



Mapping & Web GIS Application / Software Development

## Oil & Natural Gas Corporation

**Name of Project:** GIS Mapping of operational Area in Tripura Asset

**Name of Client:** Oil and Natural Gas Corporation Limited

**Narrative description of Project in brief:** The ONGC is planning to establish an Information System on a geographic base, to organize the data and information produced and used by the organization. This system is intended to serve the ONGC by using Geographic Information Systems (GIS) for providing communication, data sharing and technological integration.

Main scope of work includes:

- Detailed Scope under Creation of GIS Mapping and all applications and information"s which are to be brought under a single integrated map.
- Satellite Image Procurement and creation of a Geo referenced Base Map.
- Data Source ,Collection of data and Accuracy Assessment
- Data Organisation with all features of Data Analysis, Manipulation, Integration and Updating Data in the GIS System using professional software (ARC-GIS) for monitoring and control.



## Indian Oil Corporation Limited

**Name of Project:** Development of Geographic Information System of HMRB pipelines Right of way (ROW)

**Name of Client:** Indian Oil Corporation Limited

### **Narrative description of Project in brief:**

- A comprehensive corridor details data base backed by a GIS system to ensure complete pipeline mapping and bringing entire pipeline network under a single window info-mapping system.
- Reducing security hazard by increasing coverage monitoring and maintenance services.
- Creating GIS based plot boundary & plot ownership detail mapping
- Proper system of tracking shortest approach road and suitable system of sending security, safety and maintenance team.
- Proper system of tracking affected & contaminates area if any unethical incident will happen. The project involved mapping of 234 Km length of pipeline with Right of Way details including Road/Rail networks.



## Oil India Limited

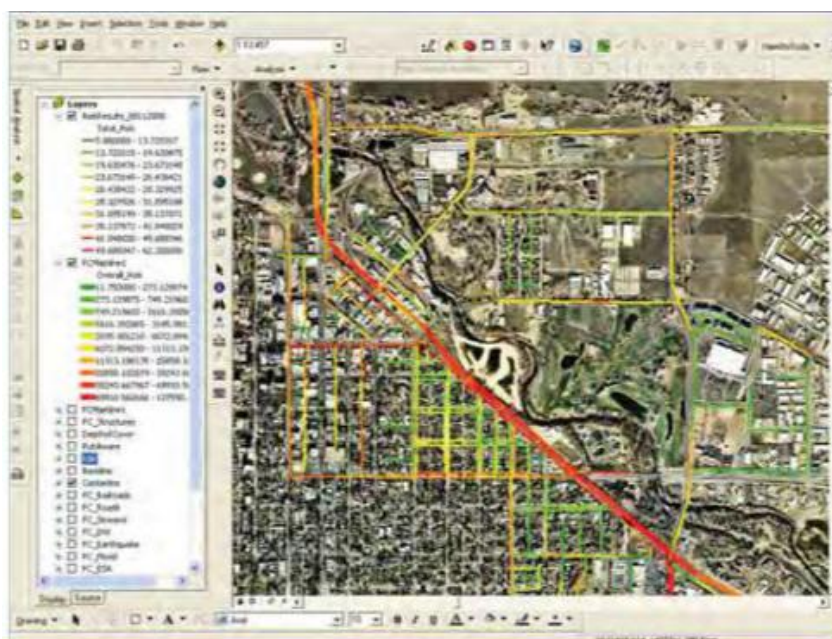
**Name of Project:** Hiring the services for Establishment of GIS based Pipeline Asset Management System under Civil Section, PHQ

**Name of Client:** Oil India Limited

### Narrative description of Project in brief:

Scope of Work includes:

- Development of Web Based GIS solution.
- Supply & installation of server of requisite capacity with sufficient power backup for storing all the information and data, software, maps etc.
- Supply of any other add-on software (which are required for the working of the system like RDBMS - oracle, Microsoft SQL etc.) to be provided by the vendor.
- Conversion of identified raster images(.jpg) of drawings & maps of Pipeline Department to vector (editable) format (.dwg/.dxf) suitable for GIS mapping through digitization software and archiving the same in server. Same has to be submitted in hard copies to OIL.
- DGPS Survey shall be carried out for collection of Ground Control Points (GCPs) data along the Pipeline corridor.
- Provide high resolution satellite Imagery.
- Radiometric correction and Geo-referencing to the required projection parameters of panchromatic and multispectral imagery of the Pipeline ROW corridor using Ground Control Points.
- Extraction of information/details/features from Survey of India toposheets of scale 1:50,000 and Owner provided various maps and incorporation of these data on the base map.
- Preparation of updated base map (containing vector data) for a corridor width of 0.5 Km by integrating all the features extracted from pan-sharpened satellite imagery.



