SGN

Digitalisation Strategy

March 2026

02 Contents

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Overview

04 Introduction

This Digitalisation Strategy sets out SGN's approach to becoming a data-driven, digitally enabled gas distribution network over the course of the RIIO-GD3 (GD3) price control period (2026–2031). It builds on the progress made during RIIO-GD2 (GD2) and responds to the evolving demands on our business: heightened regulatory expectations on safety and service quality; the imperative to deliver efficient services for customers; growing workforce challenges; and uncertainty around net zero pathways and the future role of the gas network.

Our business plans for GD3

Ofgem has recognised the importance of the investments in our GD3 business plan and our three-pillar approach ('Getting the basics right', 'Platforms & capabilities', 'Business outcomes'). SGN will demonstrably improve its digital and data posture through investments in master data management, data governance, data platforms and updated operating model for data across SGN, data literacy development and improved business analytics.

Our strategy revolves around our core data principles of Quality, Findability, Accessibility, Interoperability and Reusability (Q-FAIR). These are the foundations that will operationalise Ofgem Data Best Practice Guidelines (DBPG) compliance and unlock analytics, data sharing, and innovation value during GD3.

This strategy elevates Artificial Intelligence (AI) to a governed capability. We have formalised a nine-principle AI framework and extended our data governance to encompass AI systems. This reflects both the opportunities AI presents for network optimisation, safety, and efficiency, and the imperative to deploy it responsibly and securely within a regulated critical national infrastructure.

Business transformation

Delivery is aligned to our broader business transformation programme, which sets out a phased approach: establishing foundations and early improvements at the start of GD3, unlocking value from new systems and automation through the middle of the period, and realising the full potential of data-driven operations and advanced technology by the end of GD3 and beyond.

We will publish progress against this strategy through our Digitalisation Strategy Action Plan (DSAP) on a six-monthly cadence (June and December) throughout GD3, with baselines and targets embedded in each reporting cycle.

05 Thoughts from the Executive

Simon Kilonback
Chief Executive Officer

Optimising safety, reliability, security and value for money through digitalisation.

Digital, data, and AI are at the heart of our ambitious plans to transform the SGN business. We recognise and understand stakeholder expectations that we focus on safety and service quality, particularly for our vulnerable and fuel poor customers. We are committed to delivering efficient services that bear down on costs for consumers while maintaining the highest standards of safety and reliability. An investment in digital is also an investment in our people, their skills, productivity and their careers in SGN.

The energy system is evolving and SGN has a critical role in energy security, resilience and adapting to customer demand while shaping and transitioning to the future energy system. Our Digitalisation Strategy sets out how we'll improve our datasets to make better-informed plans and decisions based on more granular evidence, and how digitalisation will optimise how we respond in real time to what our data is telling us. We will deliver social value and help integrate the energy system by increasing the volume, quality and frequency of the data we share as part of our industry's data sharing infrastructure.

Digital technology is foundational to meeting every one of our challenges. AI-assisted risk assessment, intelligent scheduling, sensor-enabled asset monitoring, and modern mobile platforms for our field workforce are not just future aspirations, but near-term necessities. This strategy sets out our ambitions to invest in and deliver transformative digital, data and AI capabilities for the benefit of our customers, communities, and the wider energy system.

Malcolm McKee
Chief Information Officer

This update to our Digitalisation Strategy marks a step change in maturity.

The step-change in this Digitalisation Strategy over previous ones is the introduction of AI as a key strategic theme. This is underpinned by data and we remain focussed on getting the basics right in data quality, governance, management and literacy, but we have also increased our focus on making data available internally and externally in an operable and repeatable way.

We have formalised our AI framework – including Safety, Explainability, Robustness, Privacy, Accountability, Bias and Equity, Auditability, and Security – and we are extending our Data Governance to encompass the full lifecycle of AI systems, from data ingestion through model training, deployment and monitoring.

We have engaged Ofgem, our Independent Stakeholder Group and other stakeholders on the development of this strategy and will continue to engage transparently throughout GD3. We will publish regular updates to our Digitalisation Strategy Action Plan (DSAP) so that we may transparently demonstrate progress.

Ofgem's support for our GD3 business plan allows us to invest in our fundamental and underpinning initiatives which provide the business capability to serve the needs of our customers, transform our capability and productivity, and position ourselves for the future.

06 SGN digitalisation at a glance

Our Digitalisation Strategy is the means by which we harness data, technology, and AI to deliver excellence in safe and efficient services, accelerate decarbonised energy solutions, and create a shared net zero future.

Here are some key points to take you through our strategy.

SGN's journey through the GD2 price control period (2021–2026) has moved decisively from laying foundations to scaling enterprise capabilities that underpin our GD3 ambitions.

Read more on **page 7**

Our Digitalisation Strategy continues to operate within an evolving environment and regulatory context.

Read more on **page 8**

Listening to our stakeholders and acting on their feedback is at the heart of how we have developed our Digitalisation Strategy.

Read more on **page 12**

The GD3 strategy is focused on improving our digitalisation, data and AI maturity in service of our customers and stakeholders.

Read more on **page 16**

Q-FAIR (Quality, Findability, Accessibility Interoperability, Reusability) remains a core principle in all that we do, ensuring that our data provides valuable, actionable outcomes.

Read more on **page 18**

We will accelerate decarbonised energy solutions to create a shared net zero future by modernising our business to become data-driven, AI-enabled, and digital at our heart.

Read more on **page 22**

SGN is focusing on emerging technologies including AI, industry partnerships and forward-thinking policies to reshape the gas distribution network.

Read more on **page 24**

Our data and digital strategy will be implemented across our organisation via our digitalisation framework.

Read more on **page 35**

07 Our digital journey to date

SGN's journey through the GD2 price control period (2021–2026) has moved decisively from laying foundations to scaling enterprise capabilities that now underpin our GD3 ambitions.

We will build and place greater focus on our commitments to open data that we established in GD2.

Our commitments and what we've achieved in GD2

We established the Enterprise Data Management (EDM) team and embedding a governance framework to protect and steward our most critical data assets. Early progress included the launch of our Open Data Portal, initial publication of open datasets, and investment in metadata cataloguing and Q-FAIR tooling. In parallel, we convened with GDN peers to shape common approaches to data interoperability.

We consolidated those foundations and published our March 2024 strategy, to bring under governance three enterprise data domains, and initiated our DataOps programme under Ofgem's Re-opener mechanism to industrialise data delivery. We piloted AI applications through the Intelligent Gas Grid Strategic Innovation Fund project, while also achieving the ISO 22458 Kitemark, reinforcing our commitment to inclusive, accessible services. These milestones created the conditions for safe, reliable, and reusable data at scale, signalling a maturing capability that could support frontline needs.

We now publish 104 datasets in shapefile format, aligning with common geospatial practices to ease reuse across the ecosystem. In collaboration with fellow GDNs, we implemented the GAS Network Data Interoperability Technical Standard v1.0, turning cross-company collaboration into a tangible standard.

Continuing preparations for GD3

We are automating data pipelines into our central data lake to remove manual inefficiencies and ensure governed, repeatable ingestion at scale. We are establishing a comprehensive report catalogue with clear ownership and classification so that performance-critical information is discoverable, trusted and actively governed.

In parallel, we are implementing AI governance with Board-level oversight, placing safety, accountability, and ethical use at the heart of our developing AI portfolio.

The lessons from successful open data services are clear. First, open and interoperable data accelerates innovation within SGN and across the sector; second, modern digital processes are essential to sustained performance; third, strong metrics, backed by governed data, sharpen accountability and drive outcomes; and finally, responsible, well-governed AI can augment decision-making and unlock new value when deployed with clarity of purpose and proper oversight.

In GD3, we carry forward these commitments with greater focus. We will deepen data best practice and data sharing, to transform core business processes as modern digital journeys, and put metrics at the centre of performance management. We will continue to explore innovative approaches and business models that support decarbonisation and shape the Future of Energy debate. In short, the work of GD2 has moved us from experimentation and enablement to scaled, governed, and interoperable capabilities. This positions SGN to lead with confidence in a fast-changing digital world while keeping our customers and our network safe, efficient, and green.

We now publish 104 datasets in shapefile format, aligning with common geospatial practices to ease reuse across the ecosystem.

08 External trends and the regulatory landscape

Our Digitalisation Strategy continues to operate within an evolving environment and regulatory context.

Since 2024, Ofgem has strengthened the digitalisation baseline by making 'share by default', interoperability and transparent benefit-tracking the norm. In GD3, these expectations are embedded into business plan assessment, with data and digitalisation judged on the consumer and public-interest benefits they unlock, alongside clear cyber and IT resilience dependencies.

1.

Regulatory and price-control context: GD3 and digitalisation obligations

Ofgem's GD3 Final Determinations for Gas Distribution (December 2025) confirm the framework for 2026–2031, setting outputs, allowances and providing for a re-openers to manage change. Across GD3, Ofgem expects gas networks to maintain safety and resilience amid an uncertain gas future, while complying with a strengthened digitalisation licence condition, accessing baseline and re-opener digital funding only where evidence shows clear consumer and public interest benefits.

In parallel, Ofgem has refreshed its Data Best Practice Guidance (DBPG) and Digitalisation Strategy & Action Plan (DSAP) Guidance, consolidated updates and improving accessibility through 2024–2025 versions. To support the new approach, we have aligned catalogue, triage, and licensing with the refreshed DBPG and set a six-monthly DSAP update cadence with a visible change log to evidence delivery and benefits. The refreshed DBPG keeps the principles-led approach to presumed open data, metadata quality, user-centred design and value articulation, while aligning terminology to the new National Energy System Operator (NESO).

