

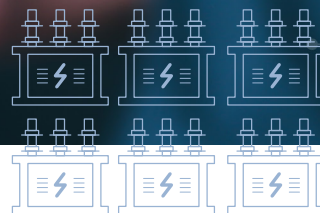
T3 Digitalisation Strategy





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This strategy marks an exciting evolution in our Digitalisation journey building on the foundations we put in place in RIIO-T2 to support and enable our Net Zero 2030 ambition.”



1. Executive Summary

Transforming the grid means making the best use of data and applying new digital technologies to allow the whole energy system to work most effectively and deliver value to consumers.

Our Digitalisation Strategy sets out a clear vision and roadmap for the investments needed in the RIIO-T3 period to continue our digital transformation journey, become a data driven leader within the sector and maintain and operate the existing products and services that we have established. This is in service to the SSEN Transmission strategy, focus and 2030 Goals along with meeting the demands set out by Ofgem through the Data Best Practice Guidance.

We have developed our updated Digitalisation Strategy through internal and external stakeholder engagement, seeking external expertise and advice where appropriate.

Our strategic goal as a Digital function for RIIO-T3 is to **“Harness Digital Capabilities to power business growth and speed”**, which is supported by the Digital Objectives:

- Increase the efficiency and deliverability of the planning, design and build of assets for Net Zero through digitisation
- Elevate Digital Asset Management and be ready to manage a >24GW power system with increased scale & complexities
- Keeping our people and assets safe and secure whilst going beyond industry and regulatory Cyber Resilience obligations

- Become a data-driven leader in electricity transmission and open data standards
- Drive continuous improvement and optimisation of digital capabilities from previous investments
- Ensure users can consume and interact with Digital services in a frictionless way

To execute our Digitalisation Strategy, we will be maturing our Digital capabilities and delivering five strategic investment themes, three of which relate to capital expenditure on IT & Digital. These themes are:

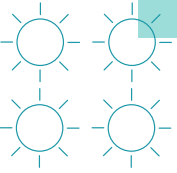
- Enabling Network Growth
- World Class Asset Management
- Data Driven

This strategy and our planned investments will enable our business to deliver on their commitments and goals, whilst developing the capabilities needed to go beyond RIIO-T3 and meet the long-term aspiration “To Deliver a Network for Net Zero”.

As we begin the RIIO-T3 period, we will align our Digital Strategy and Action Plan (DSAP) against this new Digitalisation Strategy, demonstrating the transition and ramp-up from the current regulatory period to the next.

James McLean
SSEN Transmission CIO





2. Introduction

Our RIIO-T3 Digitalisation Strategy outlines our IT & Digital investments for the RIIO-T3 period, providing context for these investments within the broader industry digitisation efforts. Our Strategy focuses on meeting the needs of key stakeholders, fulfilling internal business requirements, and supporting wider industry digitalisation initiatives.

The strategy details the data capabilities required throughout the RIIO-T3 regulatory periods, emphasizing the availability and accessibility of data for new digital technologies and supporting Open Data Initiatives. Implementing this strategy will enable and support broader industry digitalisation efforts, ensuring that SSE can contribute effectively to a digitalised energy sector.

With our ambition to deliver a network for net zero, it is important to recognise the use of digital technology as a powerful core capability. It empowers our business and employees, enabling efficiency in our ways of working, speed of decision-making, and utilisation of accurate and timely data. SSEN Transmission's growth trajectory underscores the importance of these factors.



Our Transmission business interacts with digital solutions every day and it is the Digital team's responsibility to provide and support these modern capabilities, from the brilliant basics of IT services, to cutting edge data platforms and tools.

Continued digital investment within RIIO-T3 is essential to further develop platforms and capabilities to enable our business to operate more effectively and in new digitally enabled ways. Through the liberation of data and exploitation of information in day-to-day business decision making, we can drive efficiencies through our work that directly correlate to benefits for the end consumer.

End-to-end transformation for efficient growth, enabling business focus on high value activities, and enhancing the employee digital experience will drive employee satisfaction and help us embed a culture of collaboration, data best practice and analytical problem solving. Technology investment, through our Digital programme, alongside the provision of a high quality, robust and reliable IT business services, is key to our success on the Pathway to 2030.

This document sets out our objectives, associated investment themes and provides information on how we will deliver the planned investments.



3. Meeting the needs of the Industry, Business and Technology Drivers



Industry Needs

Ofgem and the wider industry recognise that the digitalisation of the energy sector is a crucial step towards achieving net zero by 2050. The British Energy Security Strategy highlights the importance of flexibility in our energy systems to efficiently balance supply and demand, reducing waste.

This flexibility will be enabled by a smarter data driven energy system, integrating networks, markets and assets. SSEN Transmission is supportive of industry led initiatives, to ensure data best practice, facilitate open data sharing and common data sharing infrastructure.

Our strategy sets out the data and digital capabilities required through the RIIO-T3 regulatory period in support of industry needs. This includes:

- The availability and accessibility of data for the new digital technologies.
- Developing our compliance with Ofgem’s data best practice principles for data management.
- Supporting the delivery of Net Zero and the accelerated pace of change needed to meet commitments.
- Adapting our processes and platforms to the wider industry changes in connections and system planning.
- Nurturing the data driven culture across the business.

In addition, we need to continue to meet the requirements of Data Best practices to ensure that we can support the digitalisation of the industry which is critical to achieve UK and Scottish Government targets to achieve Net Zero by 2050.



Business Drivers

Delivering Net Zero:

Digitalisation is the fastest way to Net Zero. It is vital that we embrace digital capabilities and utilise our data as an asset in order to create efficiencies and improve the deliverability of the capital programme. This needs to consider the end to end lifecycle as well as global supply chains.

Digitalised Energy System:

The regulatory landscape has evolved since RIIO-T2 with Digitalising our Energy System an essential enabler of GB Net Zero ambitions. Not only will we embrace increased digital capabilities internally, but we need to meet wider expectations and demands for our products and services. Increased interoperability and sharing of data are firmly set on the horizon, and we will embrace this need fully.

Supporting our growing business:

Our business is growing at a staggering rate to meet the demands of the industry and Net Zero. However, we cannot just scale linearly given the talent constraints and the need to show value for money to consumers. It is therefore vital that we exploit the opportunity that digital brings to enable efficient growth. Our front office and back-office processes and systems need to transform to support a growing number of people.

Efficiency:

We recognise the need to ensure we represent good value for our consumers and believe Digitalising our business presents opportunities to do so through greater efficiency. As a recently established IT function many opportunities still exist that addressing would enable our business to be more efficient. We must be efficient if we want to grow in a way that represents good value to consumers.



Technology Drivers

Evolving Threat Landscape

Given the ever-increasing number of documented attacks on Critical National Infrastructure (CNI), it is not a matter of "if", but "when" a cyber attack will happen. Cyber security is not optional, but an essential component in protecting our CNI. It is vital that our security risks are addressed, and our infrastructure is protected from cyber attacks.

Growing IT Maturity and Capability

In 2020 we established our own Digital function within SSEN Transmission, following the separation from SSEN Distribution and the appointment of the first CIO for SSENT. We have spent RIIO-T2 developing our foundations but our focus for RIIO-T3 turns to refining and maturing the capabilities needed to take us through RIIO-T3 in the way that we desire. In maturing our function, we aim to attract and retain the best digital and cyber resilience talent in Scotland to deliver IT & OT services.

Provide an excellent service to our business

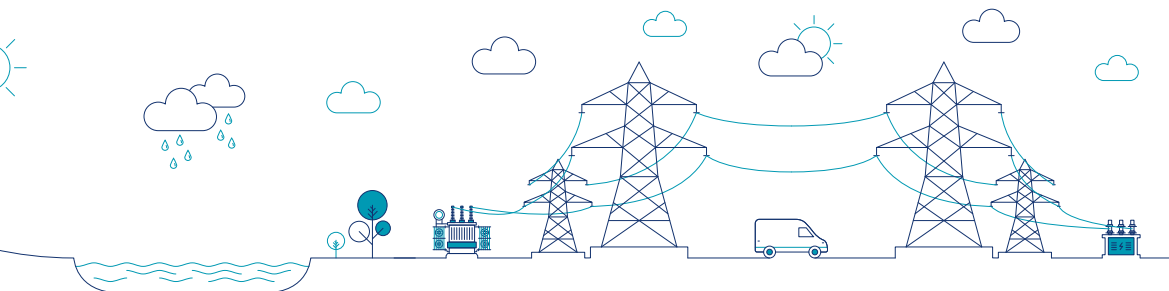
As we have matured as a function, we recognise the need to deliver a great service to our business to ensure that digital is not a blocker for business productivity. We also need to be responsive to the changing business need, meaning we need to be closer to our business as stakeholder and to the wider stakeholder community

Managing Technical Risk

Part of delivering the basics is keeping our estate up-to-date and maintained. We need to maintain a secure and resilient IT estate, reducing our technical debt and risk as well as maintaining the health of IT assets. Managing technical debt in a timely fashion reduces the long-term cost to consumers and ensures our internal customers can function effectively.

