Our Digitalisation Action Plan

Stakeholder update December 2025

Cadent

Your Gas Network

Welcome to our Digitalisation Action Plan December 2025

Our Digitalisation Action Plan reflects the progress we have made in our digitalisation journey throughout the second half of 2025.

- This document provides details on steps we are taking towards fulfilling our RIIO-2 digitalisation commitments and actions which support our proposed RIIO-3 investments.
- Actions have been classified according to the Digitalisation Themes defined in our December 2024 Digitalisation Strategy.
- We welcome this opportunity to provide transparency and increase the visibility of our work to stakeholders.

Our Digitalisation Themes:

Interoperability

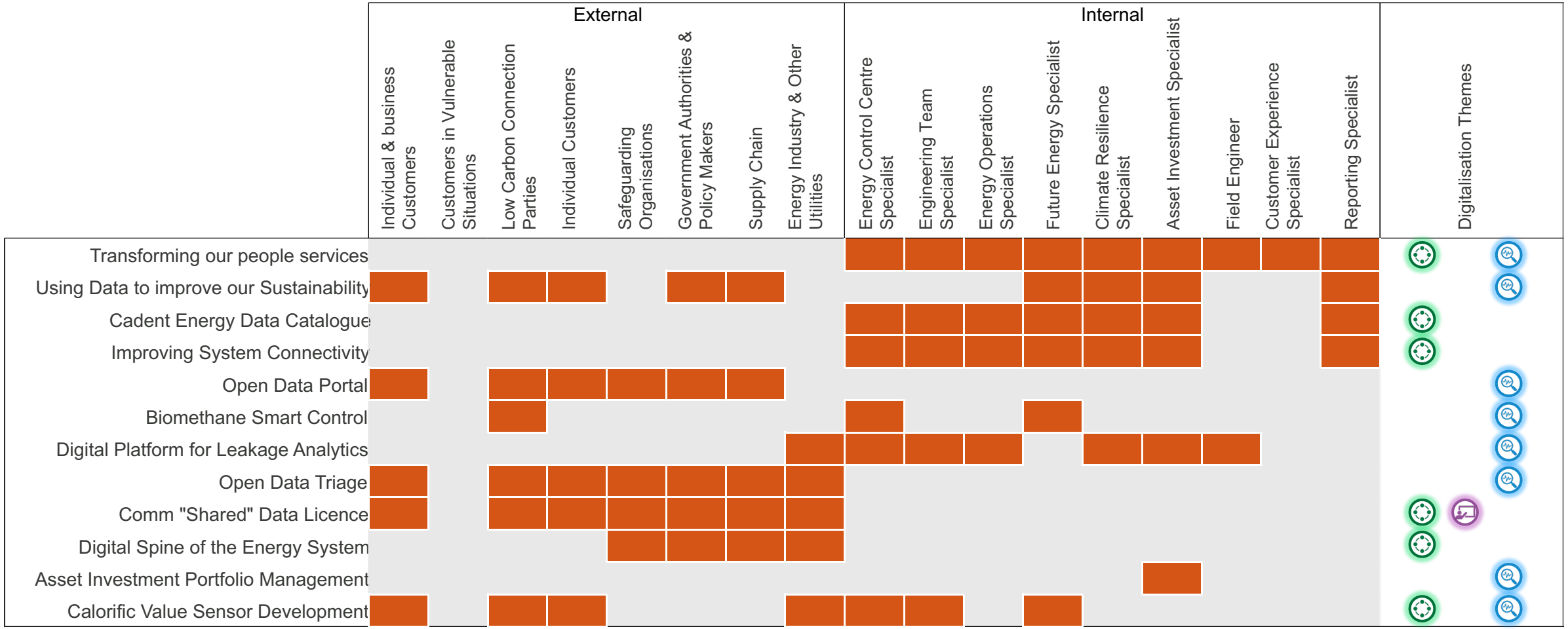
Data & Digital Literacy

Open Data

Index of initiatives

- Complete
- On Track – No identified risks
- Dependency identified and mitigated
- Cancelled/on hold – significant dependency

Our digitalisation projects will benefit our internal and external stakeholders



For more details on our stakeholders please refer to the Digitalisation Strategy

Complete

On Track

Status in previous Action Plan

Transforming our people services – Investing in HR Transformation Technologies

Problem Statement

- Our current HR systems are fragmented. We need to standardise these and improve the experience for our colleagues and to reduce the effort for people undertaking HR management processes.