Ofgem has extended the reach of DBPG beyond licensees by deciding to introduce DBPG as a Code Obligation (initially for the Smart Meter Communication Licence), signalling a phased move to embed DBPG into code governance and, over time, broaden the community that must evidence DBPG compliance. This increases cross-industry expectations on data quality, openness and interoperability that network operators must plan to consume and contribute to. SGN will work with the Code Managers, Xoserve, to support the implementation of this change.

Finally, Ofgem's Re-opener Guidance details requirements for evidence, costs and benefits for the Digitalisation Re-opener, clarifying what licensees must demonstrate when seeking additional funding as Data Sharing Infrastructure (DSI) standards and dependencies crystallise during GD3. This deepens the importance of traceable benefits and delivery assurance in any mid-period digitalisation case.

Our Digitalisation Strategy reflects the evolving technological and regulatory landscape.

09 External trends and the regulatory landscape (continued)

2.

Whole-system data sharing and interoperability: from concept to coordination

A decisive step has been the formal appointment (April 2025) of NESO as the interim coordinator for the energy sector's Data Sharing Infrastructure (DSI) through 2028. This provides clear government and regulator direction towards creating publicly owned digital infrastructure that reduces today's bilateral 'handshake' overheads and enables secure, scalable, trusted data exchange across electricity and gas participants.

NESO defines the DSI as a socio-technical solution that brings together common processes, governance and technology; practically, it will include a modular boundary 'node' any organisation can deploy to connect, discover and share data securely. The design is intent on inclusivity and interoperability, making it feasible for organisations of different sizes and maturities to participate.

This follows the government-commissioned Digital Spine Feasibility Study (2024) and subsequent government response, which reframed the 'digital spine' concept into DSI components of Prepare – Trust – Share, endorsed public stewardship, and set out the delivery pathway from feasibility to minimal viable product (MVP) and scale-up. The study and response cement interoperability and governance as foundational to achieving clean power and system efficiency, with DSI positioned as critical national digital infrastructure.

Within gas specifically, the GAS Network Data Interoperability Technical Standard v1.0 (Pipe Assets) now provides a common, DBP-aligned schema and file formats (e.g., shapefile/ GeoPackage) for publishing and consuming pipe asset datasets. This reduces friction for open data publication and cross-network reuse and creates a pragmatic on-ramp to DSI by harmonising metadata and attribute domains.

Interoperability is shifting from aspiration to executable architecture and shared standards across all data products whether under open or restricted licences. Networks will need to prepare datasets to standard, adopt trusted sharing patterns and be ready to onboard to DSI as NESO moves from pilot to MVP and wider rollout.

3.

AI governance: from principles to sector guidance and lifecycle assurance

In May 2025, Ofgem issued its first Ethical AI guidance for the energy sector, moving beyond high -level principles to set outcomes-based expectations across four pillars: safety, security, fairness and environmental sustainability. The guidance covers Board-level governance, lifecycle risk management (from design through decommissioning), supply-chain oversight, transparency and human-in-the-loop mechanisms, with sector-specific examples. Although technology-agnostic and 'good practice', the document underlines that those existing obligations (e.g. consumer protection, REMIT, competition, data protection) continue to apply to AI-enabled processes. SGN has taken an active approach to delivering Ethical AI as one of our core design principles.

This sits within the UK's wider pro-innovation regulatory approach to AI, where government continues to empower sector regulators to implement context-specific expectations and keep pace with fast-moving technologies while signalling potential targeted statutory measures around frontier AI capability assurance. Together, these developments increase the expectation that licensees will evidence AI governance proportionate to risk, especially where AI supports system operation, safety, customer interactions or market-facing activities.

AI is being normalised as a regulated activity where governance, explainability, robust controls and supplier transparency are mandatory for high-risk uses. Organisations should maintain AI inventories, risk assessments and assurance artefacts that can be presented to Ofgem and other authorities.

SGN is actively participating in the digital transformation of the UK energy sector.

10 External trends and the regulatory landscape (continued)

4.

Cybersecurity: CAF outcomes today and a stronger statutory regime tomorrow

For Operators of Essential Services, the NIS Regulations remain the legal baseline, and the NCSC Cyber Assessment Framework (CAF) provides the organising outcomes for managing risk, protecting against incidents, detecting events and minimising impact. Ofgem's Downstream Gas & Electricity (DGE) sector CAF overlay gives sector-specific guidance, clarifying proportionality, scoping and evidence expectations for compliance.

Looking ahead, the government has announced a Cyber Security & Resilience Bill to update the UK regime, expanding scope (e.g., Managed Service Providers), strengthening supply-chain duties and reporting, and broadly aligning with the EU's NIS2 direction while retaining UK specifics. This signals greater regulatory 'teeth', deeper third-party assurance and more explicit accountability for boards.

Ofgem expects higher assurance expectations across the estate and supply chain during GD3, especially for cloud platforms, identity and access, monitoring, secure baselines and cryptography. Clearly documented CAF-mapped controls and demonstrable improvement plans are becoming more important as part of wider regulatory expectations. SGN continues to invest heavily in cybersecurity, with direct executive oversight.

5.

Digitalisation as a public-interest deliverable

Ofgem's digitalisation landing pages and the DSAP/DBPG corpus consistently socialise the objectives: better quality, more accessible energy data to deliver a smart, flexible, lower-cost system, with consumer consent and trust at its heart. These publications emphasise that data sharing and digital tools are essential to meet demand, reduce costs and decarbonise. As guidance continues to evolve, the arc points to more visible openness metrics, stronger interoperability expectations and system-wide coordination through DSI.

What this means for our strategy

Interoperability first
Prepare our priority datasets and Application Programming Interfaces (APIs) to GDN data standards and DSI 'Prepare–Trust–Share' expectations; this reduces re-work and accelerates onboarding as NESO moves from pilot to production.

Assurance-ready digitalisation
Maintain an evidence pack against DBPG/DSAP (including openness triage, user needs and value cases) and the Digitalisation Re-opener requirements so we can efficiently pursue funding when industry-wide requirements or DSI interfaces necessitate new investment.

Operationalise AI governance
Map Ofgem's 2025 AI outcomes into our development and procurement lifecycles; keep an AI inventory, risk assessments and supplier attestations, and publish a proportionate AI use register for high-impact cases.

Elevate cyber across the chain
Align to the CAF overlay today and prepare for the Cyber Security & Resilience Bill by strengthening supplier assurance, incident reporting readiness, and Board-level accountability mechanisms.

Together, these changes confirm that data openness, interoperability, AI assurance and cyber resilience are no longer discrete workstreams. They are converging into a coherent regulatory fabric that determines how gas networks will be funded, interconnected and held to account through GD3 and beyond.

Data openness, interoperability, AI assurance and cyber resilience are no longer discrete workstreams – they are forming a coherent regulatory framework.

Engagement with our stakeholders

12 Our stakeholder engagement strategy

In preparing this strategy we consulted a range of stakeholder groups including:

- Customers and members of the general public.
- Our own employees.
- Industry partners, such as local authorities and members of our supply chain.
- Ofgem – our Regulator.
- Industry bodies and institutions such as the Energy Networks Association (ENA), The Alan Turing Institute, and the Open Data Institute.
- Our Independent Stakeholder Group (ISG) that consists of industry experts providing independent feedback and insights to SGN.

We truly value our stakeholders' input and consider their perspectives integral to our decision-making. As we move from GD2 to GD3 we continue to engage with our stakeholders and provide them with a regular and structured mechanism to influence and contribute to our strategic initiatives.

Our engagement programme is inclusive, designed around promoting robust dialogue, and creating opportunities for challenge, review, and iteration. Regular interaction with industry partners gives us opportunities to learn from each other as we work with NESO on the information sharing framework.

The themes that have consistently emerged from our stakeholder engagement are:

1. **Data sharing** is a fundamental enabler to visibility and efficiency across the energy system. It enables our partners and the Regulator to perform better and creates social value. Openly sharing data sets also allows entrepreneurs to explore new business models.

   In a recent survey, many stakeholders have told us that they highly rate their experience of requesting and accessing up-to-date and trusted data from SGN. We will be building on this feedback to further develop this service and the data assets we share.

2. **Modernisation** is important for us to rebuild our business processes as modern digital ones with the user experience at the core and making best use of the technology available to us. Customers, our teams, and our supply chain want our digital systems to be easy to use, integrated and automated where possible, and available on the range of platforms and devices that they are most comfortable using.

3. **Efficiency** means making best use of time and resources, reducing delay and rework, and bearing down on costs. This reduces costs for consumers, improves staff satisfaction, reduces safety risk to our employees and the public by minimising the duration of repair works, and fits with the Regulator's objective to increase system efficiency. Digitally this means the best use of metrics and performance data, provision of appropriate digital tooling, and using AI and automation to reduce the digital workload on our staff.

4. **Innovation** is seeking to prototype new technologies to improve our current performance, and to position ourselves for the Future of Energy. Many innovations solve whole-system problems, which meets the needs of our Regulator and industry bodies, while others improve our own efficiency and performance, meeting the needs of our customers, staff and supply chain.

5. **Artificial Intelligence** should be explored to drive efficiencies, reduce risk, support decarbonisation initiatives and improve identification of vulnerable customers.

With our partner FYLD, field video, voice and photos become real time safety intelligence.

SGN's commitment to inclusive customer support, a digitally skilled workforce, and collaboration with other GDNs on data-sharing best practice is strongly welcomed.

