

Case study  
February 2012

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# The leading M2M Operator, specializing in security



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In 2012, Alai Telecom launched Alai Secure, the first M2M Operator, specializing exclusively in “machine to machine” communications and the development of value-added services for corporations that base their business on monitoring, control and operation of fixed and mobile devices.

## Introduction

Alai is a 100% Spanish-owned **Smart Network Operator** with a TMC license and its own numbering, which has operated in Spain since 2006. It is the only Operator specializing in business services. It belongs to the **Ingenium Technology Group** and has a comprehensive portfolio of Intelligent Network services: Total IVR, Routing Manager, Call Recording, Virtual ACD, Security Suite, Virtual PBX, International Traffic RI,...

Since its inception, security has been at the heart of **Alai Telecom's** strategy. All R+D efforts have been focused on ensuring the highest levels of security in its customers' communications. It has made significant investments to be able to provide fully geo-redundant carrier grade systems, in both infrastructure equipment and interconnections with third parties.

In 2012 it went one step further in its **Operador Telco**, strategy, adding

mobile telephony to its range of services, and becoming an **integrated communications solution for business**, and an alternative to the major Spanish Network Operators.

**Alai Secure** begins offering mobile telephony services as an **M2M Operator** services on the mobile platform of **IOS -Ingenium Outsourcing Services-** using Orange's Network in Spain. Alai Secure's range combines expertise in Alai Telecom's Smart network with its M2M security solution.

A new concept – able to provide a comprehensive telecommunications response to companies which are forced to adapt their communication systems, either to meet regulatory standards or for service reasons, to be able to differentiate themselves and compete.



## Challenges for the M2M industry

The two major problems in terms of communications which companies have to cope with are: ensuring security and effectiveness of 100% of communications from accidents, technical failures and intrusions by third parties, and ensure 0% hyperactivity. This problem is further

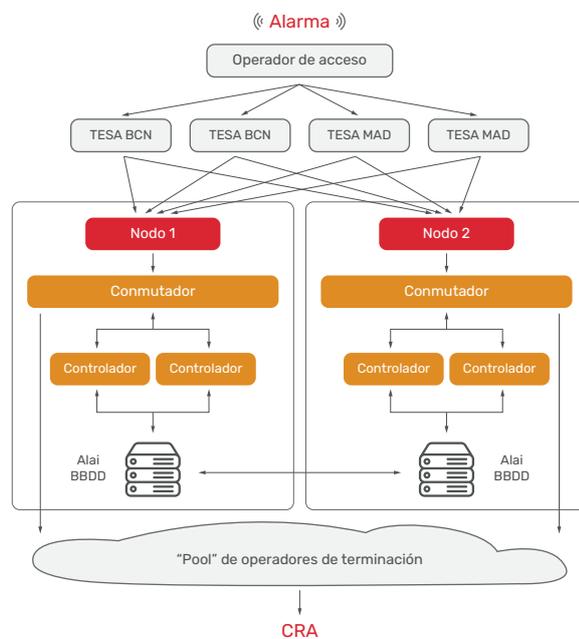
exacerbated in sectors involving critical communications which cannot miss a single call/alarm under any circumstances. In sectors such as social work and health (telephone helplines) or the security sector, where human lives are involved, there is no room for error.

## Solution

ALAI Secure's competitive argument is based on two product characteristics. First, its **dual node infrastructure** that ensure that no call is missed and also that they are all received under optimum quality conditions, and second, all communications between the clients' central systems and the devices deployed will be secure and encrypted **using Data and SMS VPN**, which provides a guarantee in all

communications with the end clients.

The ALAI Secure communications system is designed so that the SIM cards installed in the devices in the field can only connect to the client's pool of IP addresses, and they can only receive communications from the client's base, thereby ensuring that they are fully shielded against any denial of service attacks.



