DIGITALISATION RE-OPENER (DIGIt)

SSEN re-opener application - core narrative

January 2026

CONFIDENTIAL

Scottish & Southern Electricity Networks

CONTENTS

1. ABOUT SSEN DISTRIBUTION

Who we are

1.1 Scottish and Southern Electricity Networks (SSEN) Distribution is responsible for the operation and maintenance of the electricity distribution networks in central southern England and the north of Scotland.

1.2 Through our two licence areas, Scottish Hydro Electric Power Distribution (SHEPD) and Southern Electric Power Distribution (SEPD) delivers power to nearly 4 million homes and businesses. Its networks feature more than 111,000 substations and pole-mounted transformers, and 128,000km of overhead lines and underground cables across one third of the UK's land mass.

1.3 We serve some of the most diverse and unique communities across the UK, and keep customers connected today whilst developing the flexible electricity system that will be vital to delivering decarbonisation and sustained economic growth.

1.4 Our network serves some of the UK's most remote communities and some of its most densely populated areas. Our two networks cover the greatest land mass of any of the UK's Distribution Network Operators (DNOs), covering 72 local authority areas and 75,500km2 of extremely diverse terrain.

1.5 Our core purpose is to power communities to thrive today and create a net zero tomorrow. We have a responsibility to supply customers with safe and reliable power, allowing them to focus on the things that matter most, while we work hard to build a smarter, flexible, greener network that's fit for the future.

1.6 SSEN is part of SSE plc, one of the largest companies in the UK, FTSE listed, and which operates across the energy sector. SSE's activities and investments contribute around £9bn to the UK economy every year. SSE plc's vision is to be a leading energy company in a net zero world. As one of the UK and Ireland's leading generators of renewable energy and one of the largest electricity network companies in the UK, sustainability and climate action are at the core of its business strategy. It is a driver of sustainable growth in the UK and key partner of the UK Government in delivering its program.

1.7 SSE plc is grounded in strong ethical principles, which translates to us doing the right thing in how we undertake business. Examples include our commitments to the Fair Tax Mark, being a Real Living Wage, Hours and Pensions employer, meeting Science-based Carbon Targets and empowering people to speak up against wrongdoing through our Whistleblowing Policy.

2. EXECUTIVE SUMMARY

Introduction

2.1. Digitalisation now underpins every part of modern society - accelerating decision-making, enhancing transparency, enabling collaboration, broadening participation, and helping to manage costs. Operating a smarter, more flexible distribution network that meets today's needs while enabling tomorrow's opportunities is, by definition, a digital endeavour.

2.2. In our RIIO-ED2 business plan we set out a bold portfolio of digitalisation investments designed to strengthen and expand our digital capabilities. As these investments mature, their timely progress puts us in a strong position to take the next step - supporting the drive towards clean power and preparing early for the transition into ED3.

2.3. The RIIO-ED2 framework provides a unique opportunity to secure additional funding through the Digitalisation Re-opener under Special Condition 3.2 Part I of our Distribution Licence.

2.4. Our application is ambitious on behalf of our customers and communities. It proposes 14 targeted projects to be delivered within RIIO-ED2 at a total cost of £25.7m. Our ambition is also disciplined: each project has been rigorously assessed with options carefully assessed to ensure deliverability and to guarantee clear, measurable benefits for our customers, stakeholders, and the wider system.

2.5. SSEN has consistently prioritised investment in network visibility and in open, shared data that strengthens capability and coordination across Great Britain. We are the first DSO to publish granular near real-time operational data through our Near Real-time Data Access, NeRDA platform, the first to make half-hourly smart metering data available daily at street level, and the only DSO to pilot GB's emerging Data Sharing Infrastructure. By taking a leadership position, we are ready to build on these foundations now—without waiting for the start of ED3. Greater transparency and visibility across our network enable efficiencies for all, creating new opportunities for flexibility, connections, and innovation.

2.6. Our application includes projects that translate proven innovation into operational capability, such as our Local Energy Net Zero Accelerator, LENZA platform which, along with our award-winning support, is helping local communities plan their future energy needs. We have demonstrated that now is the right moment to progress these solutions, ensuring continued delivery of value in RIIO-ED2 and enabling step-changes in service quality ahead of ED3 and beyond.

2.7. We also propose projects that respond to evolving legislation, licence conditions, regulatory requirements, and industry codes. SSEN's approach is to lead industry change through practical, early action, as demonstrated when we assumed responsibility for integration testing for all DNOs under the Market-wide Half Hourly Settlement programme.

2.8. Several projects address both of these strategic needs. In every case, the benefits are clear and widely shared: accruing to SSEN Distribution, our customers, GB consumers, and the wider stakeholder community.

2.9. The policy landscape around digitalisation for energy networks continues to be dynamic, and there are further emerging requirements which may be relevant for this re-opener window, and over the remainder of RIIO-ED2. We will engage with Ofgem on these aspects through this re-opener window process.

2.10. This application is submitted on behalf of both Scottish Hydro Electric Power Distribution plc (SHEPD) and Southern Electric Power Distribution plc (SEPD), in line with Ofgem's Reopener Guidance[1]. We refer to both licensees collectively as SSEN Distribution (SSEN).

Progress on RIIO-ED2 Digital Strategy and Action Plan to date in RIIO-ED2

2.11. SSEN has taken a clear line-of-sight approach to delivering its RIIO-ED2 Business Plan, ensuring every digital initiative connects directly to the organisation's wider capability model and strategic outcomes. Across the baseline programme, SSEN has delivered value through improved data, customer experience and operational performance. This includes on-demand operational insights such as Smart ETR, enhanced customer and stakeholder journeys through tools like Customer Self-Serve and digital telephony, and advances in LV network visibility and forecasting. These reflect a disciplined approach to combining ED1 foundations with RIIO-ED2 commitments, providing the robust digital underpinnings on which more advanced capabilities, such as flexibility markets, improved modelling, and integrated network decision-support tools, are built. SSEN's baseline digitalisation work is on track, well-governed, and delivering measurable improvements for customers and the network.

2.12. Progress on our Digital Strategy and Action Plan, DSAP has been equally strong. SSEN has focused on four strategic themes—building a connected community, strengthening whole-system and partnership working, expanding an open data ecosystem, and embedding a digital-first culture—and has delivered material improvements under each. Data foundations have been significantly strengthened through the establishment of Master Data Management, a unified data lake and standardised analytics environments. Customer-facing digital tools such as Connections+, Omnichannel and Tailored Insights have enhanced transparency and ease of service, while operational systems have benefited from expanded LV monitoring, telemetry integration and ongoing ADMS development. Whole-system coordination has improved through the evolution of Active Network Management, forecasting and flexibility orchestration capabilities. Governance has also matured, with DSAP updates maintained to schedule, Data Best Practice embedded across processes, and cyber resilience integrated into technology deployment.

Drivers for change in RIIO-ED2

Core thematic areas

2.13. Reflecting on the drivers for change, we have identified 6 key thematic areas which are driving the need for further investment in RIIO-ED2:

- Market-wide Half Hourly Settlement (MHHS)
- CP2030, Local Power Plan and Connections Acceleration
- Network Visibility and Wider System Services
- Data Sharing Infrastructure (DSI)
- Radio Tele-Switching (RTS) Wind-down
- Regional Energy Strategic Planning (RESP) and Local Area Energy Planning

2.14. Under each thematic area we identify one or more projects where specific needs cases and drivers for change have qualified them for inclusion in this application. All of these projects meet

1 Re-opener Guidance and Application Requirements Document: clause 3.6

one or more of the Digitalisation re-opener criteria, confirmed in more detail in the Section Meeting Ofgem's requirements.

2.15. The policy landscape around digitalisation in the energy sector and for networks in particular continues to be dynamic. Within the last month DESNZ and Ofgem has set out their ambition to accelerate LCT connections, requiring enhancement and scaling of our digital systems, analytics capability, and data infrastructure beyond the investment originally envisaged within RIIO-ED2 and this application as submitted. We welcome engagement with Ofgem on how we can provide detail on our activities to respond to this emerging requirement within the assessment process for this application.

Overview of projects by thematic areas

Theme 1: Market-wide Half Hourly Settlement

2.16. Market-Wide Half-Hourly Settlement (MHHS) is a nationally significant reform designed to modernise Great Britain's (GB) electricity market by moving all customers to half-hourly settlement. This shift enables more accurate consumption data, better system balancing, and supports flexible, low-carbon energy use. MHHS as a key enabler of a smarter, more flexible system, accelerating decarbonisation and allowing suppliers to develop innovative tariffs that reward customers for shifting demand to off-peak periods. The transition also introduces a more modern digital architecture across the sector. MHHS replaces legacy batch-based data exchanges with event-driven digital platforms, improving industry efficiency and simplifying market roles. This strengthens competition, drives operational accuracy, and supports GB's long-term net zero commitments.

2.17. Given its importance, SSEN has consciously adopted a leading role within the MHHS programme by volunteering to take on the key Systems Integration testing as well as delivering our core responsibilities. In early 2026, whilst all other DNOs were working through an industry-wide delay caused by data-flow issues, we had independently identified the defect and implemented the fix, ready to help others - a fact recognised and escalated positively within Ofgem's MHHS leadership. We have a well-structured, resourced, and accountable delivery model for MHHS investment extending through to 2027. This includes fully aligned IT and business teams, proactive supplier engagement, progression against central milestones, and flexible replanning to accommodate major change requests.

Project 1a: Market-wide Half Hourly Settlement – Extended Scope

2.18. This project considers the work required to meet the additional and extended scope of MHHS activities including CR022, CR055, Early Life Support, and consequential smart metering interface changes. The recommended option (Do-Minimum) ensures SSEN meets its obligations, maintains programme momentum, and complies with licence conditions under the Significant Code Review, with a RIIO-ED2 funding request for this project of £1.39m.

Theme 2: Clean Power 2030, Local Power Plan and Connections Acceleration

2.19. We are entering a decisive period for the energy transition. As GB accelerates towards Clean Power 2030 (CP2030) and the delivery of the Local Power Plan (LPP), distribution networks play a central role in enabling rapid, fair and efficient access to a decarbonised electricity system. Delivering this requires not only investment in physical infrastructure, but a step-change in digital capability building on the progress already made through RIIO-ED2. The projects set out under

this thematic area enable high-volume modelling, manage access rights at scale, and improve the connection experience at the local level.

2.20. CP2030 sets an ambitious requirement for a near-fully decarbonised power system by 2030. This directly drives up the amount and complexity of modelling we must do across generation, demand, flexibility and network reinforcement. Reforms to accelerate connections, including NESO-led queue reforms and the CP2030 aligned connections approach, have a major effect on our modelling workload. The drive to fast-track viable connections means we must model connection impacts more frequently, more quickly, with the ability to manage scenarios, and at increasingly granular spatial detail (down to the local low voltage (LV) network). The projects under this theme specifically consider modelling of the LV network at scale, support to accelerate low carbon technology (LCT) installer applications, and the system to manage and track increasingly complex early access arrangements.

2.21. These projects address the unprecedented volume of work ahead and already underway. Having considered the options, we believe now is the right time to make these digital investments. This will allow us to deliver at scale, at pace and mobilising for ED3 so we can best meet external drivers, regulatory expectations and operational demands.

Project 2a: Scaled Local Network Modelling

2.22. The project enables high-volume, automated LV network modelling essential for Long-Term Integrated Network Development Plans (LINDPs), near-term investment decisions for the ED3 business plan, and short-term low LCT connection readiness assessments. It leverages prior RIIO-ED2 investments like Connections+ and Connectivity++[2] and enhances SSEN's Unified Network Model through advanced analysis software and data analytics, overcoming limitations of current manual tools. The initiative also addresses historical gaps in local network data, supporting both long-term and near real-time decision-making for LCT connections. The recommended option includes iterative power flow forecasting tools, automatically populated LV study design tools, an analytic model for LCT connection readiness, and efforts to fill historical data gaps. The RIIO-ED2 funding request for this project is £2.36m.

Project 2b: ConnectDirect Collaboration

2.23. This project implemented ConnectDirect, a collaborative, fully digital and automated portal designed to streamline the application process for domestic retrofit LCT connections, and replace manual, inefficient use of Word and Excel forms. The project works to improve efficiency, scalability, and stakeholder satisfaction amid growing volumes of LCT applications driven by decarbonisation efforts in the heat and transport sectors. The RIIO-ED2 funding request for this project is £0.82m.

Project 2c: Early Access Management at Scale

2.24. This project implements and concludes development of the Network Access Ledger (NAL) to comply with Ofgem's Access Significant Code Review (Access SCR) and the subsequent range of Early Access Products developed by SSEN to ensure customers can connect in the shortest times possible. The NAL system records, manage and tracks increasingly complex early access arrangements with accurate digital records of curtailable and non-curtailable connection access rights. The RIIO-ED2 funding request for this project is £0.77m.

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2 Our RIIO-ED2 Business Plan - SSEN

Project 2d: Two-day LCT Connections

2.25. To meet the ambition to accelerate Low Carbon Technology (LCT) connections as set out by DESNZ/Ofgem in their jointly issued letter in December 2025, SSEN may need to seek additional targeted funding through this or a further Digitalisation re-opener. Delivering higher auto-approval rates, faster customer journeys and expanded, data-driven readiness tools goes beyond the scope of our existing RIIO-ED2 activity. Further digital investment will be required to support proactive, data-led approaches, such as targeted unlooping, enhanced LV visibility and national-scale pre-application datasets, which are critical to enabling rapid LCT rollout. The Digitalisation Re-opener provides the appropriate mechanism for Ofgem to consider this emerging need and ensure SSEN can fully deliver the outcomes expected by DESNZ, Ofgem and customers. Detailed design work to assess the required activity is already underway and we anticipate making an application on or before July 2026. We will provide information to Ofgem on this process as it progresses, with the aim of accommodating our recommendation and Ofgem's assessment within the existing consultation and determinations process for this application.

Theme 3: Network Visibility and Wider System Services

2.26. The focus of this theme is to unlock flexibility, strengthen resilience, and improve service outcomes for customers in SSEN's licence area and across GB. These investments deepen our foundations for operational excellence, system-wide coordination and future readiness aligned to Ofgem's digitalisation expectations, and the evolving DSO role, and addresses the growing need for high-quality, near real-time data to run an increasingly complex system.

2.27. For customers, this means faster, more certain and more transparent connection processes. For the wider GB system, it unlocks smarter coordination between transmission and distribution, enabling more renewable generation to connect efficiently while maintaining system stability. For SSEN this increases local network insight, supporting early fault identification, targeted interventions, the minimisation of customer interruptions, and enabling advanced weather-fault prediction. From a systems perspective, this increases our ability to monitor and dynamically control voltage performance across HV and LV networks, responding to the challenges of rising electrification and increasingly variable demand and generation patterns.

2.28. In delivering near real-time visibility as a business-as-usual activity, the projects under this theme directly respond to ED3 digitalisation drivers, such as improving visibility and measurement, enabling flexibility, and facilitating faster customer connections, allowing customers to benefit through better service forecasting, more responsive network management and enhanced transparency around network conditions and constraints.