13 Outcomes of our engagement

The table below provides some examples of what we have already done to improve our business and create new initiatives, based on what stakeholders have said to us.

What our stakeholders told us	What we did
Our employees told us they were not comfortable walking away from vulnerable customers struggling to heat their homes. They wanted a mechanism to be able to support vulnerable households left off supply.	We developed a bespoke digital customer toolkit with an embedded referral app to make it easier for our engineers to access the help our vulnerable customers need. The toolkit helps ensure our customers can heat their homes safely, efficiently and affordably.
Our industry partners told us that it was difficult to access data they needed. They told us that in future they would like automated access to a growing number of data sets.	We have embraced the philosophy of open data by default and have developed a data sharing hub, to support innovation and the wider industry. We have published over 100 open data assets, not least geospatial maps of our network in response to our most popularly requested data. This data set will be expanded and automated over the course of GD3.
Our industry partners scored us at an average of 8.8 on satisfaction with the way we currently share data and 8.9 for the type of data we make available.	To maintain and improve these high satisfaction scores, we will continue to listen to our stakeholder feedback to increase the scope of the data we share that meets their needs.
The majority of our employees identified as a strength that they have the things they need to do their job effectively.	To ensure this level of satisfaction persists in our organisation as we continue to focus on digitalisation, we are going to design an employee survey question specifically on data and digitalisation tools to be included in the next survey. This will allow us to understand our employees' needs and ensure these tools are fit for purpose.
Through consultation, our Regulator Ofgem told us that future regulations would increase the focus on data best practice, and extend the current drive for open data sharing to participate in an industry-wide data sharing infrastructure.	We continue to focus on increasing our data capability maturity, deepening data governance and putting in place a data operations capability. SGN's plans for GD3 include investing in a data-sharing platform to give us the capability we need to participate in the industry-wide data sharing infrastructure.
Ofgem told us it is important to invest in digital and data skills and its expectation was that licensees grow a pool of digital skills within their organisations.	We will invest in the data and digital literacy of everyone in SGN through structured learning and development, as well as apprenticeships to grow new digital talent. In addition, we will build in knowledge transfer requirements into any contracts we have with partners to upskill and develop our staff.
Ofgem told us that AI should be used to drive efficiencies, protect vulnerable customers, reduce risk and support the drive to net zero. This must be done in a fair, ethical and safe manner.	We have implemented robust Digital and AI governance to ensure visibility to Executive, Board and regulatory stakeholders while taking AI use cases from concept to production in a fair, ethical and safe manner.

As we enter GD3, we will continue to engage with our stakeholders through structured consultation, co-creation sessions with Ofgem and industry partners, and our six-monthly DSAP feedback cycle. The outcomes of this engagement will be reported in each DSAP publication.

14 Vulnerable customers and digital inclusion

Customers are at the heart of what we do. Digital solutions have a critical role in how we identify, connect, and engage with vulnerable customers.

We put customers at the centre and use digital to identify, connect and support those in vulnerable circumstances. Our digital customer toolkit and embedded referral app make it easier for our engineers to connect vulnerable customers with the support they need. Through our smart video notes app, customers can now share with us video of issues they face rather than having to describe their issue.

However, digital solutions do not meet the needs of all our vulnerable customers. We retain face-to-face support and our call centre, while working closely with our Safe and Warm network of community and third-sector partners (e.g., Age UK, Age Scotland, Scope, Citizens Advice) to reach those for whom digital isn't appropriate.

Over GD2, SGN supported over 1 million households, generated £91m in social value and delivered 2.3 million unique services. We registered 170,000 customers on the Priority Services Register (PSR), delivered 456,000 carbon monoxide (CO) safety sessions and provided 93,000 carbon monoxide alarms. Frontline referrals rose from 4,098 (Year 1) to 13,056 (Year 4), evidencing the adoption of our digital toolkit and referral pathways. We achieved BSI 18477 Inclusive Service and ISO 22458 (Energy) Kitemark accreditation, and our website holds the Plain English Crystal Mark.

Our key focus areas to support households most in need are:

1. Direct support during operational work.
2. Tailored services for priority groups (e.g., carers, critically ill and disabled people, families with young children, financially vulnerable, digitally/culturally excluded, those with mental health conditions and older people).
3. Targeted help for communities most at risk of fuel poverty.
4. Reducing carbon monoxide harm through a data-driven approach to increase awareness and reduce risk.

Over the course of GD3, we will deepen digital inclusion by integrating our toolkit and referral pathways into core field platforms and using data analytics to better target support in fuel-poverty hotspots.

170,000
households registered to the PSR

1,596,204
total unique services delivered with our partners

9.47/10
PSR customer satisfaction score

2,901
fuel poor gas connections

766,950
households supported to date

326,743
carbon monoxide safety sessions

The SGN Digitalisation Strategy

16 Digitalisation Strategy

To make a positive impact on society, the communities we serve and our vulnerable customers by delivering excellence in the provision of safe and efficient services.

We will accelerate decarbonised energy solutions to create a shared net zero future by modernising our business to become data-driven, AI-enabled, and digital at our heart.

Our digital framework shows how the elements of our Digitalisation Strategy fit together and form a coherent whole. It is organised as a supporting hierarchy or stack, in which the most foundational elements, 'Getting the basics right', are at the bottom. These enable and underpin every other aspect of the strategy and is where, because of their foundational nature, our investment in this Digitalisation Strategy is primarily focused.

Building on top of 'Getting the basics right' is the 'Our platforms and capabilities' layer which provides the technical platforms we need to deliver 'Our business outcomes'. This layer includes platforms for managing and sharing data, analytics, and the platforms needed to support AI, Digital Twin, IoT, and innovation. Building on top of the 'Our platforms and capabilities' layer are the 'Our business outcomes' we are seeking to achieve, which in combination realise our Digital Ambition.

We have organised our thinking in this framework because it helps us to map strategic intent up and down the stack. For example, sharing open data sets needs a data sharing platform which sits on a data lake and accesses high-quality, governed data, that has been curated by people with data skills. Equally, deploying an AI model for network optimisation requires governed training data, a secure platform for model development, and clear accountability through our AI governance framework.

For GD3, we have made two structural updates to the framework. First, Digital, Data & AI Governance is introduced as a cross-cutting discipline spanning the entire framework, reflecting that governance must operate at every level from data quality through to AI model assurance. Second, we have added a horizontal principle that ensures we use the agentic AI capability of our chosen technology platforms.

Our Digitalisation Strategy has been developed with our stakeholders' input but also aligns with SGN's corporate strategy and priorities.

Our digitalisation framework enables us to:

- Improve our digital culture by developing digital talent, educating and training our people in digital, data and AI skills and ways of working.
- Prioritise consulting with stakeholders to identify data that genuinely supports the GB energy networks and its transition to a modern, decarbonised, digital energy system.
- Engage with and collaborate on the premise of Presumed Open Data (POD) which is a key element of Data Best Practice Guidelines, and is necessary to enable innovation, societal benefit and our shared journey towards net zero and a more interoperable, whole-energy ecosystem.
- Share data that is both relevant and useful for customers and stakeholders, with a strong emphasis on ensuring data completeness, quality, and accuracy through continuous review to ensure its fitness for purpose.
- Deploy AI responsibly within a governed framework, ensuring safety, explainability, and accountability in every application across our network and operations.
- Develop, deliver, and demonstrate digital innovation through our approved Future of Energy and Innovation programme of work, including AI-enabled network optimisation and hydrogen readiness.
- Prepare our data assets, APIs and sharing services for the sector's Data Sharing Infrastructure (DSI), ensuring interoperability and readiness as NESO scales from pilot to full operation.

Data use is a core part of many people's daily roles throughout SGN.

17 Digitalisation Strategy (continued)

Linked content
Click on any of the headers below to link with the content.

Our digital framework shows how the elements of our Digitalisation Strategy fit together and form a coherent whole.

3. Our business outcomes

Stakeholder and societal value
Our digital and data products and services are inclusive, secure, sustainable and reliable. They deliver recognisable value to our customers and stakeholders.

Regulatory obligations
SGN sustainably meets Ofgem's expectations on Data Best Practice, Interoperability, AI and Digital Twin solutions, and aligns to legal mandates.

Business transformation
Modernisation programme achieves performance gains by rebuilding legacy business processes as modern digital and data enabled processes.

Business excellence
Data, analytics and AI allow us to drive performance gains in a broad range of business activity and address our most difficult problems.

Future of Energy and innovation
We pilot and implement new technologies to bring about future performance gains and influence regulators and legislators.

2. Our platforms and capabilities

Data sharing platform
Allows automated access to our data sets, internally and externally, under open data or published under licence.

Analytics and reporting platform
Our DataOps service allows people at SGN to analyse our data sets to derive insight and used to produce business performance reports.

Innovation platforms
Platforms to support AI, Digital Twin and IoT which enable testing and adoption of these technologies.

AI-enabled platforms and capabilities
We use agentic AI capabilities built into core platforms to improve business and regulatory outcomes.

Data lake and integration layer
Data storage and plumbing that allows data sets to be accessed by other platforms.

1. Getting the basics right

High-quality data
Data owners take accountability for the quality and completeness of data. We apply Q-FAIR principles (Quality, Findability, Accessibility, Interoperability and Reusability) to our data.

People with digital and data skills
Our people understand the value of data and how to utilise digital solutions. They have the requisite technical and data skills to deliver the outcomes for our stakeholders and organisation.

Data and AI governance
We govern our digital solutions and strategic data assets to ensure they are fit for purpose and deliver value. We embed comprehensive digital, data and AI governance framework across all aspects of the business.

