

InovGrid

Evolution of the smartest

There's a new paradigm in the electricity industry sector. It is based on more efficient usage of energy, supported on demand management, renewable and micro generation (distributed production), reinforcing the role of the consumer/producer and making room for an active network management.

ABOUT ENERGIAS DE PORTUGAL (EDP) DISTRIBUTION

EDP is a holding company for utilities that generate, transmit, and distribute electricity. They rank among Europe's major electricity operators and serve nearly 12 million customers in Portugal, Spain and Brazil.

THE CHALLENGE

EDP saw the need to increase intelligence, supervision and control of the network. They wanted greater efficiency and quality of supply, and to allow for distributed generation and electrical vehicles. They branded this effort InovGrid and sought to introduce AMI improvements to their network management capability.

EDP strongly believes that InovGrid will bring significant benefits to customers, with increased control over energy consumed, lower costs, increased flexibility of tariffs and value added services.

The InovGrid project will respond to the challenges and opportunities, bringing benefits to all users and stakeholders. These benefits will help them perform efficiently, and effectively bring them to a new stage towards Active Network Management.

OUR ANSWER

Project ambition

Ultimately, InovGrid project will support six million customers located across Portugal. Starting with a Smart City initiative in Évora (35.000 clients), there will be a rollout across the country.

The project targets a Smart Grid since the early stage and encompasses smart metering, distribution management and integration of micro generation (photovoltaic and wind) and electric vehicles

InovGrid has been selected by the European Union Commission and Eurelectric as a leading smart grids reference project in Europe.



CASE STUDY

UTILITIES

KEY BENEFITS

Consumer/producer

- Improved access to micro generation
- Reduced energy costs
- Innovative tariffs and price plans

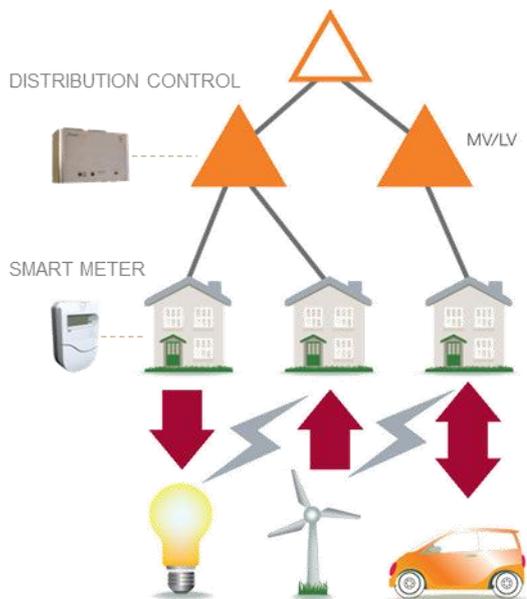
Supplier

- Ability to offer new services
- Improved customer relationship
- Reduced entry barriers

Solution Overview

In consortium with two other technology providers, we provided a three-level infrastructure for EDP Distribution:

- New AMI platform with Supervision/Control Room component using CGI Sm@rtering solution
- Distribution Transformer Controller at secondary substation
- Energy Boxes (metering devices) on client premises



Distribution Network Electrical Infrastructure

Sm@rtering

CGI was responsible for the delivery of the new AMI platform - Sm@rtering

- Collect and storage of all meter readings
- Services Platform, integrated with EDP technical and commercial systems
- Event and Incident Management for the new infrastructure monitoring
- Support for network management functionalities

We were also responsible for:

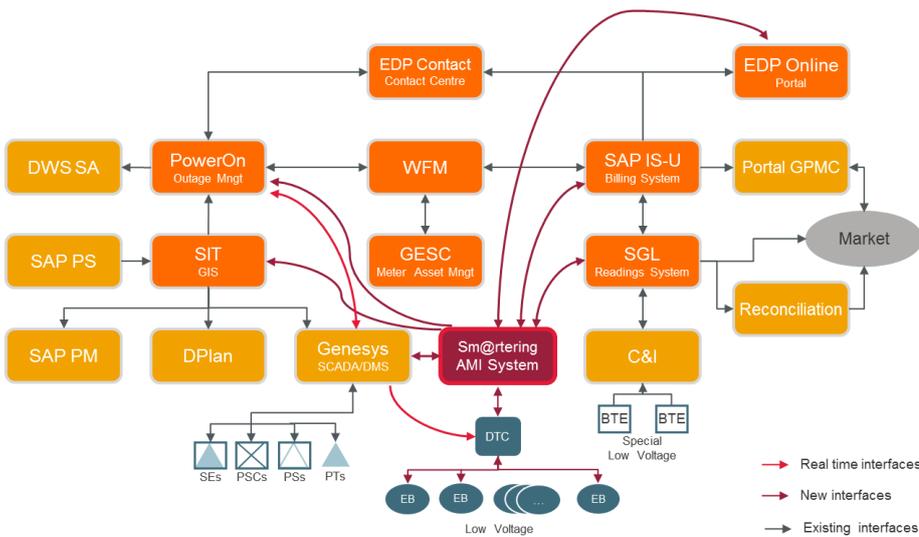
- Defining the functional and technical specifications for the overall InovGrid Solution
- Working together with EDP to define new 'end-to-end' business processes empowered by new functionalities provided by AMI implemented on distribution network
- Adapting the existing corporate systems (GIS, Outage Management, Asset Management, Work Force Management, Billing System, Customer Information and others) to the new processes integrated with Sm@rtering, supported by service oriented architecture.
- Creating value added functionalities in commercial and technical systems to support the business case evaluation
- Supporting EDP in the definition, implementation and control the rollout process
- Implementing a SmartGrid Control Room and supporting daily operations

DSO

- Reduced network losses and operational and maintenance costs
- Optimized network management and control
- Optimized investment
- Improved quality and reliability

Regulator & National Economy

- Increased market efficiency, competition and reliability
- Modern economy, sustainability
- Support for penetration of renewable energy
- Boost to R&D and economy



- We played a main role in:**
- AMI implementation
 - Sm@rtering platform
 - New interfaces to support 30 'end-to-end' business processes
 - Impact and changes in existing systems
 - Outage Management
 - Meter Asset Management
 - SAP IS-U
 - GIS
 - Work Force Management
 - Legacy Meter Readings System
 - Call Centre
 - Portal EDP

WHY WORK WITH CGI?

Our industry knowledge, technical excellence and global delivery expertise ensure we have an excellent track record in the industry. We are known for our depth of understanding of the markets in which we operate. By building on the extensive experience and practical knowledge of our consultants, we are consistently at the forefront of innovation in the utilities industry.

The solutions that we have developed will help you to evolve your operations and realize the benefits that Smart makes possible. We understand, innovate and continue to deliver. When projects are large, complex and critical, organizations around the world trust CGI to make it happen.

For more information, please contact us at info@cgi.com or visit www.cgi.com.

InovGrid Consortium



With 68,000 professionals operating in 400 offices in 40 countries, CGI fosters local accountability for client success while bringing global delivery capabilities to clients' front doors. Founded in 1976, CGI applies a disciplined delivery approach that has achieved an industry-leading track record of delivering 95% of projects on-time and on-budget. Our high-quality business consulting, systems integration and managed services help clients leverage current investments while adopting new technology and business strategies that achieve top and bottom line results. Visit cgi.com for more information.