Digital Trends and Disruption

The fast paced and evolving nature of the digital industry means it is vital to keep scanning the market for the latest advancements, seeking opportunities to innovate with new digital technologies. For example, our RIIO-T2 Business Plan did not account for AI which has resulted in missed opportunities which we need to catch up with in our RIIO-T3 investments.



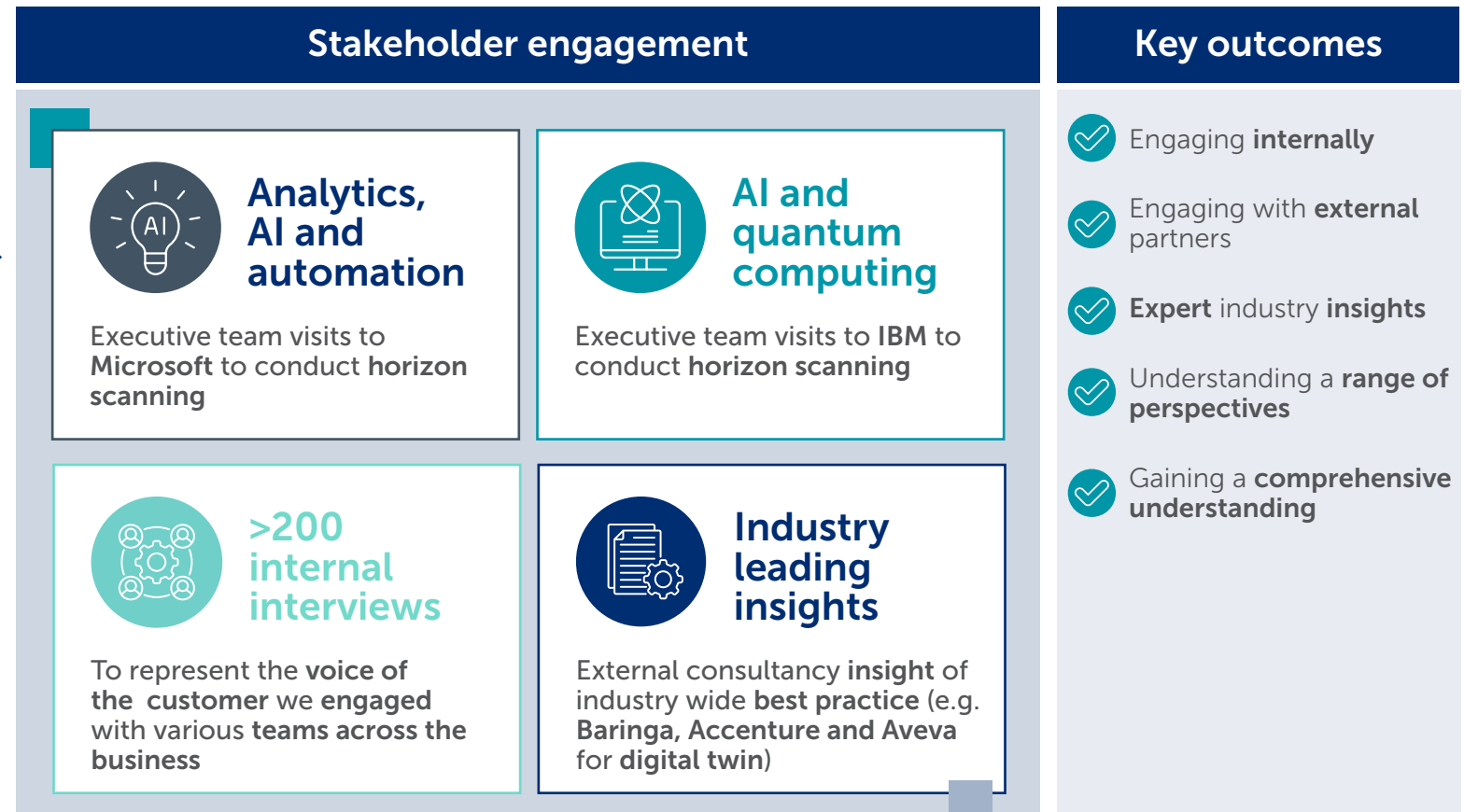
4. Engaging with Stakeholders



How we have informed our investments

Over the last 18 months, we have engaged **internally** and **externally** to gain a comprehensive understanding of stakeholder needs, to inform the development of our RIIO-T3 data and digitalisation strategy.

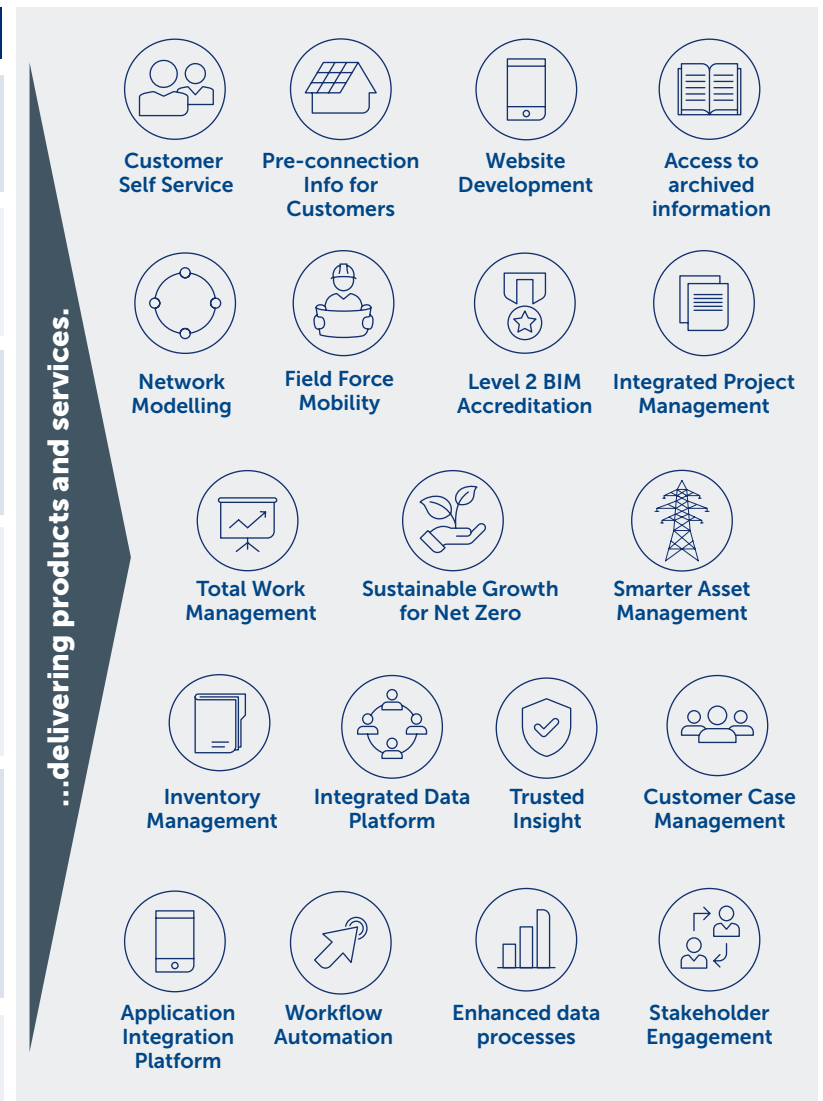
The diagram on the right summarises the engagement that we have undertaken and the impact that has had on developing our strategy for investments in digital and data. Much of our stakeholder engagement has been with internal stakeholders within the business to inform our strategy and investment. They are the voice of the external customer and stakeholders. This has been complemented with external insight and input from vendors and consultancies. Finally, we have presented our planned Digitalisation Strategy and investments to the Network for Net Zero Board.



