

Digitalisation Strategy

A digital vision for safe, resilient and low carbon networks



WALES & WEST
UTILITIES



Foreword

This is an exciting time for the energy industry as we enter a decade of significant investment and change. We are proud to share our third data digitalisation strategy in support of the transformation of the UK energy network.

Data drives our business. From the investment plan to ensure a safe and reliable gas supply, our continuously improving customer service performance and our transformation to a green energy network of the future, data is at the heart of our decision making.

Our strategy continues to be structured in two parts: making our data digital and sharing our data for the benefit of customers and the wider energy network transformation.

To support these goals, we continue to invest in significant IT projects to overhaul our major systems and make data digital and easily accessible to those who would benefit from it. We have also formed a new data and analytics department for GD2. This brings together analysts and data experts from around our business with the aim of understanding both internal and external stakeholders' data and analysis needs, and ensuring these needs are supported.

In the 15 months since publication of our last strategy we have

- Updated our data triage portal to make data request much easier for our customers
- Led a cross sector project to develop a Whole System CBA tool that has been released for any users and has already been utilised in a number of innovation projects
- Gone live with phase 1 of our IT landscape transformation
- Influenced NUAR to come to our region and signed up to the Welsh Government's Data Map Wales which we are using to share future infrastructure projects with Local Authorities and other utilities
- Shared thousands of datasets to support the transition of the energy network

Details of our achievements in digitalisation can be found throughout this plan. This document also sets out our stakeholder-led delivery plan to achieve further advances in digitalisation in RIIO-GD2. We commit to publishing an update on delivery of our plan on a 6-monthly frequency and a refresh of our strategy every two years. Feedback is critical in shaping our future strategies and we welcome views on the content, timelines and ambition. We look forward to hearing from you.



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OUR GUIDING PRINCIPLES

Digital technologies are an essential enabler for the move to a low-emission energy system and to meeting the UK Net Zero targets. We are committed to modernising energy data and making this available for the benefit of all, both inside and outside of Wales & West Utilities.

Our data digitalisation strategy is based on a number of key principles:

- We support the Government's Energy Data Taskforce's recommendations and align ourselves with the Modernising Energy Data programme. In particular we support the two key principles – Principle 1: Digitalisation of the Energy System and Principle 2: Presumed Open.
- We value the importance of consulting with stakeholders to understand what data really supports the UK energy network and the transition to the future energy network.
- We publish data where it has passed the tests of being relevant and/or useful for consumers and stakeholders.
- We make data easily available, governed by a robust triage process
- We always maintain compliance with legislation covering the use of data, in particular the General Data Protection Regulation (GDPR).
- We focus on the completeness, quality and accuracy of data, keeping these under constant review and ensuring fitness for purpose.
- We regularly update stakeholders on delivery of our digitalisation plan



PART 1 – MAKING OUR DATA DIGITAL

BACKGROUND

Our primary responsibility as a Gas Distribution Network is to provide a safe and reliable service to our customers. A digital utility reflects the dependency on technology to deliver these duties.

Wales & West Utilities Ltd (WWU) has an ambitious technology strategy that provides the services and protections required to achieve our outputs and deliver value for money. This is achieved through a focus on data quality and accessibility to inform and drive decisions to transform our network to Net Zero.

The pace of technology continues to change rapidly, and this presents both opportunities and challenges to over 2000 colleagues across our business and to the many thousands of external stakeholders with whom we interact. We have invested in foundation platforms to be able to deliver a multi-channel experience for colleagues and partners to optimise usage of our core business functions and an integration strategy that allows us to remain flexible enough to adapt to our stakeholder requirements and to continue to exploit opportunities offered by emerging technology.

WWU is classified as a provider of critical national infrastructure and has a responsibility to UK householders. We must take every step to ensure our systems are safe and to protect our services and data, from interruption or attack. We must achieve high standards of physical and cyber resilience and meet our obligations to new regulations, such as GDPR and Network and Information Systems Regulations (NIS).

We will work to achieve these objectives through innovative use of technology and a security by design principle. This document sets out our digital vision, why it is so important and how it will help achieve our objectives. We will work with our stakeholders to establish the best experience for our customers and to ensure we provide a safe and resilient network.

OUR DIGITAL TRACK RECORD

Since WWU's formation in June 2005, Information Technology has been a key enabler to WWU's strategic business vision. This accelerated during GD1, and our business will leverage more technology services than ever during GD2. WWU were the first Gas Distribution Network to gain independence from what was then National Grid, successfully exiting the 'Front Office Managed Service Agreement' programme.



So far, we have implemented over 120 significant IT projects, including the award-winning and industry-first online Connection's quotations portal. This was a major step forwards for customer experience when requesting a connection to the gas network.

Other key initiatives delivered to date include:

- a digitised work management solution for our mains replacement programme
- an internet-based system for anyone to access our network data
- more efficient data capture in the field
- automated street works noticing to assist our interactions with councils
- integration with our SCADA control system for fault management

In addition, we've focused on a number of key foundational technology investments including: a digital integration platform and master data management solution. The adoption of a cloud-first strategy and the deployment of Microsoft Azure and Office 365 services has enabled our colleagues to collaborate and share data across our region and industry.