Expected Outcomes

- **Our employees** will get a new user experience which allows them to better access and interact with their HR data.
- Improved training and learning pathways will help employees stay up to date and manage their development.
- We will also introduce automation to improve HR processes reducing time overhead for managers.
- We will expand the tool to work through a dedicated mobile application to improve ease of access for all employees.

Recent Updates

- The testing phase for the new payroll management pilot was planned complete in August 2025. Further testing was required and this was completed in December 2025.
- The technical solution for revisions to the Leave Management System which calculate leave taken by hour rather than half-day increments has been created.
- As with all changes relating to employees, new methods or processes need to be implemented fairly following consultation and support from the trade unions and capacity of the deployment
- business area.
- The technical development has been completed and has been submitted to the business for implementation once the required consultations have been undertaken. This is anticipated
- February 2026.

Key Milestones:

START: April 2022

12/2025 OUTCOME

Payroll management pilot goes live
Parallel running of the new system meets requirements and goes live for the pilot group.
The delivery of this option was moved back to minimise risk and ensure additional checks to be implemented prior to go live. This goes live end of December.

12/2025 OUTCOME

Leave management system
New system to make management of leave calculations consistent for all employees.
This technical solution has been created and can now move to full implementation.

END: March 2026

Complete

On Track

Status in previous Action Plan

Using Data to improve our Sustainability – Implementing a new Environment Reporting System

Problem Statement

- We hold ourselves to high standards of environmental performance at all levels of the business. We need a new automated system to capture and record details of our environmental performance across the business so we can measure this and seek further sustainable ways to lighten our environmental footprint.

Expected Outcomes

- To support with our obligation to publish our Annual Environmental Report, we are implementing a self-service system to record real time data enabling timely access to the right information providing a holistic view of our data. This will enable us to better protect **our people, Assets and the communities we serve.**
- The automated dashboards will show our energy consumption and greenhouse gas emissions and how we are reducing these to meet UK targets which will enable us to deliver our environmental commitments.

Recent Updates

- To successfully deliver dashboards, we have split the planned work into two workstreams:
  - To capture the required business needs of the sustainability dashboards; and
  - To use the business requirements to design a data environment which can successfully support these dashboards, with development of the dashboards planned to commence in August 2025.
- With these completed, the focus is now on delivery of the platform.
- This solution has been implemented December 2025, with final testing taking place prior to full launch in early January 2026

Key Milestones:

START: April 2023

07/2025 INTERIM STEP

System upgrade
Core platform upgrade to support new dashboard and reporting capabilities completed

07/2025 INTERIM STEP

Capture all the business requirements
Business expert reporting needs captured

07/2025 INTERIM STEP

Design the data structure to be delivered
Data structure designed to deliver the reporting needs

12/2025 INTERIM STEP

System development commenced
Delivery partner appointed and production system delivery begun

12/2025 OUTCOME

New Environment Reporting System
Production system delivered with testing prior to launch in January 2026

END: March 2026

On Track

Cadent Energy Data Catalogue – a comprehensive record to allow better control and visibility of our data

On Track

Status in previous Action Plan

Problem Statement

- It's critical that we have good visibility of our data and that we manage this appropriately to apply the right controls and measures to keep the data as healthy as possible.
- Our Energy Data Catalogue programme will set up the standards and blueprints for how we record and manage our Data Assets.

Expected Outcomes

- Centralising the metadata will mean that **our specialists** can explore our Data Assets and this will reduce duplication of effort. Our **data stewards** will have a single point where they can measure and record the key steps needed to maintain the data in line with best practice and Cadent policy.
- We will create clear and consistent templates to capture technical and non-technical metadata.
- We will create the standards to help the business populate these templates and the processes to maintain and keep them up to date.

Recent Updates

- We have continued to populate our Data Catalogue, incorporating data from core repository and reporting systems.
- We have started to automate the metadata scanning tool against our core systems to ensure that the catalogue is maintained to a high standard going forward.
- Our team continues training with our chosen data management tool to improve our capability of using this tool to support other core governance and quality functions, including data lineage.
- To support the continued expansion of the data catalogue, we are refining our operating model to make sure the skills to continue to improve compliance are embedded.
- We will continue to embed the capability to expand our catalogue of data assets once this project completed in March 2026 as this becomes a BAU function.