Secure by design
Our digital solutions and platforms are designed with cybersecurity built in.

18 Digitalisation Strategy (continued)

1. Getting the basics right

The key foundational step in our Digitalisation Strategy is 'Getting the basics right'. In doing this, we build essential skills and processes for creating high-quality data that is secure and well governed, that our employees can use to derive valuable business insight and our stakeholders can rely on. We emphasise accountability for the quality and completeness of data and ensure our employees possess the necessary skills to analyse data effectively and derive valuable insights.

High-quality data

With increasing recognition of the value of data both internally for managing our business and externally to enable other stakeholders to develop innovative solutions and create social value, we are building data maturity with a real focus on increasing data quality, particularly regarding our critical data assets. We have adopted the FAIR data principles proposed by the Go-FAIR foundation (go-fair.org) and have added 'Quality' to make our Q-FAIR principles:

- **Quality** – data is fit for purpose and our people understand the value of data as an asset, data owners are accountable for data quality, and data quality is assured.
- **Findability** – data is easy to find, catalogued and described; its metadata is machine-readable and in a consistent format with industry standards.
- **Accessibility** – data is available and retrievable using its catalogued index, and has mechanisms for authentication and authorisation built into the process.
- **Interoperability** – data is organised using consistent terms, formats and structures so that it is possible to integrate with other data sets accessed from SGN and other energy data providers.
- **Reusability** – data is described clearly, its provenance is understood and the terms of its usage, whether under open or shared licence, are well understood.

These principles enable us to enhance the reliability of our data and provide an all-round better digital service to our customers.

For GD3, our investment in Catalogue & Master Data Management and our Data Platform will operationalise these principles at scale. All critical data assets will be catalogued with machine-readable metadata and API-addressable reference data compatible with the sector's Data Sharing Infrastructure.

People with digital and data skills

Our highest value asset is our people. We understand that our employees are the key to the successful delivery of this Digitalisation Strategy. A modernised workforce, achieved through digital enablement, talent recruitment, and the upskilling of our existing employees with data and digital skills, is vital to support our digital transformation. The human dimension of transformation is one of the most challenging. Modernising processes will change how people work, and SGN is committed to supporting employees through this change; engagement with the workforce is part of the transformation governance.

Over the coming years, we have plans to recruit significant numbers of frontline engineering staff. There has been a long-standing skill shortage in the utilities sector, and we are addressing that by enhancing the training of our employees and apprentices as well as creating a new senior role, Director of Capability. We have also reviewed our workforce and digital toolset to assess the benefits of our digital tools, what skills development is needed to use these tools effectively and how we can assist our employees in using them.

To develop digital and data skills within our employees, we have developed a new core education programme that solely focuses on technology tooling and the data skills of our frontline workforce. This programme covers the whole digital side of our employees' roles. SGN's employees learn how to understand data, how to use our specific systems and how to effectively input data from the projects they are working on. Efficient data capture by our people underpins access to high-quality data across our business.

All new starters complete foundational training in our devices and digital tools, teaching them how to use our systems to find and understand data. We intend to develop this training further and introduce role-specific training for digital skills, such as gas leakage monitoring or geospatial work using GeoField.

Through our training programmes we ensure our people develop the skillset to best use data and our digital tools. We seek to ensure that our employees understand the value of data and have the skills they need to unlock the huge potential that it provides. In future, every training session we provide to our employees will be fully interactive to ensure they have hands-on experience of the tools they will be using in the field. To ensure our employees' knowledge is up to date, we will also be conducting continuous competency inspections, testing them on how they input data and use the digital tools available to them.

To develop skills and competences for those responsible for data, we provide data ownership and management training to our back-office employees, ensuring security, efficiency and informed decision-making in matters surrounding data. We will ensure that our people will benefit from data literacy and analytics training, strengthening their ability to understand, interpret and leverage data effectively.

We will promote a data culture across SGN as we take the steps to ensure our people understand the value of data and have the skills to analyse it and derive business insight from it.

For GD3, our investment in Recruitment, Apprenticeships & Data Literacy will deliver: role-specific digital training pathways; data literacy and analytics training; data ownership and management training for data stewards; apprenticeships to grow new digital talent; and knowledge transfer requirements embedded in partner contracts. This investment provides the capability backbone for adopting our new catalogue, master data management, governance, and platform capabilities, and for secure data handling aligned to DBPG requirements and DSI-readiness.

19 Digitalisation Strategy (continued)

1. Getting the basics right (continued)

Data and AI governance

To ensure our Digitalisation Strategy is delivered, we must understand the needs of customers, stakeholders and our organisation, and use these insights to shape products and services that create end-user value. We pride ourselves on doing this at SGN.

We have established the IDEAS change principles to ensure the success of any initiative and to provide a framework for gauging whether it has achieved its objectives.

The IDEAS principles:

- **Inform/Involve** – keep people informed about the vision, what's changing, why, when and what it means for them. Involve the right people in designing the new way of working and how it is implemented.
- **Design** – design the change so that benefits are realised by aligning processes, systems and structures.
- **Equip** – equip people with the knowledge, skills and behaviours they need to work in a new way.
- **Assess** – assess the context, understand what people will need to do differently and the obstacles they might face.
- **Sustain** – provide support as people get used to new ways of working and track and encourage adoption, with a benefits realisation plan.

Our governance ensures plans remain aligned to these needs throughout delivery.

Our governance process uses our 'change strategy and plan' workbook to give a clear, concise view of what is proposed, why it is needed, the targeted outcomes and the benefits it will bring. This allows us to set success criteria upfront, avoid unnecessary effort, and ensure teams share a well-developed understanding of outcomes. Starting this way drives higher success rates in meeting the needs of customers, stakeholders and our organisation.

For GD3, our investment in Data Governance will deliver: data owners and stewards across all critical domains; standards and scorecards for data quality measurement; a compliance framework aligned to DBPG; and collaboration on the Gas Common Information Model (CIM) with GDN peers. Governance artefacts will evidence DBPG compliance and gate publication to the data sharing platform and, in time, the DSI.

AI governance

As we elevate AI within our Digitalisation Strategy, we will govern its development, deployment and operation with the same rigour we apply to our data assets. SGN has established a formal AI governance approach to provide structured oversight across the organisation, anchored in nine principles:

1. **Safety** – AI systems must not compromise the safety of our network, employees, customers or the public.
2. **Explainability** – AI decisions must be understandable and interpretable by the people affected by them.
3. **Robustness** – AI systems must perform reliably under expected and unexpected conditions.
4. **Privacy** – AI systems must protect personal data and comply with data protection legislation.
5. **Accountability** – Clear ownership must exist for every AI system, with defined responsibilities for outcomes.
6. **Human-in-the-loop** – Critical decisions must retain human oversight and intervention capability.
7. **Bias and equity** – AI systems must be tested for and mitigated against bias, ensuring equitable outcomes.
8. **Auditability** – AI systems must maintain logs and documentation sufficient for independent audit.
9. **Security** – AI systems must be secured against adversarial attack, data poisoning and misuse.

Having the right guardrails in place is essential in SGN to balance reward and risk.

These principles are overseen through a governance structure that provides line of sight from Board level through to implementation, with regular review by our AI Business Forum chaired by the Director of Data & AI. All AI implementations, from concept to operational delivery, are strictly governed under our fair, ethical and safe guidelines. This applies across the full lifecycle, from data ingestion and model training to deployment and monitoring, and aligns with Ofgem's 2025 Ethical AI guidance for the energy sector.

Privacy remains a critical consideration as we deploy more intelligent and automated capabilities. Where any AI system processes personal data, we apply data protection by design and by default to identify and mitigate risks early in the lifecycle. Each use case follows a Data Protection Impact Assessment, with embedded controls to ensure GDPR compliance, uphold transparency and protect the rights of individuals.

20 Digitalisation Strategy (continued)

1. Getting the basics right (continued)

Our digital and data principles

As we adopt digital technology, we stay focused on the value it delivers for customers and stakeholders. Investing in the right solutions at the right cost is essential to support the energy sector's path to net zero while delivering safe, reliable and efficient services. SGN's Architectural Principles – aligned to IDEAS and underpinned by standards and design patterns – guide solution design for consistency, interoperability and reuse, meeting business goals and regulatory duties. Governance from the Technical and Data Design Authorities provides design assurance. For GD3 we will prioritise reuse, before buy and build, cloud native design, open standards, API first integration, and DSI ready data sharing and catalogue services.

Our data principles work alongside IDEAS when developing digital products and services. IDEAS governs delivery and adoption; the data principles ensure best practice in data management so our products are ethical, owned, secure and safe to use.

We treat data as a strategic asset and have a thorough approach to ensuring it is fit for purpose and delivers value. A data governance framework ensures our principles are upheld and reflect data best-practice guidelines so stakeholders receive the full benefit of our digitalisation efforts. For GD3, they have been updated to reflect AI governance:

1. We treat data as a shared, strategic asset.
2. We aim for continuous improvement and excellence in the way we generate value from data and AI.
3. We hold ourselves to the highest ethical standards in the treatment of data and deployment of AI.
4. We have guidelines in place to ensure accountability for data assets, AI models, insights and actions.
5. We believe in sharing data with those who can benefit from it.
6. Data and model ownership is defined to maintain quality and maximise benefit.
7. Our data is secure, our AI systems are trustworthy, and our digitised systems are safe to use.
8. Our data is recorded and classified using common standards to make it findable and reusable.