Project 3a: ADMS Data-Fabric and Operational Analysis

2.29. This project implements data fabric technology within SSEN's Advanced Distribution Management System (ADMS) to enhance cyber-secure data exchange, improve network visibility, analytics, and operational efficiency, ultimately accelerating connection works and supporting future network complexity. The data fabric will harmonise disparate data into the Operational Technology environment securely, enabling real-time contingency analysis and improved operational decisions for network management. The initiative aligns with Ofgem's ED3 methodology by enhancing customer service, resilience, and cyber security. The RIIO-ED2 funding request for this project is £4.03m.

Project 3b: FMAR Enablement

2.30. This project integrates SSEN's flexibility market platform, ElectronConnect[3], and the flexibility dispatch platform Flexible Power[4], with the Flexibility Market Asset Register (FMAR). FMAR is a centralised national asset register mandated by Ofgem and developed by Elexon to simplify registration processes for Flexibility Service Providers (FSPs) across GB. The purpose of FMAR is to streamline asset registration, improve network visibility of flexible assets, and comply with emerging regulatory obligations under RIIO-ED2. The RIIO-ED2 funding request for this project is £0.27m.

Project 3c: Situational Awareness in Near Real-time

2.31. This project enables near real-time open data publication of all relevant SCADA and local LV substation monitoring in near real time. It further reduces the latency of our daily aggregated smart metering open data sets to support whole electricity system coordination, third-party situational awareness, and innovation. It will facilitate locational dynamic congestion signals to optimise LV network use, supporting the accelerated adoption of LCT. The proposal aligns with key drivers from Ofgem's ED3 Sector Specific Methodology Consultation (SSMC), focusing on improving visibility and measurement at the LV level, enabling system flexibility and coordination, and supporting faster customer connections. The RIIO-ED2 funding request for this project is £1.61m.

Project 3d: T-D Boundary Operational Data Exchange

2.32. This project increases the operational data shared at the Transmission-Distribution (T-D) boundary to enable earlier access for embedded generation affected by transmission congestion, enhance coordination, and implement DNO primacy rules within our established Distributed Energy Resources Management System (DERMS) modules. It addresses the growing challenge of increased customer connection applications at distribution and transmission levels, leading to long reinforcement lead times extending to 2038 in some SSEN areas. The project forecasts release of [redacted] MW in SEPD area and [redacted] MW in SHEPD area, and increased data sharing with NESO through 300 to 400 additional signals. It will enable [redacted] additional transmission DERMS systems, and enhance functionality to accommodate DSO Primacy Rules across all DERMS modules. The RIIO-ED2 funding request for this project is £3.19m.

Project 3e: Dynamic Voltage Management

2.33. This project develops and deploys a dynamic Voltage Management central control system across SSEN's networks to enhance voltage control, support LCT integration, improve network reliability, and reduce costs by leveraging digital technologies and existing infrastructure such as smart metering and LV substation monitoring. Voltage management is increasingly complex due to rising low carbon technology uptake. Managing voltage within statutory limits is crucial for network safety and reliability. This system will calculate optimal voltage setpoints and dispatch dynamic instructions to network assets, enabling coordinated voltage optimisation, predictive analytics, and services such as temporary voltage reduction for the NESO. The RIIO-ED2 funding request for this project is £2.00m.

3 ElectronConnect
4 Flexible Power

Project 3f: Real Time Resilience

2.34. This project integrates reliability and pre-fault data into a multi-functional LV Management Platform and increases the functionality of existing LV monitoring devices to capture additional performance data. The LV network's expansive footprint and direct role in local energy necessitates targeted, planned investment, supported by comprehensive data to proactively repair faults and reinforce the network. The initiative builds on prior innovation projects, including SYNAPS[5] and High Voltage Feeder monitoring. The investment focuses on network visibility and wider system services, supporting fault anticipation through near real-time data collection at targeted sites. This enables proactive fault repair, targeted LV investment, and reduces repeated supply interruptions. The RIIO-ED2 funding request for this project is £2.57m.

Project 3g: Predict4Resilience

2.35. Predict4Resilience (P4R) is a digital capability developed through the Strategic Innovation Fund (SIF) to improve electricity network resilience to severe weather by combining advanced weather forecasting with probabilistic fault prediction, enabling DNOs to anticipate the likely location and impact of weather-related faults and respond more proactively. As climate change increases the frequency and severity of extreme weather events, improved situational awareness and forecasting are increasingly important to protecting customers and maintaining system resilience. We have trialled the P4R solution during the innovation phase, and the preferred option is to integrate the platform into our operational environment to utilise it as part of our BAU forecasting capabilities. The RIIO-ED2 funding request for this project is £0.49m.

Theme 4: Data Sharing Infrastructure

2.36. As energy networks become increasingly decentralised through rapid growth in renewable generation, electric vehicles, heat pumps, flexibility markets, and community-led energy initiatives, the ability to share accurate, timely and secure data is a foundational requirement for operating a reliable system and delivering value to customers and the wider GB energy sector.

2.37. Planning and investment decisions in the electricity network increasingly depend on diverse datasets generated across operational, commercial, market, and planning systems. SSEN's approach, aligned to RIIO-ED2 and ED3 ambitions, demonstrates that better data sharing directly improves the accuracy, pace, and efficiency of investment planning. Through Data Sharing Infrastructure (DSI), we can integrate core datasets such as connectivity, load flow, flexibility assets, and local network visibility into a coherent ecosystem that supports faster, more confident decision-making.

2.38. The GB energy system is increasingly dependent on collaboration among DNOs, NESO, retailers, aggregators, and innovators. Today, each operates with limited visibility of the others' data, leading to inefficiencies, duplicated network investment, and avoidable costs. Our participation as the first DNO to pilot the national DSI positions SSEN as a leader in enabling whole-system coordination by adopting decentralised, standardised, secure data-exchange principles.

Project 4: DSI Collaboration

2.39. The project enables the Minimum Viable Project (MVP) stage as defined by Ofgem and NESO, particularly targeting Type 1 and Type 2 use cases. Additionally, it includes engagement and

5 https://ssen-innovation.co.uk/nia-projects/nia-ssen-0051-synaps-2-fault-detection-classification-location-solution/

advocacy efforts to encourage early adoption of Type 3 use cases involving non-traditional energy participants. This builds on existing RIIO-ED2 investments and our DSI pilot. The RIIO-ED2 funding request for this project is £1.83m.

Theme 5: Radio Teleswitch Service (RTS)

2.40. Radio Teleswitch Service (RTS) is a critical legacy service that switches electricity meters between peak and off-peak tariffs using radio signals. It uses the BBC Radio 4 long wave frequency and two main systems to broadcast switching instructions. RTS has, for decades, enabled peak and off-peak switching for heating and hot water systems across more than a million properties, serving both tariff structures and critical load-management functions. As GB accelerates its transition to smarter, more flexible energy systems, the successful retirement of RTS is one of the more complex and consequential programmes affecting networks, suppliers, and customers alike.

2.41. SSEN holds a uniquely important responsibility in this process as the sole access provider to the national Radio Teleswitch Control System (RTCS), managing broadcast schedules, group codes and switching logic on behalf of all UK DNOs. This role places us at the centre of system reliability, customer protection, and successful migration to smart-meter-based alternatives. As suppliers are responsible for replacing RTS meters with smart alternatives, our ongoing role is essential to prevent widespread loss of heating or hot water for households. We continue to operate RTS reliably while preparing for potential failures and reactive mitigation.

2.42. The transition away from RTS is a multi-year, multi-stakeholder programme with significant technical, customer and regulatory complexity. We occupy a uniquely responsible and influential position in ensuring continuity of service, accurate switching, customer protection, and safe decommissioning.

Project 5: Radio Teleswitch Service Wind-down

2.43. The project will maintain RTS until the mandated shutdown date and to support controlled decommissioning activities, including system maintenance, third-party support, hosting costs, and administrative resources. The RIIO-ED2 funding request for this project is £0.48m.

Theme 6: RESP and Local Area Planning

2.44. As the energy system transitions to a more complex, decentralised and data-rich environment, the ability to plan, coordinate and execute with precision is essential, particularly in support of local area energy planning and NESO's RESP process. In supporting the RESPs, SSEN has prioritised solutions that enhance data quality, strengthen regional coordination and improve modelling capability. This enables more accurate representation of local infrastructure constraints, future demand scenarios and generation patterns. This in turn will ensure RESP outputs reflect local realities on the ground.

2.45. We have built strong internal capabilities in digital network modelling and data governance, allowing us to deliver technology that is both robust and operationally relevant. These capabilities underpin critical improvements including: advanced forecasting and modelling tools, provision of consistent datasets for RESP and local area planning activities; automated data pipelines to reduce manual intervention and ensuring timely, high-quality information for decision-making; and GIS-based visualisation platforms, offering clear spatial insights into constraints, opportunities and investment priorities. These capabilities ensure we are not only a reliable contributor to national and regional planning frameworks, but also a leader in how local system data is shared, consumed and validated.

2.46. Our investments in digital tools for local area planning are timely, necessary and well-governed. They reflect a strong internal capability for delivery, and a clear alignment with national and local planning expectations. By modernising our digital foundations, we are ensuring that our networks remain resilient, transparent and ready to support GB's transition to a net zero energy system.

Project 6: LAEP+ Integration

2.47. This project develops and implements the Local Area Energy Planner Plus (LAEP+) platform within the SSEN licence area. LAEP+ is an online platform facilitating local authorities in creating spatial Local Area Energy Plans (LAEPs) which can be shared with DNOs. It is designed for users with varying technical expertise and provides access to baseline datasets, modelling tools, and stakeholder engagement features. SSEN pioneered LAEP+ through the RESOP[6] innovation project, and it is now used by 260 local authorities and four DNOs across GB, with over 500 registered users and 300 projects in SSEN's application. The project will standardise the platform across neighbouring DNOs and prepare for integration with RESP in ED3. The RIIO-ED2 funding request for this project is £1.43m.

Strategic alignment with RIIO-ED2 Digital Strategy and Action Plan

2.48. Our digital purpose is to improve performance and efficiency by creating a digital network and a data community with every connection. This in turn, is how we help SSEN achieve the business strategic goals.

2.49. We have used drivers for change, stakeholder engagement, and strategic analysis to determine that by focusing on the creation of a connected community, building an open data ecosystem, and operating as a whole system in partnerships we will strengthen our digital first culture which in turn enables us to better serve our stakeholders and customers today and in the future.

2.50. Within each project EJP, individual projects present their strategic alignment with the overall DSAP.

Our plan for delivery in RIIO-ED2

2.51. We forecast to deliver all activities outlined under these projects within the RIIO-ED2 period. In doing so, we have taken the following considerations into account.

Resources

2.52. We primarily rely on our own expertise and resource to deliver these projects and prioritise building internal and enduring capability wherever possible. To augment specific skills and peak requirements we work with external specialists.

2.53. We have identified the resource we need to deliver the projects within RIIO-ED2 at a project level. For consistency, we have proposed that Indirect costs are funded through a 10.8% uplift across the portfolio based on the 'Indirects Scalar', as previously applied to Storm Arwen, LRE and HOWSUM applications.

6 Regional Energy System Optimisation Planning (RESOP) | ENA Innovation Portal

Consideration of risk

2.54. We have not included a risk funding request in our application but recognise there are a number of areas of uncertainty associated with delivery of these projects over the next 2 years. These include policy decisions by government, Ofgem and other stakeholders, and a degree of reliance on specialist third parties for the provision of technical services and support to deliver within RIIO-ED2. In the event that this drives material delay or cost increase, we will engage with Ofgem on this, including in relation to our ED3 Business Plan.

Projects not taken forward at this time

2.55. In preparation for this re-opener window, we assessed a further ten projects which, while associated with material benefits, we determined we could not confidently deliver within the remainder of the RIIO-ED2 period. We will assess these projects as part of our ED3 Business Plan preparation. We provide more information on these within the relevant thematic chapters.

Mobilisation and strategy for ED3

2.56. A significant proportion of the activities proposed in this re-opener application represent essential mobilisation for the ED3 period, ensuring we maintain momentum, avoid unnecessary delay and enter ED3 prepared. In shaping these proposals, we have reflected Ofgem's positions set out in the ED3 SSMC, ensuring the timely progression of projects aligned with future expectations. We welcome Ofgem's support for these foundational activities, which will underpin smarter, more efficient, and net-zero-aligned service delivery in ED3 and the transition to CP2030.

January 2026 application overview

2.57. We are therefore seeking funding for 14 projects in this application. The total funding adjustment requested in this application is £25.7m, summarised in Table 1. More detail is provided in the Adjustment Summary section.

2.58. All costs referenced throughout the document have been presented in 2020/21 price base and converted using the latest Ofgem indexation rates.

£m, 2020/21 price base	2023/24	2024/25	2025/26	2026/27	2027/28	Total
MHHS Extended Scope	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.39**
Scaled Local Network Modelling	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.36**
ConnectDirect Collaboration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.82**
Early Access Management at Scale	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.77**
ADMS Data-Fabric and Operational Analysis	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**4.03**
FMAR Enablement	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.27**
Situational Awareness in Near Real-Time	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.61**
T-D Boundary Operational Data Exchange	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**3.19**
Dynamic Voltage Management	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.00**
Real Time Resilience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.57**
Predict4Resilience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.49**

£m, 2020/21 price base	2023/24	2024/25	2025/26	2026/27	2027/28	Total
DSI Collaboration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.83**
Radio Teleswitch Service Wind-down	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.48**
LAEP+ Integration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.43**
Adjustment before Indirects	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**23.23**
Indirects adjustment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.51**
Total adjustment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**25.74**
SHEPD adjustment (50%)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**12.87**
SEPD adjustment (50%)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**12.87**

Table 1: Total allowance adjustment summary

3. MEETING OFGEM'S REQUIREMENTS

Structure of this application

3.1. Our application consists of:

- a core narrative document developed to address the requirements of Ofgem's Re-opener Guidance for all projects included in our application, and
- 30 external appendices consisting of Engineering Justification Papers (EJPs) and Cost Benefit Analysis for 14 projects, our Digital Strategy, and Digital Action Plan.

3.2. The structure and outline content of this application is illustrated in Figure 1. The projects in paler shades represent emerging requirements.

