

Claims

What is claimed is:

1. A method comprising:
receiving, at an element or function in a communication network from user equipment
5 of the communication network, a message comprising one or more privacy indicators; and
determining one or more privacy features for processing the message based on the one
or more privacy indicators.
2. The method of claim 1, wherein the message comprises an attach request
10 comprising a subscription identifier for a subscriber of the communication network associated
with the user equipment, the one or more privacy indicators comprising a flag indicating
whether the subscription identifier in the attach request is privacy-protected.
3. The method of claim 2, wherein the privacy-protected subscription identifier
15 comprises at least a portion of a permanent subscription identifier of the subscriber.
4. The method of claim 2, wherein determining the one or more privacy features
for processing the message based on the one or more privacy indicators comprises, responsive
to the flag indicating that the subscription identifier is privacy-protected, removing privacy
20 protection from the subscription identifier in the attach request.
5. The method of claim 4, wherein the element or function in the communication
network comprises a Server Location Function (SLF) that utilizes the subscription identifier to
map the attach request to a Home Subscriber Server (HSS) or User Data Management (UDM)
25 function.
6. The method of claim 2, wherein the privacy-protected identifier that is
encrypted utilizing a public key of a home network operator of the subscriber in the
communication network.

7. An apparatus comprising a processor operatively coupled to a memory and configured to perform the method of claim 1.

8. A method comprising:
5 determining, at an element or function in a communication network, one or more privacy features supported by the communication network;
generating, at the element or function in the communication network, a message comprising one or more privacy indicators selected based on the determined one or more privacy features; and
10 sending, from the element or function in the communication network to user equipment of the communication network, the generated message comprising the one or more privacy indicators.

9. A method comprising:
15 determining, at user equipment of a communication network, one or more privacy features for processing a message;
adding one or more privacy indicators to the message based on the determined one or more privacy features; and
sending the message with the one or more privacy indicators from the user equipment
20 to an element or function in the communication network.

10. A method comprising:
receiving, at user equipment of a communication network from an element or function in the communication network, a message comprising one or more privacy indicators; and
25 determining one or more privacy features supported by the communication network utilizing the one or more privacy indicators.