Our governance process underpins our digitalisation framework, ensuring value will be derived from the capabilities, platforms and future services we develop. It applies to data we use internally, data we share as open data or under licence, and to any AI models we develop or deploy.

Our plans for GD3 include investing in Data Governance to deliver data owners and stewards across all critical domains.

21 Digitalisation Strategy (continued)

1. Getting the basics right (continued)

Secure by design

As a Critical National Infrastructure (CNI) provider, managing cyber risk is core to our licence to operate. Information Security is embedded across our business, and our approach is anchored in the NIST Cybersecurity Framework (Identify, Protect, Detect, Respond, Recover) to strengthen resilience of our digital services and data.

We design in security from the start. SGN's enterprise architecture is governed by a Cybersecurity Architecture Strategy and a set of Security Architecture Principles aligned to National Cyber Security Centre best practice, ensuring new and existing services are secure by design and by default.

People and partnerships matter. We run year-round awareness assessments and training to maintain a strong security baseline, and we work with Ofgem and industry partners to shape adaptive, risk-based investment plans. We are progressing the Energy Digitalisation Taskforce recommendations, including zero-trust principles, managing cascade impacts, and fostering a culture of safe information sharing.

Together, these measures provide a robust, adaptive cybersecurity posture that underpins our digitalisation agenda and protects customers, communities, and critical operations.

Our core Security Architecture Principles are:

1. **Confidentiality:** ensure that data is protected against unauthorised disclosure.
2. **Integrity:** ensure that data is protected against unauthorised modification or destruction.
3. **Availability:** ensure that data, systems and services are available when they are needed.
4. **Identity and access control**, including principles of least privilege, separation of duties, need to know and zero trust: ensure that data, systems and services are only accessible to those individuals and services that are authorised to access them.
5. **Defence in depth:** take a layered approach to security.
6. **Secure by design:** consider security context and risk profile from the outset and design services to minimise the risk of compromise and disruption and to make detection and recovery easier.
7. **Design for failure and fail safe/secure:** ensure services are resilient, robust and available and, if they should fail, that they do so in such a way that does not allow data to be compromised.
8. **Minimise attack surface:** ensure that systems and services are configured and patched to minimise risk of compromise.
9. **Third party assurance:** ensure that third-party services and suppliers adopt a security posture that protects our data and services.
10. **System security controls:** apply appropriate controls to systems, services and end user equipment.
11. **Security monitoring and logging for traceability:** monitor the status of critical systems and user behaviours and carry out appropriate logging to support detection and response to cyber incidents.
12. **Response and recovery:** ensure that processes are in place to respond to and recover from cyber incidents.

By adopting this approach, we create technology products that our customers, stakeholders and staff can trust for their privacy, safety and security.

In addition to these 12 core commitments, we will be working with our supply chain on their cyber resilience to further limit third-party threats. We will continually assess cyber related regulation updates to ensure that we remain aligned with regulatory expectations and provide the most cyber-resilient infrastructure possible.

For GD3, our secure-by-design approach has been enhanced with specific attention to emerging AI-related threats. As we deploy AI systems across our operations, we are ensuring that our security posture addresses the unique risks that AI introduces, including adversarial inputs and data integrity concerns. SGN's approach includes regular testing and assurance of AI systems alongside our broader cybersecurity programme.

Our collaborative efforts with Ofgem and alignment to evolving regulatory guidance will continue to shape and enhance our cybersecurity posture throughout GD3.

Security of our data is vital and we run year-round awareness assessments and training to maintain a strong security baseline.

22 Digitalisation Strategy (continued)

2. Our platforms and capabilities

In line with our commitment to establish digital foundations by 'Getting the basics right', we are dedicated to advancing and enhancing our capabilities in handling technical data.

By developing our cloud data platforms, we aim to unlock the full potential of our data and foster innovative, data-driven solutions, enabling us to optimally harness our data skills. These robust platforms will not only enhance the storage, management, analysis, and sharing of data but will also play a pivotal role in supporting decision-making both within our organisation and, through opening access to our data, by our stakeholders.

The next phase involves using our high-quality data foundation to implement digital platforms and elevate our digital capabilities. This encompasses the creation of platforms dedicated to data sharing, analytics, reporting, AI and innovation.

This strategic infrastructure development will allow us to better store and manage large volumes of data, improve data accessibility, and empower our employees to utilise data more efficiently, promoting safer and more efficient operations.

Data lake and integration layer

Our data lake and integration layer is essential to our Digitalisation Strategy. To make sense of the vast quantities of information that exists across our organisation, our approach involves centralisation and standardisation of this data, ensuring we don't miss out on valuable insights.

We are working to identify all potentially valuable information within our business and make it available in a central data repository, which integrates and standardises information sources. These information sources can include both structured and unstructured data residing in production databases or as images and documents.

By centralising this information securely in a virtualised data lake, we create efficient data flows and the data foundations that underpin data sharing, analysis, reporting, AI and innovation.

The development of a data lake and integration layer is an ongoing activity. We are most focused on our critical data assets that are in demand by our people and stakeholders, and which drive valuable insights by refining, tuning, and developing the data foundations over time to continuously improve the performance of the platform and the value potential within it. This will become a critical part of our data infrastructure.

During GD2, we have automated data pipelines into our central data lake, removing inefficiencies of manual processes and improving scalability for reporting requirements. For GD3, our investment in a modern integration platform will deliver open standards and API-first design, anticipating the interface patterns required for the sector's Data Sharing Infrastructure (DSI).

AI-enabled platforms and capabilities

A default design pattern for AI implementation at SGN that underpins the AI strategy, especially as related to internal corporate services, IT operations and gas network asset management, is to use the agentic AI capabilities built into core platforms. Our chosen technologies have rapidly evolving agentic AI capabilities which we will implement to improve our business and regulatory outcomes.

Where these platforms are unable to deliver a specific business outcome (risk identification in field services for example) we will assess best-in-class vendors to deliver services. All chosen technologies are expected to provide open APIs for connection to other systems and ensure efficient data flow and intelligence throughout the ecosystem.

Data sharing platform

One of the key strands of our Digitalisation Strategy is developing the capabilities for sharing our data as part of our collaborative journey towards net zero and delivering societal benefits.

It is important to us that our stakeholders and data consumers have the ability to understand, find and access the data assets they need to innovate, support their business priorities and inform their plans for net zero. We are also aware of the recommendations under the EDiT report and in particular the development of a Data Sharing Infrastructure to facilitate the interoperability of energy data.

In 2025, we launched our next-generation Open Data Sharing Platform, providing our stakeholders with enhanced access to our open data assets. We have published datasets via the new platform and 104 pipeline datasets in downloadable shapefile format using the new interoperable GDN data standard. This moves us beyond static publication toward programmable, interoperable data services.

For GD3, all catalogue, APIs, and sharing services will be engineered to interoperate with the sector's DSI as it scales. The digitalisation licence condition and Digitalisation Re-opener mechanism provide the governance and change route if scope needs to evolve as DSI standards develop. The DataOps operating model will govern the organisation, service levels, and standards for data sharing operations.

23 Digitalisation Strategy (continued)

2. Our platforms and capabilities (continued)

Analytics and reporting platform

A key factor in the success of our Digitalisation Strategy is the ability to produce actionable insight and make evidence-based decisions to improve our business performance. We will develop our existing suite of analytics and improve speed of access to insight across our business. This will provide us with greater visibility of our environment and help us become a more adaptive and responsive organisation.

The provision of self-serve analysis capability across our business will allow employees to produce information to support their decisions quickly and effectively. This capability will help us gain a deep understanding of our business, identify and solve performance issues, highlight opportunities to take action and introduce a culture of continuous improvement in everything we do.

For GD3, our investment in Business Analytics & Exploration will further develop this self-serve capability. The report catalogue established in GD2 – providing line of sight of report ownership, data content, classification, and sourcing – is the foundation for our planned kite-marking system that will denote reports produced under governance and quality controls.

Innovation platforms

Put simply, robust digital foundations will enable us to innovate. Use of state-of-the-art technologies such as AI and Digital Twin are becoming increasingly commonplace. Within the context of putting the majority of our investment and effort into achieving fundamental digital and data maturity by getting the basics right and developing the platforms and capabilities we need, we will innovate where it makes most sense to do so. These experiments and innovations will be focused where we can embed and operationalise new capabilities where we can prove value.

For GD3, we will develop and maintain platforms to support AI model development and deployment (governed by our nine-principle framework), Digital Twin for asset visualisation (explicitly endorsed by the GD3 Final Determination), and IoT capabilities for real-time network monitoring. These innovation platforms will position SGN to take advantage of emerging technologies as they mature.

The development of innovative platforms which harness new and emerging technologies will enhance our ability to manage our network, drive operational efficiency, increase safety, help decarbonise the energy system, and lower costs to customers.

Innovation in the work we do has been enabled by robust digital foundations, with further developments ahead for GD3.

24 Digitalisation Strategy (continued)

3.
Our business outcomes

By leveraging our improved platforms and capabilities alongside foundational digital and data skills we will achieve key business outcomes that create value for our customers and stakeholders.

Achieving these outcomes is the means to realising our digital ambition and making a positive impact to society through the services we provide. SGN's priority is to uphold regulatory standards by providing a safe and efficient service for our customers while progressing towards net zero.

We will ensure compliance with regulations while driving business transformation. Building upon our growing digital and data capabilities will allow us to improve performance by modernising legacy business processes and fully utilising data and analytics. We will be able to explore and implement future technologies and ensure our digital products and services are inclusive, secure, sustainable and reliable.

