

Data is the tool to facilitate Net Zero

Modernising the way that energy data is managed will unlock major benefits for energy network operators, generators, suppliers and consumers, stimulating the development of new business models, new system management tools and new insights that can drive positive transformation.

As the UK transitions to a low-carbon economy, the emerging, decentralised energy generation and distribution system will include many diverse components, such as solar panels, wind farms, hydrogen plants, storage systems, electric vehicle charge points and heat pumps. All these components will need to communicate with networks, market platforms and each other. OFGEM is already asking licence holders to accelerate digital transformation across the network. The RIIO-ED2 price control framework calls on distribution network operators (DNOs) to come up with a Digitalisation Strategy and Action Plan (DSAP) that conforms to best practice guidance for ensuring open access to data.

In the future, data will be 'presumed open' unless companies can give a good reason why not.

Embracing open data will be a big change for many organisations in the energy sector. Wherever you are on your journey, NTT DATA can help you transform your data environment, paving the way for new technologies and management processes to go beyond compliance and boost your business.

Our support will ensure that your solutions meet OFGEM's Best Practice Principles for data.

Best Practice Principles for data

- 1. Identify the roles of stakeholders of the data and their needs.
- 2. Use common terms within data, metadata and supporting information.
- 3. Describe the data accurately using industry standard metadata.
- 4. Enable potential users to understand the data by providing supporting information.
- 5. Make datasets discoverable for potential users.
- 6. Learn and deliver the needs of their current and prospective data users.
- 7. Ensure data quality maintenance and improvement is prioritised by user needs.
- 8. Ensure that data is interoperable with other data and digital services.
- 9. Protect data and systems in accordance with security, privacy and resilience best practice.
- 10. Store, archive and provide access to data in ways that ensure sustained benefits.
- 11. Treat all data assets, their associated metadata and software scripts used to process data assets as **presumed open**.

Begin your journey to compliance and beyond

Complying with the new 'presumed open' scheme means opening up your common data sets to other players in the energy market, unless it would be dangerous or damaging to do so. That's the end point and NTT DATA has developed a framework to help you get there.

1

Identify your data assets, stakeholders. Define Data strategy and related use-cases.

Plan

Use a discovery phase to define the initial scope of your data transition. New data requirements will almost always emerge during your journey, so this will be an iterative process.

Establish which existing data assets will need to be open and decide which sets to prioritise. Gradually apply the same approach to new data sets with each iteration.

2

Build an "Open Data Platform" and "Open Data Process" to create trusted data and interfaces based on standards.

Standardise

The success of open data relies on a standard architecture and platform to build trust and interoperability between different data sets and stakeholders. NTT DATA's Open Data Platform provides a reliable solution.

3

As part of the
Open Data
Platform, protect
the data.

Secure

Secure all your interoperable data sets and mitigate the risks associated with opening up to third parties. Use a process of data triage and redaction to protect any sensitive data assets.

4

As part of the Open Data Platform, make data discoverable, searchable, and understandable.

Open

Ensure that all intended users can discover, search, understand and share your newly opened data sets.

Create a roadmap to best practice

NTT DATA can support you every step of the way towards achieving open data.



Discover

The first step is to review where you're starting from. You'll need to take an inventory of your data assets and decide whether they are open, public or private. Do you already have data sharing practices in place and how much of your data do they cover? Now is also the time to appoint someone to lead your effort if you haven't done so already.

Plan

Set your priorities for your first iteration. Identify initial use cases that you can deliver quickly to demonstrate proof of concept, perhaps using data sets that are already public. Then define the structures that will be needed to support open data - the architecture, processes. operating models and data culture. Set mechanisms in place to capture feedback at every iteration to keep improving.

Test/Validate

Test your plan by using a small subset of data to check its feasibility and demonstrate the business value that best practice can deliver.

Standardise

Define the basic attributes of your established data sets and develop standard metadata to ensure interoperability. This metadata should allow proper data discovery by third parties. Going forward, ensure that any new data follow these common data models.

Govern

Manage data quality and resolve data quality issues quickly.



Secure

Protect the integrity of sensitive and confidential data in line with regulations such as GDPR. For new data sets, applying 'data privacy by design' should ensure end-to-end data security.

Manage

Manage the whole data lifecycle, complete with backups, restore procedures and retention management policies. Establish a Data Triage log to justify why certain data sets cannot be shared and mitigate the risks of opening up by applying redaction techniques. Establish policies to control data access, which should be regularly audited.

Open

Allow users to discover and search the data using keywords, attributes and, eventually, ontologies. Make the data available using data-sharing platforms or standard interfaces.

Operate

Maintain the
Data Triage and
Stakeholder logs.
Where needed,
provide extra
metadata based on
the context around
the data sharing.

Embrace open data securely with a trusted partner

As the UK moves towards a low-carbon model of energy generation and distribution, choosing an expert partner and using effective tools and processes can help position your business to make the most of emerging data-driven systems.

Our Data Strategy Service and Open Data Platform blueprints can take the guess work out of your journey towards 'presumed open'.

At NTT DATA we have already help clients from across a range of industries to navigate the entire process from defining their roadmap to operating data platforms.

We always aim to develop trust and a genuine sense of teamwork. In one example we have supported a Tier 1 international bank with their data-driven initiatives for over five years. We began by developing a data strategy and target operating model, then we helped them build and scale the whole data platform, complete with a range of uses case on top. Our latest initiative is supporting them as they modernise their systems and transition to the cloud.

To find out more about how NTT DATA can help you achieve your energy data modernisation targets and sustainability goals, please contact:

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NTT DATA is a leading consulting and IT services provider, combining global reach with local expertise in over 50 countries. Whether it's business transformation, enabled by digital, data and technologies, safeguarding against security breaches, improving operational efficiency or driving new revenue streams, our vision as the Trusted Global Innovator can help organisations navigate the ever-changing digital landscape and deliver outstanding results.

NTT DATA offers a portfolio of best-in-class consulting services and innovative enterprise solutions tailored to suit the entire life cycle of IT investment. Supported by our international Centres of Excellence, our team of local experts can deliver on a wide range of services from transformation to agile development and intelligent automation for industries across manufacturing / automotive, banking, insurance, telecommunications, media and public services.

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