



# Digitalisation Strategy Action Plan

June 2024



# Introduction

The Digitalisation Strategy Action Plan (DSAP) is a document that is due to be updated every 6 months as per our Ofgem obligations. The DSAP represents progress against our Digitalisation Strategy.

In our March 2024 published Digitalisation Strategy, emphasis has been put into Data trustworthiness, access and visualisation aided with latest digital technologies including analytics and Artificial Intelligence to improve decision making with the overall aim of workforce efficiency enhancements.

We are developing an AI strategy and policy for governance of AI usage in the organisation.

Projects have been captured in specific focus areas of Data Foundation, Data Sharing, Digital Twin, Enhanced Decision Making and Efficient Enterprise Essentials, all converging towards the overall strategic Digitalisation objective, rather than initiatives by Business unit.

Projects which fall under digitalisation objectives have been mentioned here. Projects which do not fall under this category are being reported as part of RRP submission

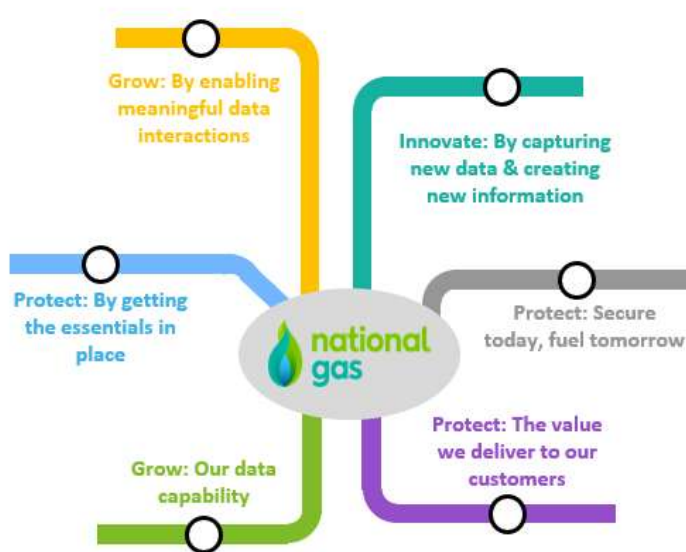
# Our Digitalisation Strategy Action Plan

We have structured this document into the following sections:

- A. Summary of how we are achieving Ofgem Data Best Practice Guidance through our revised Data Strategy and DSAP actions.
- B. Digital Initiative Updates
  - I. Projects updates from last DSAP ( Dec 23) to date
  - II. Details on focus areas with mapping
  - III. Focus area wise updates
- C. Stakeholder Engagement updates
- D. DSAP action updates

***Section A – Progress made  
against Ofgem Data Best  
Practice Guidance***

# We continue to implement our Data Strategy with a strong focus on Ofgem's Data Best Practice Guidance



Our Digitalisation Strategy has multiple initiatives focussed on data as well as a specific stream for Data Driven Asset Management. The themes from the Data Strategy are cross-cutting and lend themselves to several of our key initiatives. Our Data Strategy also covers additional more global requirements and that we are embedding the Ofgem Data Best Practice Guidance and Dublin Core standards as we implement new capabilities.

Over the last six months, National Gas has continued to implement its Data Strategy, producing our Enterprise Data Asset Catalogue, Business Glossary, and Data Dictionary Template. These artefacts are Dublin Core compliant and pave the way for the business to describe their data assets and make them more discoverable.

A new silver "tube line" has been added to our Strategic Roadmap, that captures the key deliverables that are required in the Cyber Security space to ensure we can continue to run a safe and efficient network. This work will enhance our ability to share data as per the Presumed Open Principle, in a way that minimises risk to the network and maximises value to our customers and stakeholders.

