DSAP Action Plan December 2024

National Grid Electricity Transmission

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DSAP Action Plan Update: Introduction

Our action plan outlines progress we have made against our digitisation strategy in the last 6 months. As we look towards concluding RIIO-T2, the progress we are making is building the foundations for our RIIO-T3 plans - a business plan that will deliver a transformation of our network, nearly doubling the amount of power we can transfer across the country and providing twice as many customer connections as in the last five years.

We hope you find this update useful, and we welcome any further feedback.

Simon Johnston

National Grid Electricity Transmission CIDO (interim)

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DSAP ACTION UPDATE

Updates to Older Actions

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DSAP Actions – Updates to Previous Actions

#	Theme	Action	Progress Made	Status	Next Steps
101-2	**Whole System Stakeholder Engagement**	**Establish a stakeholder engagement log linking objective feedback to the development.**	Work continues to link stakeholder feedback directly into the product development cycle.	Open	We are investigating tooling to document customer research conducted and better share it across products that that share stakeholder groups.
			Training is complete for users within External Affairs in SI and the SRM tool has been linked to the more recent project webpages that went live.	Closed	Wider roll out planned in line with project site go-lives. See action on consenting for future updates.
101-3	**Whole System Stakeholder Engagement**	**Increase stakeholder engagement for the next release of the digitalisation strategy and action plan including enhanced data best practices internally and externally.**	- Continued engagement and alignment with the ENA on Data Products and Standards. - Engaged and agreed to be part of the DSI MVP and the production of Data Products and installation of the infrastructure needed to support the roll out. - Presented NGET data strategy to ESO and ENA partners. - Continued engagement with NESO on the Data Sharing Infrastructure (DSI) architecture.	Open	Deep dive DSI architecture analysis and collaboration to look at potential improvements to be held in January 2025. Creation of the Data Products for the DSI Pilot. Install and testing of DSI components to enable Data Sharing. Completion of the DSI Pilot with NESO.
			Portfolio of Data Products of approximately 180 have been identified and prioritised in accordance with importance, value and reach. Continued engagement with interested 3rd parties and Data Requests have further helped organise the products with the most criticality, the DSI pilot has also accelerated certain product delivery. As of December, we have 23 products built and ready for sharing once the Fabric comes online.	Closed	See updates to the action on Future Data Products for progress.
			See details in our DSAP submitted as part of our RIIO-T3 plans of the stakeholder engagement conducted: **Value for money	RIIO-T3**	Closed	See action to embed stakeholder engagement in the product development process.

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DSAP Actions – Updates to Previous Actions

#	Theme	Action	Progress Made	Status	Next Steps
102-2	Trusted, Available and Secure Data	Allow integration with external datasets to expand on data discovery opportunities.	- Identification of the first Data Products which would be made available via the Data Fabric / Portal completed. - Continued to Engage with NESO DSI and Virtual Energy Network planning to provide direct capabilities and help to influence the future direction for sharing.	Open	Continue to engage and be part of the DSI pilot program to provide first industry sharable data product. Run the pilot for the NGET Data Portal or Marketplace to provide our first Data Products for Open Data consumption.
104-1	Digital Culture & Ways of Working Embedded in all we do	Adopting new ways of working that enable faster delivery of value for our customers and stakeholders.	Majority of teams now operating using agile ways of working where applicable and the focus has now shifted to how we can leverage scaled agile to improve portfolio management across our digital products. NGET wide performance metrics defined and implemented for agile deliveries and agile maturity constantly being assessed by leadership teams.	Open	Work underway to redevelop internal processes to allow for faster release of value to consumers of our digital services (specific focus on enabling DevSecOps consistently across the organisation).