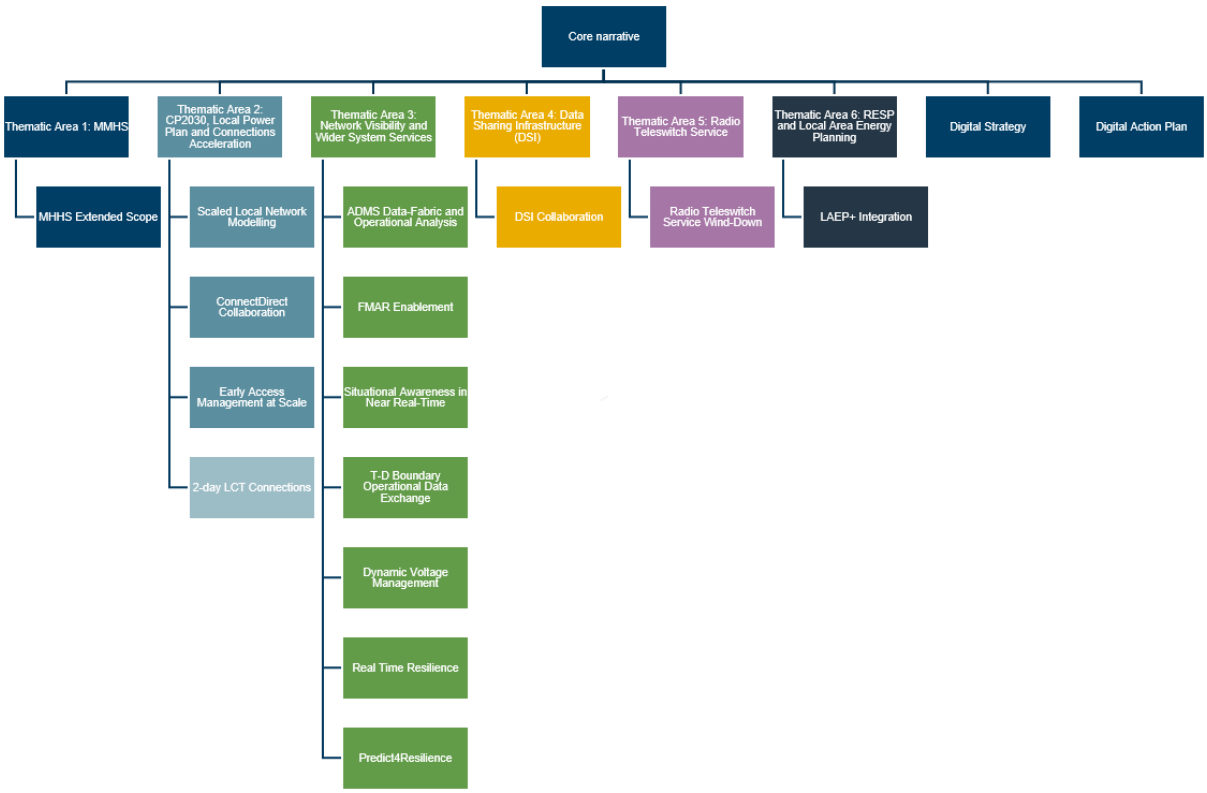


Figure 1: SSEN January 2026 Digitalisation application structure

Ofgem re-opener requirements

3.3. We set out how we meet Ofgem's re-opener licence requirements in this application in Table 2.

Digitalisation re-opener licence criteria Special Conditions 3.2.58-65	Requirement met?	How met
The Digitalisation Re-opener may be used where the licensee incurs or expects to incur costs that exceed the Materiality Threshold as a result of:		
(a) a change in legislation, licences, regulatory requirements, or industry codes, where as a result there is a requirement for the licensee to provide new, or significantly altered, digital or data services, including but not limited to:	✓	We have incurred or expect to incur costs as a result of changes to government policy, Ofgem requirements, and / or regulatory obligations, which have resulted in the need to provide new or altered digital or data services in a number of areas.
i. government or the Authority implementing energy sector reforms that require new data or digital services to be delivered by the licensee;		
ii. a re-tendering of the smart metering system resulting in additional roles or responsibilities for the licensee with regards to the smart metering system;	n/a	Not relevant for submitted projects
(b) the licensee retrofitting monitoring devices to unmonitored Distributed Generators as a result of the Authority deciding that there is net Customer benefit in doing so; or	n/a	Not relevant for submitted projects
(c) the licensee is implementing Mature Innovation related to data or Digitalisation to fulfil obligations in the conditions of the Distribution licence.	✓	We are moving a range of solutions into BAU. We set out which mature innovation we will deploy and associated benefits.
The Digitalisation Re-opener may be used where the licensee incurs or expects to incur costs that exceed the Materiality Threshold.	✓	The costs incurred or expected to be incurred exceed the Materiality Thresholds for both SHEPD and SEPD (£2.16m and £5.56m respectively).

Table 2: Mapping Ofgem's re-opener licence requirements

3.4. Table 3 sets out how each project aligns with Ofgem's re-opener licence criteria.

Project	3.2.59 (a) i	3.2.59 (c)
MHHS Extended Scope	✓	
ConnectDirect Collaboration	✓	
Early Access Management at Scale	✓	
Scaled Local Network Modelling	✓	

Project	3.2.59 (a) i	3.2.59 (c)
Situational Awareness in Near Real-Time		✓
T-D Boundary Operational Data Exchange	✓	✓
Dynamic Voltage Management		✓
Real Time Resilience		✓
Predict4Resilience		✓
FMAR Enablement	✓	
ADMS Data-Fabric and Operational Analysis	✓	
LAEP+ Integration		✓
DSI Collaboration	✓	
Radio Teleswitch Service Wind-Down	✓	

Table 3: Mapping Ofgem's re-opener licence criteria by project

3.5. Table 4 sets out where we meet Ofgem's Re-Opener Guidance requirements in this application.

Ofgem Re-Opener Guidance requirement	Requirement met?	Where addressed
Needs Case and Preferred Option	✓	Sections 5 to 11 and individual project EJPs and CBAs
Stakeholder Engagement and Whole System Opportunities	✓	Section 5 and individual project EJPs and CBAs
Cost Information	✓	Section 4 to 11 and individual project EJPs and CBAs
Cost Benefit Analysis and Engineering Justifications	✓	Sections 5 to 11 and individual project EJPs and CBAs

Table 4: Mapping Ofgem's Re-Opener Guidance requirements

Summary of bilateral engagement

3.6. We have had a number of points of engagement with Ofgem on our plans for the January Digitalisation re-opener over the past 6 months. These have been used to discuss, inform and refine our proposals. An outline of discussions is set out in Table 5.

Engagement Date and Scope	Discussion and outcomes
13 August 2025 Introductory conversation on SSEN's plans for the January 2026 Digitalisation re-opener window	• We shared an overview of our RIIO-ED2 Digitalisation plans, where we are today, and current thinking on Digitalisation re-opener. We covered our first view of drivers for investment, through MHHS, DSI, CP2030, network visibility, RESP and local area energy planning, and RTS. • We provided an overview of our initial candidate projects, aligning these against the DIGIt licence criteria.

Engagement Date and Scope	Discussion and outcomes
	• Ofgem [redacted] provided generally positive feedback, encouraged us to consider further activities driven by Ofgem's consultation on CP2030, and offered to bring other Ofgem colleagues into the conversation to discuss SSEN's proposals. Further engagement was planned for September.
16 September 2025 Follow-up call on our plans for the re-opener application, updated following our review of CP2030 and Clean Flex Roadmap	• We provided an updated view on our candidate projects further to Ofgem's feedback in August. • We discussed the challenges of assessing benefits across the portfolio where the benefits fall beyond the immediate purview of the DNO. Ofgem [redacted] noted that where detail for standard asset CBA is not readily available, the key target is to demonstrate value of a given project at scale. • Ofgem noted the candidate list appears comprehensive and sensible, inviting SSEN to be clear in the application what has been provided in the RIIO-ED2 and why / where the need for investment is new. • Ofgem confirmed they would set out some positions on network visibility and DSI in ED3 SSMC. Ofgem recommended engaging with other DNOs at the DDSG, and proposed possible re-opener-focused workshops if beneficial.

9 December 2025
 	
Follow-up call on our plans for the re-opener application, focusing on CBA and logic model approach
	• We provided an updated view on our candidate projects, including examples of how we have developed CBA where it has not been possible to follow a standard approach.
	• Principles for CBA approach – selected examples:
	  • For some projects, the benefits are to wider society rather than to SSEN directly and have been assessed as such (e.g. MHHS).
	  • Where it is difficult to disaggregate benefits of one project from wider workstream, e.g. LENZA (LAEP+), we have assigned a % share of overall benefits to project as a proxy.
	  • Where we believe our recommended approach under a project is "do-minimum", or there are no credible alternatives, we have not included alternatives in CBA. This will be explained and justified within the application (e.g. MHHS Extended Scope).
	• We also shared an update on how the projects align with the DIGIt criteria.
	• We shared our logic model approach to summarising the drivers, enablers, activities, outputs, outcomes and benefits of each project.
	• Ofgem confirmed it would not expect to see heavy optioneering where specific activities are mandated, but that we should confirm where we have choice in solutions we may take forward. Ofgem also wants to see user needs captured in our optioneering and assessment, including understanding how stakeholders want to see these evolve; and how projects build on our original RIIO-ED2 strategy and plan.
	• Ofgem agreed with the principle of building in ED3 mobilisation, and that we should show ED3 and DSAP alignment, and where stakeholder engagement is driving work. Ofgem noted the logic models are effective in providing simple, logical overviews of the projects.

8 January 2026 Follow-up call on our plans for the re-opener application, focusing on logic models for all projects	• We shared an overview of the application structure and walked Ofgem through the logic model for each project, spending more time on projects where we have taken a bespoke approach to CBA, or where benefits are not accrued to SSEN.

Table 5: Key bilateral engagement on January 2026 Digitalisation re-opener

Related documents

Ofgem Final Determinations[7] including SSEN Annex

SSEN Business Plan including IT and Digitalisation chapter[8]

SHEPD Special Licence Conditions[9] specifically Special Condition 3.2, Part I

SEPD Special Licence Conditions[10] specifically Special Condition 3.2, Part I

Digitalisation Strategy[11]

Digitalisation Action Plans[12]

Smart Optimisation Outputs licence condition Collaboration Plan[13]

Application contact point

Any correspondence in relation to this application can be directed to:

[redacted]
[redacted]
[redacted] DistributionRegulation@sse.com

7 RIIO-ED2 Final Determinations | Ofgem

8 SSEN RIIO-ED2 Final Business Plan (including IT & Digitalisation Chapter five)

9 Decision on the proposed modifications to the RIIO-2 Electricity Distribution licences | Ofgem

10 Decision on the proposed modifications to the RIIO-2 Electricity Distribution licences | Ofgem

11 SSEN Digital Strategy 2025, Digital Strategy and Action Plan Archive - SSEN

12 SSEN Distribution Digital Action Plan December 2025, Digital Strategy and Action Plan Archive - SSEN

13 ssen-dso-collaboration-plan-2025.pdf

4. ADJUSTMENT SUMMARY

4.1. We provide a detailed breakdown of the allowance adjustment for this re-opener application in Table 6. Please see the following sections for more information.

Adjustment summary £m, 2020/21 price base	**2023/24**	**2024/25**	**2025/26**	**2026/27**	**2027/28**	**Total**
MHHS Extended Scope[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.39**
Scaled Local Network Modelling	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.36**
ConnectDirect Collaboration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.82**
Early Access Management at Scale	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.77**
ADMS Data-Fabric and Operational Analysis	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**4.03**
FMAR Enablement	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.27**
Situational Awareness in Near Real-Time	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.61**
T-D Boundary Operational Data Exchange	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**3.19**
Dynamic Voltage Management	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.00**
Real Time Resilience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.57**
Predict4Resilience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.49**
DSI Collaboration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.83**
Radio Teleswitch Service Wind-down	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.48**
LAEP+ Integration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.43**
Adjustment before Indirects	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**23.23**
Indirects Adjustment[2]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.51**
TOTAL ADJUSTMENT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**25.74**
SEPD (50%)[3]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	12.87
SHEPD (50%)[3]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	12.87

NOTES:

1. Individual project costs are shown before the addition of Indirect costs.
2. Indirect costs are calculated as 10.8% of total project costs. See Resource costs and Section Resource costs and Indirects for detail.
3. This application is submitted on behalf of both Scottish Hydro Electric Power Distribution plc and Southern Electric Power Distribution plc, in line with Ofgem's Reopener Guidance. We have applied a split of the funding across SHEPD and SEPD licensees of 50% and 50%, in line with wider regulatory reporting requirements. This also mirrors the apportionment applied to Cyber OT allowances, which we consider is an appropriate precedent and it aligns with wider regulatory reporting treatment.

Table 6: Detailed total adjustment summary

5. INTRODUCTION

Background to Digitalisation re-opener and this workstream

RIIO-ED2 Business Plan and Ofgem determinations

5.1. In our RIIO-ED2 Business Plan, we proposed a total Digitalisation Investment Plan of £264.1m (non-operational capex) to deliver the IT, Operational Technology (OT) and data capabilities needed to operate as a fully digitalised DNO. The original programme comprised 28 projects structured under four strategic outcomes:

- Positive Impact on Society,
- Trusted and Valued Service,
- Safe, Resilient and Responsive Network
- Progress to Net Zero.

5.2. This investment was requested to give SSEN the digital foundations required to meet statutory and regulatory obligations, while improving the efficiency and resilience of operations. Digitalisation was positioned as an enabler across the entire Business Plan rather than as a standalone output. It underpins efficient network operation, allows data to be used more effectively in decision-making, and provides customers and market participants with better access to information.

5.3. In its Final Determinations, Ofgem agreed with the strategic importance of digitalisation and acknowledged that investment in data, IT and OT is essential to deliver a smarter, more flexible energy system. Ofgem also applied an efficiency challenge and set clear licence obligations. Specifically, Ofgem decided on an average downward adjustment of 12% to the levels of ex ante funding sought by the companies in addition to the ongoing efficiency challenge, signalling an expectation that DNOs deliver more with available resources.

5.4. Key aspects of Ofgem's determination were:

- Strategic alignment: Ofgem agreed with SSEN's digitalisation priorities and confirmed the need for investment across IT, OT and data systems to enable smart, flexible operation and support the DSO transition.
- Licence obligations: Ofgem introduced mandatory requirements for all DNOs to publish and maintain a Digitalisation Strategy and Action Plan (DSAP) and to comply with Data Best Practice guidance. SSEN's approach already reflected these expectations, so our existing governance and transparency processes directly satisfy these obligations. Ofgem also set a new licence obligation to create a System Visualisation Interface that provides access to a package of forward-looking, open and accessible digital network tools to support system optimisation and stakeholder coordination.
- Baseline vs in-period: Ofgem expected core digital and data capabilities to be delivered efficiently within baseline (subject to the 12%/1% challenges), and provided UMs to bring forward defined digitalisation items where scope and timing were not yet fixed at the price control.
- Uncertainty Mechanism: Ofgem identified a number of digitalisation activities - including elements of DSO enablement, ADMS development and flexibility management platforms - as suitable for delivery under UMs. This approach recognised that these investments were

necessary but not yet fully specified at the time of the price control, hence the re-opener provides the route for SSEN to update Ofgem with the detailed scope.

- DSO incentives and visibility: Ofgem introduced a DSO financial output delivery incentive (ODI-F) and expects greater network monitoring (particularly at LV) and increased use of data analytics to support smart, flexible operation.
- Customer-facing digital services: Ofgem recognised the role of customer digital platforms (e.g. Connections+, Omnichannel Platform, Tailored Insights) in improving service quality but concluded that benefits would be captured through the wider customer satisfaction and service incentive framework rather than as separate funded outputs.

