



Where software concepts come alive™

### Business Domain

Geospatial Sector

### Project Type

LiDAR Data Processing Solution,  
Dedicated Team, Tech Partnership

# A Remote In-Sourcing® Team Helped a Powerlines Management Company Cut Data Processing Time by 65%

## Client

The Client is a leading global specialist in optimizing the performance of electricity networks through remote sensing and data analysis of power line infrastructure.

## Project

To extract 2D features based on LiDAR data and prepare a highly specialized classification to inspect powerlines and prevent damage to them.

## Objective

To set up a seamless process for data collection and processing in order to better distribute the workload and meet a strict project deadline.

## Team Reinforcement

Due to the rapid development of power line grids, setting up a seamless process for data collection and processing has become a challenge. The Client needed the data for a fast-paced project, and this required far more human resources than they had access to. A scalable Remote In-Sourcing® team was formed to develop a parallel processing workflow and ensure output data quality control.

# Challenge

The Client is a global electricity network mapping company with expertise in engineering, surveying, field inspection, project management, GIS, and data management.

The Client's main challenge was to deliver fast-paced projects for end users, which demanded a considerable amount of resources for data processing and collection.

The Client had to choose between data collection and data processing due to the lack of resources to meet the deadlines of their project. They decided to delegate some tasks to the Remote In-Sourcing® team.

## Quick Facts

- ✓ 72 km of LiDAR data processed
- ✓ Highly-specialized classification with ~50 industry specific classes
- ✓ Classification algorithms ready to implement in other projects
- ✓ Automated feature extraction to reduce data processing time by 65%
- ✓ Project costs reduced up to 30%
- ✓ 2-week turnaround time

### Technologies

Global Mapper / TerraSolid / Python

# Solution

## ★ 01

Custom workflows provide more accurate output data compared to conventional methods of data processing. Classification algorithms are scalable and can be implemented in other projects.

## ★ 02

The Client greatly increased data processing volumes and could dedicate more time to data collection.

## ★ 03

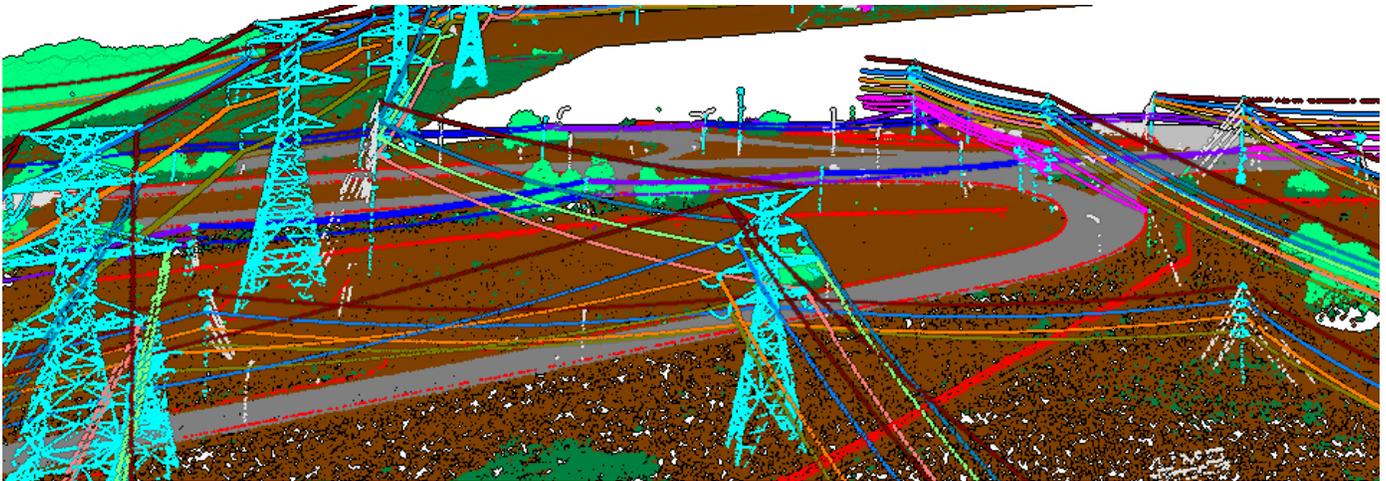
The data automation and parallel processing model reduced processing time by 65%. The project costs decreased by up to 30%.

## ★ 04

The scalable Remote In-Sourcing® team had extensive GIS knowledge and ensured a custom solution for each individual area of data processing.

## ★ 05

The Intetics Remote In-Sourcing® team produced several solutions to speed up the process of feature extraction. A custom workflow was created for specialized classification specs.



## Client Reference



*I want to express my appreciation for the Intetics team's work on the Powerline Management project. This important powerline infrastructure project was successfully completed far ahead of schedule and on budget.*

## Benefits and Results

- ★ Saving 30% of the cost of the short-term project.
- ★ Custom data processing solutions, ready to implement for future Client projects.
- ★ The Classified Point Cloud, Digital Terrain Model, Orthomosaic, CAD plan with extracted features, and workflow automation accelerated data processing by 65%.
- ★ The project was implemented within 2 weeks.