Stakeholder and societal value

Our Digitalisation Strategy has been developed with the input of our stakeholders, prioritising their needs. Throughout our continued efforts towards digitalisation, we're committed to bringing value to them. Robust foundation and purpose-built capabilities and platforms have been developed with stakeholders in mind and help ensure our digital and data products are inclusive, secure, sustainable and reliable.

Ongoing investment in our data sharing platform and DataOps capability will support the journey to achieving net zero by providing stakeholders with the access to the data they need to innovate and develop solutions for a net zero future. It is our aspiration, through continued engagement with our stakeholders, to create social value by increasing the range of data products we currently offer as well as the ease with which they can request and access those products.

Data on network pressure and demand is a critical enabler of our strategic aim to reduce network leakage by managing pressure reduction, and also for planning the introduction and blending of biomethane – which drives towards net zero. These examples illustrate the real and practical linkage between digitalisation and the creation of real-world social value.

Regulatory obligations

SGN sustainably meets Ofgem's expectations on Data Best Practice, Interoperability, AI, and Digital Twin solutions, while aligning to legal mandates. We will work alongside our sector colleagues to participate in the data sharing infrastructure in pursuit of greater energy system effectiveness and decarbonisation of the energy sector.

Through robust data management practices, we ensure the reliability, security, and accessibility of data, thereby enhancing safety and operational efficiency through informed decision-making. By developing interoperable systems, we facilitate seamless communication and collaboration with our stakeholders, promoting innovation within the industry. By harnessing AI technologies, we enhance safety across our network. The implementation of system-wide monitoring and modelling solutions enables the creation of virtual replicas of physical assets, facilitating real-time monitoring, analysis, and simulation to improve performance.

The GD3 Final Determination explicitly endorses our investment in catalogue, metadata standards, Master Data Management (MDM), integration platform, and Digital Twin as the foundations for DBPG compliance. We will participate in the data sharing infrastructure in pursuit of greater energy system effectiveness and decarbonisation. SGN's commitment to these practices not only enables us to provide a safe and efficient service, but also ensures compliance with legal mandates, fostering a sustainable and future-ready gas distribution network.

Business transformation

Our focus on 'Getting the basics right' provides the foundations to continually develop our capabilities and platforms, transforming our organisation to become digitally led. We are applying these capabilities across our business to modernise legacy business processes as modern digital and data-enabled processes, achieving performance gains and further digitalising the business.

Our business transformation programme will deliver this in phases: establishing foundations and process improvements in the early part of GD3, realising efficiencies from new systems and automation through the middle of the period, and achieving optimised operations with advanced technology deployment by the end of GD3. The digitalised processes will positively impact our organisation and our stakeholders, enabling us to deliver a safe and efficient service that better serves our communities and vulnerable customers, while decarbonising our energy solutions and working to achieve our net zero goals.

25 Digitalisation Strategy (continued)

3. Our business outcomes (continued)

Business excellence

Our commitment to achieving business excellence is driven by prioritising the safety and efficiency of our services. We will improve our operational efficiency by ensuring our workforce have access to the right digital tools, including modern mobile platforms for field data capture and integration. This commitment not only enhances the safety of our employees and customers, but also enables us to deliver a more reliable service.

Empowering our employees with the right technology will facilitate real-time monitoring of work environments and identification of potential hazards. It will enable the streamlining of processes so that our employees can communicate and collaborate more effectively and focus on activities that will generate value for our customers.

We are rolling out modern mobile platforms across our field workforce, enabling engineers to capture and upload data accurately in the field, reducing handoffs and errors while giving them better access to the information they need to complete their work safely and efficiently.

Future of Energy and innovation

Our improved capabilities and platforms allow us to develop and implement innovative new technologies within our organisation and across our services. These technologies will place us as industry leaders and bring about performance gains and added value to our customers.

Digitalisation, and the shift toward data-driven gas networks, will increase as the decarbonised energy system of the future develops. SGN's innovation team will use our digital platforms and capabilities to explore and evaluate new data capture and sharing methods and use them to bring value to our customers and stakeholders.

The new technologies and methodologies we will be able to develop will provide us with a better understanding of our processes and services and increase our ability to continually improve them. Innovation will also help enable the successful transition towards decarbonisation of gas and support us in delivering our net zero goals.

Our GD3 business plans coalesce around our 'Whole System Approach' based on three innovation streams: developing new digital data acquisition systems; addressing whole-system interoperability and decommissioning needs; and regulatory policy change and framework mapping.

H100 Fife is a UK-first end-to-end green hydrogen system on the Fife coast and will provide critical evidence evaluating the future potential role of hydrogen required for a successful energy transition.

26 SGN RIIO-GD3 commitments

Data is fundamental to the ability to meet regulatory and business outcomes. Ofgem has recognised this by supporting our data and digitalisation requests, reinforcing Regulator confidence in our digital framework and providing the funding backbone of our programme with five explicit investment areas:

- **Data platform and operating model** – Define and iterate the enterprise architecture for data/digital/analytics, modernise the integration layer, consolidate and expand the data lake to cover all critical datasets and evolve the data-sharing platform in line with Ofgem's emerging Data Sharing Fabric. Broaden the analytics 'toolbox' to enable secure self-serve reporting and advanced analytics.
- **Catalogue and master data management** – Scale the enterprise data catalogue from HR into all critical structured and unstructured assets, re-procure and operate the cataloguing toolsets, automate technical-metadata ingestion and make metadata easily searchable. Implement centralised MDM processes (creation, propagation/synchronisation, reconciliation, mapping) supported by an enterprise MDM platform and reference-data APIs so users can reliably find, trust and reuse data across analytics and sharing use cases.
- **Data governance** – Formalise Data Owners and Stewards for every critical dataset with published responsibilities and standards, institute continuous data-quality monitoring and remediation and evolve a reference enterprise data architecture. Refresh Data/Digital/AI policies under a compliance framework (including ethical-AI guidance) to keep pace with Ofgem's DBPG and flexible regulation, phasing delivery across four work packages through GD3.
- **Recruitment and data literacy** – Implement a tiered data-skills framework that mandates core data-literacy modules for all data users, delivers role-based learning pathways for data professionals and expands apprenticeships and university partnerships. Recruit to convert contractor reliance into permanent capability; curricula and reusable materials will be embedded in performance processes, with uptake and satisfaction tracked to iteratively refresh content across GD3.
- **Business analytics and exploration** – Operate an agile analytics squad to prosecute a Board-sponsored, prioritised backlog that diagnoses performance issues and deploys targeted fixes. This will deliver investigatory/diagnostic analysis, performance dashboards and embedded data-driven solutions in core processes.

Data platform and operating model, and catalogue and master data management represent the largest share of investment, reflecting the foundational nature of these capabilities.

A modernised workforce, achieved through digital enablement, talent recruitment, and the upskilling of our existing employees with data and digital skills, is vital to support our digital transformation.

Innovation showcase

28 Intelligent Gas Grid – AI-enabled network optimisation

The Intelligent Gas Grid project, funded through the Strategic Innovation Fund (SIF) beta phase, uses remote control pressure systems as the enabling technology alongside machine learning and AI applications to optimise network pressures and provide insights on network performance.

During GD2, the Upredict autonomous pressure control concept has been under live trial on SGN's Southern network. Over 60 District Governor sites are now operating with communications and anomaly detection capabilities, and a High Force Actuator has been installed and tested at a City Gate Station.

The applications developed under this project are proven to reduce methane leakage, increase the feed-in capacity for renewable gases such as biomethane and hydrogen and flag anomalous activity on the networks. Subject to assessment of cost effectiveness, the benefits in operating the networks will be delivered progressively through GD3 as the solution is rolled out.

➔ This project aims to explore potential solutions for the network by integrating AI/ML autonomous control with Utonomy's remote control pressure management technology.