5.5. Ofgem's determinations therefore largely endorsed the strategic intent of SSEN's Business Plan, while applying cost efficiency challenges and adjusting the mechanism through which funding is released. This re-opener application builds directly on that position.

5.6. Our application seeks funding for activities which were not funded through RIIO-ED2 baseline allowances. In setting out our justification for this funding, we show how our projects build on the digital activities and enablers that have already been progressed within RIIO-ED2, demonstrating these remain consistent with Ofgem's final determinations and represent a progressive approach to meeting our licence obligations and digital commitments.

Digitalisation delivery in RIIO-ED2

5.7. Delivering on our RIIO-ED2 business plan within the adjustments applied during Final Determination, we adopted a clear line-of sight-approach to link individual products and their delivery roadmap though to our business capability model, business operating model through our four strategic outcomes for RIIO-ED2.

5.8. Table 7 sets out the baseline digitalisation outcomes we are seeking, the value delivered to date and the value on track for delivery during the remainder of RIIO-ED2.

Business Outcome	Value Delivered	Value In Delivery
Providing a valued and trusted service for our customers and communities Deliver a digitally enabled stakeholder-focused foundation that meets RIIO-ED2 requirements by providing on-demand data and insights, supporting Net zero growth and enhancing customer and stakeholder journeys through technology (including IP telephony). Ensure compliance with licence conditions, while offering value and scalability compared to manual alternatives.	**On-demand data & insights**: for example Smart ETR which uses machine learning and real-time data from multiple sources (such as network, weather, traffic, and historical fault patterns) to deliver highly accurate power restoration estimates, reducing customer complaints and improving regulatory compliance. **Enhancing customer & stakeholder experience**: including Customer Self Serve which enables customers to design and apply online for Minor Connections via the SSEN website, providing all required details and receiving instant cost estimates without needing telephone support, thereby improving convenience and operational efficiency; and Amazon Connect – replaces legacy Avaya telephony with a cloud-based, AI-enabled contact centre	**Digitally enabled, stakeholder-focused foundation**: such as our online self-service platform that enables customers to choose connection points, obtain instant cost estimates, and request formal quotations quickly and transparently. **Value and scalability compared to manual alternatives**: including Design and Quote which delivers a digital Configure-Price-Quote (CPQ) solution that enables accurate, automated design and pricing for customer connections, improving speed, transparency, and stakeholder experience.

Business Outcome	Value Delivered	Value In Delivery
	that supports multi-channel customer engagement.	
Delivering a safe, resilient and responsive network for all our customers Establish the foundation for proactive asset management through leveraging ED1 investments, enabling analytics, automation, and compliance with regulatory requirements. Maximises the use of asset condition and sensor data to improve lifecycle understanding, support future flexibility markets, and deliver ISO 55000 maturity, while providing structured, open data for stakeholders and ensuring superior value compared to manual alternatives.	**Proactive asset management**: Top LV Feeder Tool (Networks Insight Tool) - consolidates smart meter, LV monitor, and telemetry data into a single Power BI interface, providing standardised peak demand calculations and visibility of network utilisation to support planning, fault prediction, and low-carbon technology integration. **Structured, open data for stakeholders:** Smart Phase 2 - delivered enhancements to smart metering systems, including data integration with the Open Data Portal and robust post–go-live support, achieving all milestones on time and earning top customer satisfaction ratings.	**Compliance with regulatory requirements:** Natural Asset Platform, designed to manage and optimise SSEN's environmental and biodiversity commitments by integrating natural capital data into asset planning and decision-making for sustainable operations. **Asset condition and sensor data:** Cyber Hawk drone-based inspections and AI-driven analytics through its iHawk platform to deliver safe, efficient, and data-rich asset condition monitoring for utilities and energy networks. Future enhancements planned include integration with Maximo.
Accelerating progress towards a net zero world Enable the technology required to deliver improved data and insight capabilities to support flexibility and net zero objectives by delivering advanced modelling and decision-making. Provide accurate, timely data for stakeholders, optimise network performance, and unlock new flexibility opportunities. Enhanced LV network visibility and Systems for Flexibility will reduce costs, improve resilience, and accelerate the transition to a low-carbon future while ensuring excellent customer value.	**Advanced modelling and decision-making including operational forecasting and decision-making:** Implementation of machine learning driven forecasting solution to support week ahead load forecasting for the dispatch of flexibility services. This was achieved by leveraging advanced machine learning models and we have significantly enhanced our forecast accuracy and supported more informed decision-making. We continue to develop this capability to support advanced optimisation to resolve constraint e.g. network reconfiguration, flexibility dispatch, flexibility market, curtailment (or a combination). **Unlock new flexibility opportunities:** Flexibility Market Platform Implemented a new flexibility market platform. More than doubling the number of organisations participating in flexibility and significantly reducing the effort required from new companies to join flexibility markets, cutting the number of contracts from 4 to 1. Enabling more capacity and faster connections, using flexibility to manage £192m of new infrastructure needs, and offered more	**Improved data and insights:** Network Model Manager (NMM) We've implemented the technology to enable Network Model Manager to drive coordination and consistency in data between core systems. We continue to develop this to deliver a single, trusted source of network model data that standardises and integrates planning, operational, and flexibility information to support accurate forecasting, investment decisions, and DSO functionality. **Enhanced LV network visibility:** Enhanced LV network visibility LV Monitoring Rollout. Improving low-voltage network sensors and integration of data into data lake to improve visibility, enable fault management, and support future flexibility and DSO functionality. **Systems for Flexibility:** Progressing our next generation 'Systems for Flexibility' to create a smarter, more effective network and support whole system coordination. Deliver the

Business Outcome	Value Delivered	Value In Delivery
	market opportunities through short-term flexibility.	technology needed by our teams to operate flexibility at scale and with much shorter lead times, ensuring that the architecture we implement is adaptable to improvements, innovation and standardisation in the wider electricity and flexibility sector.
Making a positive and lasting impact on our society Deliver the foundations of an integrated Work and Asset Management (WAM) system within SSEN to enhance site security, optimise scheduling and asset visibility. Enable coordination with national Street works systems. This will maximise ED1 investment, support the Flexibility Market, and underpin the RIIO-ED2 Commercial & Deliverability Strategy by establishing a secure, resilient, and efficient operational framework during a transformational mobilisation period	**Optimise scheduling and managing fatigue:** Overtime Reporting - replaced legacy Excel and PowerPoint processes with an integrated Power BI and Azure DevOps solution, providing IDL and Non-IDL views for improved accuracy, governance, and efficiency in tracking overtime across the organisation. **Efficient operational framework:** Top LV Feeder view (network and load insights tool) - focuses on improving data alignment and reporting accuracy by integrating validation processes, correcting misaligned data, and leveraging tools like Power BI to reduce manual interventions and enable sustainable, streamlined reporting across teams	**Integrated Work and Asset Management / Asset visibility:** including work Programme and Project Management (PPM) - digitising how we manage projects across the lifecycle; Enterprise Portfolio Project Management (EPPM) - providing a single view of the work bank; Document Management System - improving how we share & collaborate internally; and Oracle Field Services (OFS) – digitising scheduling, real-time visibility, and seamless integration to optimise resources (labour and inventory), enhance customer experience, and reduce operational costs.

Table 8: Baseline RIIO-ED2 digitalisation outcomes, examples of value delivered and value in delivery

5.9. We have assessed our RIIO-ED2 baseline digitalisation activity both delivered and in delivery to ensure the projects identified in this application activities maximise any opportunity to efficiently combine activity and build on the capabilities already delivered. As a result, we confirm there are no alternative routes for the projects identified in this application during the RIIO-ED2 price control period, other than the Digitalisation Re-opener mechanism.

Progress on RIIO-ED2 Digital Strategy and Action Plans to date in RIIO-ED2

5.10. SSEN has made effective progress in implementing its RIIO-ED2 Digital Strategy and associated Action Plans. Delivery to date has focused on establishing robust digital and data foundations that support the delivery of RIIO-ED2 outputs, facilitate the transition to a smarter and more flexible electricity network, and deliver value for money for consumers.

5.11. Digital initiatives are prioritised and governed in line with SSEN's wider RIIO-ED2 business plan, with clear linkages to consumer outcomes, network resilience, efficiency and decarbonisation.

5.12. SSEN's Digital Strategy under RIIO-ED2 is structured around the four core themes:

- Connected community centres on harnessing digital technologies to bring people, services, and assets closer together. By investing in robust platforms and intelligent infrastructure,

we can promote seamless communication and collaboration across diverse teams and stakeholders. This digital connection not only enhances workforce productivity but also fosters a sense of shared purpose and engagement among employees, customers, and the broader community.

- Adopting a whole system and partnership approach is essential for delivering operational efficiencies and maximising value for consumers. By working collaboratively with industry partners, regulatory bodies, and other key stakeholders, we have created integrated solutions that address complex challenges across the entire value chain. This approach supports more effective asset management, strengthens resilience, and ensures that initiatives are aligned with broader societal and environmental objectives.
- An open data ecosystem plays a vital role in supporting innovation, transparency, and informed decision-making. By enabling secure, controlled sharing of data both internally and with trusted external partners, we can unlock valuable insights to drive improvement.
- Embedding a digital-first culture is crucial for building sustainable internal capability and ensuring long-term organisational success. This involves not only investing in digital skills and agile delivery methods but also fostering clear ownership, effective prioritisation, and strong governance. A digital-first mindset empowers teams to embrace change, adapt to emerging challenges, and deliver measurable value for consumers through innovation and continuous improvement.

RIIO-ED2 investments delivering the Digitalisation Strategy

5.13. Data & Analytics (foundations)

- Master Data Management (MDM), data lake and analytics established to standardise, govern and analyse operational and customer data (single data model, metadata, access controls).
- Early use cases: reliability/voltage insights, capacity heat-maps, risk-based planning.

5.14. Open Data (external users)

- Open Door portal live on a “presumed open” basis with searchable catalogue, map views and downloadable standard formats.
- Publication cadence aligned to Data Best Practice (DBP); user feedback loop in place.

5.15. Customer Digital Services

- Connections+ (self-serve connections) moving through phased releases.
- Omnichannel (single customer contact platform) replacing legacy telephony/web tools.
- Tailored Insights delivers automated, user-specific information (e.g., local capacity, planned outages).

5.16. Operational Communications & Control

- Operational Technology Network (OTN): hybrid design (SSEN + carrier services) deployed in priority areas.
- Rollout coordinated with Supervisory Control and Data Acquisition (SCADA) / Remote Terminal Unit upgrades to avoid repeat site work and reduce cost.
- Public Switched Telephone Network (PSTN) withdrawal mitigations in place (e.g., Private Mobile Radio (PMR) / Voice over Internet Protocol (VoIP), alternative telemetry paths).

5.17. LV Visibility (network monitoring)

- Low-Voltage (LV) monitors being deployed at secondary substations and key feeders.
- Telemetry integrated to planning/control to improve loading/voltage management and restoration times.

5.18. ADMS (control room capability)

- Advanced Distribution Management System (ADMS) upgrades in delivery.
- Associated enhancements: Outage Management System (OMS) changes, mapping improvements and compute capacity.
- Interfaces aligned to Common Information Model (CIM) and expanded via Inter-Control Centre Communications Protocol (ICCP) for secure data exchange.

5.19. DSO (market-facing capability)

- Distribution System Operator (DSO) enablement advancing improvements in Active Network Management (ANM), plus design/build of orchestration (co-ordinating flexible resources) and optimisation tools (choosing least-cost actions).
- Objective: forecast, procure and dispatch flexibility safely to defer reinforcement where efficient.

5.20. Governance & Compliance

- Digitalisation Strategy and Action Plan (DSAP) maintained to schedule (strategy and 6-monthly action plan updates).
- Data Best Practice applied across the lifecycle (clear ownership, metadata, discoverability, user engagement).

5.21. Cyber & Resilience

- Controls strengthened (e.g., network segmentation, identity/access), integrated with Operational Technology Network (OTN) /SCADA rollout.
- Resilience measures embedded in comms design and operational procedures.

Building on stakeholder engagement insights

5.22. This section describes the stakeholder engagement that has been implemented to inform this submission, from RIIO-ED2 business planning stage to date. Our stakeholder engagement has centred around our Digital Strategy and Action Plan, and our engagement with Ofgem, NESO, and other licensees.

5.23. We have continued and deepened our stakeholder engagement over the interim period, a combination of workshops, webinars and forums covering specific topics, strategy development and broader service deliver. Subsequent stakeholder feedback and insights are included in the individual project chapters.

RIIO-ED2 Business Plan engagement

5.24. When we created our RIIO-ED2 Plan, we met with our stakeholders at 150 events. This input helped shape what we would deliver over the next 5 years. We held two events on digital, one focused on digital experts, the other on a wider group of stakeholders and this input helped prioritise where investment in digital was most valuable to our stakeholders. In addition to digital

focused workshops, we engaged 1,836 stakeholders across 14 events to identify their top priorities for our ED2 Digital Investment Plan.

5.25. Through our RIIO-ED2 Business Plan stakeholder engagement, our communities and stakeholders requested the actions set out in Figure 2.

What Stakeholders told us for RIIO-ED2	How we responded	Our proposed outputs
• We should make significant changes to our IT and operational technology networks to allow open data to be available in visual and application programming interface (API) formats.	• We have created a plan to meet your needs in connections, cyber security, DSO and customer vulnerability.	We will publish and regularly review our Digitalisation Strategy and Action Plan
• We should automate the production of fully costed quotes for customers, removing the need for budget estimates, whilst being a leader on net zero by driving energy efficiency and energy system transformation.	• We have amended our plan to automate the full quotation process and allow self-serve to be accessed earlier and easier.	We will use data in and stakeholders a way that meets the expectations and intent of the Data Best Practice Guidance

Figure 2: RIIO-ED2 Business Plan stakeholder engagement

5.26. Further key insights from our early RIIO-ED2 engagement are summarised in the Power Our Plan Stakeholder Engagement Consultation[14] of our RIIO-ED2 Business Plan.[15]

Stakeholder engagement during RIIO-ED2

5.27. Since the start of RIIO-ED2 we've held 51 discovery workshops, events and engagements to allow stakeholders to continue to inform our plans. Within each edition of our DSAP we highlight the highest priority customer needs from the previous period and how we have addressed these in line with our strategic goals. Table 9 is an example of this from our latest DSAP.

Customer Needs	What we delivered
Guidance through our data	• Published 593 supporting resources, including data dictionaries, maps, and reports, ensuring users have the context they need. • View recordings and materials from our data surgery events and see a log of upcoming events to learn more about the type of data that we share.
Better insight to consider options	• Introduced a "Create Maps and Charts" section on our Data Portal dedicated to building visualisations from select datasets, helping users to make sense of our data. • Introduced a collaborative space to share ideas and examples to inspire users on how to use our data. • View all our reports and docs from a central location with the introduction of our "Reports and Document" section on the Data Portal.
Expand access to high quality data	• Provided comprehensive analysis opportunities by publishing 173 data sets covering current and historical data.