Most recently our investment in integrated digital initiatives for enabling efficient business processes has won us leading place in industry safety exercises e.g., Firm Load Shedding four years in a row; it has also improved our safety record on Driver Risk Assessments and is saving us money on Tracking equipment and plant as our operational teams go about their important work.

We therefore have a strong track record of delivering collaborative Information Technology services

We have also been carefully planning for the longer term. We recently reviewed our future business capability needs and made key decisions with regards to the direction of our IT investments. Increasing customer and workforce expectations of engaging in a digital world, the need to enable our business to operate more efficiently with agility and to become part of an integrated energy system, led to the decision to invest during GD1 & GD2 in a new modern suite of technology solutions, as a digital foundation that will underpin our enduring business capability.

We are therefore investing in a technology platform and business transformation to solidify our foundations and improve the way we operate our business processes and manage the data that is critical to our operation.



Focusing on delivering valued services for our customers, we must become a digital utility. It is not possible to bolt on digitalisation as an afterthought; it is a cultural change to enable efficient interaction and collaboration, facilitating innovation and generating new opportunities founded on accessible and exchangeable data. We will transpose our business processes onto a modern technology platform in order to compete in the digital world.

We have a forward-looking strategy and plan to make further technology investments over the lifetime of RIIO-GD2, to continually enable our business to: deliver better service, meet sustainability targets and drive innovation and efficiency.

DIGITAL STRATEGY

The digital utility is a connected environment in which integrated technology enables efficient exchange of information between all areas of our business, our customers and the outside world. Becoming a digital utility requires a modernisation of technology and a review of the organisational processes. It is as much an approach to re-thinking the business and challenging existing business processes as it is about the technology.



The modern workforce is a generation of technology consumers born into an already-digital world, their expectation is to be able to operate at work in the same way they manage their personal lives, managing finances with online banking, communicating with colleagues using social media, locating qualified tradespeople for maintenance jobs, ordering goods for fast delivery and organising tasks and events seamlessly.

Our customers also expect a simple and efficient experience when engaging with us, and the modern utility must be able to provide a multi-channel experience to interact with customers in the most appropriate manner, whether it be online, by telephone, email or post.

Lastly, the marketplace in which we operate is changing around us with renewables, distributed generation and smart meters all generating data and integration requirements for real-time management of a connected network. We have led or participated in a number of innovation projects with hybrid boilers and smart systems using data to switch between lowest carbon and lowest cost fuel sources. A digital approach to integrating all of these technologies into an efficient customer experience is the challenge of 'The Digital Utility'.



PLATFORM APPROACH

The technology platforms that WWU has invested in, lay the foundations for delivering this connected world and enabling effective exchange of information across our organisation, partners and most importantly our customers. Our transformation programme will harness their capability to bring together people, information, and processes in the best possible experience for our workforce and customers.



- Core business processes are standardised to leverage the best practice of industry leading solutions.
- Spatial data provides powerful insight into where we can operate most effectively.
- Cloud services let us build scalable and reliable solutions on demand without large capital investments.
- Digital solutions let us develop unique services to match the demands of our business.

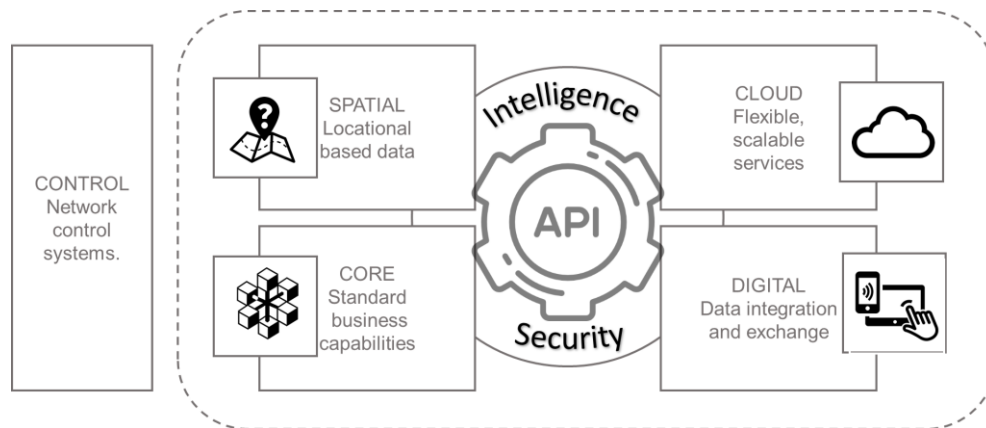


Figure 1: Technological platform

CONNECTED WORLD



Our workforce is at the heart of our day-to-day operations business, but they can only operate on information provided by our systems. Our control systems, pressure management systems, work scheduling and customer interactions all generate volumes of data that must be collected, analysed and used to generate actionable insight on, in



real time. Integration of these data sources is key to our future success and we are leading with an Application Programming Interface (API)-driven architecture.

