

CLAIMS

What is claimed is:

1. A method, comprising:

receiving, at a user equipment in a long term evolution system, a message from a
network element in the long term evolution system, the message at least
identifying a plurality of public land mobile network (PLMN) identities (IDs)
and indicating each of the plurality of PLMN IDs associated with a code
division multiple access system for which the long term evolution system
supports interworking;

selecting, by the user equipment in a long term evolution system, one of a the
plurality of PLMN IDs received from the network element in the long term
evolution system;
code division multiple access systems; and
signaling by the user equipment, one or more indications of the selected PLMN
ID;
code division multiple access system to a the network element.

2. The method of claim 1, further comprising receiving a mapping of the plurality of code division multiple access systems to associated ones of one or more long term evolution systems, and wherein selecting further comprises selecting one of the a plurality of code division multiple access systems for the selected PLMN ID using the mapping.

3. The method of claim 2, wherein:

the mapping comprises a mapping of a plurality of high rate packet data systems and 1x radio transmission technology systems to the one or more long term evolution systems;

selecting further comprises selecting a high rate packet data system and a 1x radio transmission technology system; and

signaling further comprises signaling an indication of the selected a high rate packet data system and an indication of the selected 1x radio transmission technology system to the network element.

4. The method of claim 3, wherein selecting further comprises selecting the selected 1x radio transmission technology system as a circuit switched fallback system, and wherein signaling further comprises signaling an indication of the selected 1x radio transmission system to a base station for purposes of requesting parameters for the selected 1x radio transmission system from the long term evolution system.

5. The method of claim 3, further comprising performing an uplink information transfer using one of the 1x radio transmission technology system or the high rate packet data system, the uplink transfer at least comprising a message indicating which of the 1x radio transmission technology system or the high rate packet data system is used.
6. The method of claim 1, wherein:
the plurality of PLMN IDs ~~code-division multiple access systems~~ further comprise indicates a plurality of high rate packet data systems;
selecting ~~further~~ comprises selecting one of the plurality of high rate packet data systems; and
signaling ~~further~~ comprises signaling the selected high rate packet data system to a base station in a measurement report further comprising one or more indications of one or more measurements of the selected high rate packet data system.
7. The method of claim 6, performed as part of a handover to the selected evolved high rate packet data system.
8. The method of claim 6, wherein:
the plurality of PLMN IDs ~~code-division multiple access systems~~ further comprise indicates a plurality of 1x radio transmission technology systems;
selecting ~~further~~ comprises selecting one of the plurality of 1x radio transmission technology systems; and
signaling ~~further~~ comprises signaling the selected 1x radio transmission technology system to a base station in a measurement report.
9. The method of claim 8, performed as part of a handover from one radio access technology to the selected 1x radio transmission technology system and as part of a concurrent handover to the selected high rate packet data system, and wherein the method further comprises signaling by the user equipment to the base station an extended service request comprising an indication of the selected 1x radio transmission technology system.

10. The method of claim 1, wherein:
the plurality of PLMN IDs ~~code division multiple access systems further comprise~~
indicates a plurality of 1x radio transmission technology systems;
selecting ~~further~~ comprises selecting one of the plurality of 1x radio transmission
technology systems; and
signaling ~~further~~ comprises signaling the selected 1x radio transmission technology
system to a base station in a measurement report.
11. The method of claim 10, performed as part of a single radio voice call continuity of
a voice over Internet protocol call to the selected 1x radio transmission technology
system.
12. An apparatus comprising:
one or more processors; and
one or more memories including computer program code,
the one or more memories and the computer program code configured, with the
one or more processors, to cause the apparatus to perform any one of the
previous method claims.
13. A method, comprising:
signaling a message from a network element in the long term evolution system to a
user equipment, the message at least identifying a plurality of public land
mobile network (PLMN) identities (IDs), each of the plurality of PLMN IDs
associated with a code division multiple access systems system for which
the long term evolution system supports interworking;
receiving at a ~~the~~ network element and from the user equipment ~~in a long term~~
~~evolution system~~ one or more indications of one or more selected ones of a
the plurality of PLMN IDs, and corresponding one or more selected code
division multiple access systems to which the network element has access,
the one or more selected code division multiple access systems
corresponding to one or more requested actions by a ~~the~~ user equipment
and selection by the user equipment of the one or more selected ~~ones of~~
~~the plurality of~~ code division multiple access systems; and
routing information corresponding to the one or more requested actions to the one
or more selected code division multiple access systems.
14. The method of claim 13, wherein the one or more requested actions comprise a
pre-registration procedure with a selected code division multiple access system,
and

wherein routing further comprises routing information corresponding to the pre-registration procedure to the selected code division multiple access system.

15. The method of claim ~~44~~13, wherein the plurality of PLMN IDs~~code division multiple access systems to which the network element has access~~ further comprises indicates a plurality of 1x radio transmission technology systems and a plurality of high rate packet data systems, and wherein the one or more selected plurality of code division multiple access systems comprises one of a selected 1x radio transmission technology system or a selected high rate packet data system.

16. An apparatus comprising:
one or more processors; and
one or more memories including computer program code,
the one or more memories and the computer program code configured, with the
one or more processors, to cause the apparatus to perform any one of the
previous method claims.

17. A method, comprising:
signaling, at a network element in a long term evolution system, to a user
equipment indications of a mapping of a plurality of code division multiple
access systems to ~~associated ones of one or more long term evolution~~
systems with which the network element is associated, and at least one of
the associated one or more long term evolution systems supports
interworking with the plurality of code division multiple access systems; and
receiving signaling from the user equipment comprising one or more indications of
one or more selected public land mobile network (PLMN) identities (IDs)
and corresponding one or more code division multiple access systems
selected by the user equipment.

18. The method of claim 17, further comprising, responsive to the receiving, signaling
the one or more indications of the one or more selected PLMN IDs and the
corresponding one or more selected code division multiple access systems to a
second network element in the long term evolution system.

19. The method of claim 18, further comprising receiving signaling corresponding to
one or more requested actions by a the user equipment and corresponding to the
one or more