## Gujarat Energy Transmission Corporation Ltd. (GETCO)

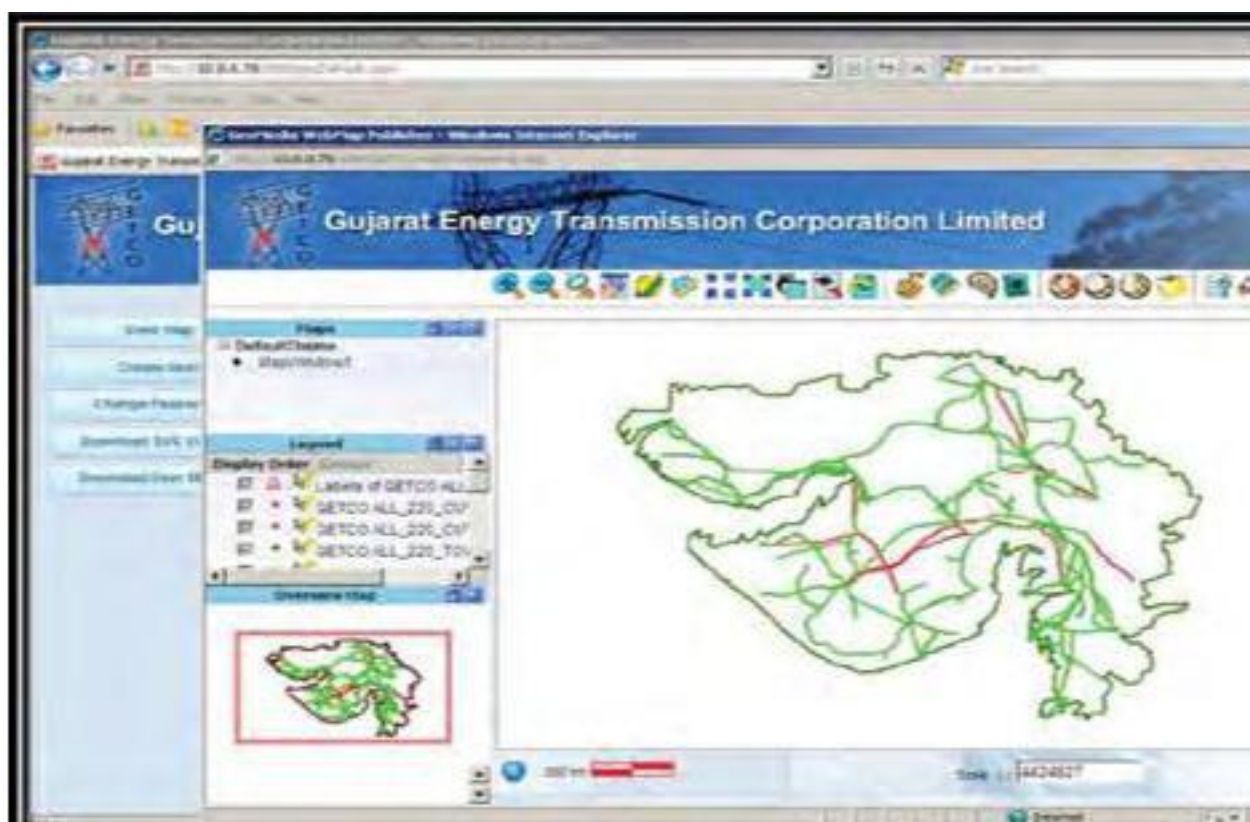
**Name of Project:** Asset Management and Geo-database Creation of 132 KV Transmission lines

**Name of Client:** Gujarat Energy Transmission Corporation Ltd. (GETCO)

### Narrative description of Project in brief:

Comprehensive web-based GIS system for asset management of power utility (400 KV & 220 KV Transmission lines) along with MIS and DSS. It included collection of utility and infrastructure related field data through GPS Survey, GIS mapping and a multi user Web Based GIS Software and customization of the same. The project scope involved corridor mapping of 18 m which included extensive mapping of Road Network, Infrastructure and Utility points. The objective of the project is to develop a GIS based asset management solution for the power utility to cater to the following requirements:

- Use for planning, comparative analysis, project feasibility analysis and risk evaluation
- Examine the geographic relationships among the various data components to identify new opportunities
- Incorporate additional layers and proprietary information to increase analytical value Create powerful visual presentations to communicate result





## Damodar Valley Corporation (Govt. of India owned company)

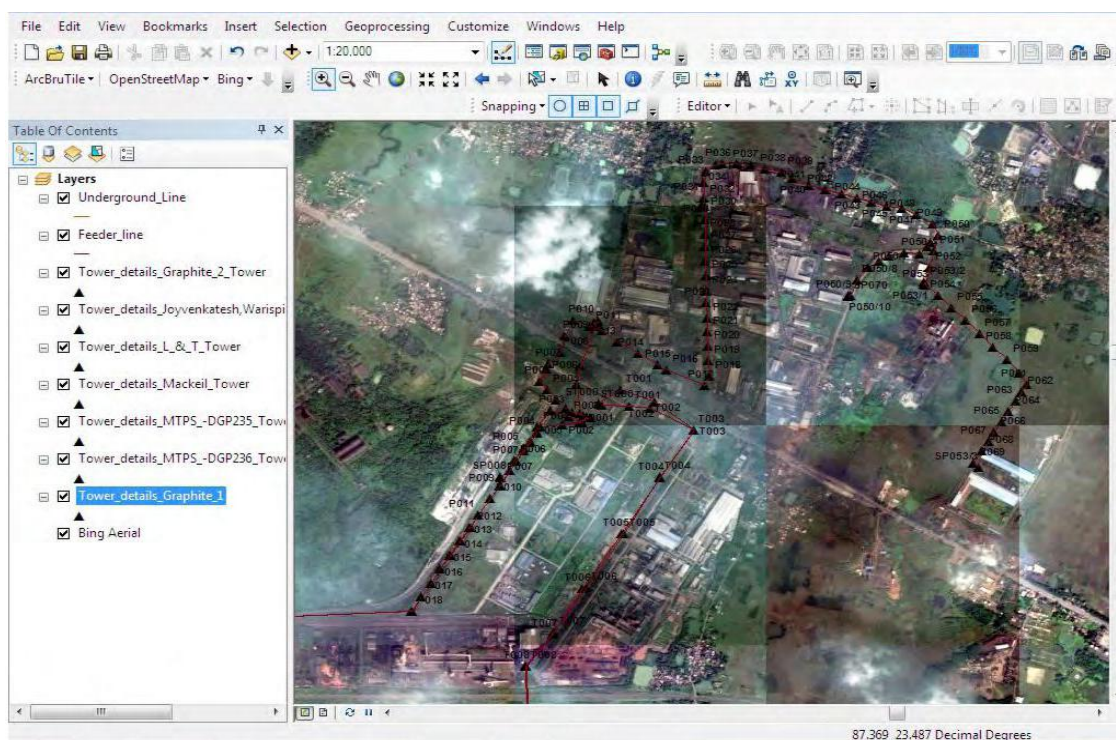
**Name of Project:** Preparation, Supply, Installation & Commissioning of GIS map of 400 KV, 220 KV, 132 KV, and 33KV Transmission lines, Towers & its connected substations using modern GPS survey techniques and setting up of an Integrated Transmission GIS

**Name of Client:** Damodar Valley Corporation

### Narrative description of Project in brief:

Scope of Work includes:

- Customizing GIS application software, on which the maps and data would have to be loaded in the proper Open GIS format
- The preparation of database should be common for the entire DVC system.
- The bidder shall have to supply & install multi user, customized, licensed, proper open GIS format Software for GIS mapping of 400 KV, 220 KV, 132 KV and 33 KV lines, towers and its connected substations.
- The bidder has to submit basic requirement of suitable hardware.
- Creation of digital map of DVC transmission network using the modern GPS survey technique
- Superimposing of route map of lines, towers & location of sub stations on topo-sheet i.e. superimposing of digital map of DVC transmission network
- Creation of back ground map based on latest satellite imagery, town maps and GPS survey
- Indexing of 400KV, 220 KV, 132 KV and 33KV Lines, towers & S/s. Ex. Name of S/s, Name of line, KV class etc.



## Mangalore Electricity Supply company Limited (MESCOM)

**Name of Project:** Asset Management and Geo-database Creation of proposed 33/11 KV substations, 33 KV lines along with updation of data

**Name of Client:** Mangalore Electricity Supply company Limited (MESCOM)

### Narrative description of Project in brief:

This is a web-based GIS system for asset management of power utilities and for providing accurate and reliable information to the utility operational staff on the spatial and non-spatial attribute data of the network created in the GIS.