Key Milestones:

START: January 2023

07/2025 INTERIM STEP

Training on data management tool
Key staff trained in data management tool to support future use cases

03/2026 OUTCOME

Data catalogues of initial selected data systems completed
Population of the Energy Data Catalogue will continue as BAU for remaining data systems

END: March 2026

On Track

On Track

Status in previous Action Plan

Improving System Connectivity – Reducing development time by creating adaptable data outputs to key systems

Problem Statement

- Currently most connections between systems are bespoke and costly in time and effort to develop. We will need to use data from different sources more often as the wider energy system continues to become more sophisticated and demands for data become more complex both in our systems and externally. A reuseable API (Application Programming Interface) will allow consistency of connection and reduce re-development.

Expected Outcomes

- We will assess the data in our systems and create multiple connections to them based on potential use cases, reducing development time and allowing trusted, tested connections which can be used multiple times. These reusable APIs will allow **our data specialists** to combine data from different systems more efficiently and allow them to support the demand for complex data for stakeholders.
- With more consistent development of the data connections we build, and the ability to reuse them, we will be able to quickly connect our data through appropriate processes both **internally and to third party data,** with the right levels of control in place to manage the data.

Recent Updates

- We completed the conceptual design of reusable connections to our Asset Data and successfully completed a proof of concept to extract data through a test connection.
- This enabled us to develop the delivery plan for implementation of live APIs for Asset and engineering data.
- This project will conclude in March 2026 and is on track to deliver it's designed outputs.
- We will also record the methodology and lessons learned for implementing these APIs so that they can be expanded if necessary in future.
- More information relating to this work can be found in the Non-Operational IT Capex Re-opener Final Determinations

Key Milestones:

START: April 2025

07/2025 INTERIM STEP

Analysis of connection between storage and processing systems – selected Asset Data
Analysis completed

07/2025 OUTCOME

High level design approval
We have created the blueprint by which we will create all the connections

11/2025 OUTCOME

Low level design approval
We have created the detailed plans for delivery

12/2025 OUTCOME

Production release of Asset data API
We will implement the APIs to support Asset data

02/2026 OUTCOME

API to support engineering works
We will implement the APIs to support engineering works

END: March 2026

On Track

On Track

Status in previous Action Plan

Open Data Portal – a digital service to make our data available to stakeholders

Problem Statement

- Ofgem introduced Data Best Practice Guidance, a key part of which is making our data open and discoverable for stakeholders. The evolving energy system landscape and technological innovation means we face increasing and more complex data demands from our stakeholders.
- We need a more effective and efficient way of **providing our stakeholders** with the data they need.

Expected Outcomes

- Our current solution required manually managing Data Assets, releasing them on request. It was slow and difficult for stakeholders to interact with.
- Our new Open Data Portal allows Data Users to self-serve Data Assets in a variety of formats, with visualisations and supporting documentation embedded. This makes our data more discoverable and accessible
- We will continually review and expand our range of Data Assets to meet evolving **Data User** needs.

Recent Updates

- We launched our new Open Data Portal in October 2024 and have continued to develop it since then.
- Initially, our main focus was to provide basic functionality with core Data Assets and since then we have redeveloped the pages to make them easier to navigate across different devices, incorporated feedback forms and configured the platform to let us serve Data Assets of different levels of control.
- Work continues on:
    - Automation and integration of the platform with our systems so that data can be refreshed frequently and automatically, ensuring Data Users always have access to the most current data. Reconfiguration of the back-end system continues with automation anticipated December 2025
    - Portal refinements to support ease of use and accessibility. Licencing requirements have moved deployment of ReciteMe to Q1 2026
- As this is a RIIO-2 aligned project it will complete in March 2026 but development will continue as BAU

Key Milestones:

START: January 2023

12/2025 INTERIM STEP

Code management function implemented

Code quality assured and promoted to code repository

12/2025 INTERIM STEP

Source data automation and ingestion

New pathway to bring critical source data into back-end system automatically which is analysed and prepared into Open Data Assets

12/2025 OUTCOME

Data Assets are refreshed end to end automatically

Geospatial based open data assets are refreshed from source to portal automatically

03/2026 OUTCOME

Accessibility of the portal is improved

ReciteMe is enabled

Data User surveys added

END: March 2026

On Track

On Track

Status in previous Action Plan

Biomethane Smart Control – Modelling and monitoring our network to maximise the injection of Biomethane

Problem Statement

- Biomethane is a green gas which is created from organic material; offering a low carbon alternative to natural gas.
- Biomethane injection into our network is optimised where there are lower pressures, but without the right monitoring and controls, this could threaten security of supply for our customers. This limits the number of potential sites where we can inject biomethane.