14 Power Our Plan Stakeholder Consultation

15 SSEN-RIIO-ED2-final-business-plan.pdf

Customer Needs	What we delivered
	• Increased assurance of our data with 54% of datasets now Level 1-assured, providing greater confidence in data accuracy and reliability. • We will soon share data quality insights on the portal to help users understand our data in greater depth.

Table 9: DSAP December 2025 stakeholder engagement

5.28. SSEN established a DSO Advisory Board in the first year of RIIO-ED2. This is an independent group established to provide strategic, customer-focused scrutiny and challenge across SSEN's DSO plans, data, digitalisation and transparency activities. It is made up of independent experts including Gareth Miller (Chair), Dr Nicki Clegg, Bridget Hartley, Dr Charlotte Johnson, Dan Roberts and Professor Jan Webb, appointed for their diverse expertise in energy, digital, policy and customer advocacy. They have given specific insight to support digitalisation in SSEN as summarised below:

- Make data usable and intuitive for customers.
- Strengthen digital transparency in operational and strategic decision-making.
- Improve digital modelling, forecasting, and scenario tools.
- Better integrate all digital planning datasets and processes.
- Ensure digital systems promote inclusion, participation, and local value.
- Clearly articulate the digital logic behind DSO investments (using Theory of Change logic model framework).

5.29. Specific stakeholder insights related to each individual project are detailed in individual Engineering Justification Papers

Ofgem engagement on re-opener application

5.30. We shared our candidate projects for the re-opener throughout the project selection and refinement process over a period of several months. Ofgem has agreed with our general approach and has shared broad support for our candidate list as comprehensive and sensible.

5.31. We have also taken account of the direction on ED3 mobilisation for certain activities provided in Ofgem's SSMC.

5.32. An overview of key points of feedback is included in Table 10. See also the summary of our engagement with Ofgem at Table 5.

Feedback	Response
CBA: Does not necessarily require specific granularity of standard asset CBA - if we can show value at scale, CBA will be considered.	We have looked to make a robust assessment on a case-by-case basis in the absence of standard asset investment costs and benefits.
Wider DNO engagement: Ofgem recommended engagement at DDSG.	We have raised at DDSG
CP2030, Local Power Plan and Connections acceleration: what is the funding gap between RIIO-ED2 baseline funding and current need?	Many of the projects represent new, unfunded activities which leverage the new capabilities from initial RIIO-ED2 investment to accelerate for now and ED3.

Feedback	Response
Why invest now: need to prove maturity and value of product, and to evidence why we need to fund their transition to BAU now, rather than wait for ED3.	We set out the rationale for investing now and the impacts of delay where relevant in the EJP / CBA. We have strong stakeholder evidence to support the current value of tools to stakeholders.
SMCC positions and ED3 trajectory: Ofgem would like to see clear narrative on logical, strategic progression between RIIO-ED2 and ED3 plans.	We are mapping ED3 trajectory into project narrative where relevant, and ED3 mobilisation activities where required and not previously funded.
Build internal capability: Ofgem wants to see company capability and growth in skills – not excessive use of consultants.	We have intentionally focused on projects which increase DNO capabilities and leverage new capabilities developed to date

Table 10: Overview of our response to Ofgem feedback to our re-opener proposals

Drivers for change in RIIO-ED2

Key thematic areas

5.33. The projects for which we are seeking funding in this application fall under several core thematic areas of work, shown in Figure 3. More detail on the thematic areas, as well as the specific drivers, needs cases, optioneering and recommendations for each project are provided in Sections 6 to 11 and the accompanying EJPs and CBA.

5.34. The six thematic areas are summarised below:

- Market-wide Half-Hourly Settlement (MHHS): The transition to half-hourly settlement requires new digital capabilities to manage increased data flows, modernised industry processes, and SSEN's expanded programme role.
- CP2030, Local Power Plan and Connections Acceleration: Rapid decarbonisation and queue-reform-driven require scalable digital tools to assess, plan, manage and accelerate customer connections at pace.
- Network Visibility and Wider System Services: Growing system complexity and electrification necessitate improved, near real-time data to operate the network efficiently, unlock flexibility, and deliver better customer outcomes.
- Data Sharing Infrastructure (DSI): A more decentralised, data-rich energy system requires secure, standardised data exchange across industry participants to support whole-system coordination and innovation.
- Radio Tele-switch Service (RTS) Wind-down: The retirement of the RTS platform requires continued digital support to safely operate, transition and decommission this nationally significant legacy system without customer detriment.
- Regional Energy Strategic Planning (RESP) & Local Area Energy Planning: Evolving national and local planning needs require enhanced modelling, data governance, and digital tools to ensure accurate, place-based network planning aligned to net zero.

	a) change in legislation, licences, regulatory requirements, or industry codes	(c) the licensee implementing Mature Innovation related to data and Digitalisation
MHHS - Market Wide Half Hourly Settlement	MHHS extended scope	
CP2030, Local Power Plan and Connections acceleration	Scaled local network modelling; Early access management at scale; Connect Direct Collaboration	
Network Visibility & wider system services	ADMS data-fabric and operational analysis; FMAR Collaboration	Predict 4 Resilience; Situational Awareness in Near Real-time; T-D Boundary Operational Data Exchange; Dynamic Voltage Management; Real-time Resilience
DSI - Data Sharing Infrastructure	DSI Collaboration	
Radio Tele-switching (RTS) Wind-down	Radio teleswitch winddown: GB sole access provider	
RESP & Local Area Energy Planning		LAEP+ Integration

Figure 3: Projects mapped by thematic area and qualifying licence criteria

Methodology for assessing Digitalisation re-opener projects

Overarching process

5.35. In assessing projects for inclusion under the Digitalisation re-opener, we have followed the approach in Ofgem's Re-Opener Guidance, as mapped in Table 4 in this application.

Identifying the needs case

5.36. We have identified where need has arisen across our Digitalisation portfolio during the RIIO-ED2 price control. We have set out the trigger of this need, whether required as a result of government policy or Ofgem requirements, requested by stakeholders, the opportunity to realise material benefits, or other factors. In doing so, we have also tested each project as to whether it meets the requirements and pre-qualification criteria for the re-opener set out in our licence, per Table 2 and Table 3. The needs case and licence qualification for each is set out in the relevant project EJP.

Assessing options

5.37. We have assessed how we can respond to the identified need by considering options which are technically feasible and deliverable within RIIO-ED2. We look at "do-minimum" options and identify where going beyond this can deliver additional benefit. In doing so, we consider how we can build on digital enablers and wider work already undertaken up to this point, including through innovation projects and activities advanced through RIIO-ED2 baseline funding. We set out our optioneering within each project EJP, and assess the options identified as feasible in the individual project CBAs.

5.38. The deterministic CBA template identifies the optimum option from a net present value (NPV) perspective. While we have identified material benefits for all projects, it has not been straightforward to quantify the benefits of certain options. In some cases the benefits are clearly significant and far-reaching, and it is challenging to comprehensively capture all of these in CBA. In many cases the benefits are attributable to wider society rather than directly to SSEN, and established metrics for valuing some benefits do not yet appear to be available. In some cases, activities are mandated to be carried out by SSEN, the business case having been established historically by another party.

5.39. As a result we have applied different approaches across the CBA, including using proxy measures, sharing and applying analysis and metrics developed by other stakeholders, and in all cases setting out benefits qualitatively. For all projects, benefits are clear, obvious and supported by other stakeholders, and our use of CBA for the purpose of this application reflects a common sense and proportionate approach to assessment.

Theory of change overview

5.40. In support of robust consideration of each project, and to provide a succinct way of communicating key aspects, we have further assessed and presented the following for each project:

- Driver: Why do this work?
- Digital Enablers: What are the enablers and pre-requisites?

- Digital Activities: What is the activity/investment?
- Output: What is the measure?
- Outcome: What will we achieve by doing this?
- Benefit: What benefit does this deliver to customers?

5.41. Figure 4 shows how we have assessed and present options against our Digitalisation methodology.

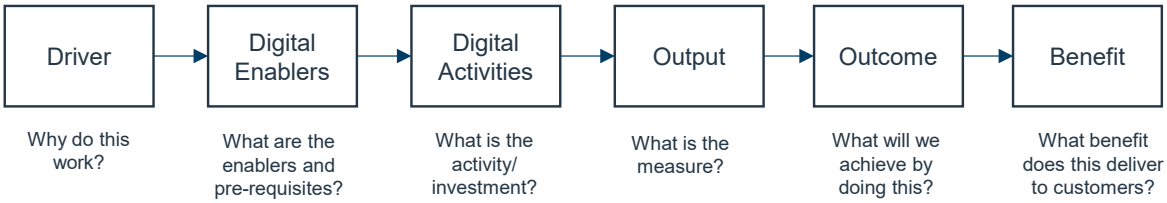


Figure 4: Theory of change model applied to Digitalisation projects

5.42. We include a summary of the needs case, optioneering, recommendations for each project within Sections 6 to 11, and include the full analysis and a theory of change model for each project within the individual EJP and CBA.

Deliverability and risk

5.43. Deliverability and risk factors are covered under each project-specific EJP, taking account of procurement, commercial and delivery challenges, and the need for any risk funding.

5.44. We have not included a risk funding request in our application, but we recognise there are a number of areas of uncertainty associated with delivery of these projects over the next two years. In some areas, we are reliant on government, Ofgem and other stakeholder policy, and have a degree of reliance on specialist third parties for the provision of technical services, and in providing support in a timely way to meet RIIO-ED2 delivery timescales. In the event that this drives material delay or cost increase, we will engage with Ofgem on this, including in relation to our ED3 Business Plan.

Digitalisation ED3 mobilisation

5.45. A significant component of the activities proposed under this re-opener application effectively represent mobilisation work for the ED3 period – for example, the dynamic voltage management project which support the adoption of key activities relevant to increased deployment of LCT. We have also taken account of Ofgem's specific positions in the ED3 SSMC to inform the timely progression of a number of projects, such as our DSI and situational awareness in near-real time projects. We welcome Ofgem's support for our activities as building blocks for smarter, more efficient, and CP2030-aligned service provision in ED3.

Resource costs and Indirects

5.46. A range of different resources will be required to deliver the projects. Where we require technical or other specialist resource, this has been costed directly into the project and will be evident in the EJP and CBA documents.

5.47. Reflecting on the outcomes of other RIIO-ED2 re-opener determinations, we have also included a standard approach to indirects across our application of 10.8%. This provision is proposed to cover the additional indirect expenditure arising as we manage delivery of the projects. Table 11 sets out the total indirects value for this application.

5.48. This is aligned with the Indirects Scalar mechanism, which was designed to mechanistically increase allowances to reflect the delivery of LRE mechanisms, and has also been awarded for HOWSUM[16] and Storm Arwen[17] projects. We consider that additional output resulting from increased funding under a re-opener should be paired with a commensurate increase in indirect allowances to cover increased affiliated costs.

	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Total Indirects adjustment - January 2026 application	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.51**

Table 11: Indirect costs associated with Digitalisation January 2026 application

Future work relevant to the Digitalisation re-opener

5.49. As detailed in this submission, we have undertaken significant investigations to understand the current drivers for change under the Digitalisation re-opener.

5.50. The next significant milestone will be the production of our plan for Digitalisation activities for the period 2028-2033 which will form part of our ED3 Business Plan submission. The key drivers in this period will be to steer DNOs toward a smarter, more coordinated, and future-ready distribution system through strategic digital outcomes, participation in shared Data Infrastructure, interoperability and system coordination and ethical, proportional use of AI.

5.51. Our plans involve building upon the capabilities we have developed through the RIIO-ED2 period, including the projects that we are seeking funding for in this application, as stepping stones and enablers of future service provision, demonstrated in our benefits cases. This will help to ensure a seamless pathway into ED3 with no loss in momentum due to the change in regulatory periods. We welcome Ofgem's support for this work.

5.52. As illustrated through our inclusion of Project 2d: Two-day LCT Connections, the policy landscape is dynamic, and it is possible new requirements will arise before ED3. We will maintain engagement with Ofgem on relevant areas through this re-opener assessment process.

16 RIIO-2 Re-opener Applications 2025 Final Determinations – ED Annex

17 RIIO-2 Re-opener Applications 2024 Final Determinations – ED Annex

6. THEMATIC AREA 1: MARKET WIDE HALF HOURLY SETTLEMENT

Background to Market-wide Half-Hourly Settlement

6.1. Market-wide Half-Hourly Settlement (MHHS) is a programme of major industry reforms led by Ofgem to modernise the electricity system and its processes, affecting how we all use and account for electricity in the UK. MHHS aims to provide a more accurate picture of electricity consumption across the UK based on Half-Hourly (HH) data provided by modern meters.

6.2. SSEN originally volunteered to represent the DNOs on the MHHS programme in 2022. This required us to participate in the Programme Systems Integration Testing (SIT), designed to exercise the new MHHS functionality.

New requirements arising in relation to MHHS

6.3. In 2024 it became clear that the original baseline MHHS plan was undeliverable, and three change requests were raised over the following months, approved by Elexon and Ofgem, to re-baseline the delivery plan, and extend the programme overall to 2027/28: CR022, CR055, and Early Life Support (ELS). This change of scope and re-baselining of programme in turn modified and extended our role and responsibilities in supporting the MHHS programme over an additional 3 years.

Projects to address requirements

6.4. We recommend progressing one project under this thematic area:

- Project 1: MHHS – extended scope

Project 1: MHHS – extended scope

6.5. The detailed proposals and justification for Project 1 are set out EJP Appendix DPF29_SSEN_DRO_1_MHHS Extended Scope.docx and CBA Appendix DPF29_SSEN_DRO_1_MHHS Extended Scope_RIIO-ED2_Cost Benefit Analysis.xlsx. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

6.6. We fulfilled our role under the original scope of MHHS with the support of funding under our RIIO-ED2 Business Plan. We were funded £5.24m to deliver the initial stage of activities to 2024/25.

Needs case

6.7. Market-wide Half-Hourly Settlement (MHHS) is a programme of major industry reforms led by Ofgem to modernise the electricity system and its processes, affecting how we all use and account for electricity in the UK. MHHS aims to provide a more accurate picture of electricity consumption across the UK based on Half-Hourly (HH) data provided by modern meters. Ofgem expects this to encourage more flexible energy use, support our transition to a net zero future

and to lower bills for all users. MHHS is one of the biggest changes to the electricity retail market since the introduction of competition in 1998. The programme has impacted over 250+ market participants from across the electricity energy industry and required changes to almost every associated system.

6.8. In October 2022, SSEN volunteered to represent the DNOs on the MHHS programme. This required us to participate in the Programme Systems Integration Testing (SIT), designed to exercise the new MHHS functionality. We fulfilled this role under MHHS, under the original scope of the project, which was due to complete in 2025, with the support of funding under our RIIO-ED2 Business Plan.

