



teleSys
SOFTWARE

MACH7-iEIR

“Next Generation Equipment Identity Register”

Overview

The Equipment Identity Register (EIR) solution hosted on MACH7-ESP platform as one of the **Number Query** and **Routing (NQR)** services, facilitates validation of mobile equipments within a network by validating the device-id also known as International Mobile Equipment Identity (IMEI).

With the capability to be deployed as a stand-alone or integrated solution to MACH7-iSTP / MACH7-iDC nodes, the MACH7-ESP solution enables advanced signaling capabilities to manage and route signaling messages for call setup and value-added services to meet increasing capacity demand within the evolving and complex telecommunication network.

The EIR solution enables operator to eliminate fraud risk by maintaining all carriers registered handsets by maintaining and managing IMEI lists as below:

White List : Includes list of Type Allocation Code (TAC) [Initial 8-digit portion of the IMEI or IMEISV] which are permitted for use on networks.

Black List : A list of IMEIs that are associated with mobile devices that should be denied service because they have been reported as lost / stolen / faulty or otherwise unsuitable for use.

Grey List : Grey lists are like Black List, contains subscriber IMEIs, but are used to track by the network for evaluation or other purposes but are not barred from service.

Subscriber EIR database can also be used to lock certain subscribers to particular mobile equipment using IMSI-IMEI management. Also it facilitates to distinguish between inbound roamers from home subscribers.

Solution Advantages

- **High Performance**

Utilizes parallel processing in multi-core environment with memory resident database to ensure high performance service handling

- **Seamless Scalability**

Service processing capacity can be expanded smoothly by run-time addition of computing elements for application controllers.

- **High Reliability**

State-of-the-art high-available distributed architecture keeps all components synchronized across the solution, ensuring no Single-Point-of-Failure for service outages.

- **Geographical Redundancy**

Allows network level redundancy by deploying solution across different geographical sites.

- **Multi-network Interface Support**

Solution supports standard protocol interfaces which includes SS7, SIGTRAN, Diameter to provide easy network specific service adaptability.

- **Cloud-Ready Software Solution**

Operating on Linux environment, software based MACH7 enhanced services facilitates seamless deployment on both virtual and physical environments on industry standard virtual environments and COTS hardware.

- **Centralized OAM&P**

The solution offers a comprehensive provisioning, fault and performance management interface using a centralized view of the distributed solution.