

# IoT/M2M platform

The M2m Platform gives Operators the ability to handle all kinds of M2M Service requests from Integrators, Devices Manufacturers, Service and Application Providers...

## General feautres

- Fast time to market
- Operational cost efficiency
- Multi-Country and Multi-IMSI
- Safe and non-intrusive to the Operator's network
- Integration with any vertical
- Autonomous platform
- Robust, scalable and cost efficient
- Extremely flexible: quick response to new initiatives of M2M services and new business models



## Main advantages for Mobile Operators

- |  |  |
|--|--|
| ■ Centralized integration of all integrators/manufacturers and customers | ■ Creation of customer profiles to monetize services             |
| ■ Operational independence towards new integrations and maintenance      | ■ Real time Risk control   |
| ■ Quick deployment of new verticals: less than one month                 | ■ Fraud control  |
|  | ■ Portfolio of value-added M2M services specialized by verticals |

# Platform M2M

MULTI-ACCESS		Traffic Control	VAS	Cost Control	VERTICALS
2G		Multi-service intelligent network	Auto-provisioning	Consumption control	
3G	↔		Anti-hyperactivity system	Business performance monitoring	
4G	↔	Real-time traffic metering		Revenue assurance	
Wimax	↔	Secured data and SMS VPN	Remote access VPN Enables off-site personnel to establish a bidirectional communications securely		
Wi-Fi	↔			Anti-fraud system Limiting communication between only the SIM and the central system	
Fixed	↔	Anti-DDoS system			
xDSL/ Fiber	↔	Self-management platform for SIMs and routing	Multi-device authentication and remote opening system		

## Models

### Flexible Operations Model

- Full managed services.
  - JSC Ingenium takes over the full responsibility of the operation based on Service Level Agreements.
  - Reporting via a complete set of KPIs to customer.
  - Periodic review at the operation steering committee.
- Full internal operations.
  - Operator takes over full operations.
  - Level 2/3 support provided by JSC Ingenium.

### Flexible Financial Model

- Per-connected-device model.
- CAPEX model.



