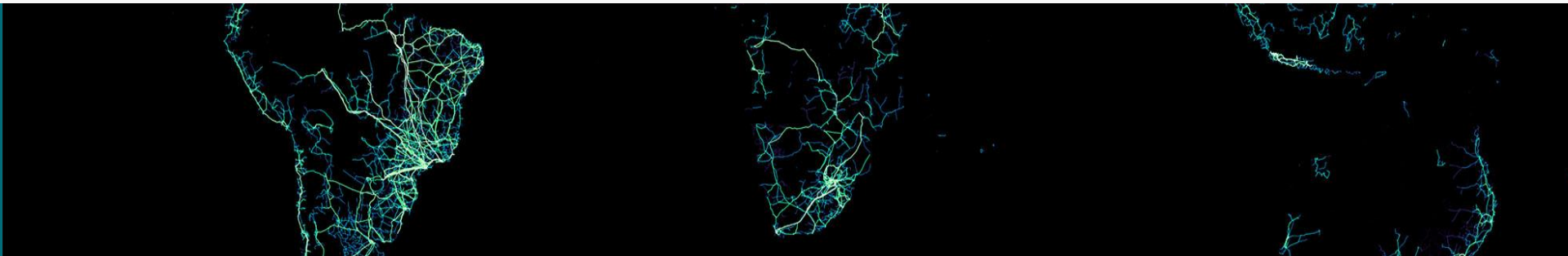
MapYourGrid

Our services



Training on Power Infrastructure Mapping

What you need

You want to train your team so they can confidently map, validate, and maintain power-infrastructure data without relying on external support. Your staff need clear methods, practical guidance, and a structured learning path that builds lasting capability. This training equips your organisation with the internal skills required to sustain high-quality OpenStreetMap (OSM) data over time.

What we do

We offer a fully interactive, hands-on learning model. We watch you map, review your screen as you work, and help you solve real problems as they arise. This allows us to understand where confusion appears, what your team struggles with, and what workflows need to be clarified. The result is faster learning, higher data quality, and long-term autonomy for your organisation.

What you learn

We train your team to collect, edit, and validate power infrastructure data using the full OpenStreetMap toolchain: **JOSM, iD Editor, StreetComplete, MapComplete**, and field-mapping methods.

Unlike the free volunteer training available in MapYourGrid, this program is built for **professional teams** who need to achieve consistent quality, scale their mapping effort, and ultimately train others.

All training materials are openly licensed (Creative Commons CC-BY), allowing you to reuse for whatever you want.

What is included

Starter Kit Training
Learn the basics of OpenStreetMap and power-infrastructure mapping. Ideal for beginners.

Pioneer Mapping
Learn how to expand network coverage, identify missing infrastructure, and prioritise mapping zones.

Advanced Technical Mapping
Master attributes essential for energy modelling tools like PyPSA-Earth: voltages, circuits, relations, lifecycle states, naming conventions, and cross-validation methods.

Expert Technical Mapping
Deep dive into substation internals, complex circuit relations, underground infrastructure, and ID management.

Field Mapping Strategies and methods
Use StreetComplete, MapComplete, Mapillary or Panoramax to collect on-the-ground data and verify infrastructure.

Community Building, Data Maintenance and Mapping Events.
Learn how to organise mapping events, sustain data maintenance practices, and grow a contributor community. Includes marketing and outreach support for one online mapping session.

Data Maintenance
Set up processes to keep your data up to date and investigate quality issues over time.

***Duration of each module**: ~4 hours (remote session).*

***Duration of the full training**: 3-4 days (blended learning).*

What you receive

- ★ You and your group are able to independently map and validate power infrastructure data.
- ★ Comprehensive training materials (slides, exercises, and OSM documentation).
- ★ Example mapping datasets created during training.
- ★ Post-training support session for Q&A or dataset review.
- ★ Certificate of completion for participants.
- ★ A printed artwork of the global or national electrical power grid.

Power Mapping Services

What you need

By strengthening data quality, you gain higher modelling accuracy and reduced uncertainty in energy planning, which in turn enables more reliable decisions and simulations. This also accelerates your electrification and infrastructure assessments in unserved or poorly mapped regions, where better data leads to stronger planning outcomes.

What we do

We provide active mapping services to help you rapidly improve the completeness, accuracy, and modelling readiness of power-grid data in OpenStreetMap. Our pioneer and technical mappers work directly from satellite and street-level imagery to add missing infrastructure, enhance attributes, and validate existing data.

Whether you need to expand grid coverage or prepare datasets for energy planning, we deliver high-quality, consistent, and fully documented improvements.

How it works

We focus on three core mapping activities:

Pioneer Mapping
Adding new lines, substations, power plants and related assets where coverage is missing.

Technical Mapping
Improving essential attributes like voltages, circuits, topology, routing, lifecycle state, and operational status, to make data usable for modelling and planning tools, including PyPSA-Earth.

Data Validation
Checking consistency, fixing errors, harmonising attributes, and ensuring the dataset meets agreed quality standards.

All our progress is tracked through **MapYourGrid's Mapping KPIs**, giving you full visibility on coverage growth, attribute completeness, and quality improvements over time.

We can work in any region, state or country where either good-quality satellite or street-level imagery is available, or where open data sources provide sufficient detail. In areas lacking both imagery and usable open data, we recommend complementary data-collection strategies before mapping begins.