# *Section B – Digital Initiative updates*

*I. Projects updates from last DSAP ( Dec 23) to date*

*II. Details on Focus areas and Mapping*

*III. Focus area wise updates*

# Summary of work between December '23 and June '24

- We have been working extensively on **customer and stakeholder engagement** over the period of last 6 months. This engagement has given us valuable insights on customer needs and is helping us to plan initiatives to meet their demands
- We have aligned our objectives with **Ofgem's Data Best Practice guidance** and with **Dublin Core Standards**
- **Digital Asset Management** – We have gone live with our replacement asset management solution and refreshed Geospatial Information and Content Management capability along with reporting
- **Digital Construction POC** – We have successfully procured and configured the Common Data Environment (CDE) platform (Autodesk Construction Cloud) and are ready to host the drawing data.
- We have acquired **Premtech** - a digital design engineering consultancy, renowned for expertise in the energy sector in digitalising construction
- **Data and Insights Platform** - We have delivered the initial phase of our Data and Insights platform with another major milestone to support the Digital Asset Management reporting now live.
- **Digitalisation of our Asset Protection processes** with a new letter generation tool which has sent letters to 11,000 landowners, which went live in June 2024
- **CVDT II** has demonstrated potential and benefits as part of the FutureGrid programme and driven the digital visualisation and representation activities ( Digital Twin) of the wider business and core systems that the business is currently using
- **New Service Now platform and Google Cloud Platform** has been set up with application migration activities ongoing
- We have enhanced the **risk accuracy profile** for our Asset Investment Planning with predictive analysis features
- Work is in progress to develop a central **AI Strategy** to manage and shape the capability induction into the organisation
- Work in progress to build IT investment plan for next price control period, known as RIIO-T3 commencing in 2026, continuing the digitalisation journey.

# Focus Areas

We have identified 5 focus areas for the remaining RIIO-T2 price control period, FY25-26, to work towards our objectives from earlier business units wise value stream mapping. We have aligned our RIIO-2 initiatives under these new focus areas, providing stronger links of initiatives with our strategy.



## Data Foundation

Continue building a strong and trusted data foundation to access wider range of datasets, especially for RRP



## Digital Twin

Leverage IT and OT for select areas of asset management, operations and automated data capture



## Data sharing platform

Continue updating data sharing platforms



## Enhanced decision making

Continue to utilise frontier technology for building enhanced decision-making capabilities



## Efficient Enterprise Essentials:

Review infrastructure and systems for improving simplicity and efficiency



# Initiatives and focus area mapping

Table below shows the mapping between earlier business unit wise value streams and new Digitalisation focus areas

Value Streams →	Market and Customer Insights	Optimised System Operator	Data Driven Asset Management	Ops Enablement	Data Insights & AI	Enterprise Apps & I/O
Focus Areas ↓						
Data Foundation					<ul style="list-style-type: none"> <li>• Data &amp; Insights platform</li> <li>• Integration services</li> <li>• Modelling Analytics and Simulation Services</li> </ul>	
Data Sharing Platform	<ul style="list-style-type: none"> <li>• MIPI Refresh</li> <li>• NIP</li> </ul>					
Digital Twin		<ul style="list-style-type: none"> <li>• Innovation Project (CVDT Phase II)</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced Asset Design</li> <li>• Asset Investment Planning Predictive Analytics</li> </ul>			
Enhanced Decision Making	CRM & Connections development		DAM	OTTP		
Efficient Enterprise Essentials				<ul style="list-style-type: none"> <li>• Asset Protection Enhancements</li> <li>• Gas Grantor</li> </ul>		<ul style="list-style-type: none"> <li>• Enterprise Apps for Payroll, People &amp; Culture &amp; Purchasing</li> <li>• Hosting platform</li> <li>• Digital Workplace services</li> <li>• ServiceNow</li> </ul>