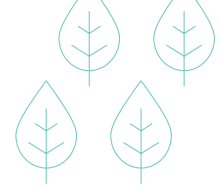
5. Our delivery track record in RIIO-T2

As set out in our Digitalisation Action Plan, we have been focused on delivering value to our key internal and external stakeholders through our products and services

Delivering Value...	Guided by a specific vision
Customer & Stakeholder and Commercial	Provide a high quality and transparent multi-channel service to stakeholders, with increased assisted and self-serve capabilities underpinned by an integrated group of fit-for-purpose platforms for entering and accessing information and insight.
Projects & Capital Delivery	Deliver at scale aligned to the growth of project demands, as a modern, slick and interactive business, moving away from the paper and Excel-based processes to embrace modern technology throughout our business. Continue our BIM journey to ensure we adopt best practice in terms of asset design, asset modelling, data capture and collaboration with our supply chain.
Network Planning	<p>Maximise the value and the opportunities presented by having easy access to a wide range of data from across the organisation to increase system performance and support future network modelling and forecasting to support the planning of a network for net zero.</p> <p>Utilise industry leading software enabling us to comprehensively plan the network of the future.</p>
Asset and Operations	Enhance existing digital solutions and deliver new capabilities across Asset & Work Management to drive business efficiency and maximise asset performance, resulting in decreased network risk and setting the foundation for further enhancements in RIIO-T3. Deliver new Complete Network Insights capabilities, enhanced asset data collection and visualisation, network monitoring and situational awareness. Enhancements to our operational data sharing with NESO & SPEN, alongside control centre disaster recovery facilities and capabilities. Strategically positioned for growth and further enhancements in RIIO-T3.
Enabling IT	Create IT capabilities that provide a fit for purpose suite of applications, supporting end-to-end business processes and enable the business to deliver the outcomes as efficiently as possible. Enhance our digitalisation, interoperability and data sharing capability across the energy industry via open data portals enabling flexible energy, which in turn can provide savings of £30-70bn between now and 2050. Achieved through data-led strategic planning and enabled transformational system-wide benefits, such as cost savings and resilience, via optimal system maintenance, asset health monitoring, planning and operation.
Enterprise and Corporate	Create and deliver cross functional solutions that facilitates better information sharing, enhanced control, improved safety and improved financial insight.



5.1 Our Achievements in RIIO-T2 (1)



Customer, Stakeholder and Commercial

T2 Ambition

- Provide a high quality and transparent multi-channel service to stakeholders, with increased assisted and self-serve capabilities underpinned by an integrated group of fit for purpose platforms for entering and accessing information and insight.

What we have achieved

- We have transformed and driven efficiencies throughout the end-to-end customer relationship journey and our engagement with third parties
- We have automated how we capture and store stakeholder details through our web platform, allowing us to engage with stakeholders based on their individual engagement preferences.
- We have developed a secure, AI enabled, sentiment analysis tool to assess stakeholder feedback, understand sentiment towards us, and identify and understand stakeholders' areas of interest and respond accordingly.
- We have redesigned our Transmission web presence, making data and information more accessible to everyone we engage with and introduced more self-serve capability to accelerate engagements
- We have developed a more sophisticated, tailored, customer facing digital presence for our ASTI projects, bringing greater clarity of our proposed OHL routes, articulation of our project stages and outline opportunities for stakeholder engagement

Feedback from stakeholders

'CRM has completely streamlined the way we work. Having all our information in one place makes it far more intuitive to find what we need. It's transformed how we engage with customers and collaborate internally, giving us more time to focus on the meaningful work that really matters'



Projects and Capital Delivery

T2 Ambition

Deliver at scale aligned to the growth of project demands, as a modern, slick and interactive business, moving away from the paper and Excel-based processes to embrace modern technology throughout our business. Continue our BIM journey to ensure we adopt best practice in terms of asset design, asset modelling, data capture and collaboration with our supply chain

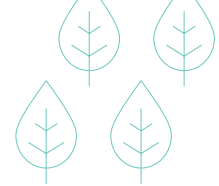
What we have achieved

- We have achieved BSI BIM Level 2 accreditation meaning improved deliverable quality, supply chain collaboration and increased efficiency.
- We have implemented a new Common Data Environment (CDE); AutoDesk Construction Cloud. The CDE improves collaboration, enhance design management and onboard asset data, resulting in improved handovers and a continuous data thread from design to operation.
- We have deployed the first of several phases of our Integrated Project Management (IPM) platform based on Oracle Unifier. This enables us to have a single source of truth for end-to-end project management in Capital Projects, bringing together health and safety, planning, design and construction, risk and financial data into one single platform.
 - By the end of RIIO-T2, we will have digitalised our Consents and Environmental processes by creating a central platform to consolidate and enhance the capture, storage, access, and analytical reporting capabilities for data.

Feedback from stakeholders

'You know every day that you go into IPM that is has the most current information, that you're not looking at the wrong file. It's all there at your fingertips'

5.2 Our Achievements in RIIO-T2 (2)



Network Planning

T2 Ambition

Maximise the value and the opportunities presented by having easy access to a wide range of data from across the organisation to increase system performance and support future network modelling and forecasting to support the planning of a network for net zero. Utilise industry leading software enabling us to comprehensively plan the network of the future

What we have achieved

- Leveraging the scalability and compute power of our cloud platform, we have re-platformed our Network Modelling tools, and consolidated onto a single PowerFactory platform, to run more complex system analysis tasks.
- We have developed a “Master System Model” that allows our planning engineers to manage the system model more effectively and with trusted data, saving time when needing to load the model into modelling tools.
- We have deployed new smart monitoring devices onto the network assets, and we are exploiting that information through a time series data historian, providing richer real time information on system performance and power quality to our planners. We will continue to develop the insight into system and asset performance as we progress through RIIO-T2
- We will have re-platformed our power system simulation capabilities onto our cloud platform, increasing the reliability, scalability and performance of the platform.

Feedback from stakeholders

‘PowerFactory automates repetitive tasks and streamlines complex power system analysis. This automation enables our teams to make faster, data-driven decisions with greater confidence’



Asset and Operations (IT)

T2 Ambition

Enhance existing digital solutions and deliver new capabilities across Asset & Work Management to drive business efficiency and maximise asset performance, resulting in decreased network risk and setting the foundation for further enhancements in RIIO-T3. Deliver new Complete Networks Insights capabilities, enhance asset data collection and visualisation, network monitoring and situational awareness. Enhancements to our operational data sharing with NESO and SPEN, alongside

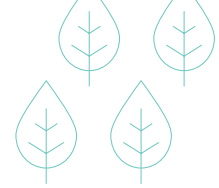
What we have achieved

- We have leveraged our Enterprise Asset Management system (Maximo) to be the primary asset information register for our business and integrated to our GIS platform for linear asset management alongside other core systems. Establishing the foundation for investing in Digital Asset Management in RIIO-T3.
- We have also deployed digitised work management processes, including mobile working, based on Maximo and our mobile solution (Fingertip). This covers all the primary work types and enables our field engineers to have access to the right information in the field to perform their activities.
- The data from our smart monitoring, IoT, devices is available through our corporate data historian across the organisation.
 - We have assessed and rationalised the control centre alarms notifications that are received through SCADA, enabling our control engineers to see prioritised alarms and improve decision making.
 - Improve phasor measurement data sharing and accessibility internally and with the NESO.

Feedback from stakeholders

‘Having the power to build your own visualisations according to your needs is truly powerful stuff. We have a real-time view of the performance of our assets which goes a long way to making the right decisions’

5.3 Our Achievements in RIIO-T2 (3)



Enabling Digital Functions

T2 Ambition

Create IT Capabilities that provide a fit for purpose suite of applications, supporting end-to-end business processes and enable the business to deliver outcomes as efficiently as possible. Enhance our digitalisation, interoperability and data sharing capability across the energy industry via open data portals enabling flexible energy, which in turn can provide savings of £30-£70bn between now and 2050. We have achieved through our data led strategic planning and enabled transformational system-wide benefits, such as cost savings and resilience, via optimal system maintenance, asset health monitoring, planning and operation.