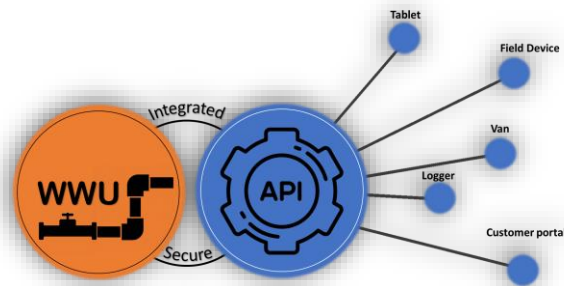


Figure 2: API architecture

The utility of the future will be connected digitally to more and more sources of data. From environmental sensors, vehicles, smart meters and body cameras the list is growing every day. We have built adaptive and flexible platforms with the capability to integrate the information from these new technologies into operations to enable digital outcomes.

Innovative solutions for national emergencies, equipment tracking, safety briefings and firm load shedding have all been developed on our digital foundation platform producing industry-leading results. Initiatives for sharing data with partners, online multi-channel interaction with our customers and more tailored experiences for our field-based workforce, are all part of our digital future.

CLOUD ADOPTION

Cloud services will become the de-facto location to host reliable solutions. Both scalable and reliable, WWU will become a cloud first business. In previous business plan cycles we have invested heavily in virtualisation of on-premise infrastructure. Whilst this has provided cost effective resilience, the move to cloud offered a considerable improvement whilst also adding agility.

Our previous virtualisation strategy stood us in good stead for a migration to cloud, but we did not simply take over our legacy applications as they are today. We are transforming our applications and infrastructure to develop the next generation of our systems, in the cloud and digital ready. When complete, we will retire our existing data centres, migrating only the remaining applications that are necessary.



The agility and flexibility of Cloud also enables us to collaborate and share data more easily than ever before. Our standardised technology platforms and data structures will allow us to publish data in a format that is easy to understand, consume and act upon, from operational capacity to emergency workloads.

DATA SECURITY

To operate in an open and sharing marketplace, we must secure our business against the variety of evolving threats we will face. With the advent of new technologies, cloud services and mobile working, the traditional security boundary of an organisation is less clear than ever before. As distributed generation introduces new entry points into our network from sites we don't control or own, the physical boundary is also changing.



Traditional corporate IT security models rely on the fact that IT own the applications, network, and all the devices, and so protect the boundary with perimeter firewalls to control what comes in and out. This is only appropriate for legacy systems within a data centre and the threat we face today has changed.

Our digital services of the future will run on both public and private networks, on trusted and untrusted devices, generating data from wholly owned and private sites. We will ensure security of the future is embedded by design, on a zero-trust basis and build inherent security into our thinking at design stage.

A holistic approach to risk, incorporating physical, cyber, organisational and operational, is the best approach to protection for true business resilience.

Regulations such as NIS and GDPR are important drivers of behaviour within organisations but need resourcing to operate effectively. We will look to establish in-house resources for retained knowledge and rapid response.

People & Mobility – flexibility in location and working hours will see a more transient workforce connecting from devices we don't own and locations we don't trust and will overall be harder to protect. Security by design in the technology we deploy and inherent protection within applications will be paramount.