Expected Outcomes

- We will create models which will help us identify the most efficient way to inject more biomethane gas into our network to support our **Low Carbon Connecting Parties.** This model will be supported by smart pressure and flow monitoring devices identifying more opportunities to inject biomethane more often and reducing the impact of seasonal changes in demand.
- We will install pressure control devices, including the first implementation of a compressor on a gas distribution network to help us create optimal conditions for biomethane by controlling the pressure of gas on the network.
- We will use these techniques on two biomethane injection sites to let us prioritise the use of biomethane over natural gas, showing an increase in the volume of gas injected through these sites.

Recent Updates

- To ensure a smooth trial of the smart pressure controls, a phased approach to installation is being followed across the six sites. Incremental change on the network has meant that this has extended the deployment time for this key milestone.
- Initial installation of the smart pressure controls will focus on remote operation. Later phases of implementation will focus on real time adjustments.
- Planned flow metering solution required innovation to create a retractable probe. This has led to a delay in the planned installation of the flow metering role out which is reflected in the key milestones.
- More information can be found here:
- Biomethane - Cadent Gas Ltd; Optinet; More information about Biomethane

Key Milestones:

START: May 2022

12/2024 INTERIM STEP

Smart pressure technology available for installation in high pressure network

07/2026 INTERIM STEP

Installing smart pressure controls at above-ground-infrastructure

Dynamically manage pipeline pressures increasing capacity for biomethane injection

10/2026 INTERIM STEP

Installing flow measurement equipment

Improve the visibility of the operation of the network, specifically at periods of low demand

12/2025 INTERIM STEP

Installing smart pressure controls at above-ground-infrastructure Proof Of Concept sites

Cancelled – incorporated into the first key milestone

12/202 OUTCOME

6

Deployment of model and measurement technology to give increased volume of biomethane supplied at project sites

END: December 2026

On Track

At Risk

Status in previous Action Plan

Digital Platform for Leakage Analytics – Identify methane emissions through non-physical methods by modelling with sensor data

Problem Statement

- 98% of our carbon emissions are because of methane emissions from our network. This impacts the customers' bills, the environment and the safety of our network for everyone.
- Detection of emissions through traditional means can be difficult with access limited to buried Assets

Expected Outcomes

- We will create a sophisticated model which can identify where emissions are happening in our network from the sensor data we have available.
- We can also incorporate the data gathered under the Advanced Emissions Detection Project previously reported.
- We will be able to detect and report methane emissions with more accuracy to allow our networks to act more proactively.
- We will create a strategic innovation funded project to model, analyse and report on emission data on parts of our Eastern and North London networks.

Recent Updates

- This has been developed as a Strategic Innovation Fund project with further investment sought to expand delivery to the rest of Cadent's networks in RIIO-3.
- The focus of this initiative is now limited to the initial development of the DPLA digitalisation modelling function. Further updates to expand DPLA to other networks will be reported in new action plans should there be new digitalisation innovation or development as RIIO-3 progresses.
- The innovative machine learning aspects of this project will be presented internationally in December 2025

Key Milestones:

START: September 2023

12/2025 INTERIM STEP

Ofgem indicates approval of extending the Digital Platform for Leakage Analytics (DPLA) Programme

DPLA has been confirmed as a RIIO-3 investment

03/2026 OUTCOME

Completion of SIF beta phase

Development of a number of advanced analytic models that help measure leakage in East Anglia and North London Areas

03/2026 OUTCOME

Commence expansion of DPLA to other Cadent Networks and to other Gas Distribution Networks

No longer required under this initial pilot, this will be part of the RIIO-3 investment delivery

END: March 2026

On Track

On Hold

Status in previous Action Plan

Open Data Triage – reviewing the Open Data Triage Playbook to support a common experience

Problem Statement

- Ofgem's Data Best Practice Guidance requires us to classify our data through the Open Data Triage process, to support data sharing effectively with the right controls in place.
- The Open Data Triage Playbook was created by Energy Networks Association (ENA) to help support the interpretation of the DBP Guidance, but it needs to be updated to remain current.

Expected Outcomes

- Through the appointment of a third-party, and collaboration of the different Energy networks, the Open Data Triage Playbook will be reviewed and updated.
- This collaborative approach should encourage energy networks to apply a consistent approach to data triage, so that the experience of **Data Users** when requesting a similar Data Asset is consistent.