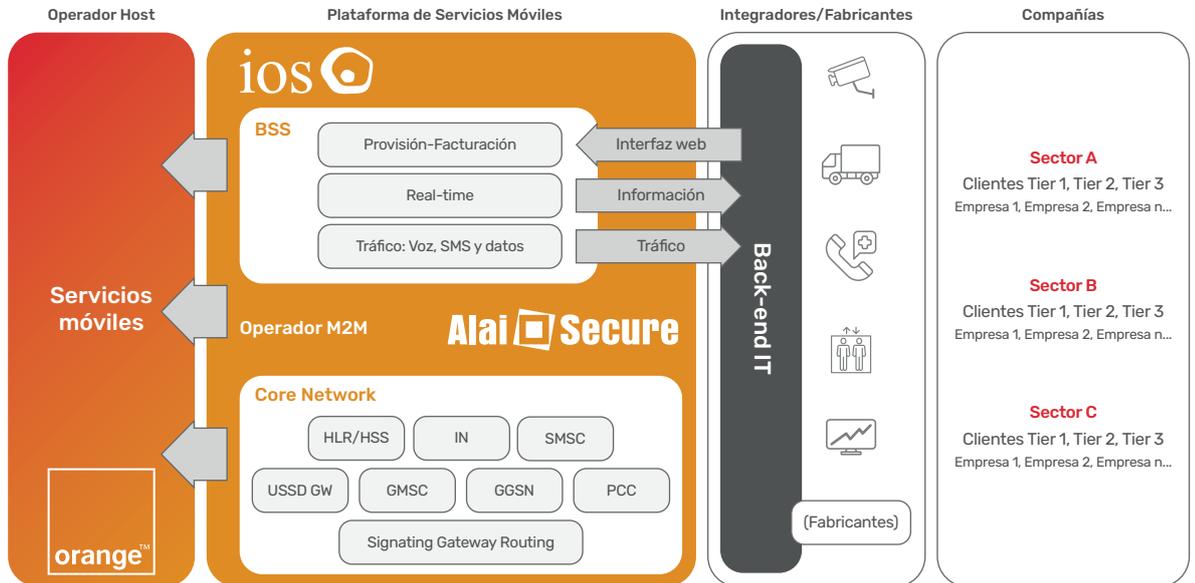
## Double NODE connection system

One of the most common attacks that businesses have to face consists of unexpectedly receiving thousands of SMS messages on their SIM cards. While this vast amount of messages is being processed, the communications on the device are compromised, and the client is completely exposed.

### Advantages of IOS as a Mobile Services Platform

Besides having a **complete 2G/3G network infrastructure**, a high level of flexibility, and an interesting and comprehensive added value network service portfolio, the **IOS platform** provides a BSS system on which Alai Secure has deployed a Self-Management Platform for its clients designed to facilitate and expedite the operation of the service, giving the client a high degree of autonomy.

The **ALAI Secure Self-Management Platform** has been designed to facilitate management as much as possible, so that the client can manage SIMs immediately and without any involvement by a third party, in addition to creating their own pricing plans - Voice, SMS and Data - perform routing to the client's 902 numbers, assign IP addresses, obtain individualized traffic reports for each of the cards installed, etc.



### Consumption Control Module

ALAI Secure also includes a “Consumption control” module in its platform showing in real time whether a card is consuming much more than

would be expected in order to be able to take quick action, solve the problem and avoid exposure to unexpected penalties on the invoice.



## Alai Secure High Performance SIM

In 2014, it launched its new **High Performance SIM card**, onto the market – a new concept of card designed especially for **M2M communications**, which meets the highest standards of connectivity, strength, reliability and above all, security.

The outstanding characteristic of the High Performance Card is that it is much more durable than any

conventional SIM card. Its new silicon microchip extends the card's life by a factor of up to five.

It is also much more resistant to extreme temperatures, humidity, vibration, shock, etc. resulting in a significant saving of costs for clients, by significantly reducing the number of incidents, journeys and replacements.