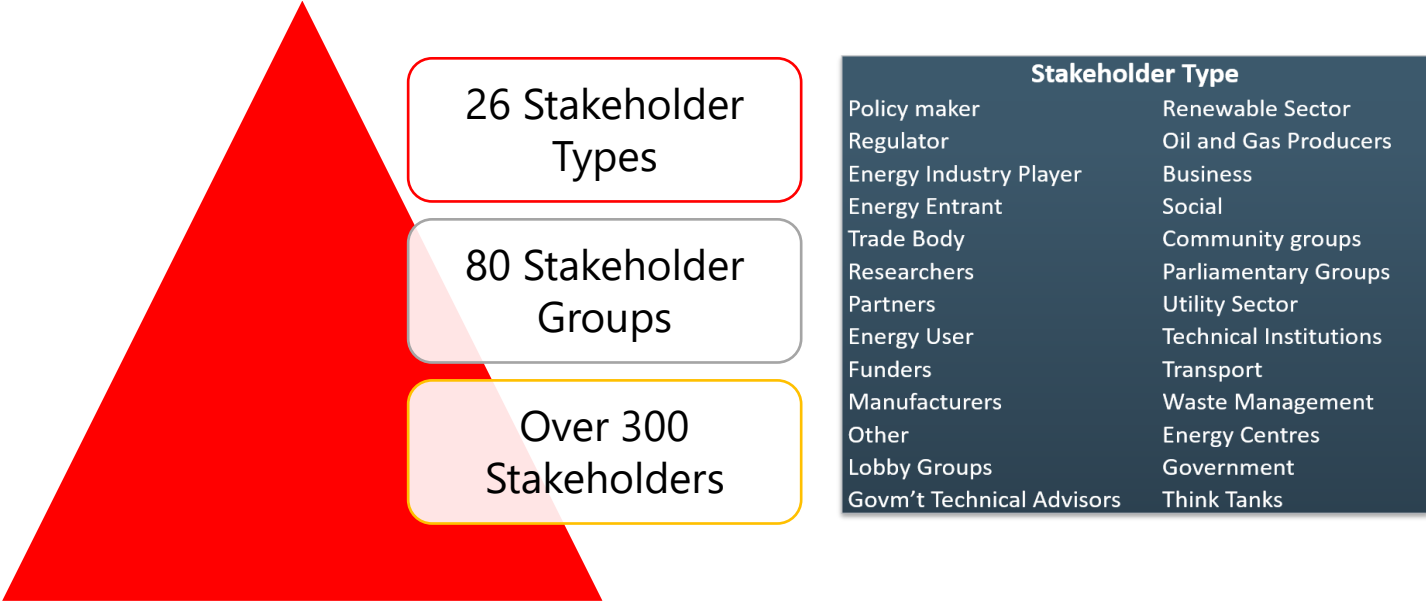


PART 2 – MAKING OUR DATA AVAILABLE

UNDERSTANDING STAKEHOLDER NEEDS AND DELIVERING THROUGH COLLABORATION

We consult extensively with stakeholders to understand the data and information that could make a difference for them. This has resulted in us sharing openly, and at no cost, many big data sets and modelling tools. Several examples are: our Pathfinder model - to help move the industry to Net Zero, our asset data - to those working in the vicinity or those who wish to connect, and our priority service register - to ensure those in need get support. We will continue to focus on understanding what is of most value to our stakeholders.

We have put significant effort into identifying key stakeholders



The wheel below is an illustration of our stakeholders and their relationships with each other and the themes they cover:



Whilst we implement structured engagement plans, we are also aware our people make many contacts on a daily basis with many stakeholders. In the summer of 2020, we carried out an internal survey to collate the contacts made relating to data, the data shared as a result and any requests for data we were unable to action. We will complete this exercise annually to inform our data sharing plan.

We see huge value in collaboration in innovative projects as a method to truly dig deeply into data required to move the future of energy transformation forward in a practical way. This turns the theoretical view on data needed into a very practical requirement for data.

By example, a 2021 project entitled 'EPIC', a collaboration with WPD, WWU and Regen has provided great insight into data that is needed to enable informed decisions. The project included a whole system CBA analysis and revealed the extent and breadth of data required for



this analysis. It has given us a direction in data collection and sharing to support future whole system CBA decisions.

In the plan for this year is a project with at least 8 Local Authorities and external groups centred around a simplified version of our Pathfinder tool. One of the key aims of this project is to share the tool and understand the data needed to support the Local Authorities in carrying out future energy pathways analysis.

We will continue to engage and collaborate in projects of this nature as we see this as providing very rich insight into future data needs compared to simple surveys and engagement that can result in more theoretical conclusions.

This combination of formal engagement plans and events, day to day contacts and collaborative projects has given us an excellent understanding of the types of data and specific data sets that could add value.

To make sense of the feedback we've collated, and for the benefit of future communications with stakeholders, we have grouped our data digitalisation into 4 key themes that align with our GD2 Business Plan. The following table shows the themes and the key analysis tools, data types and datasets our stakeholders have expressed an interest in having available to them. We are focused on improving the quality, availability and accessibility of these; a key commitment from WWU.



Meeting The Needs Of Consumers And Network Users	Delivering Value For Money	Delivering An Environmentally Sustainable Network	Maintaining A Safe And Resilient Network
Vulnerable customer information including demographic data to support our planning on delivering work in a given area	Future demand growth and associated network reinforcement plans	Our pathfinder tool which uses supply and demand data to support assessment of future energy solutions for regions	Forecast planning data
Visibility of our asset investment plans	Regulatory Reporting Packs – financial, workload and output data	Data for energy planning e.g., heat and hot water requirements for a given population	Asset location data and analysis showing proximity to buildings. Also, data showing the population of these building
Off-gas and fuel poor customers mapping data	Data on customer gas usage and profiles of usage	Hybrid heating operation data from our Freedom project	Asset capacity data
Balancing data including demand, intake, energy and weather data at LDZ or exit point level.	Data on network capacity, shrinkage and interruption	Hourly demands, intake, use of network storage data	TD13 calculator -system to help set system pressures in line with UK standards
Information on asset location and connection costs	Future asset intervention plans including mains replacement	Joint electricity and gas mapping data	Long Term Development Statements - forecasts for demand and capacity requirements
Data on 'green gas' injection sites	Asset data and required intervention plans and associated costs to transform our network to hydrogen ready	Network emissions - Shrinkage and leakage	Assets situated in private property versus those in public highway and spaces
Gas quality information including information relating to calculations of billing CVs		Environmental performance reporting	