6.9. In Q2 2024 it became clear that the original GB baseline MHHS plan was undeliverable. Three change requests were raised over the following months, approved by Elexon and Ofgem, to re-baseline the delivery plan, and extend the programme overall to 2027/28. This project delivers the additional activities carried out and costs incurred and to be incurred by SSEN in fulfilling its role in the delivery of the new activities introduced through the changes in scope and extended programme implemented through these change requests. Our investment in the extended scope for MHHS ensured our ability to respond to, and fund the additional resources required to assure delivery of the M10, M11 and M15/16 milestones stretching out to 2027/28.

6.10. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) section, as MHHS was the result of a change in regulatory requirements, under which SSEN was mandated to play a key role in the delivery of energy sector reforms.

Optioneering

6.11. We considered 3 options in relation to our response to the MHHS scope and programme changes:

1. Do Nothing (non-participation): Withdrawal from our role and responsibilities under the revised MHHS programme.
2. Do-Minimum: Continued provision of support and funding to cover SSEN's role and responsibilities through the additional scope and extended timescales of the re-baselined MHHS programme.
3. Delay option: Delay to fulfilment of SSEN role and responsibilities until funding is secured under this Jan 2026 Digitalisation re-opener, or alternative route – delayed costs.

6.12. Only Do-Minimum is viable, as it has maintained our continued participation in SIT and early qualification, has maintained programme progress for all parties and has avoided additional remobilisation costs should other DNOs have needed to replace SSEN. It has ensured our systems were fully tested and ready for M10 milestone, with technical knowledge and expertise of MHHS changes available to all to Licenced DSO systems operators (LDSO is the Balancing and Settlement Code term for a DNO).

6.13. It was not viable for us to either discontinue our role, or to delay fulfilment of our responsibilities. The disruption caused under either option would have led to escalations by Ofgem and severe reputational damage for all parties. They would have introduced delay and cost into the MHHS delivery programme, as another SIT/MVC party would have been required to be resourced. We have not estimated these wider costs.

Summary of CBA and engineering justifications

6.14. Ofgem's RIIO-ED2 standard CBA template was used to demonstrate the cost of the Do-Minimum option.

6.15. As set out in the EJP, there are no direct benefits to SSEN. While we have set out programme-wide benefits to this decision qualitatively, attributing these to SSEN would not be correct. Further, SSEN was obligated to participate in the programme through the provisions of a Significant Code Review, rather than choosing to do so from an entity CBA perspective. As such, we have not included benefits in the CBA, and are demonstrating costs only.

Option	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Option - Do Nothing	-	-	-	-	-	**0.00**
Option – Do Minimum	-	[redacted]	[redacted]	[redacted]	[redacted]	**1.39**
Option - Delay	-	-	-	[redacted]	[redacted]	**1.39**

Table 12: Costs for options to deliver MHHS - extended scope (£m, 2020/21 prices)

6.16. Option – Do Minimum is the only option which is feasible to progress, and is therefore our recommended solution.

Preferred option

6.17. Continuing to fulfil our role as defined in the Do-Minimum option enables the following role and responsibilities on the re-baselined MHHS programme:

- CR022 – SSEN delivering extended 18-month migration tail and covering delayed completion of the Programme (baseline was November 2025. Revised date May 2027).
- CR055 – SSEN fulfils extended SIT and covers 6.5-month delay on M10.
- Early Life Support – extended by 3-months from end of November 2025 to end of January 2026.
- Consequential change – changes to smart metering interface due to changes from Profile Class (PC) to Domestic Premise Indicator (DPI).

Project delivery

6.18. Maintaining our role under the extended MHHS programme requires us to provide support in meeting a number of remaining defined milestones (M11 to M16) to 2027/28.

Benefits to customers

6.19. The principal benefits of the MHHS programme reach across the energy industry and are summarised below. Note: the CBA for our participation in the extended scope does not attempt to attribute these broad GB-wide benefits to the narrow focus of this investment decision.

Supports Net Zero and Decarbonisation

- MHHS is considered a key enabler for a smarter, more flexible energy system, which is essential for integrating renewables and electrification.
- By improving cost-reflectivity and efficiency, MHHS helps reduce the need for additional generation and network investment, aiding a cost-effective transition to net zero.

Consumer Cost Savings

- Ofgem estimates net benefits to GB consumers of £1.6bn–£4.5bn over the period to 2045. These savings come from more accurate settlement, reduced inefficiencies, and better use of existing infrastructure.

More Accurate and Transparent Billing

- Settlement based on actual half-hourly consumption data rather than estimates reduces billing errors and disputes, improving trust and satisfaction.

Enables Innovative Tariffs and Services

- MHHS unlocks time-of-use tariffs, demand-side response, and new products like EV charging optimisation, battery storage, and even vehicle-to-grid solutions.
- These innovations encourage consumers to shift usage to off-peak times, lowering bills and supporting grid flexibility.

Improved Market Efficiency and Competition

- Accurate cost signals incentivise suppliers to operate more efficiently and compete on innovative offerings.
- Greater data transparency fosters competition and tailored energy products for consumers.

Better Integration of Smart Technology

- Builds on the smart meter rollout, enabling real-time data use for automation, energy efficiency, and demand-side response programmes.

Outlook to ED3

6.20. The Programme is expected to be delivered in full during RIIO-ED2. There are currently no further activities planned for ED3 but we will keep this under review as we prepare our ED3 business plans.

MHHS extended scope – recommendations

6.21. We recommend the implementation and funding for the Do-Minimum option: continued fulfilment of our role under the MHHS extended scope. Our estimated costs for the remainder of RIIO-ED2 are £1.39m.

Allowance adjustment

6.22. Table 13 summarises our adjustment request for MHHS - extended scope.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
MHHS – extended scope adjustment[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.39**

NOTES:
[1] Adjustment before the application of indirects (10.8%).

Table 13: MHHS extended scope allowance adjustment summary

7. THEMATIC AREA 2: CP2030, LOCAL POWER PLAN AND CONNECTIONS ACCELERATION

Background to CP2030, Local Power Plan and connections acceleration

7.1. Great Britain is entering a decisive period for the energy transition as it accelerates towards Clean Power 2030 (CP2030) and delivery of the Local Power Plan (LPP). These programmes set an ambitious pathway to a near-fully decarbonised power system by 2030 and place DSOs at the centre of enabling rapid, fair and efficient access to the electricity system. Achieving this transition requires not only continued investment in physical network infrastructure, but a step-change in digital capability building on progress made during RIIO-ED2.

New requirements arising in relation to CP2030, local power plan and connections acceleration

7.2. The drive to deliver CP2030 and the LPP is already resulting in a significant increase in the volume and complexity of network modelling required across generation, demand, flexibility and reinforcement. In parallel, reforms to accelerate connections, including NESO-led queue reform and CP2030-aligned connections processes, are materially changing how connections are assessed and progressed. These reforms place increasing emphasis on fast-tracking viable projects, requiring more frequent, faster and more granular modelling of network impacts, including at the local LV level. The projects within this thematic area respond to these emerging system needs by enabling modelling at scale, improving the local connection experience and supporting accelerated delivery.

Projects to address requirements

7.3. We recommend progressing three projects under this thematic area:

- Project 2a: Scaled local network modelling
- Project 2b: ConnectDirect collaboration
- Project 2c: Early access management at scale

Project 2a: Scaled Local Network Modelling

7.4. The detailed proposals and justification for Project 2a are set out EJP Appendix DPF30_SSEN_DRO_2a_Scaled Local Network Modelling.docx EJP and CBA Appendix DPF30_SSEN_DRO_2a_Scaled Local Network Modelling_RIIO-ED2_Cost Benefit Analysis.xlsx. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

7.5. This project will enable new capabilities not currently funded in our RIIO-ED2 baseline allowances.

Needs case

7.6. Existing LV planning tools limit SSEN's ability to assess network constraints consistently and in a timely manner as electrification accelerates. Without an automated and scalable local network modelling capability, these limitations will affect customers seeking LCT connections through longer connection times and potentially higher long-term network costs, and limiting our ability to plan the network efficiently in support of decarbonisation objectives.

7.7. The proposed option is to deliver an automated and scalable LV network modelling capability to replace manual processes and enable consistent, data-led planning and connection readiness assessment. This provides the necessary capability to support timely investment decisions and connections delivery as electrification accelerates.

7.8. This project enables new modelling capabilities that were not defined within SSEN's RIIO-ED2 baseline plans. It builds on, but goes beyond, existing RIIO-ED2 investments that support connections and network visibility by addressing the need for scalable, automated analysis of LV networks. It leverages investments in our RIIO-ED2 business plan from Connections+ and Connectivity++ and the development of our Unified Network Model as set out in in our in our digital strategy aligning with our focus areas of:

- Digital architecture that builds a connected community;
- Driving the future whole system and partnerships.

7.9. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) section, enabling us to meet Ofgem's strategic direction for ED3 whilst also scaling the information and support available to local network connections customers as they prepare to scale activities such as those under driven by GB Energy's GBE Local plan in support of the Clean Power 2030 Mission.

Optioneering

7.10. We considered 5 options, including 'do minimum':

- Do Minimum: No improvement on existing manual tools [redacted]
- Option 1: Add all project components - Iterative powerflow tools for out to 2050 (Forecast); Automatically populated LV study tools (Design); Analytic Model to pre-assess LCT connections readiness; Address Historical Gaps in Local Data
- Option 2: Forecast, Design and Data components only - Iterative powerflow tools for out to 2050 (Forecast); Automatically populated LV study tools (Design); Address Historical Gaps in Local Data
- Option 3: Connections Readiness Indicator only - Pre-assess LCT connections readiness; Address Historical Gaps in Local Data
- Option 4: Delay to ED3 - As Option 1, but delayed

Summary of CBA and engineering justifications

7.11. The CBA results for the technically feasible options are summarised in Table 14.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
0. Do Minimum	-	-	-	-	**-**
1. Add all project components	2.50	2.20	2.02	1.89	**1.89**
2. Forecast, design and data components (only)	0.86	0.94	0.99	1.04	**1.06**
3. Connections readiness indicator (only)	1.54	1.09	0.82	0.61	**0.58**
4. Delay to ED3	1.16	0.41	(0.04)	(0.39)	**(0.47)**

Table 14: CBA results for Scaled Local Network Modelling: NPV at different intervals (£m, 2020/21 prices)

7.12. The option with the best NPV under the deterministic CBA is Option 1. This solution comprises implementation of the full proposed capability set is technically feasible, meets local network LTINDP, ED3 requirements and LCT readiness. It is the preferred option to effectively address the identified need and is recommended as the preferred solution.

Preferred option

7.13. Under Option 1 we will add the following project components:

- Iterative powerflow tools for out to 2050 (Forecast)
- Automatically populated LV study tools (Design)
- Analytic Model to pre-assess LCT connections readiness
- Address Historical Gaps in Local Data

Project delivery

7.14. The preferred option, Option 1, is planned to be delivered [redacted] aligned with the individual tools, between Spring 2026 and Spring 2028.

Benefits to customers

7.15. This project delivers the following outputs and benefits over the RIIO-ED2 and ED3 period:

- Decisions are ‘future-proofed’ aligning long-term strategy and short-term need.
- Enables increased local and community ownership of clean energy.
- Faster connection and LCT adoption.

7.16. This delivers local network LTINDP, ED3 outputs and proactively communicates LCT readiness.

Outlook to ED3

7.17. The capabilities that this project enables will support extensions and broader adoption in subsequent periods. This strategic investment is consistent with SSEN's long-term digitalisation goals and will position the organisation for continued success in ED3 and beyond.

Scaled local network modelling – recommendations

7.18. We recommend the implementation and funding for Option 1. Our estimated costs for the remainder of RIIO-ED2 is £2.36m.

Allowance adjustment

7.19. Table 15 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 2a: Scaled local network modelling[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.36**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 15: Scaled Local Network Modelling allowance adjustment summary

Project 2b: ConnectDirect Collaboration

7.20. The detailed proposals and justification for Project 2b are set out EJP Appendix DPF31_SSEN_DRO_2b_ConnectDirect Collaboration and CBA Appendix DPF31_SSEN_DRO_2b_ConnectDirect Collaboration_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

7.21. This project enables an adaptable and scalable digitalised process for asset registration of domestic LCTs that were not defined within SSEN's RIIO-ED2 baseline plans. It responds to stakeholder demand and aligns to DESNZ's strategic ambition to streamline the customer and installer journey, aiming to reduce administrative friction and improve compliance with notification requirements. It aligns with two of our four focus areas within our digital strategy:

- Digital architecture that builds a connected community;
- Promoting a digital-first culture.

Needs case

7.22. The Department for Business, Energy & Industrial Strategy (BEIS), now DESNZ, conducted investigations into the process of notifying DNOs about the installation of LCTs as part of their Central Asset Registration Strategy (CARS). Findings revealed significant gaps in the notification process: only around 40% of LCT installations were being reported to networks, despite subsidies for Electric Vehicle Charging Points (EVCPs) and Heat Pumps (HPs) requiring such notifications. An unofficial survey by the Microgeneration Certification Scheme (MCS) indicated that while half

of its members were aware of the need to notify, only half of those (equating to 25% of the total) consistently followed through with notifications.

7.23. DESNZ maintains a strategic ambition to streamline the customer and installer journey, aiming to reduce administrative friction and improve compliance with notification requirements. This context underscores the need for enhanced awareness and simplified processes to ensure that network operators have clear visibility of LCT uptake and distribution.

7.24. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a).

Optioneering

7.25. We developed 2 options, including a 'do minimum'. The options considered are summarised in EJP DPF31_SSEN_DRO_2b_ConnectDirect Collaboration, where we include more detail on our cost assumptions and the estimated cost of each option.

7.26. Each option was assessed against a consistent set of criteria, including technical feasibility, ability to meet the identified requirements at scale, deliverability within the required timeframe, and cost effectiveness. Options were assessed on their ability to process applications using automation and integrate with existing digital processes. Options that relied on manual processes were assessed as unable to meet the required scale or to address the identified

7.27. Applying these criteria reduced the list of options to a single viable solution comprising implementation of an automated portal for receiving and processing retrofit domestic LCT applications. This option is technically feasible, delivering the ability to auto-approve applications, thereby removing the need for manual processing. It is therefore the only option that effectively addresses the identified need and is recommended as the preferred solution.

Summary of CBA and engineering justifications

7.28. The CBA results for the technically feasible options are summarised in Table 16.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
0. Do Minimum	-	-	-	-	-
1. Implement ConnectDirect	0.93	2.17	2.92	3.50	3.65

Table 16: CBA results for ConnectDirect Collaboration: NPV at different intervals (£m, 2020/21 prices)

7.29. The option with the best NPV under the deterministic CBA is Option 1.

Preferred option

7.30. The preferred option proposes using ConnectDirect to automate the processing of 50% of domestic retrofit LCT applications, with half of those auto-approved, saving significant staff time. The implementation cost for RIIO-ED2 is £0.82m, with projected benefits of £[redacted]m from reduced manual processing. Initial auto-approval rates rose from 17% in year one to 50% in year two, with further benefits of £[redacted]m anticipated by 2035 due to increased efficiency and positive stakeholder feedback. Additional investment will enable integration between ConnectDirect and

SSEN's CRM system, cutting manual entry time from 10 minutes to 2 minutes per escalated application—delivering a further £[redacted] benefit in RIIO-ED2.

