Integrity (and confidentiality, if required) of SIP messages between the UE and the S-CSCF shall be provided in a hop-by-hop fashion.

The first hop extends between the UE and the P-CSCF. Security associations are user specific here and are established by the 3G AKA mechanism.

The second hop extends between the P-CSCF and the S-CSCF. Security associations are not user specific here and are established via the Network Domain Security mechanisms.

The authentication is performed in the home network. It is ffs whether it is performed in the HSS or the S-CSCF.

It is ffs whether confidentiality of SIP messages is required on all hops.

The exact mechanisms for integrity and confidentiality are ffs.