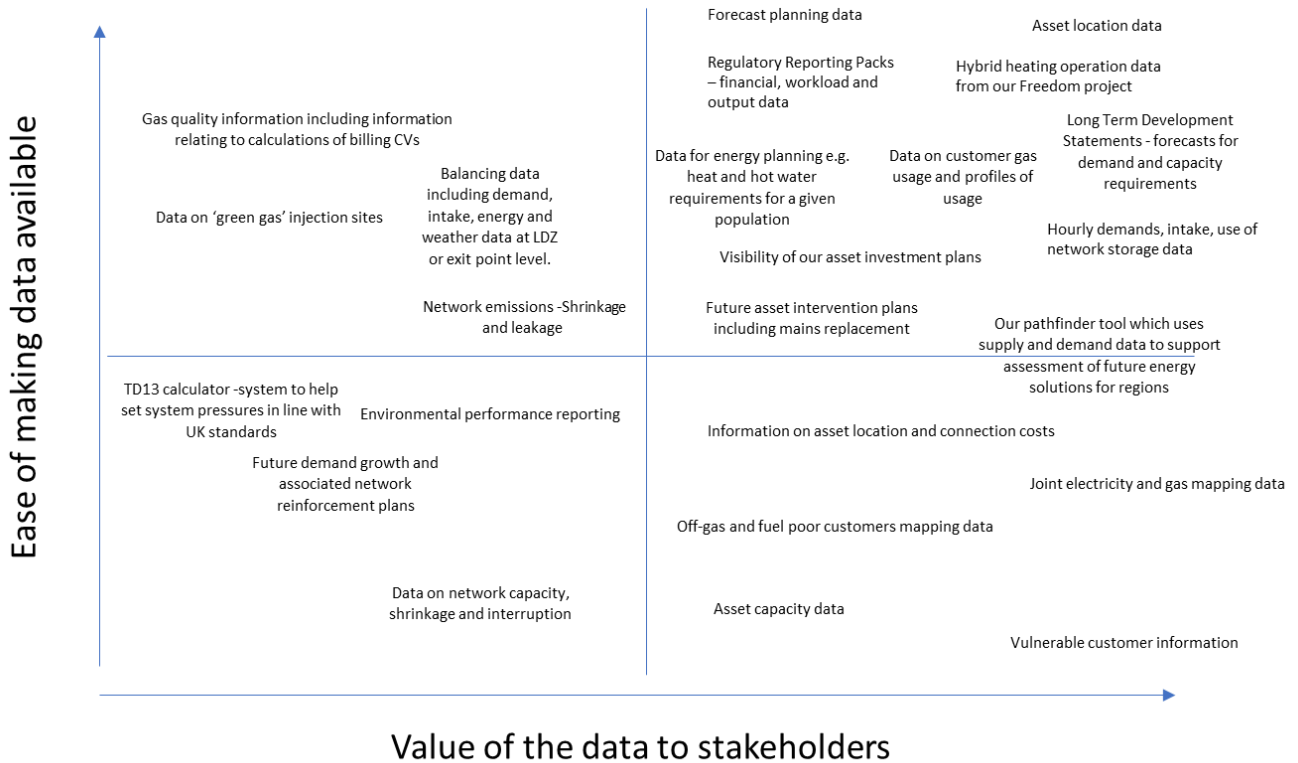
DATA TRIAGE

Our data is vital in transforming the energy system and we are committed to making it available to those who will benefit directly or who could derive benefit for the wider UK. Unfortunately, it is also invaluable to those seeking to cause harm. We must balance our responsibility as an operator of critical national infrastructure with the principle of openness and sharing. The recent events in Ukraine have highlighted the importance of the consideration of security when making data open and available. We have listened carefully to CPNI and their advice on data sharing and national security.

Not all data is created equal and the validity for publishing openly must be considered on a case-by-case basis. Privacy, Consumer Impact, security and commercial constraints must all be considered when triaging the opportunity. Data provenance must also be considered. The energy sector has a legacy of assets handed from government and national structures, down to distributed commercial organisations, through a period of technology evolution. For example, whilst modern mapping systems utilise high accuracy Global Positioning Systems (GPS) for recording asset locations, this simply wasn't available when many of the legacy assets were buried in the ground. Whilst we take every precaution when we manage and operate our network, this kind of data shared outside the organisation may not be treated with such consideration.

We need to balance the value of data with the cost and effort to generate and publish the data. To do this we use a simple Boston Square assessment that considers value and effort. The figure below shows our analysis of our stakeholder-requested data and information.





The value is assessed based on use cases from feedback from interested parties. The ease of making data available is an assessment that considers:

- Availability and completeness of data
- Challenges of GDPR
- Security and threat

We want to ensure we balance speed of making data available with the value. To this end, we have focused on data sets in the top right quadrant. We are also looking at the high value, high difficulty data sets. As an example, we have managed to map our vulnerable customer database to our mapping system to support the vulnerable in our own planning and operational activities but also with a view to sharing with others who could support those who most need it. We have hit some significant challenges with GDPR in making this data available but due to the high value, we are committed to working through these challenges and this forms part of our DSAP (Digitalisation Strategy Action Plan).