The information will be in the nature of a GIS layer of any type of network entity (poles, conductors, underground cable segments etc.) or location information etc. The facility could be used to point out all the poles and the conductor segments located along a road. The network solutions will be Automated Mapping / Facilities Management / Geographic Information System (AM/FM/GIS) solutions. With the collected GPS readings, latitude, longitude and altitude, the software will generate the final output as a vector GIS layer with point objects and associated attributes in standard GIS formats. The system will add the vector GIS layer on Google Earth. The system will also have Google Earth controls, Implement measurement tools, Station to station distance calculation, Calculate distance between poles.





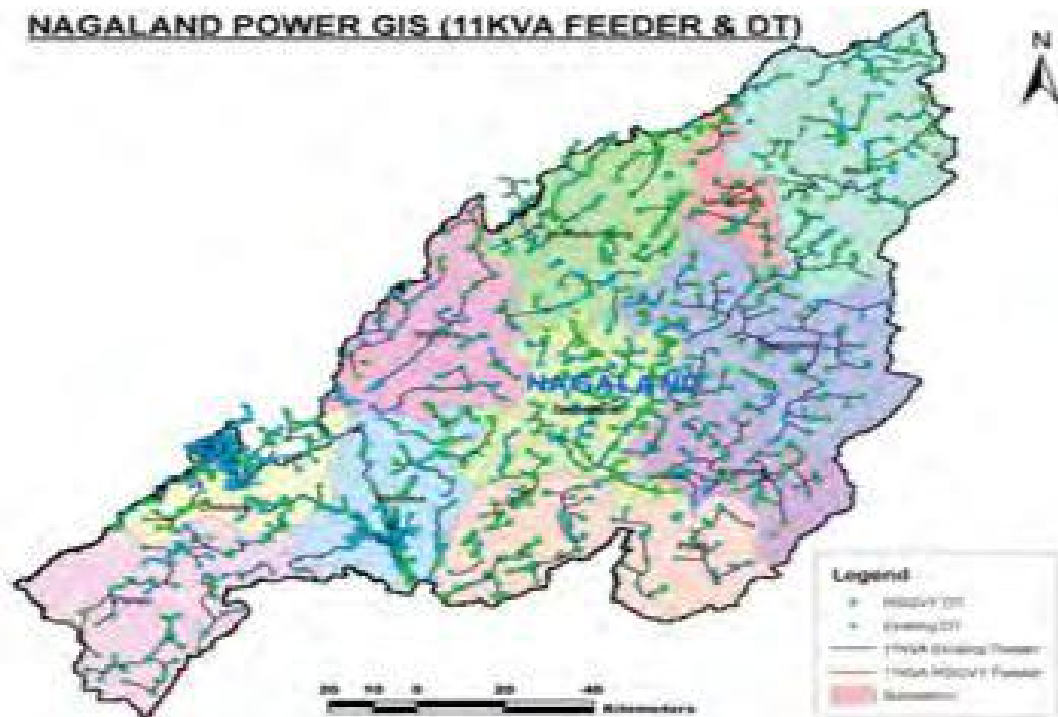
## Dept of Power, Govt. of Nagaland

**Name of Project:** Asset Management System for Power Utility

**Name of Client:** Dept of Power, Govt. of Nagaland

### **Narrative description of Project in brief:**

Creation of GIS database for the entire power network and utility assets for the state of Nagaland for efficient management of assets to help in planning, comparative analysis, project feasibility analysis and risk evaluation and to examine the geographic relationships among the various data components to identify new opportunities. Project components included preparation of Spatial Data & Base Map Creation, development of GIS Application Software and Asset Codification. An integral part of the project was preparation of Nagaland State Map with Road and important physical landmark.



## Power & Electricity Dept, Govt. of Mizoram

**Name of Project:** GIS Mapping of Electrical assets Under RGGVY Schemes for Mizoram

**Name of Client:** Power & Electricity Dept, Govt. of Mizoram

### **Narrative description of Project in brief:**

Geospatial technologies have been deployed in RGGVY Scheme of the Ministry of Power for improving efficiency of electricity distribution network as well as improving the efficiency and the manner in which the consumers are served. GIS helps reduce costs by optimizing routes and channelizing resources, energy accounting and auditing.

The project involved creation of base map and asset maps followed by codification of the entire asset base of the Utility