# Data Foundation

Action Plan Deliverable ★ Delivery 



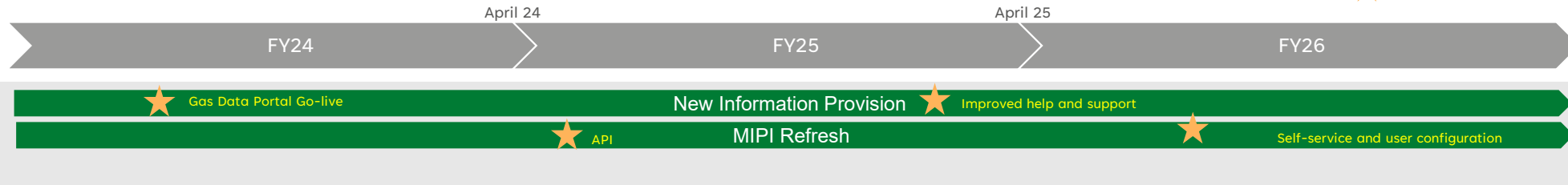
 **Data Foundation**



Action No.	Project	Description – what we have committed to do	Action Outcome (aspect of supporting Digitalisation and Data) – What we have achieved so far	Next Step
DSAP 017 DSAP 023	Data & Insights platform	We are building a data and insights platform as a central data store for data science, modelling, analytics and reporting	The first phase has now gone live for Digital Asset Management reporting which will be incremented and further data subject areas will be added in the next few months covering Construction, Cyber Asset Management and Network Operations	Roll out of second phase of DAM reporting, Construction and Cyber Asset Management
DSAP 036	Integration services	We are migrating to a new National Gas target architecture to simplify IT landscape, network, data transfer systems and interfaces.	We have productionised all three integration platforms MuleSoft, Apigee and Thru and all platforms are now available to accept application integrations based on the integration platform and approved design decisions.	To commence the formal programme closure processes.
DSAP 012	Modelling Analytics and Simulation Services	We will continue to develop the D&I platform to support delivery of data science use cases which will improve how we run and forecast the network	The data science platform and architecture is now being developed with migration of existing models in process of being migrated across to the platform	Demand forecasting, migration from separation and productionising of the platform

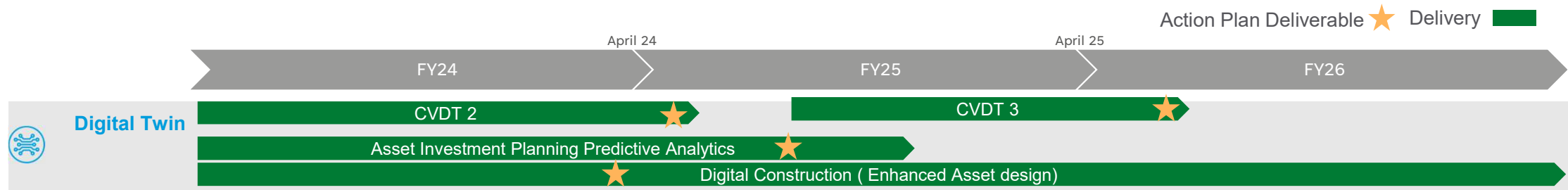
# Data Sharing Platform

Action Plan Deliverable ★ Delivery



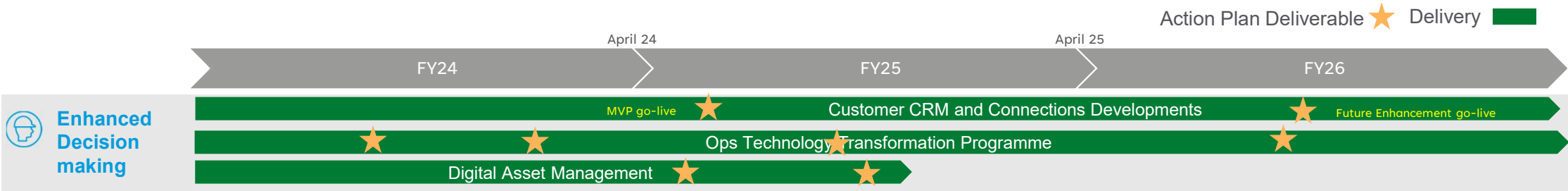
Action No.	Project	Description – what we have committed to do	Action Outcome (aspect of supporting Digitalisation and Data) – What we have achieved so far	Next Step
DSAP 26	MIPI refresh	<p>Improve the discoverability and interoperability of our Operational Data for customers by:</p> <ul style="list-style-type: none"> <li>• providing a modern RESTful API</li> <li>• data catalogue and metadata available via the API</li> <li>• Enabling customers to configure and personalise their view of our data</li> <li>• Enhancing our help and support for data</li> </ul>	<p>Work in progress to deliver APIs to provides better interoperability and data discovery. Currently in testing phase and planned to go live in August '24. Discovery work in progress for new instant messaging capability and self service functions</p>	<p>Continue testing for APIs and go live preparation. Complete discovery for next phase and initiate design and build phase</p>
DSAP 27	New Information Provision	<p>Continue to provide richer data and information to customers by:</p> <ul style="list-style-type: none"> <li>• Improving how we manage data triage requests</li> <li>• Improving data quality</li> <li>• Create new metrics to measure successful delivery</li> </ul>	<p>NIP discovery work to improve help and support features and provide a better customer journey. Provide additional content and views and support customer requests for additional data.</p>	<p>Conclude discovery work and initiate build and test phase. Planning future release of the mobile app</p>

