

Group 2000 B.V.

LIMA ÉLITE

Solution Brochure

**YOUR ARCHITECTS
IN SAFETY AND
INTELLIGENCE**



Your professional partner for legal compliance, resilience, and smart networks.

End-2-End Lawful Interception Verification

Advancements in communication technology and, as a result, the increasing complexities in communications systems have fostered the need for advanced LI processes. Some of the intercepted communication channels mainly include VoIP, Email, SMS, images, and telephony. Telecom providers must support lawful interception by adhering to the government regulations regarding the same.

It is crucial for law enforcement that they can rely on the data of telecom providers. While on the other hand, it is essential for telecom providers to trust the deployed interception technologies in their networks.

Automated end-to-end lawful interception test tooling would help law enforcement in validating the availability of the complete LI chain for all operators and ensures timely detection of non-compliance of telecom providers. For telecom providers, end-to-end LI verification tooling and IRI Inspection tool functionality facilitate full system validation and demonstrable compliance with government regulations.

1 Fully Independent
Integrates with all LI Mediation and LEMF systems.

2 Risk Compliancy
Facilitates auditing processes and SLA Management.

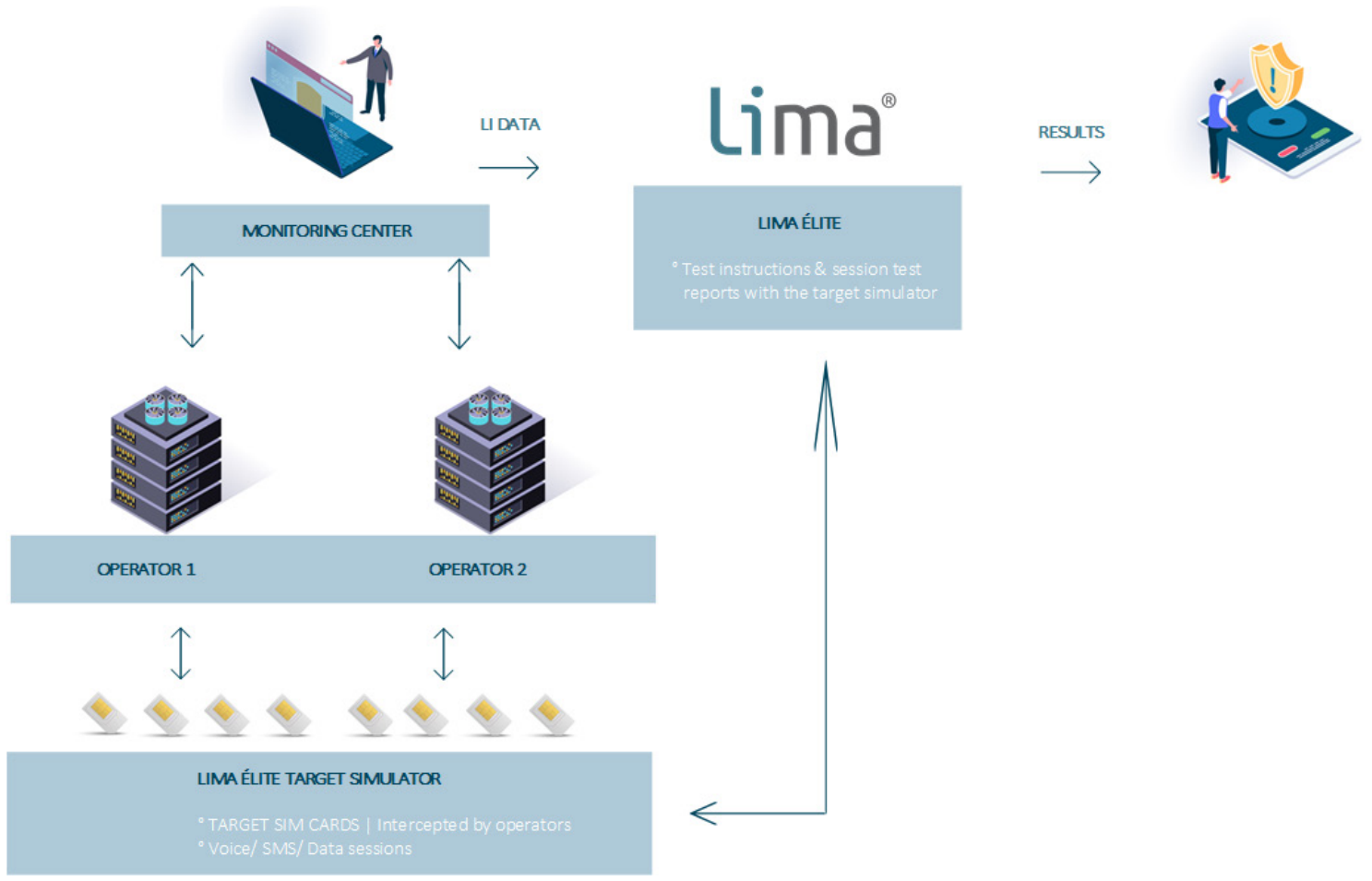
3 Gain Control
Early detection of failed interceptions.



