

DSO Data Enhancement

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Asset Data Quality Enhancement Using Street Level Imagery and LiDAR

DNO's across the globe, own, operate, and maintain electrical distribution networks. Typically, these networks service a large geographic region with a significant proportion of their network being overhead poles and conductor often in semi-urban and rural areas. As DNO's are transitioning to DSO's and leading a movement towards a low carbon future enabling customers to be both producers and consumers; many innovative initiatives including Flexible Connections, Active Network Management, and Open Networks have become a priority for DNO's, local communities and policy makers.

Central to all DSO initiatives is Data. Whilst utilities have been maintaining asset data management systems for years, the requirement for accuracy, digital, accessibility and low level details is increasing and fundamental to the success of all DSO programmes.

How Can Cyclomedia Help?

Virtual Survey

Cyclomedia collects very High definition 360-degree imagery and LiDAR data at ground level, over very large areas. We collect our own imagery, using our fleet of 65+ data collection vehicles. This provides DNO's with an up-to-date image database of their operational area collected within a defined period. We drive down roads and tracks not normally accessed by other imagery providers such as google. This can involve getting permission from local authorities and other landowners to gain access to private roads. For off road collection our camera units are attached to quad bikes.

Asset extraction and Data Quality Control

We can extract the location, asset type, and condition of overhead distribution network assets, very accurately from our imagery. This includes poles, cables/conductors (Service, LV, MV & HV), transformers and telecoms infrastructure.

This data can be used to validate existing network data, support the merging of data to a single source of truth and enable quality control process for digitalisation programmes.

Temporal and Accessible Data

If imagery of the same location is collected many times, we can visually monitor any deterioration of assets over time.

The imagery collected along with the extracted assets are made available within our Street Smart application along with API's. Cyclomedia have existing Plugin's to all major GIS applications enabling simple integration.

**Visualize
a better
world.**