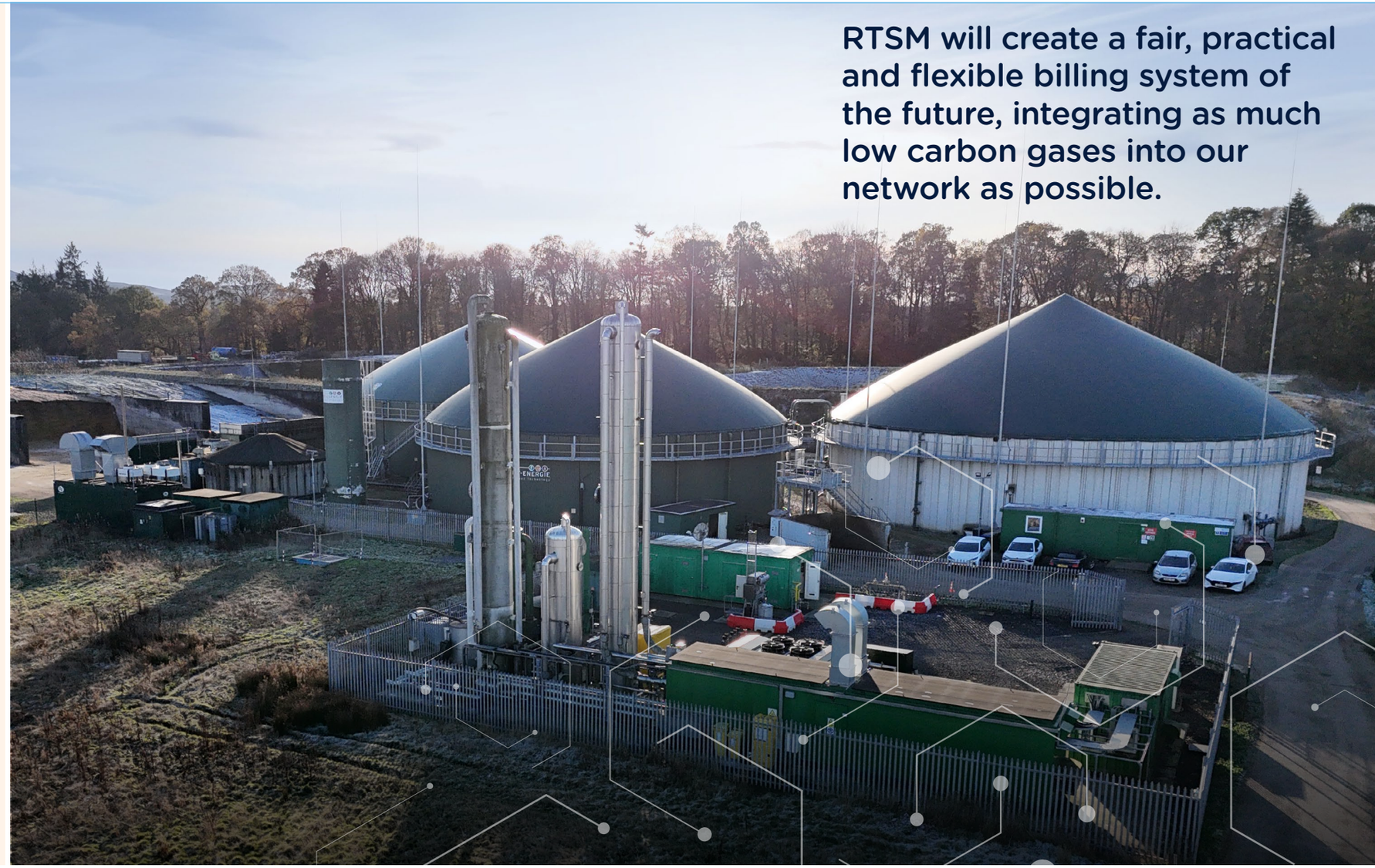
29 Real-Time Settlement Methodology (RTSM)

RTSM is our industry programme, delivered with Xoserve as Central Data Service Provider (CDSP), to make energy (kWh) the unit of account for gas billing and settlement in a multi-gas network.

As green gas volumes grow in the future, the current Flow-Weighted Average CV (FWACV) calculation approach of one average Calorific Value (CV) per Local Distribution Zone (LDZ) creates unbilled energy and cross subsidies. Customers near injection points are at risk of overpaying on volume. RTSM replaces that with time stamped CVs at the right level of granularity, so suppliers bill fairly for the energy customers receive while enabling wider low carbon gas adoption across our footprint. The work builds directly on Cadent's Future Billing Methodology and formalises the data, models and interfaces needed to operate a mixed CV system at scale.

It is SGN's intention in GD3 to sequence delivery through engagement, methodology, FEED and demonstration, with industry-wide implementation targeted for 2030. Phase 1 has established the basis of design for CV modelling, data and integration. This brings together GIS topology, SCADA/telemetry and consumption profiling to compute daily settlement CVs at node level, typically around pressure reduction points.

➔ Data on network pressure and demand is a critical enabler for planning the introduction and blending of biomethane.



30 Predictive Safety Interventions (PSIs)

With our partner FYLD, field video, voice and photos become real-time safety intelligence using natural language processing and computer vision. Providing proactive prompting crews and managers to mitigate hazards during the job, this brings AI directly to the point of work where risk and context change by the minute.

Building on our SIF-funded Predictive Safety Interventions work, the solution blends live site inputs with safety influencing and human factor data to anticipate risk and target interventions in the moment. Retrospective review shifts to proactive detection and action.

Across SGN deployments, we are seeing measurable reductions in incidents alongside productivity improvements from AI-assisted video risk assessments. Real-time prompts help crews complete work more safely and efficiently while giving managers better oversight of evolving conditions and strengthening our safety culture.

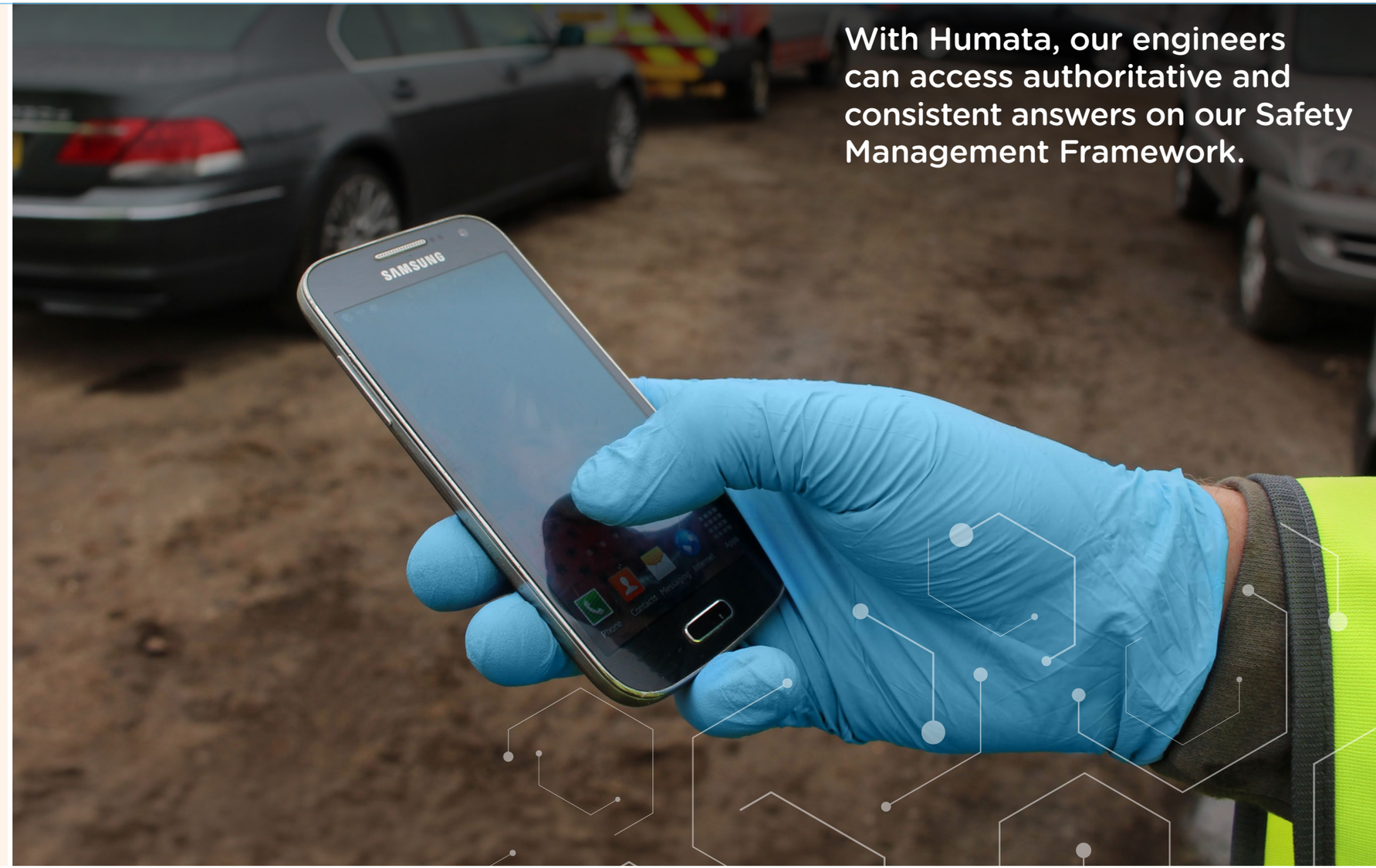
➔ The realities of frontline work are turned into real-time, structured intelligence using FYLD and is used to strengthen delivery performance and enable predictable outcomes.

31 SMF query tool

With our partner Humata, we are turning the Safety Management Framework (SMF) into a chat ready, source linked knowledge base so teams can ask questions across SMF documents and receive answers with clickable citations. This brings searchable, contextualised safety guidance to the point of need.

Engineers can access authoritative answers from their phones, accelerating safe decision making in the field and reducing time spent navigating multiple documents and versions. The result is consistent application of the SMF wherever teams are working.

By coupling conversational retrieval with source linked responses, the tool improves the retrieval and verification of safety critical information. This creates a digital audit trail showing the guidance used in decisions, delivering faster access with transparent provenance.



➔ Using Humata allows frontline colleagues to find the answers they need quickly right from their phone.

32 Energy transition modelling

SGN is focused on accelerating decarbonisation across its 6 million connections.

Companies need to build networks that can support the transition to lower-carbon green gases. SGN is working to link customer choices and built environment constraints with network physics and commercial outcomes, enabling executives and planners to act on evidence rather than assumptions.

Energy transition modelling is a cloud decision platform that forecasts the transition pathway, using an agent-based econometric model of low carbon technology adoption. It integrates SGN customer and pipe data with external research and couples the results to advanced gas pressure modelling to show implications down to individual pipes. Scenario planning and stress testing to 2050 turn ‘what ifs’ into clear options for network design and resilience of shareholder value. This platform has become an effective digital asset, with AI being integrated to improve insights and help drive decisions.

Energy transition modelling supports an efficient, affordable and equitable path to net zero across the communities we serve.

We’re continuing to upgrade and futureproof our network for the country’s energy needs.

33 H100 Fife – hydrogen network demonstration

H100 Fife continues as a ‘first of its kind’ demonstration of a 100% hydrogen network.