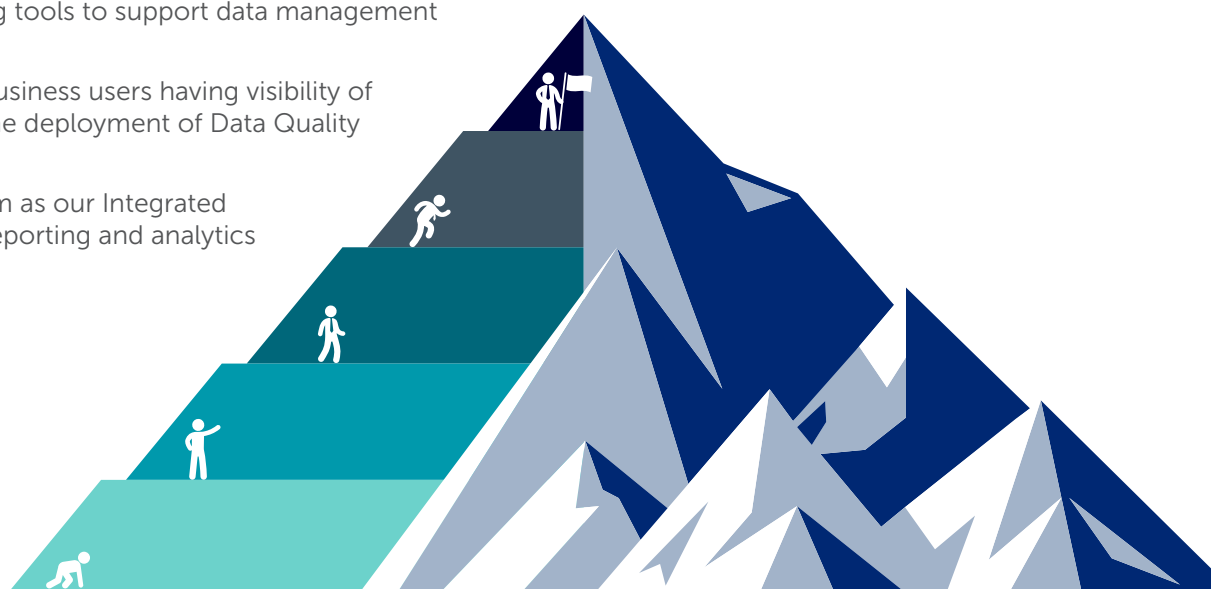
What we have achieved

- We have established the essential technology foundations to enable the business and the digital programme, including in our data capabilities so that we are ready to move forward as a data driven organisation.
- We have appointed over 100 data stewards and data owners in the business, with additional data management and governance roles and responsibilities embedded. Established data cataloguing tools to support data management capabilities.
- Driven increased data quality through business users having visibility of areas of focus for improvements with the deployment of Data Quality tooling
- Established the Microsoft Fabric platform as our Integrated Data Platform and enabled numerous reporting and analytics asset centric use cases

- Deployed Microsoft’s Azure Integration Services allowing data and systems to be integrated quickly and securely to support day-to-day activities and facilitate collaboration across the entire business unit.
- Deployed an Open Data Portal providing internal and external stakeholders access to data sets; signposted with supporting information, which delivers data best practice and Ofgem compliance for industry data sharing.

Feedback from stakeholders

‘These projects have strengthened our core data and analytics foundations, sparking real momentum and a clearer view of our data maturity across the business. T3 takes this even further—our digital success will rely on high-quality, accessible data, and the groundwork laid by T2 puts us in a strong position to unlock even greater value.’



6. Our digitalisation strategy

With our ambition to deliver a network for Net Zero, it is important to recognise the use of digital technology as a powerful core capability. It empowers our business and employees, enabling efficiency in our ways of working, speed of decision-making, and utilisation of accurate and timely data. SSEN Transmission's growth trajectory underscores the importance of these factors.

Our business colleagues interact with digital solutions every day and it is the Digital team's responsibility to provide and support these modern capabilities, from the brilliant basics of IT services, to cutting edge data platforms and tools.

In RIIO-T3 we will build upon our core systems and facilitate digital transformation, enabling network growth and world class asset management. We will identify and execute opportunities to enhance, exploit and optimise process and experiences, through automation, reporting and analytics, to drive efficiency and effectiveness across SSEN Transmission.

Underpinning this is our drive to embed a data-driven culture within SSEN Transmission harnessing the power of data to deliver a safe, resilient and efficient electricity transmission network. We remain committed to investing in our established core services while actively leveraging new emerging technologies to optimise and transform our processes, delivering both efficiencies and valuable insights.

SSEN Transmission's business strategy is 'Delivering a Network for Net Zero'. Our Digital Strategy supports us in achieving our five strategic themes.

How the Digital Strategy helps SSEN Transmission achieve our focus areas



A network that is safe, reliable and resilient

We need to keep our assets cyber secure and resilient to the evolving threat landscape. We will leverage asset data and digital products to drive increased reliability and resilience in network performance, ensuring that we maximise the uptime of our assets



Accelerating the pathway to net zero

We will continue to evolve the digital products and services for the planning, design and delivery of the capital programme and ensure that the supporting corporate services are able to keep pace with the demand for their support



Working with our customers and stakeholders

Creating a consistent, coherent and integrated Digital and non-digital experience with all customers and stakeholders is key to successful engagement across our entire organisation



Being part of one team Transmission

With Digital products and services, we can break down siloes and increase the collaboration across the business, increase employee engagement and increase the digital & data literacy and competency across the organisation



A business that is fair and sustainable

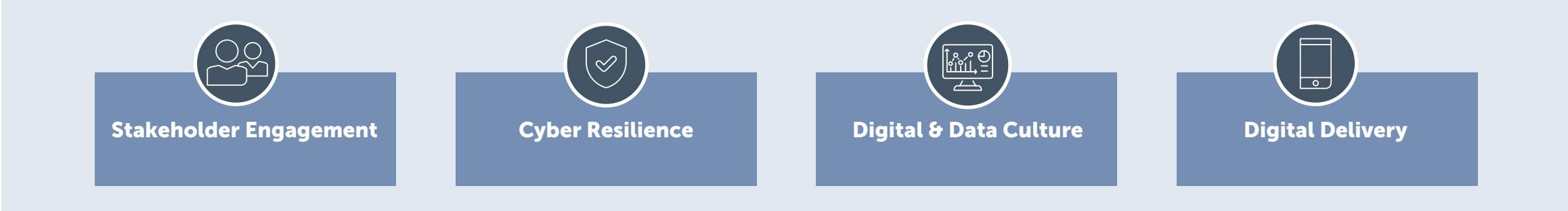
We will establish a robust digital infrastructure to enable efficient growth of the business and ensure that sustainable practices and ways of working are embedded into the organisation

6.1 Our vision and strategy

Based on the business and technology influences set out in the previous sections, we have established our Digitalisation vision and strategy for RIIO-T3 below. This shows our overall strategic goal and associated objectives.

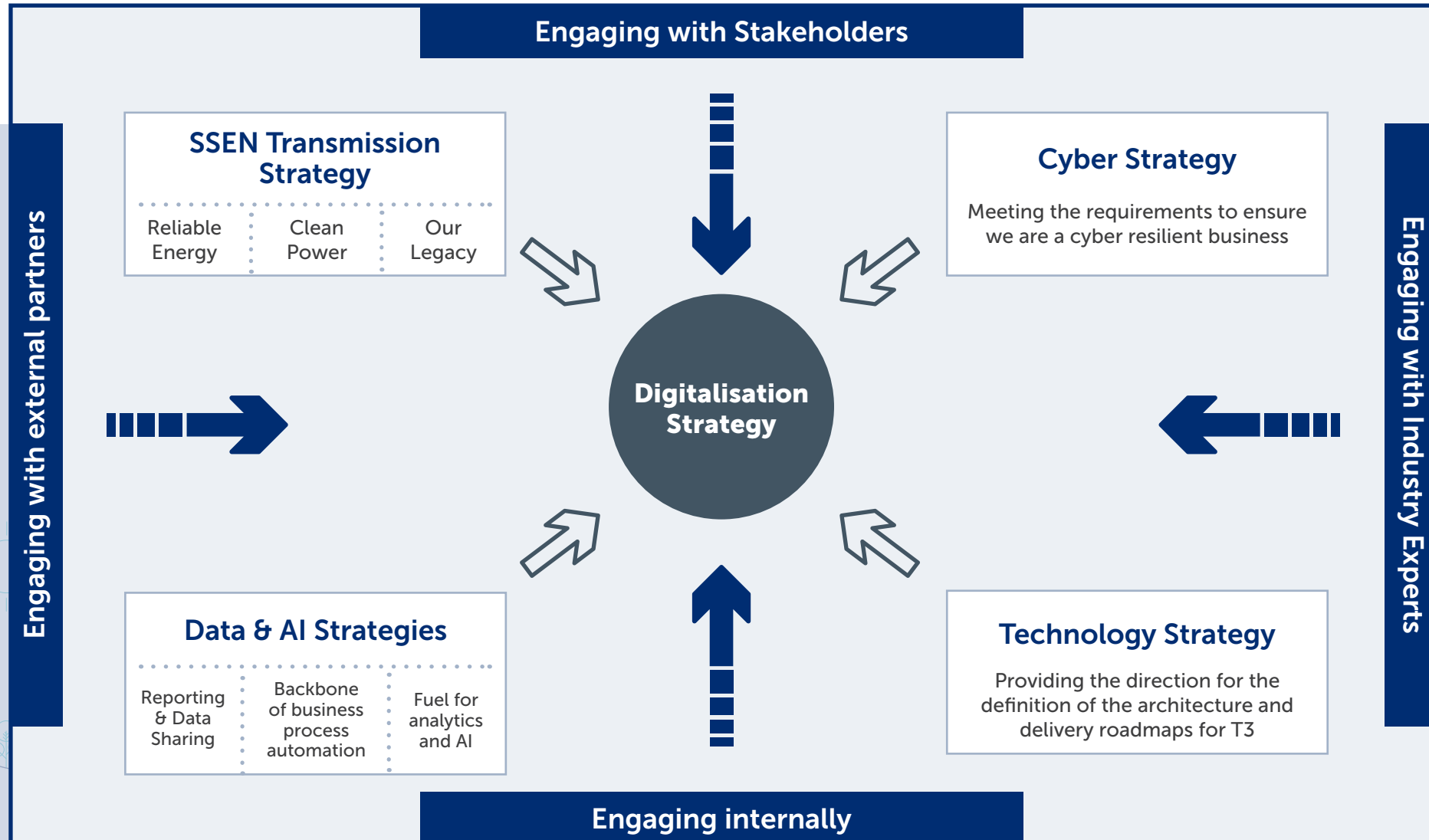


Our enablers



6.2 How we informed our Digitalisation Strategy

We have taken input from a number of internal and external sources as well as our wider strategies to inform our Digitalisation Strategy