Project delivery

7.31. ConnectDirect was initiated in 2023, with full implementation achieved in May 2024. The system is now in operation and is actively maintained, featuring a dedicated back-office platform for DNOs. This platform facilitates the reporting of progress and ensures transparency in project delivery.

7.32. To support the ongoing success of ConnectDirect, SSEN has established specialist teams responsible for its continued operation and enhancement. These teams are tasked with implementing improvement developments, ensuring that the system remains effective and responsive to emerging needs.

7.33. Further enhancements have been identified by both DNOs and installers. These improvements are essential to meeting the evolving expectations of installers and customers, not only for the remainder of RIIO-ED2 but also as the project moves into ED3. The planned upgrades encompass a variety of features, all designed to maximise the efficiency in processing new devices and to enable faster response and processing times.

7.34. The delivery of these improvements is scheduled [redacted] and has been incorporated into the CBA to ensure continued value and performance for all stakeholders.

Benefits to customers

7.35. The implementation of ConnectDirect delivers substantial benefits for SSEN by automating the processing of 50% of domestic retrofit LCT applications, with half of those being auto-approved, thereby saving significant staff time. This results in an anticipated benefit of £[redacted]m in RIIO-ED2 from reduced manual processing, and with further improvements raising the auto-approval rate to 50% in the second year, projected benefits rise to £[redacted]m by 2035. Additionally, integrating ConnectDirect with SSEN's CRM system cuts the time required to create escalated application records [redacted], bringing a further £[redacted]m benefit in RIIO-ED2. The overall efficiency gains remove the need for additional staff, enhance processing speed, and have led to positive feedback from installers and stakeholders, supporting increased LCT uptake.

7.36. The preferred option will enable quicker and more efficient processing of applications, facilitating the prompt approval of residential retrofit installations. By introducing a single, centralised platform, customers no longer need to navigate multiple apps or email addresses for different DNOs, simplifying and streamlining the application process. The reduction of paper-based procedures minimises errors, leading to a more dependable and efficient experience. Applications that meet predetermined criteria can receive instant approval, allowing customers to move forward without unnecessary delays. Furthermore, communication and transparency are enhanced, with customers benefiting from timely updates and improved data quality throughout the connection process. These improvements also bolster safety and forecasting capabilities, supporting the broader transition towards decarbonisation and digitalisation of the network.

Outlook to ED3

7.37. In order to deliver works required in ED3 for this project, we need to start project development in RIIO-ED2.

ConnectDirect Collaboration – recommendations

7.38. We recommend the implementation and funding for the option: Implement ConnectDirect. Our estimated costs for the remainder of RIIO-ED2 are £0.82m.

Allowance adjustment

7.39. Table 17 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 2b: ConnectDirect Collaboration[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.82**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 17: ConnectDirect Collaboration allowance adjustment summary

Project 2c: Early Access Management at Scale

7.40. The detailed proposals and justification for Project 2c are set out EJP Appendix DPF32_SSEN_DRO_2c_Early access management at scale EJP and CBA Appendix DPF32_SSEN_DRO_2c_Early access management at scale_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

7.41. Access SCR costs were not contained within baseline expenditure for RIIO-ED2. In August 2022 all DNOs submitted ex-ante Access SCR costs, totalling £1.1bn across all DNOs for the five-year period of the RIIO-ED2 control to March 2028. These costs did not include the costs associated with a central store for access rights and the implementation of access products for smaller customers where an ANM connection is not feasible.

7.42. This project enables a central digital solution capable of supporting Access SCR compliance to support all site-specific connection access rights, associated connection agreements and Access Products. It aligns with two of our four focus areas within our digital strategy:

- Digital architecture that builds a connected community.
- Promoting a digital-first culture.

Needs case

7.43. The needs case arises from the requirement to comply with Ofgem's Access Significant Code Review, which mandates new standards for managing access rights, connection offers, and curtailable agreements within the electricity network.

7.44. Existing systems and processes are not adequate to meet these regulatory obligations, particularly in relation to the implementation of a central store for DCUSA 2d eligible curtailable connections and the provision of access products for smaller customers who cannot be accommodated through traditional ANM solutions.

7.45. Without these changes, the organisation would face non-compliance with Access SCR requirements and risk inefficiencies and manual workarounds that could hinder customer service and network flexibility. Therefore, investment is necessary to deliver compliant, efficient, and future-proofed digital solutions that support the evolving needs of both customers and the wider energy system.

7.46. This project therefore qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a).

Optioneering

7.47. We developed 2 options, including a 'do minimum'. The options considered are summarised in EJP DPF32_SSEN_DRO_2c_Early access management at scale EJP, where we include more detail on our cost assumptions and the estimated cost of each option.

7.48. Each option was assessed against a consistent set of criteria, ability to meet the identified requirements at scale, deliverability within the required timeframe, and cost effectiveness. Options were also assessed on their ability to meet Access SCR compliance that relied on minimal manual processes.

7.49. Applying these criteria reduced the list of options to a single viable solution comprising implementation of a single digital store for all network access rights, replacing the previously fragmented approach to flexible access arrangement. It also enables a usage monitoring and message exchange to manage access rights of smaller customers and support future access products. It is therefore the only option that effectively addresses the identified need and is recommended as the preferred solution.

Summary of CBA and engineering justifications

7.50. The CBA results for the technically feasible options are summarised in Table 18.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
0. Do Minimum	-	-	-	-	-
1. Implement a central store and wider range of access products	0.25	0.05	0.08	0.17	0.18

Table 18: CBA results for Early Access Management at Scale: NPV at different intervals (£m, 2020/21 prices)

7.51. Option 1 is demonstrated to have the best NPV, and is therefore our proposed solution.

Preferred option

7.52. The preferred option involves implementing the Network Access Ledger (NAL) to cover all site-specific connection agreements and consolidate customer access rights, whilst also enabling a broader range of access products for smaller customers. This approach builds on the initial MVP solution implemented at the start of RIIO-ED2, with a total investment of £0.77m. Key outputs include digitised connection agreements, indexed records linked to billing, and new scheduled capacity access products. The project aims to accelerate customer connections, improve

management and visibility of access rights, and establish a centralised digital platform, thereby meeting regulatory obligations and supporting future network flexibility.

Project delivery

7.53. The NAL was implemented in April 2023, to capture the access rights of any new connections offered under the Access SCR to enable compliance with reporting requirements. The initial versioning of the NAL was basic with enhancements rapidly identified.

7.54. The future landscape for NAL is to act as the single repository for all site-specific connection records, both curtailable and non-curtailable, and to become the authoritative record for Access Products and any associated restrictions. For this to be realised all connection agreements were digitised in 2024 with a reconciliation against billing records in 2025.

7.55. The delivery of a scheduled capacity early access product is expected [redacted] following a successful proof of concept and has been incorporated into the CBA to ensure continued value for all stakeholders.

Benefits to customers

7.56. For customers, the main benefit is the ability to connect to the network earlier thanks to flexible access arrangements, which speeds up the process for new connections. The establishment of a centralised digital store for network access rights simplifies and streamlines access, replacing the previous fragmented and manual system. Smaller customers also gain from a wider range of access products, ensuring more tailored solutions even where ANM may not be suitable.

7.57. By accepting capacity that is only available at agreed times, customers can often connect months or years earlier and avoid the cost of major network reinforcement. For sites with predictable or flexible operation, the time restrictions may have little impact, while still allowing projects to start operating, generate revenue, or meet delivery milestones sooner, with the option to move to firm capacity when available.

Outlook to ED3

7.58. In order to deliver works required in ED3 for this project, we need to start project development in RIIO-ED2. This is particularly important for ED3 as it lays the groundwork for a more dynamic and resilient network environment. By digitising and centralising access rights, the project ensures that future regulatory requirements can be met efficiently, and that the network can adapt to new types of connections and evolving customer needs.

7.59. Additionally, the ability to offer a wider range of flexible and scheduled access products will be crucial in supporting the anticipated growth in low-carbon technologies and distributed energy resources during ED3, helping to facilitate the energy transition and deliver greater value to customers and stakeholders.

Early Access Management at Scale – recommendations

7.60. We recommend the implementation and funding for the option: Implement a central store and wider range of access products. Our estimated costs for the remainder of RIIO-ED2 are £0.77m.

Allowance adjustment

7.61. Table 19 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 2c: Early Access Management at Scale[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.77**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 19: Early Access Management at Scale allowance adjustment summary

Project 2d: Two-day LCT Connections

7.62. To deliver the ambition set out by DESNZ and Ofgem to accelerate LCT connections by set out the joint letter[18] sent to DNOs on 2nd December 2025, SSEN may need to seek targeted, additional funding through this Digitalisation re-opener window, or this may require a further window to be directed by Ofgem. As highlighted in our response sent 23rd January 2026, the scale and pace of change required to reach high levels of auto-approval, reduce customer friction, and deliver a significant uplift in data-driven readiness tools will exceed the scope of our existing RIIO-ED2 baseline allowances. We are already progressing key innovations, such as expanded auto-approvals, AI-enabled assessment tools, and the LCT Connections Readiness Indicator, and moving them into business-as-usual. However, meeting the stretch targets only just described by government, including 80% auto-approvals and rapid turnaround times for upgrades, will require enhancing and scaling our digital systems, analytics capability, and data infrastructure beyond the investment originally envisaged within RIIO-ED2 and this application as submitted.

7.63. The transition toward proactive, data-driven approaches, such as targeted unlooping, coordinated LV upgrades, and nationalisation of pre-application datasets, creates new digital responsibilities for DNOs that are not yet fully funded. As we work with industry to standardise readiness data, integrate new predictive tools, and support whole-system planning aligned with the Warm Homes Plan, additional digitalisation spend may be required to ensure these capabilities are delivered consistently, efficiently, and at pace. Provision of this information to Ofgem, whether through this or a further Digitalisation Re-opener submission would therefore allow Ofgem to consider the emerging evidence, updated cost requirements, and benefits to consumers and system operation, ensuring that SSEN can fully meet the expectations set out by DESNZ and Ofgem in a timely way while maintaining a reliable and secure network.

7.64. Detailed design work to assess the required activity is already underway and we anticipate making an application on or before July 2026. We will provide information to Ofgem on this process as it progresses, with the aim of accommodating our recommendation and Ofgem's assessment within the existing consultation and determinations process for this application.

7.65. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) a change in legislation, licences, regulatory requirements, or industry codes, where a result there is a requirement for the licensee to provide new, or significantly altered, digital or Data Services.

18 Joint Letter from Martin McCluskey MP, DESNZ and Johnathan Brearley, Ofgem to Distribution Network Operator Chief Executives

8. THEMATIC AREA 3: NETWORK VISIBILITY AND WIDER SYSTEM SERVICES

Background to Network Visibility and Wider System Services

8.1. Network Visibility and Wider System Services have developed in response to the increasing complexity of operating a highly electrified, distributed energy system. Historically, network monitoring and control have been focused on higher-voltage assets and targeted use cases; however, rising electrification, variable generation, and increasing reliance on flexibility have driven the need for more comprehensive, near real-time visibility across both HV and LV networks.

8.2. The focus of this theme is to unlock flexibility, strengthen resilience, and improve service outcomes for customers in SSEN's area and across the wider GB system. These investments build on existing operational capabilities and reflect the transition of enhanced network visibility from discrete initiatives into a core, business-as-usual function. For SSEN, improved visibility increases local network insight, supporting earlier fault identification, more targeted interventions, and reduced customer interruptions, while at a system level it enables more effective coordination between transmission and distribution and the efficient integration of renewable generation.

New requirements arising in relation to Network Visibility and Wider System Services

8.3. New requirements under this theme arise from the growing need for high-quality, near real-time data to operate an increasingly complex system and to deliver improved customer and system outcomes as electrification accelerates. In practice, this increases the need to improve visibility and measurement, enable flexibility, and support faster and more transparent connections processes.

Projects to address requirements

8.4. We recommend progressing seven projects under this thematic area:

- Project 3a: Advanced Distribution Management System (ADMS) Data Fabric and Operational Analysis
- Project 3b: Flexibility Market Asset Register (FMAR) Enablement
- Project 3c: Situational awareness in near real-time
- Project 3d: T-D Boundary Operational Data Exchange
- Project 3e: Dynamic Voltage Management
- Project 3f: Real Time Resilience
- Project 3g: Predict4Resilience

Project 3a: Advanced Distribution Management System (ADMS) Data Fabric and Operational Analysis

8.5. The detailed proposals and justification for Project 3a are set out in EJP Appendix DPF33_SSEN_DRO_3a_ADMS data-fabric and operational analysis and CBA Appendix DPF33_SSEN_DRO_3a_ADMS data-fabric and operational analysis_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.6. This proposal is not funded within the RIIO-ED2 baseline. At the outset of RIIO-ED2 the capabilities of the data fabric were unknown. This investment looks to capitalise on the investments and developments within RIIO-ED2. It is expected that implementation of an Advanced Distribution Management System (ADMS) Data Fabric will provide enabling works for ED3 for further production and benefits are be expected.

Needs case

8.7. The proposed expenditure for implementing data fabric technology within the ADMS is essential to address the growing complexity and demands of the electricity network. As connections and loads rapidly increase, the ability to manage, exchange, and secure data efficiently becomes critical not only for operational effectiveness but also for maintaining the reliability and resilience of network assets. For consumers, this investment is significant as it will support faster and more transparent connections, reduce waiting times for energisation, and enhance the overall quality of service. From the perspective of network assets, adopting advanced data exchange methods will improve performance, enable real-time analytics, and strengthen cyber security, ultimately safeguarding infrastructure against emerging threats.

8.8. Wider society stands to benefit through increased trust in the electricity system, greater transparency, and better alignment with strategic regulatory goals. The investment in a cyber-secure ADMS Data Fabric directly responds to stakeholders' expectations for faster, safer, and more automated operational processes, and supports the transition to a more digital, sustainable, and resilient energy sector. Failure to act risks falling behind on regulatory requirements, undermining public confidence, and limiting the network's ability to meet future needs.

8.9. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) a change in legislation, licences, regulatory requirements, or industry codes, where as a result there is a requirement for the licensee to provide new, or significantly altered, digital or Data Services.

Optioneering

8.10. We developed four options, including a 'do minimum'. The options considered are summarised in EJP DPF33_SSEN_DRO_3a_ADMS data-fabric and operational analysis, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 1: Implement ADMS Data Fabric during RIIO-ED2 - Implement ADMS Data Fabric during RIIO-ED2 to accelerate benefits.
- Option 2: Increase operational modelling through additional resource - Increased resource costs to improve modelling but without cyber security benefits.

- Option 3: Implement ADMS Data Fabric during ED3 - As Option 1 but with delay to costs and benefits
- Option 4: Do minimum - No change to existing practice.