# Digital Twin



Action No.	Project	Description – what we have committed to do	Action Outcome (aspect of supporting Digitalisation and Data) – What we have achieved so far	Next Step
DSAP	Innovation Project (CVDT Phase II)	The project aims to link developing Digital Twins platform with our data clouds and live data and ensure the integration is aligned with data quality and security requirements.	CVDT II has demonstrated potentials and benefits as part of FutureGrid and driven the digital twin activities of the wider business and core systems that the business is currently utilising	<b>CVDT III – Integration</b> Increasing the number of connected systems to provide further detail on finance, project delivery and system operation.
DSAP 033	Digital Construction (Enhance Asset Design)	Implementation, utilisation of BIM-CDE capability and applied new standards on construction projects which are delivered by external contractors and are tendered after the first two years of RIIO T2	National Gas’s own Common Data Environment (CDE) is configured and onboarded 2 construction projects with first wave of key users trained to use the platform.	Continue to onboard more construction project and phasing approach to adopt ISO19650 standard and ways of working. Begin to detail out integration activities.
DSAP 032	Asset Investment Planning Predictive Analytics	Enhance our Asset Investment Planning solution and improve the accuracy of risk profiles	We have developed our Asset Investment Planning system to improve the accuracy of risk profiles that we use for investment decision making and delivered Predictive Analytics capability to enhance our RIIO-T3 submission	Action complete with the delivery of Predictive Analytics