We currently chair the ENA data triage group. We offered to take this role as we see a cross sector triage process as much more valuable and informative than individual company processes. We have set out a future works plan for this group. This includes

- Reviewing of all network triage processes to drive best practise through the industry
- Understanding the nature of requests received with an aim to make as much data as possible easily accessible and prevent the need to go through an application process



- Understanding the demographics of data requestors to inform and improve the industry stakeholder engagement process and ensure we are engaging with all relevant stakeholders
- Promoting engagement across networks to help consistency and quality of response to data requests

We are committed to continually improving our own triage process and applying the learning we get from leading the cross-sector triage group. Once adopted, we will publish details on our website along with our metadata catalogue.

DATA SHARING

This wide range of stakeholder feedback has resulted in us sharing a huge amount of data and information. The sections below give details on data sets currently shared under the 4 themes, and how to access. Our DSAP details future plans to share data not currently available but requested by stakeholders.

Meeting The Needs Of Consumers And Network Users

- We provide an on-line system for connection quotes – so that anyone who requires a gas connection can receive a quote through a simple internet-based process. [Online Quotation Portal \(wwutilities.co.uk\)](http://www.wutilities.co.uk)
- We are undertaking leading work in data sharing agreements, with the aim of aligning the gas, water and electricity sectors into a virtual working common Priority Services Register (PSR) while working towards a single PRS for all utilities.
- **National Grid** provide a portal for all gas network data via their Operational Data Exchange: <http://mip-prod-web.azurewebsites.net/DatatemExplorer/Index> . We supply data for publication on this portal. This database is available to all and provides daily balancing data including demand, supply, temperature and calorific values at LDZ or Exit Point granularity.

Delivering Value For Money

- We publish our Regulatory Reporting Packs (RRPs) in the public domain. These contain significant detail on money spent, workloads delivered and outputs achieved each year. [Wales & West Utilities – Company Reports \(wwutilities.co.uk\)](http://www.wutilities.co.uk)



Delivering An Environmentally Sustainable Network

- We issue complete sets of our asset data to key stakeholders such as Independent Gas Transporters (IGTs), green gas producers and other utilities to aid assessment of future energy solutions and connections. This is currently on a request by request basis. We are committed to the UK National Energy Map project and will publish our data openly through this medium in 2021
- We have shared our future of energy modelling tools such as the unique Pathfinder model with interested parties under licence at no cost. This includes Local Authorities, other utilities including GDNs and DNOs, universities and other organisations that can play a role in delivering an energy network that supports net zero. We have ambitious plans set out in our DSAP for sharing Pathfinder and supporting its use further in RIIO-GD2

We publish details and results of Future of Energy Projects both completed and in flight: <https://www.wvutilities.co.uk/about-us/our-company/future-of-energy/> . This allows others to implement the learnings from our research projects in future work

- Prevailing View: <http://mip-prod-web.azurewebsites.net/PrevailingView/Index>
This source provides current and projected information on the status of the national gas system balance
- **Gridwatch** this is an external source for electricity balancing hourly data which is available for download: <http://www.gridwatch.templar.co.uk/>

Maintaining A Safe And Resilient Network

- We share asset data readily. Interested parties can log onto an internet-based system and within minutes have access to our mapping data. - <https://www.wvutilities.co.uk/services/dial-before-you-dig/our-mapping-service/>
- We publish our long-term development statement to support future planning and resilience of the energy network. Ten-year statement: <https://www.wvutilities.co.uk/media/2844/2018-long-term-development-statement-summary.pdf>
- We have published our TD13 calculator on our website. This supports gas network operators and our own operatives in calculating safe pressure settings for pressure reduction installations.

Our DSAP provides details on our data and information sharing targets for 2021/22.



Collaboration

We value collaboration and have invested time in building relationships with organisations that can either support us in our digitalisation aims or who benefit from data sharing agreements.

We are an active member of the Energy Networks Association Data Working Group (DWG), to ensure we deliver significant benefits from collaboration across sectors. Our Asset Strategy Manager sits on the subgroup tasked with delivering the common network map. We see this as a real step forward in making data available in a common format that will benefit the transition to the energy network of the future. We are also engaged in the development of the data triage process and plan to adopt this once the work is completed.

We are currently working with Xoserve to get true value from the big data sets they hold on consumers and consumer use. This data is currently used within WWU to drive down the costs of network reinforcement by having up to date consumption data. We are exploring the value of this data to other stakeholders and working through any GDPR issues that could prevent sharing.

Welsh Government have formed an Energy Data in Wales group. This is in its infancy, but we have committed to being an active participant.

We have instigated the formation of and chair a Strategic Infrastructure Steering (SIS) Group with Welsh Water, Transport for Wales, Western Power Distribution, Welsh Government and Local Authorities. The aim is to share investment plans and asset data to ensure collaboration with street works and limit disruption to the public. This has resulted in NUAR coming to Wales as the next area of the UK for their programme. This will offer a one stop service to stakeholders that need to know the location of all utilities in our region to support plant protection and safe delivery of work.

Another outcome of the SIS group is use of the Welsh Government's 'Data Map Wales' tool. We now publish forecast work data onto this platform to help utilities and Local Authorities understand future plans of all and help with collaboration to minimise both costs and disruption to the public.

