

## Mapping Underground Assets

The following problem statement has been developed by the innovation teams within the UK's Gas and Electricity Networks for the 2024 Energy Innovation Basecamp.

**Theme: Building Better, Faster and Safer**

**Network Areas: Electricity Distribution,**

### **What is the problem?**

The LV network is increasingly important in delivering a reliable supply of power to homes and businesses as they decarbonise and adopt Low Carbon Technologies that they rely on. This means that knowing exactly where our assets are and what their specifications are is becoming more vital when responding to outages or planning and delivering network upgrades.

To provide a better service to our customers, we need a more accurate and complete database of our underground network that we currently have.

While the primary focus for this is the LV network, we would also like it to be scalable to higher voltages as required.

### **What are we looking for?**

We are looking for a proposal that will be able to integrate new data into our existing GIS tool. It needs to be able to draw data from a variety of sources such as job sheets, wayleaves (?) and existing mapping as well as understanding likely dates of installation and asset types used at those times. This will allow us to make an assessment of the likely capacities and composition of the underground assets. Also having more accurate locations of our assets and having that mapped would be valuable

We can then use this to inform network development plans as well as effect faster repairs after faults.

### **What are the constraints?**

The solution must be able to integrate with the existing GIS tool used by SSEN.

It must be able to draw data from a variety of sources, some of which may be incomplete.

### **Who are the key players?**

The key stakeholders for this problem sit within our DSO and Operational functions. Solutions will help with network planning, forecasting, flex procurement etc, as well as fault response.

We are open to applications from any innovator but currently see this sitting in a digital modelling environment.

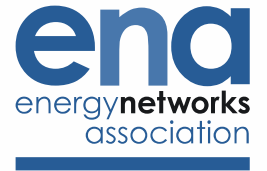
### **Does this problem statement build on existing or anticipated infrastructure, policy decisions, or previous innovation projects?**

There are many projects looking at the LV network currently as the uptake of LCTs increases. These include projects such as Substation monitoring, LV Power Quality, Portable LV FPI, and RESOP. As far as we are aware this is the only project that is looking specifically at using historical records, with some field work input, to understand makeup and location of underground LV assets

### **What else do you need to know?**

# Energy Innovation Basecamp 2025

## Problem Statement EIP146



Innovator submissions to this problem statement will be open [here](#) during March and April, but we encourage you to submit your response as early as possible, as networks will be able to review submissions as soon as they come in.

You can also use the virtual Q&A on the Smarter Networks Portal to ask for more information about this problem statement. Questions may be answered online or at the ENA Problem Statement Launch in March 2024. More information on last year's Basecamp programme can be found [here](#).