We Claim:

1. A method of processing indication messages in a user equipment, the method comprising:

for at least one RRC state, if the current RRC state of the UE is a result of a previously sent indication message, the UE inhibiting itself from sending a further indication message.

2. The method of claim 1, further comprising:

in the user equipment, if the upper layers indicate that there is no more PS data for a prolonged period:

in the user equipment, sending an indication message with a cause set unless the UE is inhibiting itself from sending a further indication message.

3. The method of claim 1, further comprising:

inhibiting the sending of an indication message with the cause set while an inhibit timer is running.

4. The method of claim 1, wherein the at least one RRC state consists of CELL_PCH state and URA_PCH state.

5. The method of claim 1, wherein the UE inhibiting itself from sending a further indication message comprises:

maintaining a flag, bit token, or other indicator that indicates whether or not the current state of the UE is a result of a previously sent indication message:

if the upper layers indicated that there is no more PS data for a prolonged period of time, transmitting an indication message with the cause set unless the flag, bit token, or other indicator indicates that the current RRC state of the UE is a result of a previously sent indication message.

6. The method of claim 5, wherein maintaining a flag, bit token or other indicator comprises:

setting the flag, bit token or other indicator to a first value when the current RRC state is the results of a previously sent indication message;

otherwise setting the flag, bit token or other indicator to a second value.

7. The method of claim 6, wherein:

setting the flag, bit token or other indicator to the first value comprises setting a "triggered" value in a variable TRIGGERED_SCRI_IN_PCH_STATE to FALSE.

8. The method of claim 7, further comprising:

if the upper layers indicate that there is no more PS data for a prolonged period of time:

if the UE is in CELL_PCH or URA_PCH state and the "triggered" value is FALSE:

setting the "triggered" value to TRUE;

sending the indication message with the cause set.

9. The method of claim 7, further comprising:

after sending the indication message with the cause set, if PS data becomes available for transmission, setting the variable to FALSE.

10. The method of claim 1, further comprising:

determining if the current state is a result of a previously sent indication message by determining if the network reconfigures the RRC state to a less battery intensive state of the UE within a predetermined time interval following the sending of an indication message.

11. The method of claim 1, wherein the indication message comprises a signalling connection release indication message.

12. A user equipment configured to process indication messages, the user equipment configured to:

for at least one RRC state, if the current RRC state of the UE is a result of a previously sent indication message, inhibit itself from sending a further indication message.

13. The user equipment of claim 12, further configured to:

if the upper layers indicate that there is no more PS data for a prolonged period:

send an indication message with a cause set unless the UE is inhibiting itself from sending a further indication message.

14. The user equipment of claim 12, further configured to:

inhibit the sending of an indication message with the cause set while an inhibit timer is running.

15. The user equipment of claim 12, wherein the at least one RRC state consists of CELL_PCH state and URA_PCH state.

16. The user equipment of claim 1, wherein the UE inhibiting itself from sending a further indication message comprises the UE further configured to:

maintain a flag, bit token, or other indicator that indicates whether or not the current state of the UE is a result of a previously sent indication message:

if the upper layers indicated that there is no more PS data for a prolonged period of time, transmit an indication message with the cause set unless the flag, bit token, or other indicator indicates that the current RRC state of the UE is a result of a previously sent indication message.

17. The user equipment of claim 16, wherein maintaining a flag, bit token or other indicator comprises the UE further configured to:

set the flag, bit token or other indicator to a first value when the current RRC state is the results of a previously sent indication message; and

otherwise set the flag, bit token or other indicator to a second value.

18. The user equipment of claim 17, wherein the UE is further configured to:

set the flag, bit token or other indicator to the first value comprises setting a "triggered" value in a variable TRIGGERED_SCRI_IN_PCH_STATE to FALSE.

19. The user equipment of claim 18, further configured to:

if the upper layers indicate that there is no more PS data for a prolonged period of time:

if the UE is in CELL_PCH or URA_PCH state and the "triggered" value is FALSE:

set the "triggered" value to TRUE;

send the indication message with the cause set.

20. The user equipment of claim 19, further configured to:

after sending the indication message with the cause set, if PS data becomes available for transmission, set the variable to FALSE.

21. The user equipment of claim 1, further configured to:

determine if the current state is a result of a previously sent indication message by determining if the network reconfigures the RRC state to a less battery intensive state of the UE within a predetermined time interval following the sending of an indication message.

22. The user equipment of claim 1, wherein the indication message comprises a signalling connection release indication message.

1. A method performed by a user equipment (UE), the method comprising:

at the UE, maintaining a count of how many indication messages with a cause set have been sent by the UE while in at least one radio resource control (RRC) state;

transmitting signalling by the UE on radio bearer 3 (RB3) or upward;

resetting the count by the UE responsive to the transmission of signaling.

2. The method of claim 1, wherein the signaling comprises uplink radio link control (RLC) control protocol data unit (PDU).

3. The method of any one of claims 1 to 2, wherein the indication messages comprise signalling connection release indication messages.

4. The method of any one of claims 1 to 3, wherein the indication messages in the count each have a cause set to "UE Requested PS Data session end".

5. The method of any one of claims 1 to 4, wherein the cause is set to "UE Requested PS Data session end".

6. The method of any one of claims 1 to 5, wherein the at least one RRC state comprises a CELL_PCH state or a URA_PCH state.