Utilities



E-health



Industry



Fleet control



Security

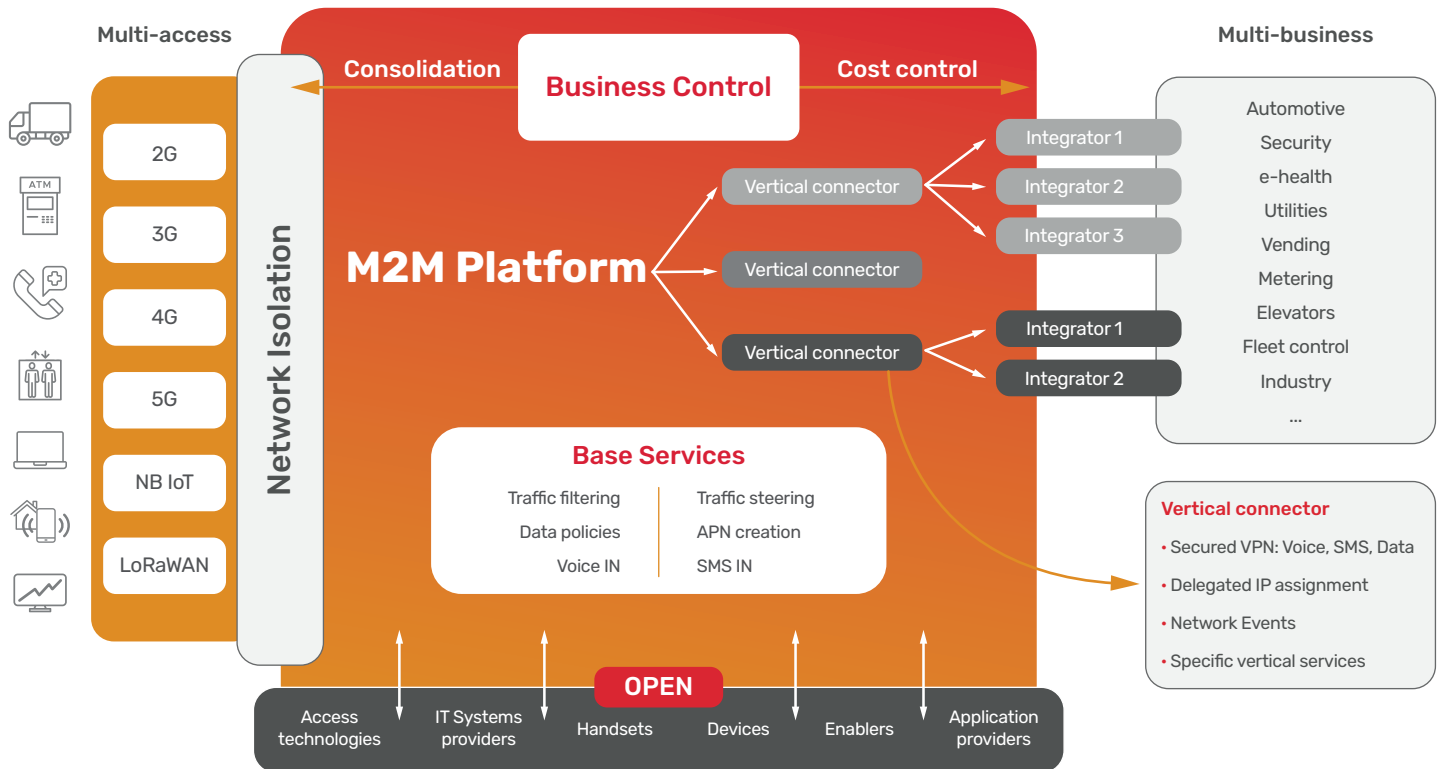


Vending



Ascensores

# Platform M2M



## M2M Platform

- Network Isolation**
  - New deployments have no impact on the Network.
  - Integrate once, run always.
- Real Time Traffic Control**
  - Multi-Service Intelligent Network.
  - Real Time traffic metering.
- Business Control**
  - Real Time traffic/cost metering.
  - Service Monetizing, Rating and Billing.
  - Revenue Assurance.
- Supervised Self-Configured Traffic Routing**
  - Network Operator decides which traffic routing options are available to customers.
  - Customers self-configure traffic routing.
  - Operator is notified of any change.
  - Self care: provisioning, reporting...
- Integral Web Based Customer Interface Continuous Event Reporting**
  - Event Detail Records / Triggers (WS SOAP, WS Rest...).
- Device IP address assignment (Supervised and VPN-Aware)**
  - Internal dynamic (pool based).
  - Internal fixed (self-configurable).
  - Delegated to customer (Radius).
- Secured Access**
  - IMEI check.
  - Expected location check.
  - Tailored service profile.
  - Network registry history.
- End-to-End Secured Traffic**
  - Redundant VPNs.
  - Denial Of Service Protection.
  - Fraud Protection.
  - No Hiperactivity.
- M2M Service Profiling**
  - Flexible per customer Service assignment.
  - Flexible per customer/application Policies.
  - Service/Policies Monetizing.

# Success Stories

## Alai Secure



Alai Secure is Spain's first exclusive M2M/IoT operator specialising in Telco Security. It launched its own special High Performance SIM card for M2M/IoT communications onto the market in 2015. It has the most comprehensive portfolio of Telco Security services deployed and operational in some of the main verticals:

Private Security  
Social-healthcare  
Telecare

Fleet location and management  
Metering

It provides a service to some of the leading business groups in Spain in the provision of comprehensive services, in some of their main verticals: private security, social-healthcare, facility services, authentication and access control. It offers a secure opening system.



## Imagina Ingenio



Provides a real-time telemetry service to vending operators –mainly in the tobacco sector: monitoring and providing remote control of stock, breakdowns, incidents and delays in revenue collection. Remote changing of prices and a complete reset of the terminal is also possible. Also, includes a secure remote opening system.

## Nayar Systems



An engineering company specialising in landline communications management and M2M/IoT in the elevator sector. Communications are secured by a data VPN between the central office and the network of elevators to ensure security in monitoring, control and remote confirmation of faults and battery alerts, as well as in reactivating devices.