



At-a-Glance

The Company:

AES Sul, leading energy Company in Brazil.

The Challenge:

Real-time inventory of assets spread in a territory of 99,512 sq KM.

The Solution:

PDA's and GPS Mobile data gathering system plus a NetWeaver back office integration platform.

The Benefits:

An effective, real-time and accurate inventory of assets.

SAP NetWeaver mobile solutions for the Energy Industry

Enabling operational efficiencies through the integration of multi-vendor technologies

The Client

AES Sul Distribuidora Gaúcha de Energia S/A is a Company member of the AES Corp one of the two world's largest investors in the electric power sector, with presence in 25 countries in 5 continents, 129 power generation and 14 energy distribution plants covers practically all Latin America (Argentina, Chile, Brazil, Colombia, Venezuela, Panama, El Salvador, Dominican Republic, Mexico and Puerto Rico) and over 30,000 AES employees all over the world.

AES Sul distributes electric energy in 118 municipalities of the Brazilian state of Rio Grande do Sul since 1997, and serves an area totalizing 99,512 square Kilometers, for approximately 1.07 million Clients delivering electric energy 24 hours a day to nearly 4 million people.

The Challenge

By the year 2006 AES Sul created the program CONTA COMIGO, with the purpose to comply with regulatory mandates from the Brazilian Government geared toward determining the adequate rate for the services provided by the Company.

An essential requirement of this process; the Inventory of Electric Assets in the Field required a solution capable of supporting a vast territory and facilitate the integration with the backoffice information systems: SAP R/3, the ERP platform which included PLM (Product Lifecycle Management) and a Geographic Information System (GIS).

The main challenges for the project were:

- Geographic Dispersion: AES covers 99,512 square Kilometers in 118 municipalities in the Rio Grande do Sul state;
- Cultural Process: Migrate the Management Process of Electric Assets, a very important part of the Company's patrimony;
- Different Systems, Different Realities: SAP R/3 and the GIS do not have any type of correlation between their data;
- Implementation Time: Adhere to the plan that demanded a 9 months project was fundamental;
- Innovative Technology: Probably this was the first project to ever integrate SAP R/3 and the GIS system in the country. Furthermore, the solution also involved the use of SAP Mobile and the use of a GPS solution;

The Solution by Tim Tech Consults

The solution designed jointly with AES Sul had two components:

- A) To develop a mobile system for the Inventory of Electric Assets, which needed to be tightly integrated with the SAP R/3 and GIS systems. With this application, the technician on the field uses PDAs to enter information into the catalog sending real time updates of the works conducted in the field.
- B) Adopt "SAP NetWeaver" as the integration platform. This tool would integrate the backoffice systems (SAP PLM and the GIS) and the mobile solution through the use of SAP eXchange Infrastructure (SAP XI) and the SAP Mobile Infrastructure (SAP Mobile) products.

The implementation of the solution was carried out by a team composed by professionals of AES Sul, Tim Tech Consults and two other consulting companies specialized in the GIS System. Tim Tech Consults was the main partner, responsible for project management, the implementation of NetWeaver and implementation of SAP XI and SAP Mobile while also doing development in ABAP, JAVA and Basis.

The Benefits

Qualitative benefits

- **Agility in the Catalog Maintenance:** Through the mobile applications, the catalog can be updated by the field technician during the service.
- **Process Improvement:** The integration between the systems eliminates re-work of data entry and improves data quality.
- **Integration and Transparency between systems:** Standard tool for field technicians offers a solution that allows easy navigation between catalogs with better speed and productivity.
- **Geographical Location:** Through the GPS installed in the PDA is possible to determine the location and positioning of every object of the electric network
- **Data Integrity:** Catalogs are updated directly by the technician performing the work, eliminating additional risk related to data entry.
- **Validated Business Rules:** Through the application the business rules of the GIS and SAP R/3 were implemented on the PDA in a way that it does not allow inconsistencies.
- **Standardized Procedures:** Process for Data entry and format were made standard.

Quantitative Benefits

- **Average Time of Catalog Maintenance:** Was reduced from 45 to 10 minutes per object.
- **Operational Cost Reduction:** Savings with tracking supplies. The economic impact is yet to be estimated, but it is anticipated to be of several million dollars.
- **IT Assets Cost reduction:** Economy of scale through maximized use of SAP and Netweaver at AES Sul.

ABOUT TIM TECH CONSULTS

Founded in 2010, Tim Tech Consults is an African leading provider of process-driven IT solutions with 10 years of Expertise in 3 Offices in East Africa with 15 Global Delivery Centers on the Global, Tim Tech Consults helps improve time-to-business-solution, lower costs of existing applications, deliver better engineered and tested applications, and produce predictable outcomes for top-tier corporations in over 5 countries. Through on-site, on-shore and its trademarked Global Nearshore service delivery models, Tim Tech Consults teams with CIOs to constantly increase the business value of IT. Tim Tech Consults is the creator and a leader of the nearshore industry.

All Rights Reserved Tim Tech Consultants 2010. Tim Tech Consults, the TTC logo, Near Shore and other TTC products and services mentioned herein are registered trademarks of Tim Tech Consultants Uganda Limited , Canada and several other countries.