CLAIMS

1. A method of operation of a wireless device in a cellular communications system, wherein the wireless device is in an RRC_INACTIVE state, the method comprising:

transmitting, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request triggered by a RAN-based Notification Area Update, RNAU;

in response to the RRC resume request, receiving, from the RAN node, an RRC resume reject message comprising a wait timer value;

starting a wait timer initialized with the wait timer value;

monitoring for RAN paging and core network paging while the wait timer is running;

upon receiving a RAN paging or core network paging while the wait timer is running, responding to the RAN paging or core network paging; and

sending the RNAU when the wait timer has expired.

2. The method of claim 1, wherein the RNAU is a periodic RNAU or the RNAU is due to mobility.

3. A wireless device for a cellular communications system, wherein the wireless device is in an RRC_INACTIVE state, the wireless device adapted to:

transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request triggered by a RAN-based Notification Area Update, RNAU;

in response to the RRC resume request, receive, from the RAN node, an RRC resume reject message comprising a wait timer value;

start a wait timer initialized with the wait timer value;

monitor for RAN paging and core network paging while the wait timer is running;

upon receiving a RAN paging or core network paging while the wait timer is running, respond to the RAN paging or core network paging; and

send the RNAU when the wait timer has expired.

4. The wireless device of claim 3, wherein the RNAU is a periodic RNAU or the RNAU is due to mobility.

5. A method of operation of a wireless device in a cellular communications system, wherein the wireless device is in an RRC_INACTIVE state, the method comprising:

transmitting, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;

in response to the RRC resume request, receiving, from the RAN node, an RRC resume reject message comprising a wait timer value;

starting a wait timer initialized with the wait timer value;

performing a cell reselection to a target cell while the wait timer is running; and

upon performing the cell reselection to the target cell while the wait timer is running, re-initiating a pending Access Stratum, AS, layer procedure in the target cell.

6. The method of claim 5 further comprising:

determining whether an upper layer event has occurred;

wherein re-initiating the pending AS layer procedure in the target cell comprises re-initiating the pending AS layer procedure in the target cell if an upper layer event has occurred.

7. The method of claim 6 further comprising discarding the pending AS layer procedure if an upper layer event has occurred.

8. The method of claim 6 or claim 7, wherein the upper layer event is mobile originating data or mobile originating signaling.

9. The method of any one of claims 5 to 8, wherein the pending AS layer procedure is a RAN-based Notification Area Update, RNAU, procedure.

10. A wireless device for a cellular communications system, wherein the wireless device is in an RRC_INACTIVE state, the wireless device adapted to:

transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;

in response to the RRC resume request, receive, from the RAN node, an RRC resume reject message comprising a wait timer value;

start a wait timer initialized with the wait timer value;

perform a cell reselection to a target cell while the wait timer is running; and

upon performing the cell reselection to the target cell while the wait timer is running, re-initiate a pending Access Stratum, AS, layer procedure in the target cell.

11. The wireless device of claim 10 wherein the wireless device is further adapted to perform the method of any one of claims 6 to 9.

12. A method of operation of a wireless device in a cellular communications system, wherein the wireless device is in an RRC_INACTIVE state, the method comprising:

transmitting, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;

starting a timer;

performing a cell reselection to a target cell while the timer is running; and

upon performing the cell reselection to the target cell while the timer is running, re-initiating a pending Access Stratum, AS, layer procedure in the target cell.

13. The method of claim 12 wherein the timer is a timer that is started upon initiation of an RRC resume procedure during which the RRC resume request is transmitted.

14. The method of claim 12 or 13 further comprising:

determining whether an upper layer event has occurred;

wherein re-initiating the pending AS layer procedure in the target cell comprises re-initiating the pending AS layer procedure in the target cell if an upper layer event has occurred.

15. The method of any one of claims 12 to 14 further comprising discarding the pending AS layer procedure if an upper layer event has occurred.

16. The method of any one of claims 12 to 15 wherein the upper layer event is mobile originating data or mobile originating signaling.

17. The method of any one of claims 12 to 16 wherein the pending AS layer procedure is a RAN-based Notification Area Update, RNAU, procedure.

18. A wireless device for a cellular communications system, wherein the wireless device is in an RRC_INACTIVE state, the wireless device adapted to:

transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;

start a timer;

perform a cell reselection to a target cell while the timer is running; and

upon performing the cell reselection to the target cell while the timer is running, re-initiate a pending Access Stratum, AS, layer procedure in the target cell.

19. The wireless device of claim 18 wherein the wireless device is further adapted to perform the method of any one of claims 13 to 16.