We work with the other utilities on Priority Services data to ensure we collaboratively support those most in need. Recently, all PSR additions are shared between gas, electricity and water and in RIIO-GD2 we are looking to find ways around GDPR challenges to make this data more freely available for the benefit of those most vulnerable.



OUR FUTURE PLANS

OUR PLAN TO ACHIEVE OUR STRATEGY

We are signing up to a series of commitments relating to digitalisation. These form the basis for our DSAP

1. **Consult on strategy and action plan** – We have listened to our stakeholders, and this updated strategy and plan reflects views received. We will continue to consult on an ongoing basis following publication to inform future strategies and plans.
2. **Upgrade our core asset repository and finance systems** – we have a project 'Link' to upgrade our SAP system and have our data in digital formats that are readily accessible for use by internal and external stakeholders. This project is 24 months in and will conclude in the final quarter of 2022. This is a key enabler to digitalisation.
3. **Digitise remaining asset data sets** – The bulk of our asset data is in digital form and we publish this for plant protection and provide full data sets to interested parties with a robust use case. There are a number of asset groups where data is not completely digital, or data sits outside of core systems making analysis difficult in some cases. These are namely service governors, risers on multi occupancy buildings (MOBs) and our cathodic protection (CP) systems
4. **Internet of Things (IoT)** - With improvements to sensor and communication technologies there are many opportunities to enhance our IoT capabilities and data. We plan to develop and publish a co-ordinated strategy in this area
5. **Metadata catalogues** – we will publish a metadata catalogue to raise awareness of data we hold and the routes to access or request this data.
6. **Pathfinder** – This WWU-developed tool has been hailed as a significant source of data and analytics to inform future energy scenarios and strategies. We have an ambitious plan to share widely in RIIO-GD2
7. **Priority Services Register** – We share data on vulnerability within the bounds of GDPR. We are looking to improve sharing and develop analytics that help us combine big data sets and allow us to better target the needs of the vulnerable in our region
8. **National map** – We are supporters of the need for a national map for ease of access for stakeholders to utilities data. Our Asset Strategy Manager sits on the ENA Data Working Group and is an active member of the mapping subgroup. We have provided data for the Proof of Concept in 2021 and plan to be an active participant and user of the production system when finalised
9. **Central data and analytics team** – we recognise the importance of data both in our day-to-day operations, our future planning and for the transformation of the energy system to achieve net zero. To support this, we have formed a new centralised and



specialist data and analytics team within WWU. This team will facilitate all requests for data and manage our data triage process.

10. **Sharing further data sets** – As seen in this document, we share considerable amounts of data and information to interested parties. Our ongoing consultation with stakeholders and our data triage process has informed our plans for data sharing in GD2.

The plan to deliver on our commitments can be found in Appendix 1 -Digitalisation Strategy Action Plan (DSAP)

Governance

This strategy has been reviewed and approved by our Business Operating Committee, comprising of our Chief Executive and his Executive team. The Strategy is owned by our Director of Regulation and Asset Strategy.

The delivery of the strategy and, in particular, the Digitalisation Strategy Action Plan (DSAP) will be tracked through this committee on a monthly basis. The strategy and plan will be updated every two years, based on feedback received.

We would appreciate feedback and suggestions for our strategy and action plan. We see this as a very iterative and fluid process. Any feedback will be gratefully received and can be sent to the mailbox ian.dunstan@wwutilities.co.uk.



Appendix 1 -Digitalisation Strategy Action Plan (DSAP)

This can also be found and launched as a spreadsheet using the link on our website.

