MULTI IMSI solution

Optimizing connectivity and reducing operational complexities

The Multi IMSI solution supports Mobile Network Operators (MNOs) in reducing roaming costs and enhancing coverage by using local networks. It adheres to the latest 3GPP/ETSI standards and supports a wide range of use cases involving consumer and M2M/IoT devices.

Using a local network with a local IMSI is the most cost-effective approach to roaming. This strategy provides better coverage for end-users while safeguarding MNO revenues, but it requires to seamlessly direct subscribers to a partner network.

Our offer

Our Multi IMSI solution consists of an advanced mobile application and our OTA Platform. The Multi-IMSI applet enhances the user experience while roaming by enabling a single physical SIM/eSIM to support several International Mobile Subscriber Identities (IMSI) from different MNOs. This allows for seamless switching of a device between networks.

Network switching (Automatic/Manual)

The Multi IMSI applet ensures seamless connectivity and cost-effective network usage by attaching devices to local networks using local IMSI. This innovative and intelligent solution simplifies the operational complexity of managing multiple IMSI by automatically selecting the optimal IMSI when the device starts up or when it detects that it is in a roaming situation. It provides users with uninterrupted service and optimized network performance regardless of their location.

With the manual switching feature, users may also select their roaming network through the SIM Toolkit menu.

In addition, our OTA Platform comes with a set of services for MNOs to fully administrate the Multi IMSI applet (IMSI update and swap, IMSI addition, etc.)

Multi IMSI for M2M/IoT

With Multi IMSI activated for M2M/IoT use cases, carrier redundancy can be achieved across a wide range of IoT devices, ensuring readiness in the event of line failure. The connected line can switch automatically from main network to backup network using just one SIM/eSIM, and automatically switch back after certain period of time, eliminating the need to implement communication monitoring or a SIM/eSIM switching function on the IoT device.

Interworking Public / Private networks

The private network switching feature allows end-users to switch between public and private networks automatically without changing SIM/eSIM. This allows uninterrupted performance and enhances network security.
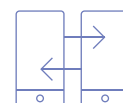
Benefits

Ensure better network quality
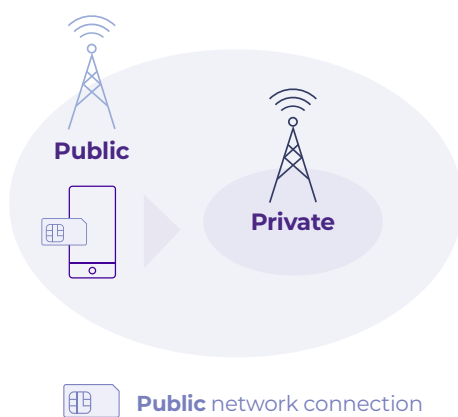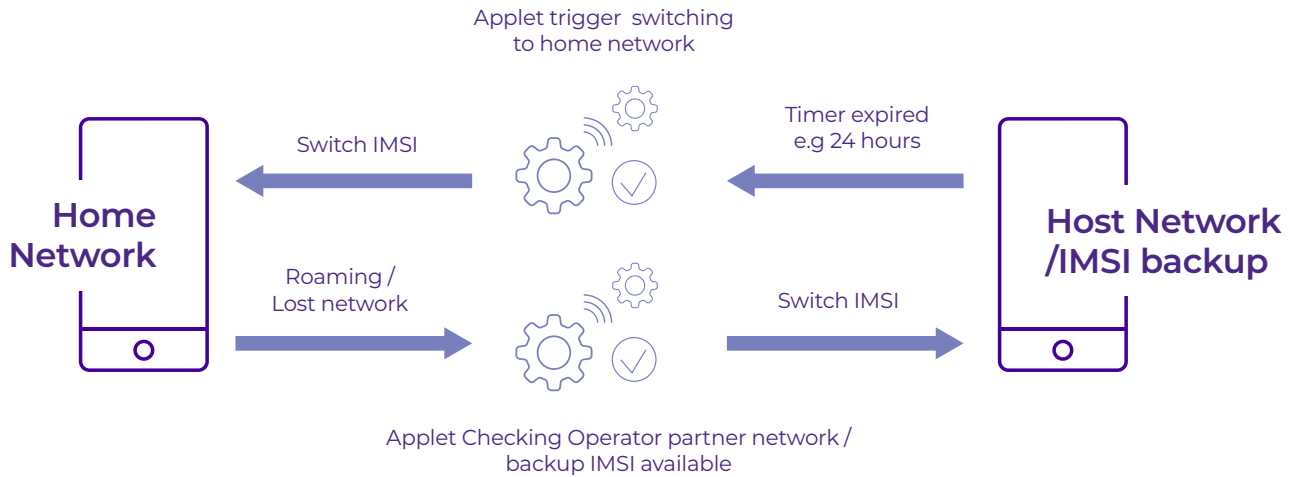
Optimize roaming costs

Allow seamless switch between networks

Why IDEMIA?

› Interoperable with Java-enabled USIM or eSIM profiles
› Lightweight and easy to deploy and update via OTA

IDEMIA SECURE TRANSACTIONS

A solution to optimize connectivity and reduce operational complexities:

› Ensure high service availability for a wide range of consumer and IoT devices by automatically detecting failures and triggering network switches
› Easily manage roaming agreements by incorporating new affiliates/partners into roaming files
› Expedite attachment when roaming by seamlessly switching between networks on the same SIM/eSIM
› Interwork with private networks to provide end-to-end security, ensuring that information, infrastructure, and people are protected from threats.

How does it work?

Applet trigger switching to home network

Switch IMSI

Timer expired e.g 24 hours

Home Network

Host Network /IMSI backup

Roaming / Lost network

Switch IMSI

Applet Checking Operator partner network / backup IMSI available

Public

Private

Public

Private

Applet detects location update and verifies the cell ID

Public network connection

Private network connection

Features

› Automatic switching
› Manual switching
› REFRESH
› M2M Mode
› STK Menu
› Activate / Deactivate

› Fallback mechanism
› Interworking with public / private network
› 2G, 3G, 4G, 5G network supported.
› Compatible with OTA updates

SIM/eSIM Requirements

› Java Card v3.0 and above
› ETSI TS 102.241 UICC API for Java Card
› 3GPP TS 131.130 (U)SIM API for Java Card
› GP 2.2 Amd.B version 1.1.1
› Compliant with TCA's SAIP (SIMAlliance Interoperable Profile) specification

IDEMIA GROUP

www.idemia.com