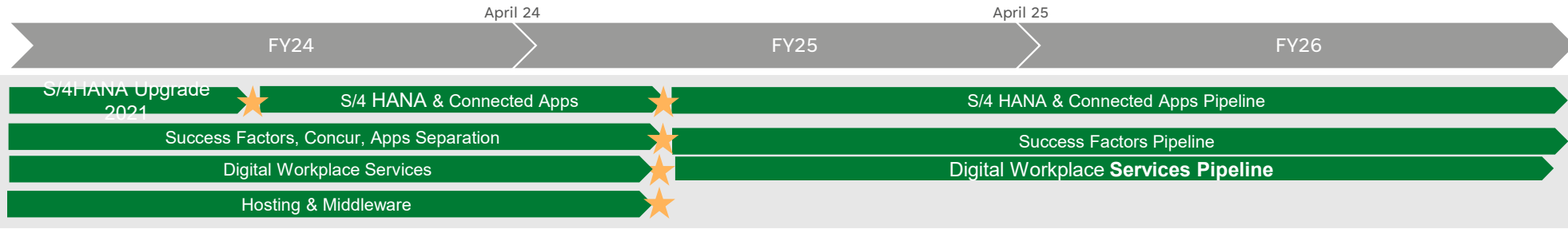
# Enhanced Decision making



Action No.	Project	Description – what we have committed to do	Action Outcome (aspect of supporting Digitalisation and Data) – What we have achieved so far	Next Step
DSAP 028	CRM & Connections development	Improve the customer journey, satisfaction and engagement for Customers & stakeholders by: <ul style="list-style-type: none"> <li>Refresh of automated connections process</li> <li>Enhanced infrastructure</li> <li>Single solution for customer data</li> <li>Improving query management processes</li> </ul>	We have delivered enhancements to our CRM capability to enhance logging of customer queries and interactions and further digitalise the customer journey	Go-live of our refreshed Connections portal is due Summer 2024 and will include additional process automation and a greatly enhanced customer journey of workflows
DSAP 024 & DSAP 025	Digital Asset Management	We are replacing our asset management solution, this includes Asset Management, Geospatial Information, and Content Management.	We have gone live with our replacement asset management solution and refreshed Geospatial Information and Content Management capability	A further programme to deliver enhancements to our EAM system to improve maturity and enhance key processes underpinned by our EAM capability
DSAP 035	Ops Technology Transformation Programme	We will deliver improvements and extend digitalisation for our field force teams, including device refresh, connectivity and enhanced maintenance planning.	Delivered a new Competency management to manage skills and competencies as well as enhancing workforce management capability to deliver some time booking automation, ability to capture work activities in the field and commenced rollout of key technology to ensure the workforce is always connected	Continued rollout of always connected technology, ongoing enhancements to workforce management capability