6.3 Translating needs into investment

We have taken input from a number of internal and external sources as well as our wider strategies to inform our Digitalisation Strategy

RIIO-T2 established the foundational Digital Capabilities to support our business, RIIO-T3 investment shifts to affect transformational change across the organisation in order to meet our business to grow efficiently at pace. We will build upon our core systems and facilitate digital transformation, enabling network growth and world class asset management. We will identify and execute on opportunities to enhance, exploit and optimise process and experiences, through automation, reporting and analytics, to drive efficiency and effectiveness across SSEN Transmission.

We are committed to investing in our established core services, proactively managing and maintaining our IT & OT estate, while actively leveraging new emerging technologies, for example cutting edge AI developments or exploring opportunities to utilise quantum technology, to optimise and

transform our processes, delivering both efficiencies and valuable insights.

Underpinning this is our drive to embed a data-driven culture within SSEN Transmission harnessing the power of data to meet the growing scale and deliver a safe, resilient, and efficient electricity transmission network.

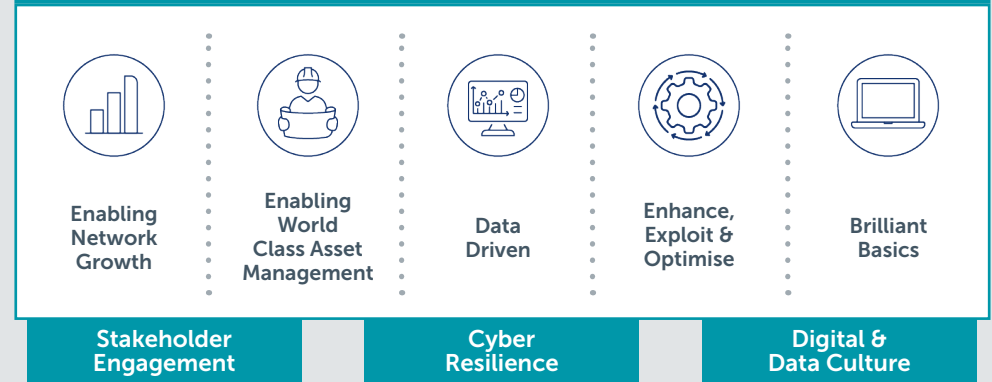
Based on the strategy set out in this section we have developed five investment themes that will execute our strategy. Four of these themes result in capital investment, and are set out in our Project Definition and Investment Justification papers. The fifth will see us develop our operational capabilities to seek and prioritise new business demand and execute a continuous improvement regime to enhance and develop our products and services. The diagram to the right sets out our investment themes against the objectives in our strategy.

Harness Digital Capabilities to power business growth and speed

Our digital objectives:



The five investment areas for our digital pathway to Net Zero



6.4 Reaching digitally excluded customers

Reaching digitally excluded customers

In line with Ofgem's guidance, we design every digital initiative to meet specific stakeholder needs and deliver clear benefits for customers, stakeholders, end-consumers and the broader public interest. Crucially, we recognise that some stakeholders may not have digital access, and we ensure these individuals can equally benefit from our digital programme through alternative, offline means.

Delivering benefits to all stakeholders (digital or not):

Many of our internal digital systems, such as those used for network planning, outage management, and project scheduling, provide indirect benefits to all stakeholders, regardless of their digital access. These systems help us deliver a more efficient, reliable, and resilient network, ensuring that even those who are not online experience improved service outcomes.

Ensuring parity through non-digital engagement:

We remain committed to in-person and offline channels so that no one is left behind. Our digital capabilities are designed to complement, not replace, face-to-face services. For example, stakeholders can attend community consultation events to speak directly with our expert teams, view printed maps, take home booklets, and watch in-person presentations, including 3D visualisations of proposed network assets. We also send thousands of letters to local communities, which often include web addresses and QR codes to help people access our online services directly by themselves or even through family, friends, or community hubs. We are also in contact with stakeholders via phone and by post, based on their preferences or planning obligations, etc.

Communicating in accessible language and engaging in person:

We work hard to ensure our employees can speak about our systems and digital programme in a way that is accessible and easy to understand. Whilst not all employees are technical experts, our public- and customer-facing teams are encouraged to liaise with our digital programme specialists to provide accurate and relevant information to stakeholders. This is supported by internal SharePoint resources, spotlight sessions, a digital people and change programme that helps bring our people on our digitalisation journey with us, and all-business updates. We also take our digital programme into communities, for example, we visited Newmill and Keith Primary Schools to demonstrate 'Haggis', our autonomous robot which was also named in a competition. As our Community Liaison Manager,








Rob Whytock, explained: "We were delighted to take our autonomous robot to Newmill and Keith Primary Schools and talk to the pupils about how science and technology is helping us in our operations. "The pupils had the chance to operate the robot and put it through its paces in an obstacle course, and they asked us lots of interesting questions about its role and how it works which helped broaden their understanding." This kind of engagement helps explain digital innovation in a fun and memorable way, and ensures that even those without digital access can understand and connect with our technology. You can read more about this story on our website: [Pupils name robot 'Haggis' in primary school competition - SSEN Transmission](#). Good news stories like this are often picked up by local and regional newspapers, helping us reach people who are not, or cannot be, active online. Our Corporate Affairs team play a key role in this by working closely with their media contacts to produce and share these stories widely.

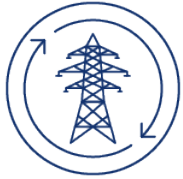
Providing alternative contact routes and information access:

Although we do not operate a call centre like our sister distribution businesses, due to the different nature of our public engagement and our role in the energy system, members of the public can contact our Corporate Affairs team by phone or post. These contact details are published on our website and in our Digitalisation Strategy. If someone contacts us by phone or letter and requests information such as a printed copy of our Digitalisation Strategy, we are happy to post this to them free of charge.

7. Our digital and data RIIO-T3 outcomes

Our vision is clear, through investment in digitisation, digitalisation and the execution of our data strategy, we will deliver transformational change to our business which in turn will deliver a range of outcomes that support the business strategy and the 2030 ambitions. These outcomes are set out more completely in the Individual investment justification papers, but are summarised below:

Digital Capabilities for Growth	In RIIO-T3 we will establish a robust digital infrastructure to support our future business. This is essential for ensuring efficient growth and supporting the SSEN-T business in delivering the transition to net zero.	
Customer and Stakeholder Engagement	Transforming engagement strategies to create a seamless and coherent approach is vital. This means integrating various touchpoints in our stakeholder and connection customer journeys and ensuring consistent communication and service delivery, regardless of the customer.	
Accelerating Project Delivery	Enhancing efficiencies in delivering large capital projects, such as those under RIIO-T3, ASTI, LOTI, and Offshore schemes, is crucial. This involves streamlining and digitalising processes, adopting innovative project management techniques, and leveraging digital tools to reduce timelines and costs.	
Asset Management and Operations	Improving asset management and operational processes is necessary to manage and maintain a >24GW power system securely and resiliently. This includes predictive maintenance, real-time monitoring, and advanced analytics to ensure optimal performance and reliability.	
Investment in Support Services	Investing in essential support services like finance, legal, and procurement is critical. These services enable the core business functions and ensure sustainable growth. Without incremental investment, these areas might struggle to keep up with the demands of rapid expansion	





Investment area: **Enabling Network Growth**


We utilise the latest digital tools and technology to improve and enhance SSEN Transmission's Customer and Stakeholder relationships and engagement. Digitally enabling the effective planning and delivery of large-scale capital projects.


Vision: Accelerate the **pace and value for money** of the planning, design and build of assets for **Net Zero** through digitisation. Changing how we engage with **all customers & stakeholders** and **driving efficiency** in the management of projects and suppliers to deliver the **CPP2030 and wider community benefit**.

Why do we need this?


