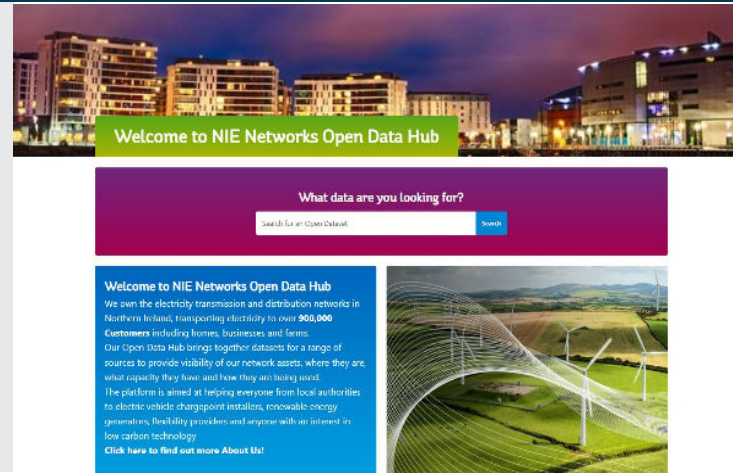


SUCCESS CASE 46.2025

Open Data Hub

CREATING ACCESS TO REAL
TIME NETWORK DATA FOR
CUSTOMERS



THE CHALLENGE

The aim of this project was to deliver an Open Data Portal and DSO Dashboard to improve access to real-time network data for customers and stakeholders. The key objectives were:

- Provide consumers and market participants with fair and easy access to comprehensive, detailed electricity system data;
- Align with the aims of the Northern Ireland Energy Strategy by enabling better quality data and appropriate access to it;
- Support the Energy Data Taskforce recommendations;
- Demonstrate ongoing cooperation between transmission and distribution system operators.

THE SOLUTION

The solution uses platforms such as Power BI and OpenDataSoft, and integrates with existing systems, including the SONI API. A proof-of-concept helped shape the proposed approach.

The Open Data Hub is now available on the NIE Networks website. This hub allows for fair and easy access to comprehensive, detailed electricity system data, it brings together datasets for a range of sources to provide visibility of the network assets, where they are, what capacity they have and how they are being used. The platform is aimed at helping everyone from local authorities to electric vehicle charge point installers, renewable energy generators, flexibility providers and anyone with an interest in low carbon technology.

The hub provides:

- A link to the DSO Realtime Dashboard which shows up-to-date data for a selected substation;
- A link to the Substation Dashboard which shows key characteristics against a selected substation;
- Additional data / figures about the network such as customer numbers, the length of the Transmission and Distribution Networks.

MAIN ACHIEVEMENTS

Our Open Data Hub brings together over 49 datasets for a range of sources to provide visibility of our network assets to customers.

The platform aligns with the core principle that energy system data is 'presumed open' and that it should be discoverable, searchable and understandable. It demonstrates ongoing cooperation between transmission and distribution system operators. It also supports the system data and accessibility aspirations, and the Energy Data Taskforce recommendations focussed on new and higher quality data and maximising its value by presuming that data is open.

KEY SUCCESS FACTORS

- There are over 4,000 users on the system in the last 12 months with >600 users in a single month.
- Access to data from both mobile devices & other sources with >90% from other sources.
- c100,000 hits on the Hub & datasets so far.
- With 100% of available datasets already being used.

WAY FORWARD

The Open Data Hub will be continually developed over time adding further data sets as they are available and responding to customer requests for insights and information. Further information is available on the official website:

<https://nienetworks.opendatasoft.com/pages/home/>

SNAPSHOTS OF DIFFERENT DASHBOARDS FROM OPEN DATA HUB

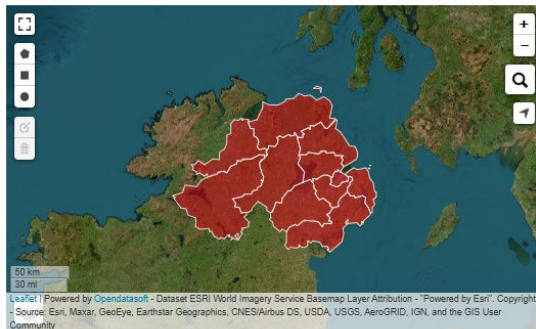


Substation Dashboard

Select a substation in the dropdown list or click on an area of interest on the map.

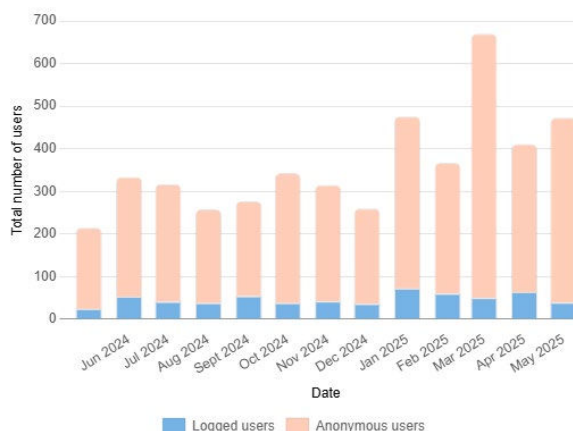
Select a site

Select a site



Substation Assets

	License Area	Asset Description	Asset Number	Voltage	Asset Type	Year of Manufacture	Serial Number	Site Functional Loca
1	NIE Networks	LUCY FRMU MK2A 11KV RMU	50203188	6.6KV	Ring Main Unit (FS) (Oil)	1997	4871/256	10302689
2	NIE Networks	500KVA 11/6.6/416KV SOUTH WAL...	50200092	6.6KV	Secondary Tx	1997	25862033	10302689
3	NIE Networks	ABB S WAY 1600A FUSE CABINET	50204588	400V	LV Cabinets	1997	97/6583/12	10302689
4	NIE Networks	WYE POWER TAP 1000VA 6.6/416	50200746	6.6KV	Combiner	2011	11115170206	10302689



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