CLAIMS

1. A method comprising steps of:

forming (500) a communication intelligence cell (200) for carrying out uplink and downlink communication with cellular mobile devices (300), the cell having a physical cell identity and a tracking area code unused by neighboring real cells (202-216) of a cellular network operator;

connecting (502) the cell (200) to an identity query interface associated with the cellular network operator;

receiving (508) a first registration request from the mobile device (300), with an encrypted subscriber identity of the mobile device (300);

closing (510) a radio connection to the mobile device (300) subsequent to the first registration request; characterized by

receiving (512) a second registration request from the mobile device (300) with a temporary identity of the mobile device (300);

transmitting (516) an identity query with the temporary identity of the mobile device (300) to the identity query interface;

receiving (518) permanent identity of the mobile device (300) from the query interface; and

closing (520) the radio connection to the mobile device (300) subsequent to the second registration request.

2. The method as claimed in claim 1, wherein the forming includes:

providing a downlink radio channel having a power level higher than downlink radio channel power level utilized in neighboring cells (202-216) of the cellular network operator.

3. The method as claimed in any one of claims 1 to 2, wherein the closing includes:

sending a first registration reject to the mobile device (300) with an error code indicating network error after receiving an encrypted subscriber

identity of the mobile device (300).

4. The method as claimed in any one of claims 1 to 2, wherein the closing includes:

sending a first registration reject to the mobile device (300); and

reducing power level of the cell (200) for a time period or switch off the cell for a given time period or switch the cell to barred for a given time period after sending the first registration reject to the mobile device (300).

5. The method as claimed in claim 4, wherein the steps further include:

sending a second registration reject to the mobile device (300) with an error code indicating “no suitable cells in tracking area” after receiving permanent identity of the mobile device (300).

6. The method as claimed in claim 5, wherein the steps further include:

storing time stamp of a first registration request of the mobile device to database;

transmitting Radio Resource Control (RRC) User Equipment (UE) capability request to the mobile device after a first and second registration request;

receiving RRC UE capability information from the mobile device;

comparing received RRC UE capability request messages after receiving the permanent identity of the mobile device (300);

indicating potential matching identity of concealed identity and the permanent identity if a time period between the first and the second request has not exceeded.

7. The method as claimed in any one of claims 1 to 6, wherein the one or more registration requests include an identity identifier of the mobile device (300), and wherein the steps further include:

in response to the identity identifier being an encrypted subscriber identity, storing said identity identifier in a database of said communication

intelligence cell (200); and

in response to the identity identifier being a temporary identity, transmitting an identity query with the temporary identity of the mobile device (300) to the identity query interface of the cellular network operator, receive a permanent identity of the mobile device (300) from the query interface and store said temporary identity and said permanent identity in said database.

8. The method as claimed in any one of claims 1 to 2, wherein the closing includes:

transmitting, after receiving a registration request from the mobile device (300), a registration rejection to the mobile device (300) thereby closing radio connection to the mobile device (300).

9. The method as claimed in any one of claims 1 to 8, wherein the cell (200) is one of a fake cellular base station and Communication intelligence (ComInt) base station.

10. An apparatus in a communication system comprising a transceiver, at least one processor; and at least one memory including computer program code, the at least one memory and computer program code configured to, with the at least one processor, cause the apparatus to implement the method as claimed in any one of claims 1 to 9.

11. Computer program code configured to cause at least one processor to implement the method as claimed in any one of claims 1 to 9.