 £20bn Capital Delivery Programme to invest in our Network Growth already planned


 As our business expands to meet these challenges, the ongoing need for advanced digital tools is essential to elevate our services for communities, customers, and stakeholders


 Collaboration and engagement within and beyond our ecosystem is now essential


 The services supporting the capital program must transform to remain efficient

Objectives of investment area





 Achieve BIM Level 3 and continue to digitise capital delivery processes through Integrated Project Management platform

 Establish a unified digital engagement and management platform for all customers and stakeholders

 Meet the demands of Connections Reform and continue system and network planning investment

 Transform enabling services in Finance, Legal, Land and Procurement in support of Net Zero delivery

Targeted outcomes

-  Deploy **digital engagement and experience initiatives** across the whole business
-  Digitally enable **land management and wayleaves** processes
-  Ensure that business **planning and reporting** are **fit** to meet **future demands**
-  Digitise and **automate repetitive tasks and activities** across the business
-  Enhance the **procurement and management of suppliers** to the business
-  Digitise **reformed connections** processes across **Customer and System Planning**



Investment area:
Enabling Network Growth

Example Personas:



Capital Delivery PM

My current challenges:

With the growth in the network across T3 managing projects across planning, cost and risk management with our contractors is difficult at the scale in which we are operating

What will be different:

The enhanced digital capability will enable me to manage these effectively through one source of the truth and effectively collaborating based on this with all required parties. Using AI risk modelling will help me to proactively manage risks based on our experience of delivering similar projects



Land Manager

My current challenges:

Currently land agreements are not tied to landowners and assets in our systems, and it takes manual work to align these when needed. This impacts the speed at which we can communicate planned works/changes

What will be different:

By linking these three data sets together I will be able to respond more quickly to requests, provide new insight to our Capital Delivery and Asset teams as well as improve the timeliness and detail we can provide to our stakeholders and landowners.



External Contractor

My current challenges:

Currently it is challenging to receive and share information across the team with more effort required to access and share information I need

What will be different:

By being able to share information more easily and manage reporting and raising risks collaboratively we all have access to the information and insight we need as a team.

Benefits:

Customers and Stakeholders

- Enhanced collaboration throughout our Capital Programmes delivery
- Increased visibility and communication with customers and stakeholders
- Improved efficiency in our Capital Delivery, Corporate and System Planning functions
- Effective cost management against our 2030 vision

RIO-T3 Delivery surety

- Delivering with greater certainty against our strategic ambition through digitalisation and data availability
- Improved collaboration between across our internal and external teams
- Effective management of risks throughout the asset lifecycle
- Clearer long-term view of demand and requirements for our Network

Efficient Scale

- Enable efficiency in our delivery and supporting functions to build and manage our future network
- Remove manual processes across our delivery lifecycle
- Provide purposeful data to our teams to make effective and efficient decisions at scale
- Provide information to external parties through digital channels



Investment area:

Enabling World Class Asset Management

We prioritise Digital security and resilience to enable 100% transmission network reliability. Continuously developing our technology capabilities to maintain, protect and secure our Assets, driving increased Asset Performance and efficient Operations.

Vision: Enhance **existing** and deliver **new capabilities** across **Asset & Work Management** that will drive **business** and **asset performance**, resulting in **decreased network risk** and **increased network reliability**

Why do we need this?

-  Our power system will grow to >24GW by 2030 – 20% of the national demand through our network
-  Deliver energy security & system resilience at an efficient cost – enabling a fairer transition for all
-  Continue to deliver Zero interruptions in electricity supply
-  Embrace the latest technologies to build skills and digital capabilities

Objectives of investment area

-  Delivering an enhanced Asset Management & Asset Performance capability
-  A step change in work & workforce management – putting digital technology in the hands of field workers, and providing access to the information needed to execute work
-  Capture new and existing high-quality data, at the right level of granularity, to drive insight, enable reporting and support data-led decision making

Targeted outcomes

-  Shift towards **risk based** and **predictive** asset maintenance
-  **Digitally transform** vegetation management with **AI**
-  Establish an integrated digital **outage planning** and **management** capability
-  Use **advanced simulation** techniques to **train** and **develop** control engineers
-  Establish a **digital twin** for **asset operations**
-  Build **Asset Investment Optimisation** capability



Investment area:

Enabling World Class Asset Management

Example Personas:



Asset Engineer

My current challenges:

With the growth in assets in R110-T2 and the strategy moving forward maintaining resiliency across the Network, I need to use digital tools more effectively to manage my work more efficiently

What will be different:

Leverage additional data sources and improvements in work management, I will move away from Schedule based maintenance to using this data to predict where I need to focus to maintain the network



Outage Planner

My current challenges:

Our outage planning process is very manual/spreadsheet based currently. Changes are complex and take time meaning I am focusing on the immediate outage windows and not able to look at this further into the future.

What will be different:

By digitalising how we manage the outage planning process I will be able to optimise our windows between Capital Delivery and Asset Management, and I am to plan more strategically further into the future and manage unplanned changes more easily.



Vegetation Manager

My current challenges:

I'm currently still inspecting many of our assets in person to assess where vegetation is posing a risk to their resiliency.

What will be different:

By using satellite data and digitalising how we manage vegetation risk to ensure the resilience of our network, I will be able to make interventions based on data rather than manual vegetation inspection

Benefits:

Customers and Stakeholders

- Enables the effective management of risk and delivering a highly resilient Network
- Optimise the investments we make in asset interventions based on data
- Improved efficiency in our Asset Management and Operations teams against a growing asset base

Resilient Operations

- Use our asset data to move towards predictive based maintenance
- Improved collaboration between across our internal and external teams
- Increased data led interventions to support network resiliency

Efficient Scale

- Enable efficiency in our asset operations to manage and maintain our future network
- Remove manual processes across our asset management lifecycle
- Provide purposeful data to our teams to make effective and efficient decisions at scale







Investment area: **Data driven**



We enable a data driven SSEN Transmission business based on a culture of business data ownership, ensuring it is accurate, available and accessible and by providing data and analytics tools and technologies for our business to develop, deliver and operate the network.

Vision: To become a **data-driven leader** in electricity transmission, harnessing **the power of data** to deliver a **safe, resilient** and **efficient** electricity transmission **network** that meets the **evolving needs** of our **customers & stakeholders** and the transition to a **sustainable energy future**.





Why do we need this?

-  Embrace the opportunity that data analytics and AI bring
-  Meet the regulatory and industry requirements for data best practice and data sharing
-  Continue to improve master data across our systems and improve the quality of our data in order to enable business decision making
-  Improve the document and records management capabilities

Objectives of investment area

-  Our people are skilled, confident and supported to use data
-  We have fit for purpose data in appropriate digital formats in the right source systems
-  Our data is trusted, compliant and understood by all who use it
-  Our data is accessible to both people and systems for exploitation

Targeted outcomes

-  Equip all employees with the necessary **skills to leverage data, analytics, and AI**, boosting business performance and efficiency.
-  Convert critical **information** from paper, PDFs, and non-digital formats **into digital formats** to support new capabilities.
-  Expand the **data governance** framework across key business domains, improving **data quality** and **consistency**.
-  Continue creating a suite of **data products** to meet document **management**, information **sharing**, and regulatory **reporting** needs.



Investment area: **Data driven**

Example Personas:



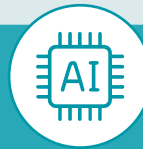
Asset Engineer

My current challenges:

Some of the data I need is difficult to access, inconsistent and sometimes of poor quality. This means it takes me longer to perform my tasks than I would like

What will be different:

I can be more efficient in my work by using data that is easier to access, of the quality I need and consistent across my tasks. I am able to make informed decisions, meaning I can work in a more joined up way with my colleagues.