The project demonstrates green hydrogen production, storage and use, and will provide critical evidence evaluating the future potential role of hydrogen and the customer engagement required for a successful energy transition.

During GD2, major infrastructure has been completed including a new hydrogen network, a 5MW electrolyser, six storage tanks, and the upskilling of over 70 Gas Safe engineers.

The Hydrogen Demonstration Facility has been positively received, supporting customer visits and demonstrates the domestic conversion to hydrogen for the customers and the wider community, and domestic connections will continue through GD3.

The project will continue to generate critical evidence and learnings for the sector on the safe and efficient operation of hydrogen distribution networks, which will be shared with DESNZ, Ofgem and the wider industry.

Regulatory-grade data flows and billing for hydrogen metering and portfolio views are being delivered via Xoserve. Once fully live, the trial will collect important data through 2027, including customer demand profiles and production management information, to inform future gas-conversion decisions.

Hydrogen storage tanks playing a key role in our pioneering H100 Fife projects.

Our Digitalisation Strategy Action Plan (DSAP)

35 Our approach to implementation

Our data and digital strategy will be implemented across our organisation via our digitalisation framework. Following the stages and achieving the outcomes provided by the framework will ensure our digital success translates to added value for our customers and stakeholders.

This strategy is backed by our Digitalisation Strategy Action Plan (DSAP), which details the progress of the projects and initiatives through which we are delivering this strategy. They are both anchored in the feedback we have received from our stakeholders and in delivering their identified needs and priorities.

Continued digital transformation

Our Transformation Programme provides the conduit through which we deliver business transformation projects to realise organisation-wide benefits as we pivot towards maximising the productivity of our front-line functions and people. The Digitalisation Re-opener mechanism within GD3 provides a route to adjust scope for material, justified changes, particularly as Data Sharing Infrastructure standards crystallise and the sector's interoperability requirements evolve.

We share our progress every six months through our DSAP updates, published each June and December throughout GD3. Each iteration of our action plan will allow you to see how we are implementing our strategy at all levels of our organisation. We report our progress, realisation of benefits and the delivery of outcomes. Regular DSAP updates allow us to seek out further input from our stakeholders into the delivery and anticipated benefits of our projects. Stakeholders will have the opportunity to share their opinions on the success of our projects and initiatives.

Updating our stakeholders on progress

Each DSAP publication will report progress against commitments and milestones; realisation of benefits against plan; baselines and targets for all key measures; corrective actions where variance occurs; and stakeholder feedback and the actions we have taken in response. This reporting structure ensures transparency and accountability throughout the price control period and provides the evidence base through which our stakeholders can track our delivery and hold us to account.

We are committed to the achievement of digitalisation through the delivery of our strategy.

Engaging with our stakeholders is an important part of understanding their data use.

Digitalisation is being implemented through the Transformation Programme to realise organisational benefits and value for customers and stakeholders.

36 Our success criteria for GD3

As part of our six-monthly publication of the Digitalisation Strategy Action Plan, we will be providing updates on the following key success measures.

These carry forward and expand from our GD2 success criteria to reflect the broader scope of our GD3 programme, including AI governance, platform modernisation, business transformation, and our participation in the sector's evolving Data Sharing Infrastructure.

Specific targets and baselines for each measure will be confirmed and published in our first GD3 DSAP (June 2026), ensuring they reflect confirmed starting positions as we enter the new price control period. The following table sets out what success looks like, how we will measure it, and the programme or initiative to which it is aligned.

Action plan area	GD3 outcome	Key measures
Data best practice and DataOps	Enterprise-wide data maturity uplift; trusted critical data assets used across SGN and by stakeholders.	Critical data assets catalogued; Q-FAIR kite-marking coverage; API availability; open datasets published.
Open data and interoperability	Full participation in the energy sector data sharing infrastructure with interoperable, machine-readable datasets.	New shared datasets in machine-readable formats; stakeholder satisfaction; request-to-access timeliness.
Secure by design and AI safety	Security embedded across platforms and AI systems; resilience against emerging threats.	Material security incidents; threat modelling coverage on new services; AI assurance coverage.
AI-enabled operations	Operational efficiency and safety improved by AI applications across the network.	Leakage reduction; AI models in production; predictive intervention adoption.
Workforce capability and tools	Staff equipped with digital and data skills and modern tooling.	Role-specific training completion; competency assessment; data literacy improvement.
Vulnerable customers and digital inclusion	Targeted support scaled with inclusive digital and non-digital channels.	Vulnerable customers supported; PSR satisfaction; digital toolkit usage; non-digital response timeliness.
Stakeholder co-creation	Structured co-creation with Ofgem and stakeholder groups; transparent decision-making.	Co-creation sessions held; stakeholder feedback addressed; publication cadence met.
Hydrogen and biomethane readiness	Demonstrate safe, efficient operations supporting renewable gas feed-in.	H100 milestones; renewable feed-in capacity; safety performance; telemetry coverage.
Platform modernisation	Consolidated, cloud-native platforms with enterprise integration and open standards.	Platform consolidation; uptime; data pipeline reliability; time-to-insight improvement.
DSAP transparency and benefits	Clear six-monthly reporting of progress, benefits, and corrective actions.	DSAP publications on schedule; benefits realisation to plan; corrective actions closed.

Glossary of key terms

38 Glossary of key terms

Term	Definition
Agentic AI	AI capabilities embedded within core platforms that automate actions under governance.
AI	Artificial Intelligence. Computational systems performing tasks requiring human intelligence.
AI governance	SGN's nine principle lifecycle governance framework for safe, explainable and accountable AI.
API	Application Programming Interface. Predefined interfaces that enable data and services to be shared between applications.
CAF	Cyber Assessment Framework. A structured tool developed by UK's National Cyber Security Centre to help organisations assess and improve their cyber security and resilience.
CDSP	Central Data Service Provider. Xoserve is the CDSP for Britain's gas market.
CIM	Common Information Model. A standard way of describing and sharing information about IT systems, networks or power systems so that different tools and technologies can understand and work with the same data consistently.
CNI	Critical National Infrastructure. The essential systems and services a country relies on for daily life and security such as energy, water, transport, communication and healthcare.
CO	Carbon Monoxide.
CV	Calorific Value.
Cyber Security & Resilience Bill	Forthcoming UK legislation updating cybersecurity duties and resilience expectations.
Data Catalogue	Enterprise system that indexes metadata and improves findability of data.
Data Lake	SGN's centralised, virtualised repository of structured and unstructured data.
Data Steward/ Data Owner	Roles accountable for managing, improving and assuring critical data assets.
DataOps	Operating model for governed, automated data pipelines and data product delivery.

Term	Definition
DBPG	Data Best Practice Guidelines.
DESNZ	Department for Energy Security and Net Zero.
DGE	Downstream Gas & Electricity. These are parts of the energy system that deliver gas and electricity to homes and businesses.
Digital Twin	A virtual model of physical assets enabling real time monitoring, analysis and simulation.
Digitalisation	Integration of digital technologies into business operations.
DSAP	Digitalisation Strategy Action Plan.
DSI	Data Sharing Infrastructure. NESO-led national framework for interoperable energy data exchange.
EDiT	Energy Digitalisation Taskforce.
EDM	Enterprise Data Management. SGN's team that are responsible for data governance and elements of data management.
ENA	Energy Networks Association.
FEED	Front-End Engineering Design. Early stage engineering project phase.
FWACV	Flow-Weighted Average CV. The average energy content (calorific value) of gas entering the network, weighted by the amount of gas flowing from each source.
GD2/GD3	Gas Distribution Price Control Periods.
GD3 Final Determination	Ofgem's formal decision defining funding, outputs and obligations for 2026-2031.
GDN	Gas Distribution Network.
GDPR	General Data Protection Regulation.
GIS	Graphical Information System.
IDEAS Principles	SGN's change governance model: Inform/Involve, Design, Equip, Assess, Sustain.

39 Glossary of key terms (continued)

Term	Definition
Integration Layer	Technical layer enabling API first architecture and secure system connectivity.
IoT	Internet of Things.
ISG	Independent Stakeholder Group.
LDZ	Local Distribution Zone.
MDM	Master Data Management.
ML	Machine Learning.
MVP	Minimal Viable Product.
NCSC	National Cyber Security Centre.
NESO	National Energy System Operator.
NIS	Network and Information Systems Regulations.
NIST	National Institute of Standards and Technology.
Ofgem	The Office of Gas and Electricity Markets; the government regulator for the electricity and downstream natural gas markets in Great Britain.
Open Data Platform	SGN's modern open data and sharing platform for stakeholders.

Term	Definition
POD	Presumed Open Data.
PSI	Predictive Safety Intervention.
PSR	Priority Services Register.
Q FAIR	Quality, Findability, Accessibility, Interoperability, Reusability.
REMIT	Regulation on Wholesale Energy Market Integrity and Transparency. An EU regulation designed to ensure fairness, transparency, and prevent market abuse in wholesale electricity and gas markets.
Re-opener Mechanism	Ofgem process enabling scope or funding adjustments within GD3.
RIIO	Revenue = Incentives + Innovation + Outputs.
RTSM	Real Time Settlement Methodology.
SCADA	Supervisory Control and Data Acquisition.
SIF	Strategic Innovation Fund.
SMF	Safety Management Framework.

St Lawrence House
Station Approach
Horley, Surrey
RH6 9HJ

Axis House
5 Lonehead Drive
Newbridge
Edinburgh
EH28 8TG

0800 912 1700

sgn.co.uk