

Overload Protection. Defend your mobile network against disasters.

Perimeter Control. Selective network availability.

Access Class Management. Prioritize network availability for emergency responders.

INTRODUCTION

Group 2000 LIMA Network Protect is a modular solution that can protect the mobile network against overload caused by either planned or unplanned events. Through barring at cell level, LIMA Network Protect ensures network availability for critical emergency services. Besides cell level barring, group level subscriber barring and control is supported for regulatory purposes. The Network Protect solution comes with the LIMA Management System. Our LIMA solutions have been deployed in over 25 countries worldwide and in networks ranging from legacy PSTN to today's LTE networks.

LIMA Network Protect

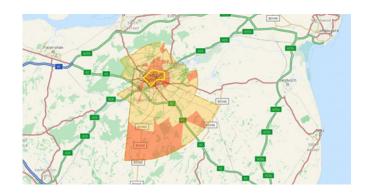
When a disaster or event threatens network availability and public safety, LIMA Network Protect is used to control the network service. LIMA Network Protect integrates with the network Management System (NMS) and Radio Planning System (RPS) in order to reconfigure the Base Station Controller (BSC) and Radio Network Controller (RNC). The BSC and RNC control the cells directly. This is all done in a timely, controlled, and secure manner to avoid costly mistakes while ensuring maximum availability.

The integrated solution

LIMA Network Protect is a complete solution for network and subscriber barring control with a central management system. It integrates with all necessary network equipment, databases and registrars, and includes a Graphical User Interface to visualize the network and its affected areas.

The LIMA Management System is the central location for the administration of cell barring requests. It guides the end user in creating requests for cell barring based on location, address, time, affected users, types of access, and specific barring methods. The platform supports pre-definition of high risk location areas. The end user does not require any prior detailed network knowledge. Based on the barring request, a plan is made to execute the request in the network using the appropriate infrastructure. The system allows the plan to be authorized and checked for consistency before it is executed in the network. All actions are logged and available for audit.

LIMA Network Protect will provision the authorized plan against the network infrastructure, particularly the BSC and RNC. The plan can be executed immediately or can be scheduled for the [near] future as required. LIMA Network Protect notifies the operator about the results of the provisioned plan. While the plan is running, the operator can stop the plan manually or manage this automatically by the LIMA Management System based on the scheduling information in the request. The system ensures all measures are removed from the network, leaving it as it was before the control took place.



Standard compliance

LIMA Network Protect complies with 3GPP 22.011 cell barring specification and also supports vendor proprietary features at cell level through their respective interfaces. For subscriber control, standardized MAP interfaces, using default or proprietary grids, ensure easy integration in the operator network.

Flexibility and scalability

By combining multiple adapters on a single system, LIMA Network Protect can be configured to support multi-vendor networks as well as the different mobile network generations: GSM, GPRS, UMTS, and LTE. LIMA Adapters are available for most network equipment found in mobile networks. Customer specific adapters can also be developed on request.

LIMA Network Protect can be deployed in a centralized solution where control is fully exercised by a single node, or in a distributed configuration. As networks expand or change, LIMA Network Protect can easily be extended to cater for the expansion or new types of network elements.

Secured environment

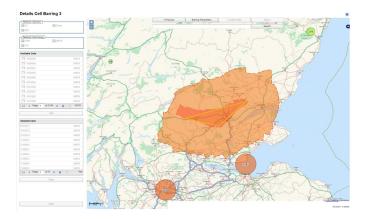
System level security measures ensure that only authorized people have access to the system, software, database, operating system, and hardware. All information is kept private for users and systems outside the customer's network. All user actions and system events are logged for auditing and reporting purposes.

High availability

LIMA Network Protect can be delivered with a High Availability option. In this setup LIMA Network Protect is configured as a cluster consisting of one active and one standby server. If the active server fails, the cluster manager will shut down the active server and move to the standby system.

User interface

The intuitive and user friendly interface of LIMA Network Protect provides the user with precise control through integration of radio planning and map information.



LIMA modular approach

LIMA Network Protect can be supplemented with the following modules:

- LIMA Network Protect Umbrella a centralized solution that manages network availability from several different Communication Service Providers.
- LIMA Disclosure Management providing functionality to gain intelligence by querying the Call Detail Records created before, during, and after the barred period in the barred area.

HIGHLIGHTS

Off-the-shelf solution for managing cell and subscriber barring

Supports 3GPP cell and cell barring control

Supports multiple barring scenarios like overload barring, event barring, and route barring

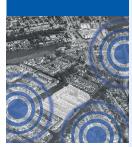
Highly secured and access-controlled environment to avoid costly configuration mistakes

Intuitive cell selection using location details, pre-defined location areas, and geographic map interface

LIMA Network Protect Umbrella, a centralized solution for network control of different CSPs

Intuitive user friendly interface

OUR LIMA SOLUTIONS



LIMA PORTFOLIO

Comprehensive solutions for service providers, enterprises, law enforcement, and intelligence agencies.

- LIMA Lawful Intercept
 - · Warrant management with workflow support
 - Provisioning and mediation
 - Passive and active IP interception
 - E-mail monitors
 - VoIP monitors
 - Mobile data monitors
- LIMA Disclosure Management
- Workflow support
- Data retention storage solutions
- Data collection and mediation
- LIMA SS7 Secure
- LIMA Location Services
- LIMA Network Protect
- LIMA Cell Monitor
- LIMA Intrusion Detector
- LIMA Oversight
- LIMA Élite

ARCHITECTS IN SAFETY AND INTELLIGENCE

WHY GROUP 2000?

- Group 2000 is an independent global solutions provider of interception and intelligence solutions
- Group 2000 delivers and preserves essential and reliable interception knowledge
- Group 2000 has global experience in the public and telecommunication domain
- Group 2000 minimizes complexity, delivering end to end solutions
- · Group 2000 has technology partnerships with leading suppliers
- Group 2000 is an active member of ETSI
- Group 2000 LIMA solutions are modular and scalable to support the largest networks