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DSAP ACTIONS

New and Updated Actions
aligned to Roadmap

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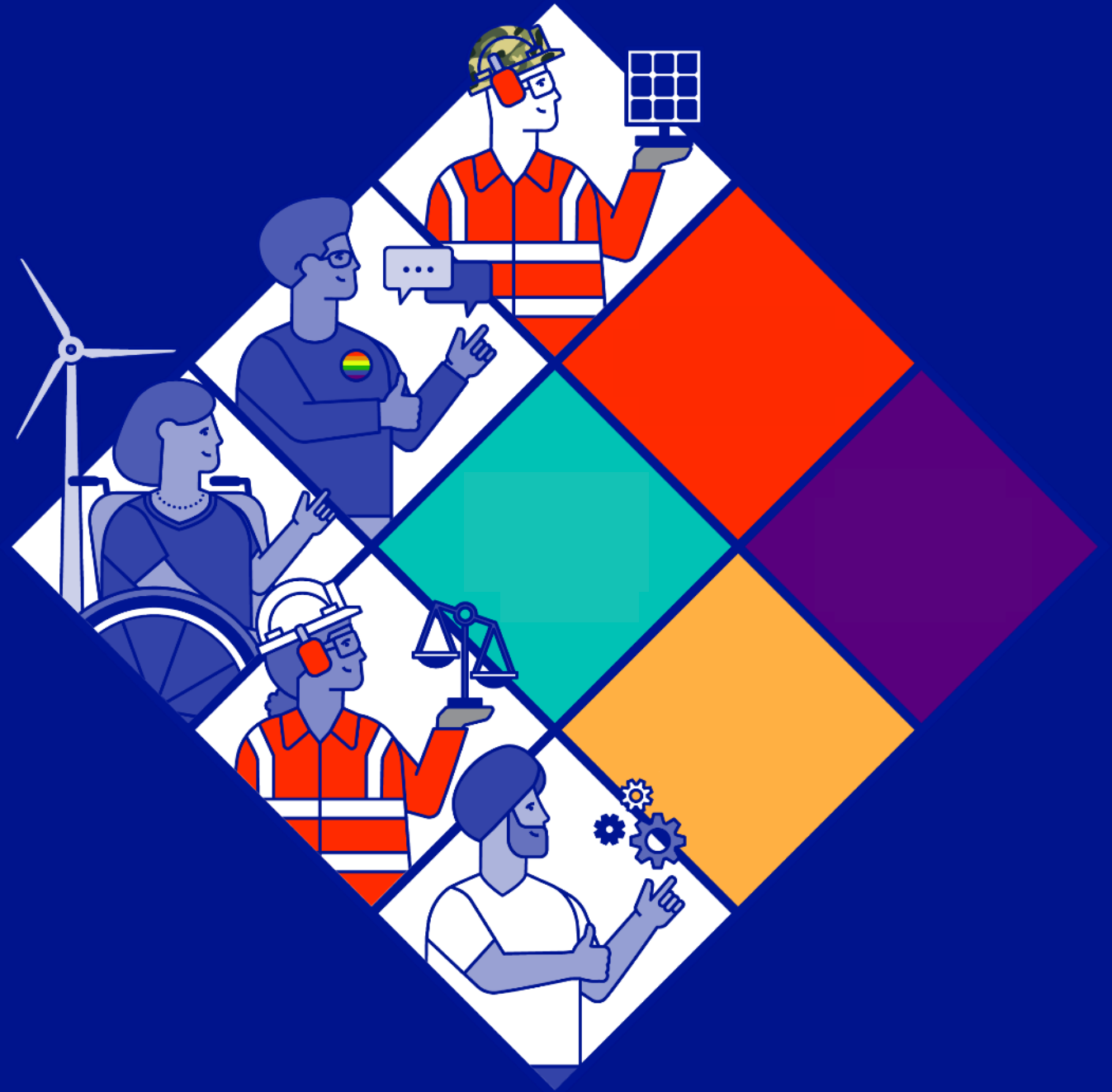
DSAP Actions December 2024

Objective	#	Product Description	Stakeholder Value	Progress Made	Status	Next Steps
1. The Great Grid Upgrade – Network Development, Capital Planning & Delivery	1-1	**Consenting:** **Delivering digital products designed to optimise and streamline the consenting process.**	More targeted stakeholder engagement on proposed projects and a visualisation of the future network to support consenting.	Successfully piloted two visualisation products designed to improve transparency and process clarity for consenting. SRM tool has been delivered to capture feedback from key stakeholders and ensure engagement is tracked.	Open	Roll out visualisation and SRM tools across the ASTI portfolio and continue to innovate to ensure technology is utilised to enable pace around consenting.
	1-2	**Supply Chain Visibility & Collaboration:** **Creating a common data environment (CDE) for the delivery partners on the ASTI projects to enable collaboration and sharing of information across the portfolio.**	Greater efficiency of infrastructure builds through a uniformed approach to digital project design and sharing of information across supply chain.	Delivery of the CDE has started on the ASTI portfolio including giving access to our supply chain.	Open	Roll out of a foundational Common Data Environment (CDE) across all projects in the ASTI portfolio.
	1-3	**Optimised Design and Build:** **Delivering a Building Information Modelling (BIM) capability to enable collaborative design across the ASTI portfolio.**	Greater efficiency of infrastructure builds through a uniformed approach to digital project design and sharing of information across supply chain.	BIM Capability about to be rolled out for design on the ASTI portfolio where required.	Open	Roll out of a foundational Building Information Modelling (BIM) capability across all projects in the ASTI portfolio and ensure a plan is in place to make the most of the BIM capability in asset operations and the asset total lifecycle.