Recent Updates

- The gas networks left the Energy Network Association at the end of December 2024, which included participation in ENA projects and workstreams.
- The Open Data Triage Playbook Refresh workstream has completed and a new edition has been published by the ENA.
- We will review the new edition of the Open Data Triage Playbook and make revisions to our Open Data Triage processes.
- As we are continuing to develop our Open Data capability through the portal, revision of our Open Data Triage process will be incorporated into a wider review of documentation and data literacy improvements to support this.
- This action reflects the Open Data Triage process review only which is planned to complete March 2026.

Key Milestones:

START: September 2024

10/2025 INTERIM STEP

ENA publishes the new edition of the Open Data Triage Playbook

03/2026 INTERIM STEP

Cadent review of ENA Open Data Triage Playbook and new draft of Open Data Triage Process created
Sufficient timescales allocated to support trials and approvals of the new process

12/2026 OUTCOME

Cadent Open Data Triage processes are updated with consideration of the improvements made to the ENA Open Data Triage Playbook
The Cadent Open Data Triage process has been revised and approved. Supporting information has been generated to ensure Data Stewards and Data Owners understand any new requirements

END: June 2026

On Hold

Data Sharing Licence – Common "Shared" Data Licence – a common experience for stakeholders across all networks

On Hold

Status in previous Action Plan

Problem Statement

- Ofgem introduced Data Best Practice Guidance, a key part of which is making our data open and discoverable for stakeholders.
- Data Assets which are triaged as "Shared" require additional controls. Every network has its Data Sharing Agreement to do this, making the process cumbersome for stakeholders.

Expected Outcomes

- The Energy Networks Association (ENA) initiated a workstream to create a common Data Sharing Licence to be used where a Data Asset is triaged as "Open".
- As the licence, or core terms of it are common, **stakeholders who wish to access data from multiple energy networks** will find the experience consistent.

Recent Updates

- The gas networks left the Energy Network Association at the end of December 2024, which included participation in ENA projects and workstreams.
- The ENA workstream to develop a Common Data Sharing Licence has completed and this has published between its members.
- We have marked this action as "On Hold" until we have interacted with the ENA to understand the output of their workstream and the best route to implement this so we remain aligned with the other networks.
- It is anticipated that the core elements of the Common Data Sharing Licence could be adopted very quickly once agreement for use of these has been reached with the ENA.

Key Milestones:

START: September 2024

01/2025 INTERIM STEP

Cadent leaves the ENA
Cadent can no longer participate in the development of a new licence for Shared data

12/2026 OUTCOME

Review the output of the ENA Open Data Triage Playbook refresh workstream
Cadent will engage with the ENA to agree Cadent's implementation of the energy network-wide Common Data Sharing Licence and work to adopt this.

END: December 2025

On Track

Digital Spine of the Energy System – assessing potential use cases for gas network data with the Data Sharing Infrastructure (DSI)

On Track

Status in previous Action Plan

Problem Statement

- The evolution of the energy market and the challenges of achieving Net Zero means data will need to be shared more often between more parties.
- Implementing data sharing between parties requires contracts and agreements on how data will be transmitted and in what form, slowing down the delivery of critical information.

Expected Outcomes

- Ofgem has identified a need for a common environment where data can be provided from one party to another under a centralised trust framework to support **industry stakeholder data needs.**
- This Data Sharing Initiative will need collaboration between similar parties to develop common Data Assets which can be delivered in a consistent manner.
- An interim governance entity has been appointed and a pilot undertaken to prove the proof of concept. While work to build the DSI is a RIIO-3 activity the magnitude of the work means planning needs to start as soon as possible to ensure a successful delivery.

Recent Updates

- The DSI delivery is a RIIO-3 investment and is anticipated to be delivered between 2026 and 2031.
- The scale of the work needed to develop an interface and Data Assets for transmission via the DSI is recognised and Cadent has been actively engaging with NESO to understand the development lessons learned from their pilot phase.
- Through the Gas Data & Digitalisation Collaboration Group and through the NESO led DSI workshops the gas networks are engaging strongly with NESO with respect to DSI.
- The focus of work is firmly on the planned development of the Governance models and architecture for the technical DSI solution, and due to this the mobilisation plan for a proof of concept through DSI has been sidelined until these fundamentals are resolved.