AI Agent

My current challenges:

The data I need is currently siloed, not digitised or inconsistent meaning I am not able to automate processes or provide insight to my colleagues

What will be different:

I am able to support colleagues by providing them with insight relevant to their roles and automate manual tasks based on the data being available to me in a format I can consume



Market Participant

My current challenges:

I receive data in a static format over email which provides only a point in time view of the information I'm looking for, which I then have to process to provide valuable insight to my organisations

What will be different:

I can leverage the DSI to be able to receive this information in a way that is timely, and ready to be consumed by my organisation removing the manual data processes which are in place today

Benefits:

Customers and Stakeholders

- Meeting and enhancing our capability against Data Best Practice principles
- Providing relevant and timely data to both internal and external stakeholders
- Comply with our licence conditions

Data in our organisation

- Improve data literacy and use across SSENT Transmission
- Provide new internal and external data sets to support our business to meet our 2030 Ambition
- Modernise our data estate & ways of working to unlock AI, Automation and analytics initiatives

Efficient Scale

- Enable our business to be more efficient as we scale the Network that we operate
- Improved decision making and speed of delivery through data driven insight
- Deliver AI use cases which benefits our business as well as customers and stakeholders

8. Delivery Roadmap

Engaging with our Stakeholders to create our Roadmap

In our preparation for the start of RIIO-T3 we have re-engaged with our stakeholders to revalidate the priorities and requirements from our digital products. We have also revalidated the outcomes they will deliver against our Digitalisation Strategy. Based on this engagement we have refreshed the roadmap to the right which include the products we will be focusing on over the next two years. We have detailed in section 8.1 the products and outcomes we have jointly prioritised with our stakeholders

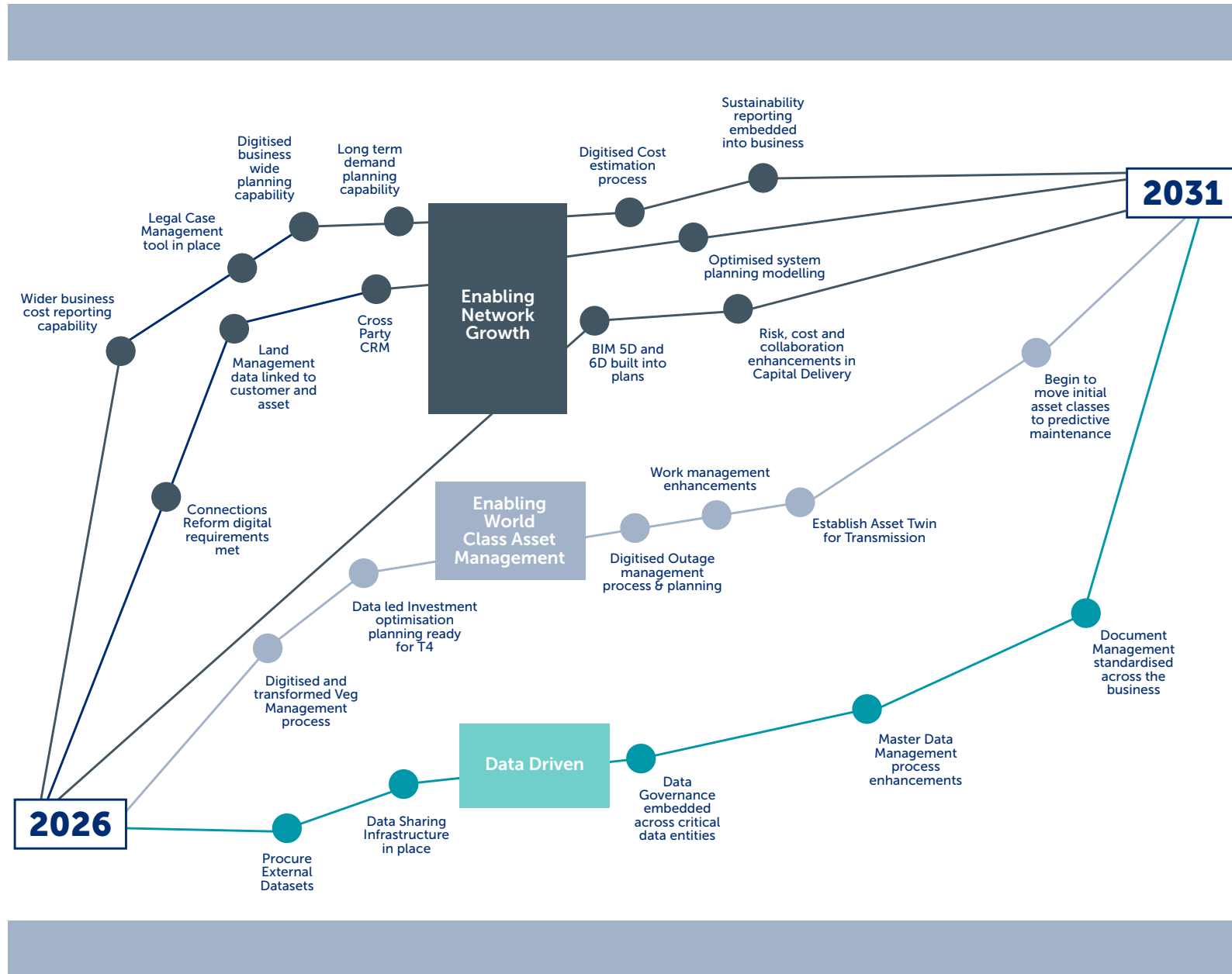
Changes in how we will deliver

We will leverage the industry recognised and SSE Group standard operating model of Run, Grow and Transform to establish the different change delivery portfolios needed to execute our strategy.

This means that our Digital IT Transform team will be focused on the delivery of our Enabling Network Growth and World Class Asset capabilities against our Digitalisation strategy and strategic objectives

We will implement a new Data delivery function from the beginning of RIIO-T3 which will be responsible for delivering our Data Driven programme of work and ensure its continued alignment to Ofgem's data best practice principles

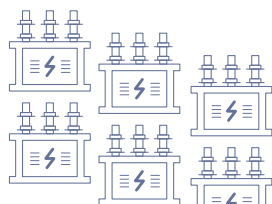
Our Brilliant Basics and Enhance, Exploit and Optimise investment areas will be delivered through our Business as Usual IT teams who have been established in RIIO-T2.



8.1 Products we will be developing over the next 2 years

Enabling Network Growth

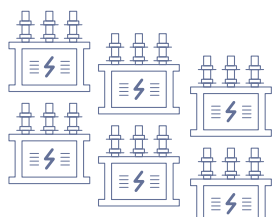
Project	Capability	Outcomes	Performance Measure	Timeframe	
Capital Delivery	Defining and implementing additional data led insights to our capital delivery teams across reporting, AI cost and scheduling and dynamic risk management	<ul style="list-style-type: none"> Enable proactive risk management in delivery Increased visibility into live projects Improved collaboration between internal and external stakeholders 	<ul style="list-style-type: none"> Survey reviews on increased collaboration within our projects Drivers impacting the performance of Capital Delivery, e.g. cost, speed, risk 	Year 1	Year 2
BIM	Building our capability to bring 5D (Cost) data into our BIM Models for T3 Projects and beyond. Starting preparation for BIM Level 3 certification	<ul style="list-style-type: none"> Supporting delivery of a consistent approach to design and construction across all projects Improved data sharing and collaboration with partners and contractors 	<ul style="list-style-type: none"> Improved consistency of approach to design of projects 		
Project Cost Reporting	Providing additional insight into cost reporting by integrating supply chain cost forecasting, aligning cost reporting to schedule, automation of cost forecasting and scenario-based forecasting	<ul style="list-style-type: none"> Enabling efficiency gains across Finance, Procurement and Large Capital Projects Enhanced cost management across SSEN Transmission 	<ul style="list-style-type: none"> Improved reporting across projects 		
Business Planning	Digitalise our Business planning processes starting with Financial and Long-range planning activities, moving into workforce and project planning against the Financial planning activities	<ul style="list-style-type: none"> Enabling efficiency gains across Finance and budget holders by removing manual effort Provide greater visibility for Business Units into near and long term financial, workforce and project planning activities 	<ul style="list-style-type: none"> Digitalisation of Business Planning processes 		
Cost Estimation	Digitalise our longer-term cost estimations based on requested changes to our network to provide stakeholders and suppliers a longer-range view of projected cost and planned investment	<ul style="list-style-type: none"> Provide longer term cost estimations for procurement to manage forward looking supply chain demand Enable access to accurate and trusted unit cost data based on actual costs 	<ul style="list-style-type: none"> Digitalisation of Cost Estimation processes 		
Demand Planning	Enable our procurement teams to have a digital tool to manage future demand based on the business plan to efficiently manage the supply chain needed to service this demand	<ul style="list-style-type: none"> Enable a centralised digital platform for procurement forecasting and demand planning 	<ul style="list-style-type: none"> Digitalisation of long term demand planning activities 		