7. The method of any one of claims 1 to 6, wherein maintaining a count comprises using a counter.

8. A user equipment (UE) configured to:

maintain a count of how many indication messages with a cause set have been sent by the UE while in at least one radio resource control (RRC) state;

transmit signalling on radio bearer 3 (RB3) or upward;

reset the count responsive to the transmission of signalling.

9. The user equipment of claim 8, wherein the signaling comprises uplink radio link control (RLC) control protocol data unit (PDU).

10. The user equipment of any one of claims 8 to 9, wherein the indication messages comprise signalling connection release indication messages.

11. The user equipment (UE) of any one of claims 8 to 10, wherein the indication messages in the count each have a cause set to "UE Requested PS Data session end".

12. The user equipment of any one of claims 8 to 11, wherein the cause is set to "UE Requested PS Data session end".

13. The user equipment of any one of claims 8 to 12, wherein the at least one RRC state comprises a CELL_PCH state or a URA_PCH state.

14. The user equipment of any one of claims 8 to 13, further comprising a counter for maintaining the count.

15. A method performed by a user equipment (UE), the method comprising:

at the UE, maintaining a count of how many indication messages with a cause set have been sent by the UE while in at least one radio resource control (RRC) state;

entering RRC Connected mode;

resetting the count responsive to entering RRC Connected mode.

16. The method of claim 15, wherein the indication messages comprise signalling connection release indication messages.

17. The method of any one of claims 15 to 16, wherein the indication messages in the count each have a cause set to "UE Requested PS Data session end".

18. The method of any one of claims 15 to 17, wherein the cause is set to "UE Requested PS Data session end".

19. The method of any one of claims 15 to 18, wherein the at least one RRC state comprises a CELL_PCH state or a URA_PCH state.

20. The method of any one of claims 15 to 19 wherein maintaining a count comprises using a counter.

21. A user equipment (UE) configured to:

maintain a count of how many indication messages with a cause set have been sent by the UE while in at least one radio resource control (RRC) state;

enter RRC Connected mode;

reset the count responsive to entering RRC Connected mode.

22. The user equipment of claim 21, wherein the indication messages comprise signalling connection release indication messages.

23. The user equipment (UE) of any one of claims 21 to 22, wherein the indication messages in the count each have a cause set to "UE Requested PS Data session end".

24. The user equipment of any one of claims 21 to 23, wherein the cause is set to "UE Requested PS Data session end".

25. The user equipment of any one of claims 21 to 24, wherein the at least one RRC state comprises a CELL_PCH state or a URA_PCH state.

26. The user equipment of any one of claims 21 to 28, further comprising a counter for maintaining the count.

We claim:

1. A method comprising:

maintaining, by a user equipment (UE), a count of how many signaling connection release indication (SCRI) messages sent by the UE to a network;

entering RRC Connected mode; and

resetting the count responsive to entering RRC Connected mode.

2. The method of claim 1, wherein the SCRI messages sent by the UE each have a cause set.

3. The method of claim 2, wherein the cause is set to UE Requested PS Data session end.

4. The method of claim 1, wherein the SCRI messages are sent by the UE while in at least one radio resource control (RRC) state.

5. The method of claim 4, wherein the at least one RRC state comprises a CELL_PCH state or a URA_PCH state.

6. The method of claim 1, wherein maintaining a count comprises using a counter.

7. The method of claim 1, wherein said maintaining includes incrementing the count.

8. A method comprising:

maintaining, by a user equipment (UE), a count of signaling connection release indication (SCRI) messages sent by the UE while in at least one radio resource control (RRC) state to a network, the SCRI messages having a cause set to UE Requested PS Data session end;

entering RRC Connected mode; and

resetting the count responsive to entering RRC Connected mode.

9. The method of claim 8, wherein the at least one RRC state comprises one of a CELL_PCH state or a URA_PCH state.

10. The method of claim 9, wherein maintaining a count comprises using a counter.

11. The method of claim 10, wherein said maintaining includes incrementing the count.

12. A user equipment (UE) comprising a processor, configured to:

maintain a count of signaling connection release indication (SCRI) messages sent by the UE to a network;

enter RRC Connected mode; and

reset the count responsive to entering RRC Connected mode.

13. The UE of claim 12, wherein the SCRI messages sent by the UE each have a cause set.

14. The UE of claim 13, wherein the cause is set to UE Requested PS Data session end.

15. The UE of claim 13, wherein the SCRI messages are sent by the UE while in at least one radio resource control (RRC) state.

16. The UE of claim 15, wherein the at least one RRC state comprises a CELL_PCH state or a URA_PCH state.

17. The UE of claim 13, wherein maintaining a count comprises using a counter.

18. The UE of claim 13, wherein said maintaining includes incrementing the count.

19. A user equipment (UE) comprising at least one memory and a processor, configured to:

maintain a count of signaling connection release indication (SCRI) messages sent by the UE while in at least one radio resource control (RRC) state to a network, the SCRI messages having a cause set to UE Requested PS Data session end;

enter RRC Connected mode; and

reset the count responsive to entering RRC Connected mode.

20. The UE of claim 19, wherein the at least one RRC state comprises one of a CELL_PCH state or a URA_PCH state.

21. The UE of claim 20, wherein maintaining a count comprises using a counter.

22. The UE of claim 21, wherein said maintaining includes incrementing the count.