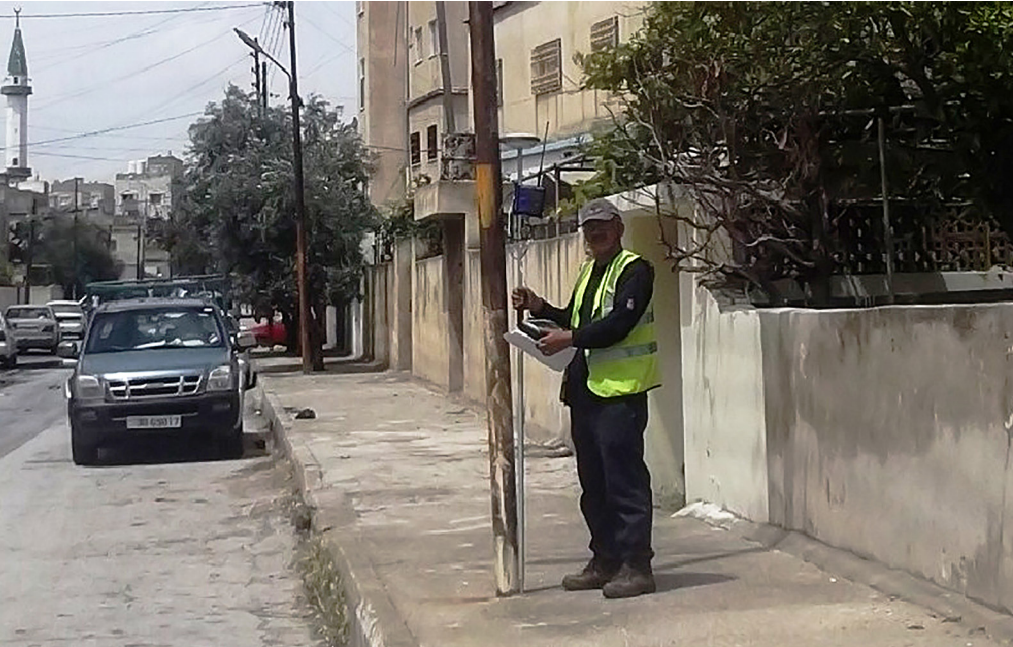


# Leica Geosystems **TruStory**

## Leica Zeno GIS for the capture and management of Jordan's electrical assets



### ■ Company

IDECO (Irbid District Electricity Company LTD.)  
www.ideco.com.jo

### ■ Challenge

- To capture, collect and document accurate position and GIS attribute information of all overhead and underground low voltage and medium voltage network assets

### ■ Objectives

- To enrich and update the existing electrical asset records to a new level of accuracy
- To provide a better service to its customers
- To resume system operation quickly in cases of power interruption or breakdown

### ■ Location

The northern region of the Hashemite Kingdom of Jordan



### ■ Deliverable

A complete and accurate database and the definitive source of information for the entire electrical distribution network

### ■ Key Tasks

- Capture the network asset features and appropriate attribute information
- Transfer data from Zeno Field to Zeno Office
- Quality check and audit on the data

### ■ Hardware and Software

- Leica CS25 with External GG03 Antenna with Glonass Option and Leica Zeno Field
- Leica Zeno 5 with External GG03 Antenna with Glonass and Leica Zeno Field
- Leica GR10 Base Station with Radio and GSM Options for RTK Correction Transmitting
- Leica AR10 Reference Antenna
- Leica Zeno Office on ArcGIS Office

**IDECO is an electricity provider supplying power to four concession areas in the northern region of the Hashemite Kingdom of Jordan. IDECO's network covers approximately 23,000 km<sup>2</sup>, some 26% of the total area of the Kingdom and includes the Malfraq Governorates, Irbid, Jerash and Ajloun and some parts of the Balqa Governorate. IDECO's efficient management and administration of such a large number of electrical assets is key to controlling maintenance costs, improving functionality and providing a better service to consumers.**

The goal for the GIS department at IDECO was to capture, collect and record accurate position and GIS attribute information, including images, of all overhead and underground low voltage and medium voltage assets. In order to better manage its vast network. IDECO

chose Leica Zeno GIS data loggers to collect all asset information, feeding it seamlessly into their existing Esri ArcGIS database.

### Intuitive workflow chain

The automated and straightforward Zeno workflow ensured data integrity was maintained from field to office. When fieldwork was completed the collected data was transferred in one simple step using Leica Zeno's "EasyIn" transfer routine. As all features are captured with accurate co-ordinates at the same time, the office engineers simply uploaded the data and made a final check.

Geomatics Engineer, Needa Bani-Ata, head of IDECO's Low Voltage Department commented, "Leica Zeno cut the time spent in data collection and improved productivity since there is no need to go back to the office and spend more time on data correction and data entries."



## ■ Benefits

- Easier, faster and more accurate data collection
- Leica Zeno compatible with Esri based GIS
- Simple EasyIn/ EasyOut workflow saves time and money whilst improving productivity
- Increased profitability through efficient management and administration of assets
- Controlling of maintenance costs
- Providing a better maintenance and service to customers

Leica GR10 receivers and AR10 reference antennas deliver RTK correction data for the precise positioning of IDECO's electrical assets.

To continually update their assets, IDECO also export features from Zeno Office to Zeno Field using the equally simple 'EasyOut' wizard. The information is fed directly into the rugged Leica CS25 tablet and a GG03 smart antenna with dual frequency GNSS.

Needa Bani Ata added, "The special sun readable touch screen make Zeno devices particularly easy to use. It all helps to save time and money whilst achieving greater accuracy with less staff."

### Smarter, faster data

The Leica Zeno integrated solution enabled the surveyors and technicians to enrich and update the existing database down to centimetre accuracy and create the definitive and complete source of information on all electrical assets across the whole of IDECO's network.

With the ability to capture and record assets from metre to survey grade accuracy, maintenance teams

are directed to precise locations and can swiftly identify each asset and the supply to specific consumers. Data collection from the field, relating to the measurement and position of electricity poles, can also include any number of pre-defined attributes such as height, type, notes on condition, barcodes, cable size and supporting images.

### A perfect fit

Mazen Jouaneh, Managing Director, InfoGraph, the leading GIS software supplier and GIS application provider in Jordan observed, "The combination of the automated and simple to use Zeno workflow with the Esri geodatabase also leverages maximum value for IDECO as a valued Esri client".

In an increasingly competitive market, organisations look for way to maximise the returns and potential from owned or managed assets. IDECO have found Leica Zeno an essential tool in the quest to keep maintenance costs to a

minimum whilst maximising up time. The results add up to increased-profitability for asset managers and ultimately, an improved service for end users.



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- when it has to be right

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