What is included

Expansion of data coverage
Pioneer mapping in OpenStreetMap for any target region.

Advanced Technical Mapping
Validation of power lines, substations, and plants. Attribute enhancement for voltages, circuits, topology, and operational status.

Expert Technical Mapping
Substation internals, circuit relations, line management, underground assets, ID management.

What you receive

- ★ Updated and validated OSM power infrastructure dataset for target regions.
- ★ Summary report showing data coverage, attribute completeness, and KPI improvements.
- ★ Mapping statistics (features added, edited, and validated).

Grid Data Integration

What you need

Being able to integrate, validate, and maintain public and internal power infrastructure data using OpenStreetMap and related open data sources.

What we do

We have developed extensive, validated OpenStreetMappower-infrastructure data for all countries. We train and support your team in updating, maintaining, and expanding datasets that use OSM as either a primary or secondary data source.

How it works

We begin by assessing your current datasets, identifying gaps, and determining whether OSM should be used as a primary or secondary source.

We then update and validate OSM data for transmission lines, substations, and power plants, and guide you through the integration of OSM into your own GIS environment.

Because this process involves detailed cross-checking, conflict resolution, and workflow adjustments, it is more complex and resource-intensive than standard mapping activities.

What is included

Option A : OSM as a primary source
Updating and validating OpenStreetMap data as a ***primary source*** for transmission lines, substations, and power plants.

Training on manual updating, filtering, validating and cleaning of the GIS dataset.

Option B : OSM as a secondary source
Supporting the use of OSM as a ***secondary source*** to enhance closed or proprietary GIS datasets.

Option A or B :

Duration: *4–8 weeks, depending on scope.*

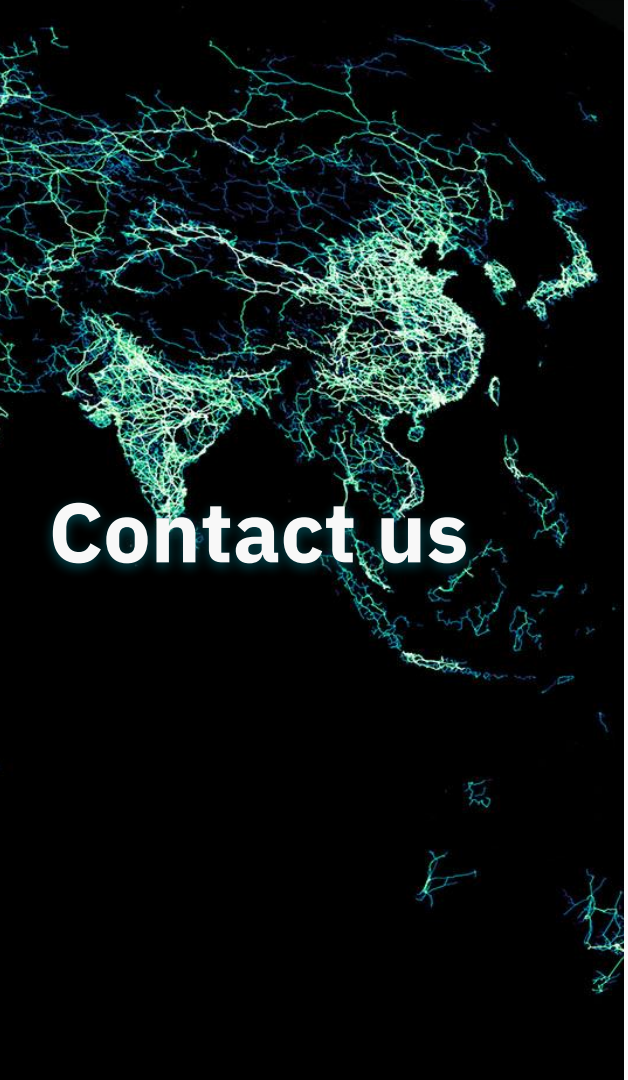
Full support for updating power infrastructure GIS data in targeted region
Including 2x 3-hour hands-on training sessions for up to 8 participants.

Workflow Documentation
Providing process guidelines along with QGIS and Python scripts to support repeatable, high-quality integration.

Ongoing Quality Support
Up to one year of optional mentoring and technical assistance to help maintain consistent data quality. *~15 hours of email or phone support.*

What you receive

- ★ A validated, and integration-ready OpenStreetMap-based dataset for your selected region or country.
- ★ Coverage, quality, and consistency assessments for all integrated data.
- ★ Training materials, workflow documentation, and reusable scripts.
- ★ A practical integration roadmap tailored to your team's processes and tools.
- ★ Mentorship and support to maintain long-term data quality and autonomy.
- ★ We support you in open licensing questions regarding OpenStreetMap's Open Database License (ODbL) but also other open database licenses like Creative Commons.
- ★ Guidance on how to combine non-public and confidentional data with OpenStreetMap data without making it public.



Contact us

Get in touch

Reach out to us to discuss your needs, and we will connect you with the appropriate MapYourGrid partner who can deliver the service.

Once we understand your scope, we will prepare a clear, customised proposal for you.

mapyourgrid@gmail.com

Our Companies

OET Open Energy Transition · DATACTIVIST · dynartio · JUNGLE BUS · Infrageomatics