8.1 Products we will be developing over the next 2 years

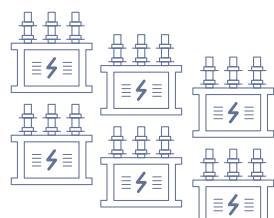
Enabling Network Growth

Project	Capability	Outcomes	Performance Measure	Timeframe	
				Year 1	Year 2
Legal Case Management	Implementing a legal case management tool to enable consistent and improved responses to legal requests across SSEN Transmission	<ul style="list-style-type: none"> Delivery of a single case management platform for all legal requirements Improve Case Management and risk mitigation Reduce the risk of legal challenges and litigation 	<ul style="list-style-type: none"> Survey of Legal team Improved consistency and speed of legal request resolutions 	→	
Time Management	Implementation of a consolidated time management tool across SSEN Transmission to enable clearer visibility and management of resource and costs	<ul style="list-style-type: none"> Reduction in time taken by staff to complete, reconcile and record project time Provide enhance forward looking visibility of resource capacity 	<ul style="list-style-type: none"> Survey of teams who use Time Management solution Efficiency in managing timesheets 	→	
Sustainability	Enabling a sustainability reporting suite aligned to our sustainability action plan	<ul style="list-style-type: none"> Supporting meeting the commitment of our Sustainability Strategy 	<ul style="list-style-type: none"> Survey of Legal team Improved consistency and speed of legal request resolutions 	→	
System Planning	Enhance and increase the capacity of our system planning teams to be able to meet current and future demand	<ul style="list-style-type: none"> Deliver increased accuracy of our future network plans, reducing rework and changes through the approval process 	<ul style="list-style-type: none"> Quality of modelling completed 	→	
Connections Reform	Implement the process and system changes to meet the requirements for Connections Reform,	<ul style="list-style-type: none"> Provide the necessary data transparency to meet the requirements with the Regulator and interested parties 	<ul style="list-style-type: none"> Meeting our regulatory requirements Customer satisfaction scores of our connections process 	→	
Cross Party CRM	Establish an integrated data model for all parties and provide a 360-degree view for our teams	<ul style="list-style-type: none"> Deliver an enhanced, consistent experience for all external parties in their interactions with SSEN Transmission 	<ul style="list-style-type: none"> Meeting our regulatory requirements Customer interaction satisfaction 	→	
Foundational Data Model for Land	Design and implement a data model which links our Landowner, Asset and Location datasets	<ul style="list-style-type: none"> Support efficiency in our land management processes to enable them to scale with the demands and growth in RIIO-T3 	<ul style="list-style-type: none"> Survey of Land Management teams Improved response rates to queries 	→	



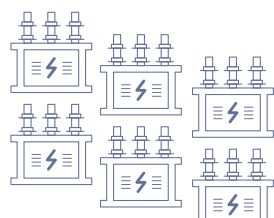
8.1 Products we will be developing over the next 2 years

Enabling World Class Asset Management	Project	Capability	Outcomes	Performance Measure	Timeframe	
	Risk and Predictive Maintenance	Building the foundational data model to assess risk and begin risk-based maintenance modelling to predictive modelling across asset classes	<ul style="list-style-type: none"> Build the foundations to start the move from schedule to risk based maintenance 	<ul style="list-style-type: none"> Predictive modelling performance 	Year 1	Year 2
	Investment Optimisation	Implementing an enhanced investment optimisation capability which is ready to support asset intervention planning for RIIO-T4	<ul style="list-style-type: none"> Provide insight and evidence for asset management investments (NARM) Exploit integrated data sets to drive improved planning and investment optimisation 	<ul style="list-style-type: none"> New capability is ready for planning commencement for RIIO-T4 		
	Total Work Management	Enhancements to our asset management digitalisation capabilities across: work management, inventory management, mobility and work planning	<ul style="list-style-type: none"> Improvements in data quality and insight for engineering teams Optimisation of work planning and execution 	<ul style="list-style-type: none"> Internal surveys of Field Force Driver on improved planning and work execution 		
	Vegetation Management	Digitalising the vegetation management process and using data to inform required interventions to maintain the resiliency of our network	<ul style="list-style-type: none"> Reduction in line inspections by personnel by moving to targeted inspections Digitalisation of the end to end process 	<ul style="list-style-type: none"> Internal surveys of Vegetation Field Force Drivers on improved vegetation management execution 		
	Outage Management	Digitalisation of our outage management processes to enable the efficient planning and execution of outage windows	<ul style="list-style-type: none"> End to end visibility over a longer time horizon of outage windows and planned works Exploit integrated data sets to drive improved planning and investment optimisation 	<ul style="list-style-type: none"> Drives on efficiency in the planning and logistics of maintenance operations 		
	Digital Twin	Implementing the foundational capability of a digital twin for SSEN Transmission	<ul style="list-style-type: none"> Foundational Digital Twin capability implemented Data required to begin first use case build identified 	<ul style="list-style-type: none"> Foundation capability in place for use case development 		



8.1 Products we will be developing over the next 2 years

Data Driven	Project	Capability	Outcomes	Performance Measure	Timeframe	
	Data and AI Literacy	Curriculum & experiential based learning pathways to equip our people with the skills needed to securely use data, analytics and AI	<ul style="list-style-type: none"> Improve personal and team productivity, drive efficiency, improved decision making and process automation, whilst adhering to responsible and compliant practices. 	<ul style="list-style-type: none"> Data and AI Survey feedback Improvement against Data Best Practice 	Year 1	Year 2
	Fit for purpose data in Digital Formats	Convert asset, project and operational data from off-system sources into compliant 'AI ready' digital formats for people/systems to use	<ul style="list-style-type: none"> Reduce paperwork, duplication and manual data entry, lowering operational risk & enable faster data access for reporting, analytics, automation and AI for IT/OT transformational programmes 	<ul style="list-style-type: none"> Improvement against Data Best Practice 		
	Procure external datasets	Enrich our own data by acquiring new open and commercial datasets once and then make them available to the whole of SSEN Transmission to use	<ul style="list-style-type: none"> Enable new insights to drive agile data-led decision making, productivity, and safety improvements. Reusing datasets for multiple purposes to enhance efficiency. 	<ul style="list-style-type: none"> Improvement against Data Best Practice 		
	Data Governance	Implement consistent industry standard data definition and quality standards across systems, automate manual data maintenance processes, data compliance & protection controls	<ul style="list-style-type: none"> Minimise operational 'friction' between teams/ systems/ processes Enable standardised data sharing with partners customers & stakeholders. Strengthen data protection and minimise breach risks 	<ul style="list-style-type: none"> Improvement against Data Best Practice 		
	Master Data Management	Automate MDM processes across business systems for assets, projects, customer and corporate services, so manual effort is limited to approval steps away from end-to-end data handling	<ul style="list-style-type: none"> Measure the consistency of data across our major business systems at the beginning of and throughout the RIIO-T3 period 	<ul style="list-style-type: none"> Improvement against Data Best Practice 		
	Data Sharing in the Energy Ecosystem	Once operational, the NESO Data Sharing Infrastructure (DSI) will provide a secure, efficient mechanism for sharing data with partners, transforming current data-sharing practices	<ul style="list-style-type: none"> Transform data sharing practices using an efficient and compliant mechanism Number of data sharing use cases enabled by this new mechanism 	<ul style="list-style-type: none"> Meeting new licence obligations Improvement against Data Best Practice 		



9. Maintaining our Digitalisation Strategy & Digitalisation Action plan

We will continue to publish regular Digital Strategy and Digitalisation Action Plan (DAP) updates as set out in our licence conditions. As we conclude the outcomes of our RIIO-T2 activities we will shift focus on providing updates to our RIIO-T3 plans.

Our refreshed RIIO-T3 Digitalisation and Data Strategies will take precedence over the prior strategies that have been published, and the activities that we undertake consist of reporting on the closing our RIIO-T2 investments and the ramp-up activities for RIIO-T3, with the objective of ensuring we accelerate into the next period of digital programmes.

Our DAP will continue to align with the guidance from Ofgem, and as expectations change then our DAP will evolve to meet those needs, including responding to feedback from Ofgem.

We will seek to make the following enhancements to the approach that is used to maintain our Digitalisation Strategy and DAP.

- 1. Improved Traceability** – from the Digital Strategy we are establishing now and the corresponding investments to the progress against the agreed outcomes
- 2. Enhanced Agility** – where a previously proposed investment or outcome can be achieved in an alternative way, or enhanced value to the consumer, then we will identify and publish that
- 3. Clearer External Stakeholder Input** – our objective is to move beyond passive stakeholder feedback and using our internal business stakeholders being the voice of the customer/stakeholder and actively engage stakeholders to seek feedback and input into the digital products and services that they would like to have access to and the measures of our success
- 4. Product and Services Interoperability** - Ensuring that we demonstrate the interoperability of our products and services and how we are making it easier to integrate and exchange data sets internally and externally



10. Conclusion

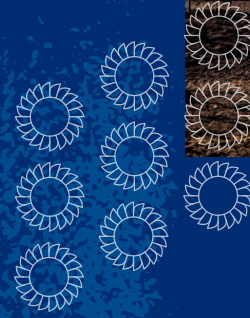


Our Digitalisation Strategy outlines our ambition to meet the internal and external demands; through our vision and planned investments we will be able to meet these demands and support the execution of our Net Zero 2030 Strategy. Working with our Stakeholders we will progress against our roadmap and provide regular updates on our performance against the strategy.

We will continue to publish regular Digitalisation Strategy and Digitalisation Action Plan (DAP) with the next DAP provided in 3 months time and our updated Digitalisation Strategy in 2 years time.

We invite feedback on our Digitalisation Strategy from stakeholders, and if you have views on how you would like our Digitalisation Strategy to evolve please scan the QR code and share your thoughts.





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