LIMA Élite

To help Law Enforcement and Telecom providers, Group 2000 developed LIMA Élite. With LIMA Élite, the complete paths from target interception in the network via the LI Mediation systems at the operators to the Law Enforcement Monitoring Facility (LEMF) are being tested for each mobile network operator and technology.

LIMA Élite is operator, network & technology independent and supports the validation of voice calls, SMS and mobile data transfer interceptions, on the availability of metadata (IRI) and content (CC). For Law Enforcement, LIMA Élite can integrate with any LEMF.



Our solution

LIMA Élite works independently and automatically generates calls, SMS messages and data sessions. The frequency with which this test data is generated is configurable. It will automatically cycle through the available connections, testing all operators and networks in sequence. The SIMs used for generating test calls are being intercepted by the operators. This can be achieved through the normal process of providing warrants for these test numbers. As a consequence all traffic generated by these test numbers is intercepted and delivered to the Monitoring Center.

By forwarding the intercepted IRI and CC data on the Monitoring Center to LIMA Élite, the application can verify the correctness of the generated metadata and their contents. In case deviations are detected between the data received and expected, the tool will immediately alert the user, so that corrective measures can be taken.

In an operator environment, LIMA Élite integrates with the deployed mediation system(s) and is able to simulate a LEMF. For troubleshooting purposes, the IRI Inspection tool feature of LIMA Élite provides the user with the capability to download PCAPNG files from LIMA ETSI 232 mediation systems, view the decoded IRI and SMS messages and playback or download the call content.

With the IRI Inspection tool, operators are still able to validate their Lawful Interception environment completely.

The LIMA Élite solution consists of a LIMA Élite Management Tool and a LIMA Élite Target Simulator. A single LIMA Élite Target Simulator can simulate user traffic of users residing on multiple mobile network operators in parallel, each with e.g. a 2G, 3G and a 4G mobile network.

LIMA Élite comes with an intuitive web-based management tool. This user friendly application provides a clear dashboard with real-time status of the LI environment. Various configuration options give the user full control of the operation of the LIMA Élite solution. For example, new validation actions can be defined and activated within seconds.



Capabilities

Network & technology independent. Works with 2G, 3G, 4G and 5G technologies of all NE vendors.

LEMF independent and integrates with any LEMF System.

LI Environment independent and integrates with any LI mediation system; Voice calls, SMS and mobile data transfers interceptions.

Supports validation of the HI2 and HI3 streams for Metadata and Content interception.

IRI Inspection Tool. View decoded IRI messages and view SMS messages plus playback or download of call content/audio.

Technical Specifications

LIMA Élite Target Simulator

Micro SIM slots

Supported bands:

FDD LTE: B1/B3/B5/B7/B8/B20

UMTS: B5/B8/B1 (850/900/2100MHz)

GSM: 850/900/1800/1900MHz

LIMA Élite Management Tool

Operating system: CentOS or Red Hat

User friendly web-based GUI for configuration purposes

Comprehensive logging and auditing

Alerting via e-mail, SNMP, Nagios

Supports virtual and bare metal deployments



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WE INNOVATE,
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