# Efficient Enterprise Essentials

Action Plan Deliverable ★ Delivery

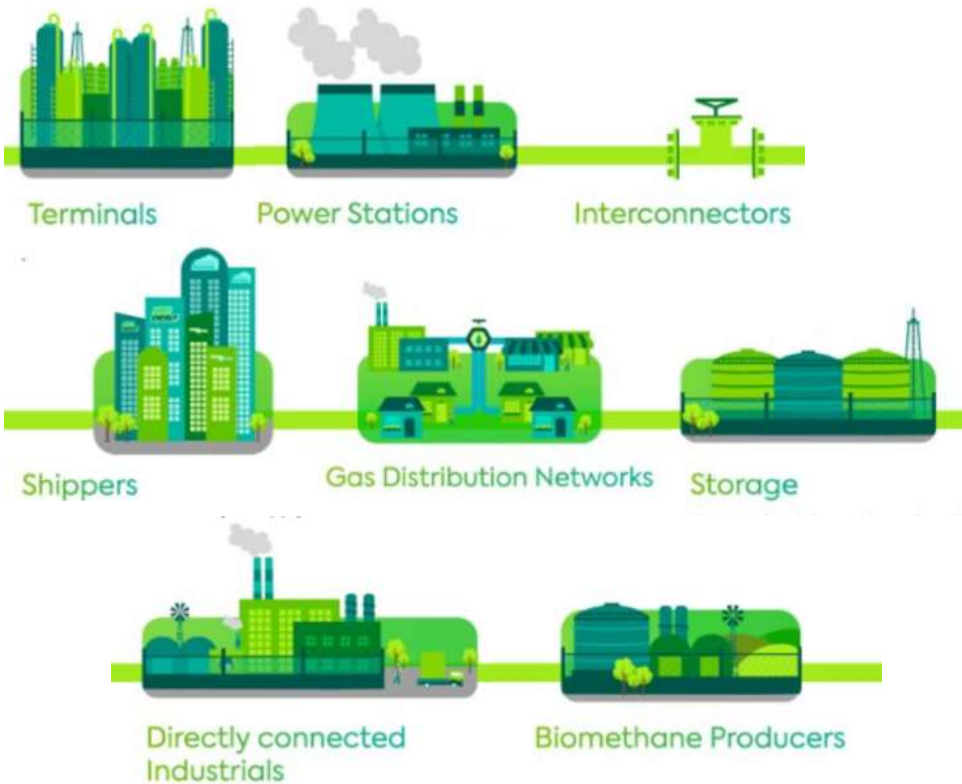


Action No.	Project	Description – what we have committed to do	Action Outcome (aspect of supporting Digitalisation and Data) – What we have achieved so far	Next Step
DSAP 039 & 41	Enterprise and connected apps Separation, refresh	Refreshed Gas instance of S/4HANA and connected applications	FY24 – Refreshed instance go live	Prioritise and deliver enhancement opportunities
		Refreshed Gas instance of Success Factors ( HR) and outsourced payroll provider, Concur ( Expense Management) and connected applications	FY24 – Refreshed instance go live FY24 – Outsourced payroll provider go live	Prioritise and deliver enhancement opportunities
DSAP 039	Digital Workplace Systems / Service Management tool ( ServiceNow)	Provide a modernised and updated DWS environment	Implemented a new ServiceNow platform Continuation of device refresh activities Contracted new EUC vendor	Enhancement of platform of Service now platform based on user feedback
DSAP 038	Hosting platform	Deliver a strategic platform for the hosting of applications as part of our cloud-first strategy.	Google Cloud Platform implemented and application migration underway	Optimisation and FinOps focus
DSAP 034	Asset Protection Enhancements	Digitalisation of our Asset Protection processes for sending 11,000 letters to landowners, through moving data and functionality to a CRM platform.	We have gone live June 2024 with our new letter generation tool that is part of our CRM platform	Refresh of asset protection enquiry management functionality

# *Section C - Spotlight on stakeholder engagement*

# We have recently completed a customer engagement sprint

## Our customers and consumers...



## In the past three months...

8

Interactive workshops

70+

1 to 1 Deep Dive interviews

55

Organisations represented in our engagement so far

100+

Engagements *via* surveys and LinkedIn

## ...and our wider stakeholders



National and regional government  
Environmental interest groups  
Innovators and academics

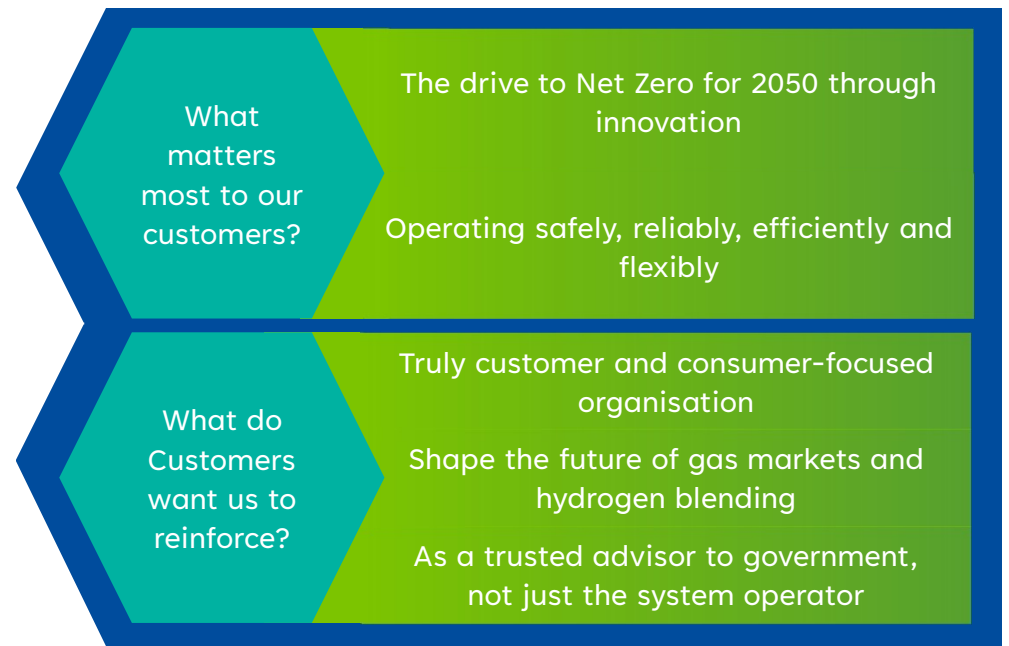


# Our engagements have been key to understanding the customer journey

We have developed a targeted and strategic approach for customer engagement- 100+ questions and reaching out to 10,000+ customers and stakeholders

Our customer priorities in RIIO-GT2 were **affordability, reliability**, and delivery of a **sustainable energy system** while minimising disruption to their lives.