Commitment	Key deliverables	Current status	2021												2022											
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Ongoing consultation on strategy and plan	Publish strategy and inform stakeholders	Completed	█																							
	Digitalisation specific engagement events	A number of engagement events are planned to inform the next strategy update																								
	Receive and review feedback	We are in constant touch with stakeholders on their data needs. There are a number of new lines added to the plan as a result of stakeholder feedback to date																								
	Use of Pathfinder Lite by additional parties (tbc)	Under review - legal licences under draft - Been trialled under 'Tools of Engagement phase 2' NIA project with 8 external bodies including some Local Authorities																								
2. Upgrade our core asset repository and finance systems	Monthly review of data requests received via ENA data triage process	Ongoing but feeding into data sharing plan																								
	Complete future system design	Complete	█																							
	Build phase of new system	Build is underway with a large team of IT and Business experts supporting. We are currently reviewing complexity to ensure delivery risk is minimised whilst still delivering the improvements and ambitions of ourselves and our stakeholders																								
	Data migration	Over 1million records have been reviewed and many thousands improved in readiness for data migration																								
3. Digitise remaining asset data sets	Cutover to new system	April 2021 saw the launch of our new Customer Experience (CX) system. This is already helping us to serve our customers more effectively and efficiently than ever before. September saw the launch of our HR system. Next phase, we are prioritising changes to our Emergency & Repair systems and processes with the introduction of a new smart App for Operational colleagues. Changes will be accompanied by the roll out of new iPad's, replacing outdated CF19 devices																								
	Complete Service Governor surveys and digitisation programme	Physical surveys complete but impacted by covid. Currently updating our GIS system and asset repository. New app built to improve survey process for future condition surveys. HSE have reviewed app with positive feedback																								
	Cathodic Protection Systems digitised and mapped to assets	HP system in Wales digitised and currently collecting data from Operational colleagues in the South West																								
	Multi-Occupancy Building (MOBs) moved from standalone databases to core asset repository	High rise data prepared awaiting migration process to new SAP																								
4. Internet of Things (IoT)	Innovation project on trial sites to explore sensors, remote monitoring and remote maintenance technologies	ICS Project completed with ICS consultancy using existing data to flag gaps that could be filled by sensor technology. Considering a phase II project on 2 PRI sites																								
	Delivery of remote pressure control at test sites as part of project Optinet	Complete	█																							
	Develop a strategy and plan for sensors and monitoring	Virtual team of operational; Asset And IT people assembled																								
	Deliver phase 1 of the IoT plan	Not started																								
5. Publish a metadata catalogue	Derive GD3 IoT plan	Not started																								
	Derive 1st catalogue based on stakeholder themes	A catalogue of data and publications has been developed and we are currently designing version 2																								
	Publish on our website and inform stakeholders	Complete	█																							
	Publish further links to key data sets and analysis	These are detailed as new lines at the bottom of this page																								
6. Pathfinder	6 monthly review and update to metadata catalogue	Under review																								
	Use of Pathfinder in a number of projects including: Milford Haven Energy Kingdom - Innovate UK project	Project in final stages of completion																								
	EPIC - West of England Combined Authority (tbc)	Project in progress. Currently supporting data provision for whole system CBA use																								
	Zero 2050 - South Wales Decarbonisation planning	Complete	█																							
7. Priority Services Register (PSR)	Zero 2050 - South Wales Decarbonisation roll out to the rest of Wales (TBC)	Plan under review - replaced by a Welsh Government Project which we are supporting - details yet to be made public																								
	Gas Goes Green workstream 1.3 local, regional & national pathways studies	Complete	█																							
	Develop a Business Parks version of Pathfinder	A collaborative project with Blaenau Gwent Local Authority																								
	Engage on further projects and use cases	Updates are detailed as new lines at the bottom of this page																								
8. National map	Produce national map and increase data sets available	Concept proved but not productionised following legal advice on GDPR																								
	Resolve GDPR issues over use of PSR data in maps	Not able to overcome GDPR issues																								
	Innovation project to add ONS and licenced data on demographics to further support planning	Reviewed Warm Wales (Fresh) data. Sample sets taken. Currently developing use cases using available demographic data																								
	Build analytic tools to use the data and drive communication plans and target projects and campaigns	ARGIS reviewed - new improved mapping data contract to improve ease of data access to 3rd parties. Currently trialling internally with operational colleagues																								
9. Create a dedicated data and analytics team	Actively participate in ENA subgroup PoC	PoC complete and project report written. Currently deciding on next steps																								
	Develop system to seamlessly publish data to the national map	We have easy access to GIS data through use of a new GIS system																								
	Productionalise national map and increase data sets available	Not started. Will be driven by learning from the PoC																								
	GD2 Business restructure	Complete	█																							
10. Sharing future data sets	Populate data and analytics team	Team built but some members are involved in our SAP upgrade and won't join the team until year end. Analytics offering under development																								
	Implement new data triage process	Process through ENA adopted within WWU. We have a representative on the ENA data triage subgroup reviewing success and managing future improvements																								
	Publish methods for external stakeholders to engage	Done via ENA currently																								
	Gas goes green - green gas data reporting through ENA	Proposals discussed with GGG Advisory Group																								
New: Whole System CBA tool	Publish detailed environmental performance data	This is now published annually through RRP																								
	Publish heat and hot water ready reckoner	This is complete	█																							
	Promote and support use of Whole System Cost Benefit Analysis tool developed as part of Open Network	This is a new line item added in this period. One of our team co-lead the project to create the tool. Currently supporting various innovation projects and other use cases																								
	Developed as part of Open Network																									
New: Flexible Generation Forecaster	Flexible Generation Forecaster for real time developed as part of a WWU led innovation project: https://www.smarternetworks.org/project/nia_wwu_068	This is a new line item added in this period. This is now complete																								
	Agree mechanism to share Flexible Generation Forecaster with project partners	Complete	█																							
New: Pathfinder Lite	Share Flexible Generation Forecaster with non-funding parties (tbc)	Shared with parties including SGN and Cadent																								
	Development of Pathfinder Lite as part of Innovate UK Project: Bank Energi	Complete	█																							
	Agree mechanism to share Pathfinder Lite	Under review - legal licences under draft																								
	Use of Pathfinder Lite by additional parties (tbc)	Under review - legal licences under draft - Been trialled under 'Tools of Engagement phase 2' NIA project with 8 external bodies including some Local Authorities																								
National Underground Asset Register (NUAR) is now coming to Wales. This is a plant protection tool that gives a one stop shop plant protection service		We have signed a data sharing agreement and have shared sample data for the team to explore. We hope to move to a live system in 2022																								

