Ceinsys Energy Solutions

Description

The utility sector is one of the expanding areas, as utility management is one of the basic needs of the modern infrastructure management. To keep it functional without any breakdown and avoid power loss is a difficult task to manually manage entirely including a variety of operational and energy measures. To maintain the balance between the Generation, Transmission and Distribution Geospatial data can help provide detailed information of the specified area to be targeted. The Government of India initiated projects like RAPDRP (Restructured Accelerated Power Development and Reforms Programmed), IPDS (Integrated Power Development Scheme), Smart Grid and many more.

Geospatial data mould a solid foundation for achieving goals needed, from data capture and management to planning and maintenance of trenches, cable, pipe and conduit networks, from supply and distribution stations to the end users. Energy supply security and sustainability are central prerequisites for stable societies and a robust economy.

Offerings

- Business Process Automation (Utility Software)
- Automated Metering Infrastructure (AMI)
- SCADA – DMS – OMS
- Energy Audit
- Electric Infrastructure
- GIS Based Application

Technology Used

- Remote Sensing Satellite Imagery (High Resolution)
- Smart Meter
- SCADA
- GPS

14,000 km
Network Survey

6 Million
Consumers Tapped

5000 NOS
MDA System Implemented

4000 Sq. Km
Base Map Created

Enterprise GIS

Enterprise GIS is an architecture that integrates geospatial data and services and shares them across the organisation. It Provides an interface for multi-user access to both spatial and non-spatial data. It can also be viewed as an infrastructure that extends and enables existing enterprise systems using geospatial data and services.

Benefits of Enterprise GIS are; Total Project mission planning, Field GCP Survey, Photogrammetric Scanning, Preparation of map, Geo-referencing, Mosaicing, Aerotraingulation, Digital Surface Model Compilation, DEM/DTM Compilation, Digital Orthophotos and Complete project development services.

Enterprise Asset Management

Enterprise asset management (EAM) involves the management of the maintenance of physical assets of an organization throughout each asset's lifecycle. EAM is used to plan, optimize, execute, and track the needed maintenance activities with the associated priorities, skills, materials, tools, and information. This covers the design, construction, commissioning, operations, maintenance and decommissioning or replacement of plant, equipment and facilities.

Smart Metering/AMI

A smart meter is a new kind of electric device that can digitally send meter readings to individual energy supplier for more accurate energy bills. Advanced metering infrastructure (AMI) is an integrated system of smart meters, communications networks and data management systems that enable two-way communica-tion between utilities and customers.

AMI (Advanced Metering Infrastructure) is the collective term to describe the whole infrastructure from Smart Meter to two way-communication networks to control centre equipment and all the applications that enable the gathering and transfer of energy usage information in short time. AMI makes two-way communications with customers possible and is the backbone of a smart grid. The objectives of AMI can be remote meter reading for error-free data, network problem identification, load profiling, energy audit and partial load curtailment in place of load shedding.

SCADA

SCADA (Supervisory Control and Data Acquisition) refers to an industrial computer system that monitors and controls a process. In the case of transmission and distribution elements of electrical utilities, SCADA will observe substations, transformers and other electrical assets. SCADA systems include hardware and software components. The hardware gathers and feeds data into a computer that has SCADA software installed.

Power distribution system deals with the transmission of electric power from the generating station to the loads, with the use of transmission and distribution substations. Most of the power distribution or utility companies rely on manual labour to perform the distribution tasks like interrupting the power to loads, hourly checking of the parameter, fault diagnosis, etc. The implementation of SCADA to the power distribution system not only reduces the manual labour cost but also facilitates smooth automatic operations with minimising disruptions.

WEB & Mobile Applications

Web & Mobile applications are built for the public as well as for government authority. The applications are developed on various platforms to help in the overall decision-making process.

Data Center Management

Data Center Infrastructure Management (DCIM) is the convergence of IT and building facilities that function within an organisation. The goal of a DCIM initiative is to provide administrators with a holistic view of a data centre's performance so that energy, equipment and floor space are used as efficiently as possible.