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DSAP Actions December 2024

Project	#	Deliverable Description	Stakeholder Value	Progress Made	Status	Next Steps
2. Delivering for our customers – Enhanced Customer Experience	2-1	**Connect Now: Research Assistant** **Our publicly available ConnectNow Research Assistant has made available regional information providing a further channel for our customers to access important content.**	Providing regional information on available connection points.	Ongoing engagement with customers to understand data and information needs. This action has extended to include new discovery of data needs to support industry wide Connections Reform, along with analytical and reporting requirements. Actively engaging with NESO on data exchange to support Connections Reform.	Open	Continued engagement with NESO on alignment of external facing tools and data exchange. Cross industry engagement on information provision and digitalisation to support Connections Reform.
	2-2	**Customer Insights, Intelligence & Customer Feedback**	This benefits our consumers through structured simulation features that enable us to fairly enact our newly formed policies to offer accelerated connections to customers. Our stakeholders can explore deeper insights through those capabilities to gain further intelligence on the customer and ultimately enable us to construct effective business plans and strategic connection offerings based on customer behaviours and evolving conditions.	Further feature advancement on four data products, enhancing our understanding of customer behaviour and opportunities in our queue. These features include machine learning capabilities to identify patterns of change in customer projects that could indicate variation to our plan. Furthermore, web application features enable simulation of scenario-based options in our queue.	Open	Continued development of the data products. Aligning to the Connections Reform project, which targets reducing connection timescales and boosting transparency, we plan to enhance CX through new technology-led experiences.

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DSAP Actions December 2024

Project	#	Deliverable Description	Stakeholder Value	Progress Made	Status	Next Steps
3. Intelligent Asset and Network Management – Asset Life Cycle Management	3-2	**Digital Asset Management:** **Leveraging digital to gain a deeper understanding of our asset performance which is vital to making optimal investment decisions.**	Enterprise asset management tool which can support our asset management strategy now and in the future.	Clear roadmap to November launch, change champion network established.	Open	We will be significantly through the project to build our new enterprise asset management capability. We will have established training, and mapped processes. Testing will begin in May.
	3-3	**Intelligent Substation:** **We are developing an intelligent substation architecture to transform its operations and meet the needs of a changing market and net zero goal.**	Continued high network reliability, safety and resilience.	Blueprint specifications have been developed, a demo facility set up and cross functional workshops have taken place.	Open	To complete trials of virtualised protection and control and establish next areas of the blueprint to test and validate.
	3-4	**IoT:** **Our Internet of Things platform will enable the collection of asset performance and condition data.**	Continued high network reliability, safety and resilience. Lower operating costs for running the network.	A proof of concept has been set up in a substation. We are now receiving data from the sensors.	Open	Further trialling of the optimal method for returning sensor data in the organisation to inform asset condition monitoring will then inform a roll out plan. Condition monitoring assets will be added to Maximo, and a process defined for the lifecycle of the assets.
	3-5	**SCADA:** **We are building a new Supervisory Control and Data Acquisition (SCADA) system to support the separation of the NGET and ESO businesses. SCADA provides connectivity between operational sites and control centres to allow the operational management and control of the Electricity Transmission Infrastructure.**	Continued high network reliability, safety and resilience.	All Data Centres initial builds are complete, and associated connectivity is in place.	Open	The build of the application environments and deploy the SCADA application.

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Project	#	Deliverable Description	Stakeholder Value	Progress Made	Status	Next Steps
4. Cross-Cutting and Interoperability – Data and Intelligent Planning	4-1	Platform & Priority Data Products	Greater transparency and visibility of business and regulatory performance. New Data Products and delivery of industry initiatives.	Completed procurement event and selected Fabric Partner.

Software and Infrastructure established and implementation in progress. | Open | Platform – Launch development environment for Data Fabric in December 2024.

Platform – Roll out Live Fabric to deep technical community and Data Product Community by March 2025.

Platform – Complete roll out of Data Fabric to Super users and Business by December 2025.

Platform – Launch External Portal for Data Access and Sharing by March 2026. |
| | 4-2 | Future Data Products | Greater transparency and visibility of business and regulatory performance. | Started the discovery phase with the objective of developing a comprehensive data product roadmap for our Performance products. This initial step involves gathering insights and requirements from stakeholders to identify the key data elements necessary for enhancing our performance management capabilities across NGET. | Open | Based on this, develop the roadmap that will establish the foundational elements and prepare us for automating the performance processes. |
| | 4-3 | Strategic Network Modelling

Long term regional network strategy capability - automating and machine learning and visualisation for regional stakeholder engagement for network strategy. | Improved network design and delivery of work. | Started discovery on how to increase automation our existing network planning and design capability.

Developing a data product that will automate and improve scripting time for power systems analysis.

Discovery to identify process automation improvements for thermal line ratings. | Open | Automation digital and data product in development and build to digitise manual processes and improve efficiency and productivity with power system studies for September 2025.

Thermal ratings product in development and build for November 2025. |
| | 4-4 | Portfolio Management | Improved coordination of the delivery of work on the network. | Progressing discovery to identify existing capabilities and how to consolidate into a unified capability for the organisation. | Open | Discovery in progress to set the foundations to enable the portfolio investment for T3. |
| | 4-5 | Planning | Planning will enable NGET to meet its commitments by sequencing the right work in the most optimum way and enable planners to create visible plans that can iterate and mitigate delivery risk. | The first release is enabling planners to model outage scenarios and view the critical path, saving time and enabling faster decisions. | Open | Enable managing outages and resource allocation for NGET so we can more efficiently plan work on the network. |

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