

## A day in the life of... The Utilities Engineer

Counting Europe's largest provider of electricity and gas as a customer, ALK has built a reputation for solutions that improve the efficiency for both domestic and field engineers within the **Utilities Sector**.

Here we outline how a combination of mapping, advanced routing and back office mapping visualization tools enable utilities companies to maintain a competitive edge.

### The Domestic Engineer

Based from home, the domestic engineer begins their work day by using their handheld computer to download the day's appointments directly from the company's back office system.

Depending on the engineer's preference, CoPilot Professional can preview an appointment list of addresses from which to select a job, or overlay all the day's planned locations as custom pins on a detailed map view.

Engineers unfamiliar with the locality can use the route optimization facility in CoPilot Professional on their handheld to provide the most efficient route between appointments, based on either fastest or shortest criteria.

### Technology

- ➔ CoPilot Professional
- ➔ ALK Maps
- ➔ Advanced Route Optimization

### The Benefits

- ➔ Increased field engineer productivity through optimized routing
- ➔ Reliable GPS navigation in remote locations
- ➔ Real-time mapping visualizations of all field engineer locations
- ➔ ALK Maps advanced weather/traffic warning

For engineers with a more thorough local knowledge, CoPilot Professional provides the facility for them to select their own job sequence.

In both cases, the details when the engineer is expected on-site with the customer are conveyed to the back office, generating an accurate ETA time window of one hour or less. This ETA can then be communicated to the customer.

On the road, CoPilot Professional provides turn-by-turn instructions to each customer location. On arrival, their CoPilot Professional can automatically switch to the engineer's field service application to allow them to perform job related tasks, safety checks and, once the job is completed, capture the customer's signature.

Returning to their vehicle, the domestic engineer noting that they are low on work materials can consult the CoPilot Professional map which displays a set of customized Points of Interest (POIs) of company approved suppliers and fuel service stations.

After a quick detour to refuel and pick up supplies, the engineer is ready to move on to their next appointment. If their route becomes congested, the Alternate Routes feature in CoPilot Professional provides the engineer with up to three alternatives to reach their destination, ensuring they keep on schedule.

When servicing a broad area, there are times when the engineer will require extra vigilance while performing their daily routine. By geofencing territories in the back office, the engineer can receive an automated warning if their appointment is in an area of high risk, advising them to take additional precautions both personally and when securing their vehicle.

Using a third party application, their location can be monitored via the handheld while on-site, providing regular updates until the job is cleared.

Geofences can also be used to provide the driver with notification of actions. For example, if the engineer is visiting the property of an elderly or vulnerable person, a pre-agreed password may be set up by the customer. As the Engineer arrives within the geofenced location, the password will automatically be provided.

Alternatively, if the property requires a key code for entry, this can be provided to the driver as they arrive.

On shift completion, all data captured on the device including the day's route is sent remotely to the corporate backend for further analysis.

Prior to leaving the depot, their line manager can review each driver's schedule online via ALK Map's route visualization tool.



## Increased Productivity

The combination of vehicle navigation and automating field service processes on the handheld has proven to be a significant contributor in increasing the number of installations or site visits performed each day.

## The Field Engineer

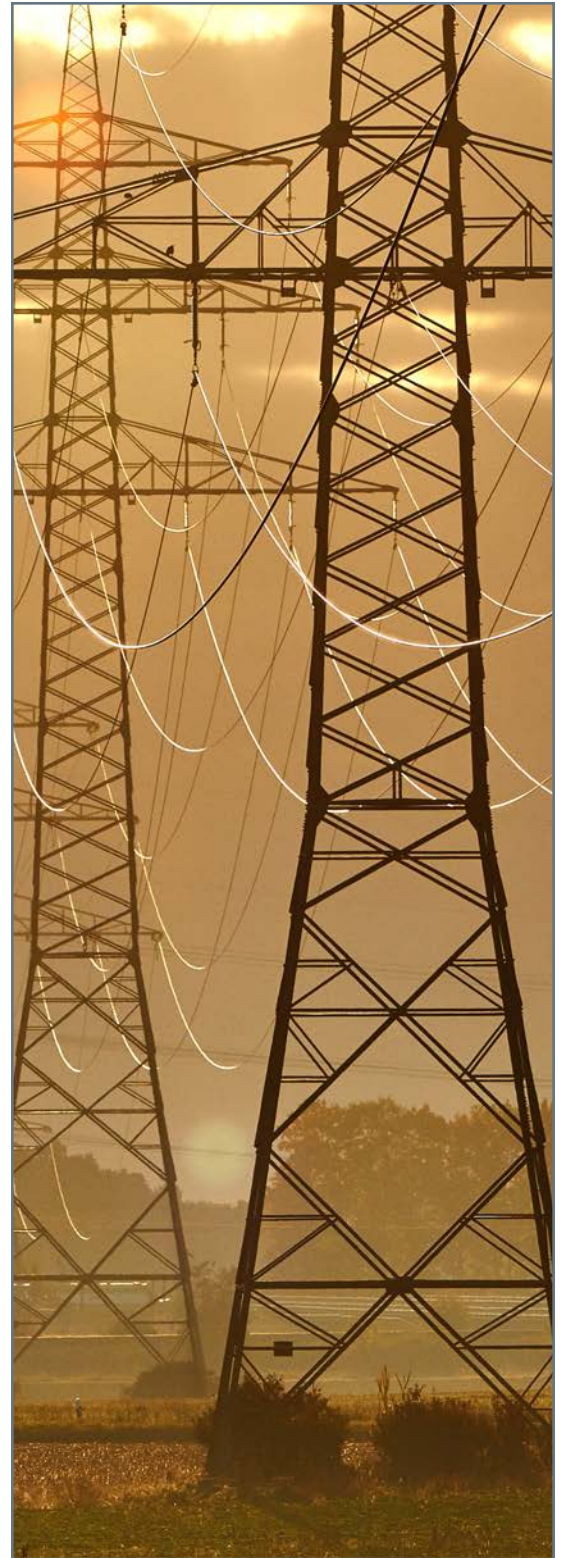
The field engineer also receives job details directly to their handheld, this time as latitude and longitude co-ordinates, showing the locations mapped to the nearest road.

These details can also contain a unique identifier relating to a specific object, an electricity pylon for example, where there may be a group in close proximity.

On the road, CoPilot Professional uses the latitude/longitude co-ordinates to get the engineer close to the location of the object requiring servicing or repair.

The off-line mapping and GPS connection means that the engineer can rely on robust GPS navigation even in the remotest locations – often a challenge with navigation systems reliant on mobile internet connection for navigation.

Should the work requirement be some distance from the roadside, the engineer can use CoPilot Professional to record the exact vehicle location, thereby making it easier to find during night time emergency call outs or in adverse weather conditions.



**In the Back Office**



**MAPS**

Whether domestic installer or field engineer, the direct line manager can monitor the progress of mobile personnel using ALK Maps visualization tools, indicating if field service personnel are on or behind schedule.

In the event of an emergency, the manager can locate the closest engineer and redirect them to the required destination.

In addition, over time, collected data can be used as a tool to debrief and mentor engineers in improving their driving efficiency.



**Find out More at: [copilotpro.com](https://copilotpro.com)**

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