However, there is a greater consumer focus for National Gas to **shape and drive the Net Zero transition – as a must-have, not a nice to have.**



# How we have and will continue to engage

1 to 1 Interviews

Topic-Specific  
Customer and  
Stakeholder  
Workshops

Forming forums and  
coalitions

Acceptability Testing

Stakeholder  
perceptions surveys

Customer  
Satisfaction Surveys  
(CSAT)

Informed panel  
groups (e.g., our  
Independent  
Stakeholder Group)

Set piece events to  
update on our  
progress

Deep Dive Webinars

All our activities are underpinned by  
**active listening and continuous feedback**

# *Section D – DSAP open action update*

# Action Updates

Action No	Category	Action	Due Date	Outcome/ June 2023 update
10	Customer Journey	DSAP Action Plan: Utilising the Data Best Practice, Supporting Information develop a plan based on Customer & Stakeholder engagement to improve the visualisation and interaction with DSAP Plan	Dec '24	Work in progress to understand how we improve Data Discovery for customers and Stakeholders.
13	Customer Journey	Stakeholder Engagement: Develop further metrics to demonstrate the successful delivery of DBPG (Data Best Practice Guidelines) recommendations for personas groups	June '25	Gas industry partners will be stepping away from ENA at the end of 2024. To ensure we are complying with Ofgem's Data Best Practice Guidelines, National Gas has joined the Gas Distribution Networks to form a self-organising group focused solely on gas data.
15	Customer Journey	Stakeholder Engagement: Develop and maintain a digitalisation-focused stakeholder engagement strategy to target key groups / personas and drive our stakeholder engagement plans	Ongoing	Ongoing work, sessions held since the last DSAP publication using the shaping the future webinars, Ops Forums and data discovery webinars. Support the engagement & coordination group within the DDSG

# Action Updates

Action No	Category	Action	Due Date	Outcome/ June 2023 update
16	Customer Journey	Stakeholder Engagement: Engage with customers and stakeholders as per the digitalisation stakeholder engagement plan, maintaining a stakeholder engagement log linking feedback to activity and stakeholder outcomes	Ongoing	Ongoing work to maintain the engagement log
18	Customer Journey	Access: Develop a plan based on customer and stakeholder feedback to improve Information Provision API functionality, and user experience across Data Community portal and data platform	Ongoing	As part of the data discovery project, we have been consulting our stakeholders on the API standard. In addition Ofgem are also requesting feedback from the industry on this subject via the call for info and RFI.
22	Data Driven Asset Mgmt.	Enhanced Asset Design: Implement BIM technology across asset investment projects to digitalise information and data capture	Ongoing	Successful proof of concept delivered and process design completed for implementation of the new platform. Awaiting decision from Ofgem through the re-opener process to secure funding to continue with the next phase of the project

# Action Updates

Action No	Category	Action	Due Date	Outcome/ June 2023 update
23	Data & Data Platforms	We are building a new Data Insights & Advanced Analytics platform that will bring together data from across the National Gas estate together into a single, highly capable platform	Ongoing	The platform is now live with the operational asset data supporting the Digital Asset Management stream. Additional data sources and reports will continue to be added to it as we progress with our separation migration and as we extend new capabilities
24	Digital Asset Management	Enterprise Asset Management replaces legacy technologies with a new IBM Maximo Platform which will enhance our Asset Data, digitise additional processes and lay foundational capability for other deliverables such as Asset Performance Management	Ongoing	Ensures our Asset Managers have access to accurate managed technical asset records and are working on a supported platform which will enable optimised planning and scheduling of work, as well as supporting the modernisation of maintenance policy
25	Enterprise Content Management	Enterprise Content Management will migrate our data repository for Asset related documentation from OpenText to Microsoft SharePoint. This simplifies and modernises our technology estate and ensures our documentation is accessible and available	Ongoing	Ensures our Asset Manager's have access to accurate managed technical asset records and are working on a supported platform which will enable optimised planning and scheduling of work, as well as supporting the modernisation of maintenance policy Content Management System went live in June 2024 and is now in Early Life Support.

# Previously published Action Plan

To provide traceability and transparency, attached is the link to the previous published action plan in December 2023.

<https://www.nationalgas.com/document/144986/download>

All open actions from the previous published DSAP have been referenced and addressed in this pack

Link for March 2024 Digitalisation Strategy which has been referenced in this document

<https://www.nationalgas.com/document/145391/download>