

CLAIMS

1. An apparatus comprising:
 at least one processor; and
 at least one memory including computer program code;
 the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:
 in response to receiving a fallback indication from a radio resource control layer,
 determine whether (i) the apparatus has no pending non-access stratum procedure,
 or (l) the apparatus has a pending non-access stratum procedure other than a service request procedure;
 invoke a service request procedure based on the determining; and set a service type information element in a service request message dependent on the determining.

2. The apparatus of claim 1, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:
 determine that (i) the apparatus has pending uplink user data and no pending non-access stratum procedure.

3. The apparatus of claim 1, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:
 determine that (l) the apparatus has a pending non-access stratum procedure other than a registration procedure, a service request procedure or a deregistration procedure.

4. The apparatus of claim 1, wherein the apparatus is in a connected mode.

5. The apparatus of claim 1, wherein the apparatus is in a connected inactive mode.

6. The apparatus of claim 1, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus at least to:
 set the service type information element in the service request message to 'high priority access', 'emergency services' or 'data' when (i) the apparatus has no pending non-access stratum procedure.

7. The apparatus of claim 1, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus at least to:

set the service type information element in the service request message to 'high priority access', 'emergency services' or 'signalling' when (l) the apparatus has a pending non-access stratum procedure other than a service request procedure.

8. The apparatus of claim 1, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus at least to:

set an uplink data status information element in the service request message based on the determining.

9. The apparatus of claim 8, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus at least to:

set the uplink data status information element in the service request message to indicate packet data unit sessions for which user-plane resources were active prior to invoking the service request procedure when (i) the apparatus has no pending non-access stratum procedure.

10. The apparatus of claim 8, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus at least to:

set the uplink data status information element in the service request message to indicate packet data unit sessions for which user-plane resources were active prior to invoking the service request procedure, when (l) the apparatus in connected mode has a pending non-access stratum procedure other than a service request procedure.

11. The apparatus of claim 8, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus at least to:

set the uplink data status information element in the service request message to indicate always-on packet data unit sessions, when (l) the apparatus in connected inactive mode has a pending non-access stratum procedure other than a service request procedure.

12. The apparatus of claim 1, wherein at least one of the receiving, the determining, the invoking and the setting is performed at a non-access stratum layer.
13. A method performed by an apparatus, the method comprising:
 - in response to receiving a fallback indication from a radio resource control layer,
 - determining whether (i) the apparatus has no pending non-access stratum procedure, and (l) the apparatus has a pending non-access stratum procedure other than a service request procedure;
 - invoking a service request procedure based on the determining; and
 - setting a service type information element in a service request message dependent on the determining.
14. The method of claim 13, comprising:
 - determining that (i) the apparatus has pending uplink user data and no pending non-access stratum procedure.
15. The method of claim 13, comprising:
 - determining that (l) the apparatus has a pending non-access stratum procedure other than a registration procedure, a service request procedure or a deregistration procedure.
16. The method of claim 13, wherein the apparatus is in a connected mode or in a connected inactive mode.
17. The method of claim 13, comprising:
 - setting the service type information element in the service request message to 'high priority access', 'emergency services' or 'data' when (i) the apparatus has no pending non-access stratum procedure.
18. The method of claim 13, comprising:
 - setting the service type information element in the service request message to 'high priority access', 'emergency services' or 'signalling' when (l) the apparatus has a pending non-access stratum procedure other than a service request procedure.

19. The method of claim 13, comprising:
setting an uplink data status information element in the service request message based on the determining.
20. A computer program product with a non-transitory computer readable medium comprising computer executable instructions which when run on one or more processors perform the steps of the method of claim 13.