Key Milestones:

START: December 2024

03/2025 INTERIM STEP

Collaboration between Gas Networks to assess potential use cases for the DSI
Initial possible use cases for the DSI are discussed between gas networks and NESO

07/2025 INTERIM STEP

Review of insight from pilot
NESO shares output of pilot and gas networks review lessons learned

12/2025 INTERIM STEP

Development of a mobilisation plan
Gas networks work with NESO to create a mobilisation plan for a POC

03/2026 OUTCOME

Proof of concept use case prepared
Subject to agreed timescales, gas networks undertake a proof of concept of data to be shared over the DSI

END: March 2026

Complete

On Track

Status in previous Action Plan

Asset Investment Portfolio Management – Digital solutions to visualise Asset investment scenarios

Problem Statement

- Presently the development of any modelling scenario is manually intensive which restricts efficiency.
- With the challenges of climate resilience, Net Zero and whole system planning, there is a need for scenario planning through increasingly sophisticated modelling which can visualise results quickly and with minimal manual intervention.

Expected Outcomes

- New approaches to modelling which deliver output quickly and require minimal manual intervention for:
  - Whole System Scenario
  - Climate Resilience
  - Asset Investment Portfolio Management
- Models will have access to high quality, interoperable data, supporting the work of our **Future Energy, Climate Resilience and Asset Investment Specialists.**

Recent Updates

- This initiative was subject to RIIO-3 investment approval, which was confirmed through the Final Determination.
- This action was limited to the discovery of the requirements for delivery prior to the RIIO-3 period as all scenario modelling will require high quality and interoperable Asset data as a foundation.
- As such it has been marked as complete, and the delivery of the Asset Investment Portfolio Management will progress in RIIO-3 and developmental activities associated with that new project will be reported in the Digitalisation Action Plan in due course.

Key Milestones:

START: March 2025

07/2025 INTERIM STEP

Asset Management Data Discovery
Map out the business processes, high level data elements and how these are transformed into main Asset Investments metrics

12/2025 OUTCOME

Asset Investment Portfolio Management RIIO-3 investment agreed
The future development of Asset Investment Portfolio Management modelling has been agreed as an investment under RIIO-3

END: March 2026

On Track

New Action

Status in previous Action Plan

Calorific Value Sensor Development – enabling more accurate billing of energy

Problem Statement

- Biomethane is a green gas which is created from organic material; offering a low carbon alternative to natural gas and offering UKGD the ability to blend Bio with Natural Gas
- Biomethane injection into our network can change the calorific value of gas in a local area.
- Calorific values (CV) are not currently measured on a local basis to allow shippers to charge customers for the energy they consume, instead of the volume of gas.

Expected Outcomes

- By developing low-cost, easily deployable calorific value sensors and installing them in our network, we will be able to more accurately assess the energy content of the gas we transport to customers, regardless of its source.
- Customers will benefit from fair and transparent billing reflecting the energy used rather than the volume of gas supplied.
- This collaborative effort between Cadent, SGN, WWU, and GNI is funded through Network Innovation Allowances to test a number of sensor technologies for accuracy and the ease with which it can be installed prior to implementation in to live gas networks.

Recent Updates

- The participants of this project have reviewed technical specification of sensors to ensure system requirements are well defined. These sessions have been instrumental in validating the proposed sensor technology, the associated performance criteria, and integration into the network in the future.
- The team is now focused on defining and agreeing the performance criteria for the phase one laboratory testing phase, which will specifically evaluate CV accuracy, comparing this to existing technology already used in gas networks.
- Overall, the project is progressing to schedule, with strong engagement from all partners and a clear pathway established towards laboratory testing.

Key Milestones:

START: August 2025

10/2025 OUTCOME

Define technical specification for sensor development

12/2025 INTERIM STEP

Start phase one Laboratory testing of calorific measurement sensors

To define performance criteria of the sensors and comparison with existing technology

03/2026 INTERIM STEP

Completion of phase one laboratory testing of the sensors

04/2026 INTERIM STEP

Start of phase two laboratory testing including integration of deployment method

END: August 2027

Our previous Digitalisation Action Plans:

Date of publication	Link
June 2025	Digitalisation Action Plan – June 2025
December 2024	Digitalisation Action Plan - Dec 2024
June 2024	Digitalisation Action Plan - June 2024
December 2023	Digitalisation Action Plan - Dec 2023
June 2023	Digitalisation Action Plan - June 2023
December 2022	Digitalisation Action Plan - Dec 2022
June 2022	Digitalisation Action Plan - June 2022
December 2021	Digitalisation Action Plan - Dec 2021
December 2020	Digitalisation Action Plan - Dec 2020

Open to You

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Your comments and suggestions on our Digitalisation Action Plan are valued.

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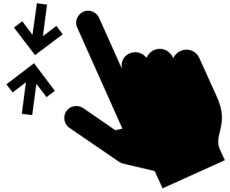
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