the active network and the standby network.

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

configuring, by the device (40) for dual network backup, different broadcast control channel, BCCH, carriers for the active cell and the standby cell, wherein the BCCH carriers are carriers, which are used to send a broadcast channel, among cell carriers, and a carrier, except a BCCH carrier, among all carriers of one cell is a non-BCCH carrier.

3. The method according to claim 2, wherein the enabling (22), according to whether thea current network is thean active network or thea standby network, corresponding carriers of the active cell and corresponding carriers of the standby cell to separately work comprises:

when the current network is the active network, enabling, by the active base station controller, all carriers of the active cell to work, and enabling, by the standby base station controller, a BCCH carrier of the standby cell to work and a non-BCCH carrier to skip working; or

when the current network is the standby network, enabling, by the standby base station controller, all carriers of the standby cell to work, and enabling, by the active base station controller, all carriers of the active cell to skip working.

4. The method according to claim 3, wherein the performing (23), when it is determined that the network availability status meets thea designated condition, thea switchover between the active network and the standby network comprises:

when the BCCH carrier of the standby cell is normal, an operation and maintenance link OML link of the standby base station controller of the standby cell is normal, an A-interface link of the standby base station controller is normal, and the standby base station controller is normal, performing a switchover from the active network to the standby network if one of the following situations is met: a BCCH carrier of the active cell is faulty; the BCCH carrier of the active cell is normal, but an OML link of the active base station controller of the active cell is faulty, and a delay protection time for OML link interruption expires; and an A-interface link of the active base station controller is faulty, and the active base station controller is faulty.

5. The method according to claim 4, wherein the performing (23) athe switchover from the active network to the standby network comprises:

starting, by the active base station controller, a switchover timer, switching a service of the active cell to a neighboring cell of the active cell, sending a switchover request to the standby base station controller, and starting a switchover waiting timer;

after receiving the switchover request, enabling, by the standby base station controller, all the carriers of the standby cell to work, recording a switchover alarm, and sending a switchover response to the active base station controller; and

after receiving the switchover response, stopping, by the active base station controller, the switchover waiting timer, and recording a switchover alarm.

6. The method according to claim 3, wherein the performing (23), when it is determined that the network availability status meets thea designated condition, athe switchover between the active network and the standby network comprises:

performing athe switchover from the standby network to the active network when the standby network works, a BCCH carrier of the active cell is normal, an OML link of the

active base station controller of the active cell is normal, and an A-interface link of the active base station controller is normal.

7. The method according to any one of claims 2 to 6, wherein the method further comprises: configuring the non-BCCH carrier of the standby cell as a subset of non-BCCH carriers of the active cell.

8. The method according to any one of claims 1 to 7, wherein:

the active base station controller and the standby base station controller are connected by using a same core network, or the active base station controller and the standby base station controller are connected by using different core networks.

9. A device (40) for dual network backup, ~~characterized by~~ comprising a generating unit (41), a control unit (42), and a switchover unit (43), wherein

the generating unit (41) is configured to generate a one-to-one correspondence between an active cell and a standby cell, wherein coverage areas of the active cell and the standby cell are the same, the active cell is one of a plurality of cells managed by an active base station that is managed by an active device, and the standby cell is one of a plurality of cells managed by a standby base station that is managed by a standby device;

the control unit (42) is configured to enable, according to whether a current network is an active network or a standby network, corresponding carriers of the active cell and corresponding carriers of the standby cell to separately work; and

the switchover unit (43) is configured to: query a network availability status; and when it is determined that the network availability status meets a designated condition, perform a switchover between the active network and the standby network.

10. The device according to claim 9, wherein the device further comprises a configuring unit, wherein

the configuring unit (54) is configured to configure different broadcast control channel, BCCH, carriers for the active cell and the standby cell, wherein the BCCH carriers are carriers, which are used to send a broadcast channel, among cell carriers, and a carrier, except a BCCH carrier, among all carriers of one cell is a non-BCCH carrier.

11. The device according to claim 10, wherein:

the switchover unit (43) is specifically configured to: when the BCCH carrier of the

standby cell is normal, an operation and maintenance link, OML, link of the standby device of the standby cell is normal, an A-interface link of the standby device is normal, and the standby device is normal, perform a switchover from the active network to the standby network if one of the following situations is met: a BCCH carrier of the active cell is faulty; the BCCH carrier of the active cell is normal, but an OML link of the active device of the active cell is faulty, and a delay protection time for OML link interruption expires; and an A-interface link of the active device is faulty, and the active device is faulty.

12. The device according to any one of claims 10 to 11, wherein the configuring unit (54) configures the non-BCCH carrier of the standby cell as a subset of non-BCCH carriers of the active cell.

13. The device according to any one of claims 9 to 12, wherein:

the active device and the standby device are connected by using a same core network, or the active device and the standby device are connected by using different core networks.

14. A wireless communications system, ~~characterized by~~ comprising an active base station, a standby base station and the device for dual network backup according to any one of claims 9 to 13.