Summary of CBA and engineering justifications

8.11. The CBA results for the technically feasible options are summarised in Table 20.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
1.Implement ADMS Data Fabric during RIIO-ED2	0.14	0.25	(0.39)	(0.89)	(0.97)
2. Increase operational modelling through additional resource	(1.14)	(3.13)	(5.03)	(6.50)	(6.87)
3. Implement ADMS Data Fabric during ED3	(0.34)	(0.30)	(0.98)	(1.52)	(1.64)
Do minimum	-	-	-	-	-

Table 20: CBA results for ADMS data-fabric and operational analysis: NPV at different intervals (£m, 2020/21 prices)

8.12. The option with the best NPV is Option 1. Option 1 is therefore our proposed solution.

Preferred option

8.13. Option 1 involves implementing the ADMS Data Fabric during the RIIO-ED2 period. This leads to the fastest introduction of Data Fabric to deliver increased network visibility and advanced analytics without increased resources, with the aim of enhancing digital capabilities and supporting more efficient network operations.

Project delivery

8.14. The preferred option, Option 1, involves 4 core delivery milestones [redacted] following successful procurement and discovery work.

Benefits to customers

8.15. The implementation of the ADMS Data Fabric and Enhanced Operational Analysis offers several key benefits to customers.

8.16. By improving data integration and operational efficiency, the project will help facilitate more customer connections to the network, supporting increased demand and new technologies. Customers can expect improved reliability, better service quality, and the ability to connect distributed energy resources more easily, ultimately leading to greater flexibility and resilience in the electricity supply network.

Outlook to ED3

8.17. Looking ahead to ED3, the integration of ADMS Data Fabric is anticipated to be a foundational step, enabling further advancements in operational analysis and digitalisation. By embedding SSMC considerations into the ADMS Data Fabric strategy, the business will be better positioned to respond to evolving security challenges and market demands, ensuring robust support for future network operations and regulatory requirements throughout the ED3 period.

ADMS Data Fabric and Operational Analysis – recommendations

8.18. We recommend the implementation and funding for Option 1. Our estimated costs for the remainder of RIIO-ED2 are £4.03m.

Allowance adjustment

8.19. Table 21 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3a: ADMS Data Fabric and Operational Analysis[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**4.03**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 21: ADMS Data-Fabric and Operational Analysis allowance adjustment summary

Project 3b: Flexibility Market Asset Register (FMAR) Enablement

8.20. The detailed proposals and justification for Project 3b are set out in EJP Appendix DPF34_SSEN_DRO_3b_FMAR Enablement and CBA Appendix DPF34_SSEN_DRO_3b_FMAR Enablement_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.21. There is no existing baseline allowance for Flexibility Market Asset Register (FMAR) development. The requirement for FMAR development was first proposed by Ofgem in 2024; no allowances have previously been requested for this work through RIIO-ED2 business plan submissions or subsequently.

Needs case

8.22. The needs case for this project centres on aligning Electron Connect and Flexible Power with the FMAR, currently being developed by Elexon. This alignment is necessary to streamline asset registration for Flexibility Service Providers (FSPs), enabling them to register assets once on a central platform and participate in multiple flexibility market tenders without repeated registration. Furthermore, integration with FMAR will significantly enhance visibility over flexible assets within the network, supporting more informed and effective decision-making about where flexibility can be most beneficially deployed. The initiative directly supports regulatory requirements under

RIIO-ED2 to improve data visibility, interoperability, and automation, as part of broader digitalisation and transparency objectives.

8.23. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) a change in legislation, licences, regulatory requirements, or industry codes, where as a result there is a requirement for the licensee to provide new, or significantly altered, digital or Data Services.

Optioneering

8.24. We developed four options, including 'do nothing'. The options considered are summarised in EJP DPF34_SSEN_DRO_3b_FMAR Enablement, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 1: Do Nothing - No integration with FMAR. FSPs must continue to register on SSEN's platform directly.
- Option 2 (CBA Option 1): Manual FMAR Integration - Electron Connect and Flexible Power do not interface with FMAR, data from FMAR is manually downloaded and an SSEN employee registers assets into Electron Connect and Flexible Power manually.
- Option 3 (CBA Option 2): Basic FMAR Integration - Electron Connect and Flexible Power accesses data on assets and locations directly in FMAR. Pre-qualification is still conducted in Electron Connect.
- Option 4: Advanced FMAR Integration - Both asset registration and pre-qualification can be performed within FMAR and Electron Connect and Flexible Power access this data. Not progressed to CBA as a decision to progress this option is not required within RIIO-ED2 timescales.

Summary of CBA and engineering justifications

8.25. The CBA results for the technically feasible options are summarised in Table 22.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
1. Do Nothing					
2. Manual FMAR Integration (CBA Option 1)	(0.11)	(0.24)	(0.32)	(0.39)	(0.40)
3. Basic FMAR Integration (CBA Option 2)	(0.14)	(0.27)	(0.34)	(0.40)	(0.41)
4. Advanced FMAR Integration					

Table 22: CBA results for FMAR Enablement: NPV at different intervals (£m, 2020/21 prices)

8.26. Option 3 (CBA Option 2) proposes the investment required for basic integration is taken forward. This option does not present the best NPV but is foundational for future advanced integration to allow pre-qualification within FMAR. This is therefore our recommended option.

Preferred option

8.27. This option represents the development of SSEN processes and systems to enable direct integration with asset registration data held in FMAR via APIs. This option excludes additional functionality to allow pre-qualification within FMAR, because there is still some uncertainty on the direction the pre-qualification functionality will take.

Project delivery

8.28. The preferred option, Option 3, [redacted] and is dependent on the completion of the final FMAR architecture.

Benefits to customers

8.29. The integration of flexibility platforms with FMAR is designed to offer several key benefits to customers. Firstly, by making it easier for flexibility service providers to participate in the market, the initiative increases market liquidity and competition, which in turn helps to keep costs down and ensures the efficient use of resources. This supports more cost-effective management of the electricity network, potentially leading to lower bills for end customers.

8.30. Additionally, improving access and streamlining processes for FSPs enables quicker and more reliable responses to network constraints, reducing the likelihood of outages and interruptions for customers. The move also accelerates connections for new users and renewable generation, supporting a more sustainable and resilient energy system. Over the longer term, the increased use of flexibility services is expected to reduce the carbon intensity of network operations, delivering environmental as well as financial benefits to all customers.

Outlook to ED3

8.31. It is expected that the benefits of the integration between SSEN systems and FMAR will incur benefits long into ED3. Our ED3 strategy includes procurement of flexibility services to aid strategic reinforcement delivery, avoid and reduce outages, to accelerate connections, and to reduce curtailment of renewable generation where possible. We are also developing a number of specific use cases for flexibility services which we plan to deploy in ED3.

8.32. In order to reach our ambitious flexibility procurement goals, we must ensure it is as straightforward as possible for FSPs to access our systems. Doing so will help to incentivize new providers to sign up, and increase market liquidity.

8.33. For this reason, moving swiftly to enable this integration as early as possible will enable us to reap the maximum benefits of flexibility services in ED3.

FMAR Enablement – recommendations

8.34. We recommend the implementation and funding for Option 3 (CBA Option 2). Our estimated costs for the remainder of RIIO-ED2 are £0.27m.

Allowance adjustment

8.35. Table 23 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3b: FMAR Enablement[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.27**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 23: FMAR Enablement allowance adjustment summary

Project 3c: Situational Awareness in Near Real-time

8.36. The detailed proposals and justification for Project 3c are set out in EJP Appendix DPF35_SSEN_DRO_3c_Situational awareness in near real-time and CBA Appendix DPF35_SSEN_DRO_3c_Situational awareness in near real-time_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.37. Situational Awareness in Near Real-time is not included within the RIIO-ED2 baseline and is based on the existing Near Real-time Data (NeRDA) platform. NeRDA was originally developed as a Network Innovation Allowance (NIA) project, meaning there are no ED2 outputs or provisions supporting its ongoing development or business-as-usual operation. Without further investment, the service will cease, risking the loss of critical capabilities that stakeholders rely on for network visibility and flexibility

Needs case

8.38. This digital investment will deliver the near real-time publication of all relevant smart metering, SCADA and substation monitoring data, in as timely a manner as possible to support whole electricity system coordination, third party situational awareness and innovation. It will enable locational dynamic congestion signals that support better use of the local LV network, particularly suited to the faster adoption of LCT, and provide greater network insight and contextual information to support customer connection decisions in advance of, and without need to, instigate formal connection quotation processes.

8.39. Without further investment, NeRDA will cease to operate, risking the loss of key capabilities relied upon by stakeholders. Stakeholder feedback has highlighted the need for expanded LV data, improved circuit mapping, and enhanced dashboards, all of which are essential for supporting a flexible, low-carbon energy system. The enhancement of NeRDA will reduce data latency, increase transparency, and unlock further value for network management and customer decision-making, supporting SSEN's strategic goals and broader regulatory objectives.

8.40. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (c) – implementing Mature Innovation related to data and Digitalisation to fulfil obligations in the conditions of the Distribution licence.

Optioneering

8.41. We developed three options, including a 'do minimum'. The options considered are summarised in EJP DPF35_SSEN_DRO_3c_Situational awareness in near real-time, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 1: Do Minimum - Stop operating NeRDA and discontinue service to energy stakeholders that use the NeRDA portal and consume via APIs.
- Option 2: Adopt NeRDA to BaU (as-is). No Smart Metering changes and minimal development - Publish and present NeRDA data. Do not improve insight from smart metering data or enhance contextual information.
- Option 3: Adopt NeRDA to BAU with enhanced contextual information and access disaggregated smart metering data - Publish and present NeRDA data, enhance contextual information and user reporting and interface tools and access disaggregated smart metering data to reduce latency from three days to one

Summary of CBA and engineering justifications

8.42. The CBA results for the technically feasible options are summarised in Table 24.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
Do Minimum					
1. Adopt NeRDA to BaU (as-is). No Smart Metering changes and minimal development	0.77	0.15	(0.22)	(0.51)	(0.57)
2. Adopt NeRDA to BAU with enhanced contextual information and access disaggregated smart metering data	1.70	1.20	0.91	0.68	0.64

Table 24: CBA results for Situational Awareness in Near Real-time: NPV at different intervals (£m, 2020/21 prices)

8.43. The option with the best NPV under the deterministic CBA is Option 2. Option 2 is demonstrated to have the best NPV and is therefore our recommended solution.

Preferred option

8.44. This option aims to deliver the near real-time publication of essential data from smart metering, SCADA, and substation monitoring, enabling dynamic congestion signals that optimise the use of local LV networks. Additionally, it will enhance network insight and provide crucial contextual information to support customer connection decisions, including access to generation data.

8.45. Stakeholder insight has been central to shaping this proposal. The scheme responds directly to drivers identified through Ofgem's ED3 SSMC, including the need for improved visibility at the LV level, enhanced system flexibility, and better customer services regarding connections. These insights have informed the focus on network visibility, supporting the sector's transition and addressing stakeholders' requests for more timely and transparent data to facilitate innovation and improved system operation.

Project delivery

8.46. The proposed development work for Situational Awareness in Near Real-time will begin in 2026, following approval of Digitalisation Re-opener funding, with delivery phased across 2026-27 and 2027-28.

Benefits to customers

8.47. By improving network visibility and enabling dynamic pricing for LV flexibility, customers will benefit from more efficient use of network capacity, supporting the faster adoption of LCT. The initiative will also reduce both the cost and delay associated with obtaining connection budget estimates and major connection requests, thanks to enhanced availability and transparency of data. Additionally, customers will experience a better user journey when accessing information and making informed connection decisions, without the need to enter formal quotation processes.

Outlook to ED3

8.48. Looking ahead to ED3, the outlook is shaped by the continued emphasis on enhancing network visibility and situational awareness at the LV level, as highlighted by Ofgem's ED3 SSMC. The proposed work during ED2 lays the groundwork for further advancements, particularly in the near real-time publication of smart metering, SCADA, and substation monitoring data.

8.49. This will facilitate more dynamic and flexible network management, supporting the accelerated adoption of LCT and enabling improved customer experiences through faster and more informed connection processes. The enduring value of these investments is expected to deliver ongoing benefits, aligning with the anticipated regulatory and operational priorities of ED3.

Situational Awareness in Near Real-time – recommendations

8.50. We recommend the implementation and funding for Option 3. Our estimated costs for the remainder of RIIO-ED2 are £1.61m.

Allowance adjustment

8.51. Table 25 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3c: Situational awareness in near real-time[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.61**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 25: Situational Awareness in Near Real-time allowance adjustment summary

Project 3d: T-D Boundary Operational Data Exchange

8.52. The detailed proposals and justification for Project 3d are set out in EJP Appendix DPF36_SSEN_DRO_3d_T-D Boundary Operational Data Exchange and CBA Appendix DPF36_SSEN_DRO_3d_T-D Boundary Operational Data Exchange_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.53. The ENA Strategic Connections Group's May 2023 paper was the first to formally introduce technical limits at Grid Supply Points (GSPs), but it came after the start of RIIO-ED2, meaning no funding was allocated for this initiative in baseline allowances. Similarly, SSEN's receipt of Bilateral Connection Agreements (BCAs) requiring ANM/DERMS from 2023 onwards in SHEPD was not provisioned for in ED2 funding.

8.54. Although the RIIO-ED2 business plan anticipated benefits from flexible connections, these were based on existing Central ANM systems like SWAN. The Primacy Rules working group made key decisions only in 2024, resulting in no prior funding requests for these developments, and the need to add constraint forecasting functionality to DERMS systems emerged as a new requirement with the Market Facilitator launch in 2024/25.

Needs case

8.55. The needs case highlights the rapid growth in both distribution and transmission connection queues, resulting in increased constraints on the transmission system and long connection delays for many projects, particularly in the SEPD region. To address these challenges and support net zero targets, technical limits at the transmission/distribution boundary have been introduced, enabling earlier, non-firm connections for customers who might otherwise face significant delays.

8.56. However, differing definitions and thresholds between England and Scotland create region-specific complexities, particularly in the SHEPD area, where distribution assets typically have lower limits. This has led to more BCAs requiring DERMS or power flow management solutions for non-firm access, as transmission reinforcement dates are often unavailable.

8.57. The coexistence of technical limits and other T-D boundary constraints at the same Grid Supply Point[redacted], confirming the need for an integrated approach. Overall, the case establishes the necessity for enhanced operational data sharing and DERMS functionality to efficiently provide early access to customers, manage constraints, and future-proof the network for evolving requirements.

8.58. This project qualifies for the Digitalisation re-opener under both Special Licence Condition 3.2.59 part (a) a change in legislation, licences, regulatory requirements, or industry codes, where as a result there is a requirement for the licensee to provide new, or significantly altered, digital or Data Services, and part (c) – implementing Mature Innovation related to data and Digitalisation to fulfil obligations in the conditions of the Distribution licence.

Optioneering

8.59. We developed three options, including a ‘do minimum’. The options considered are summarised in EJP DPF36_SSEN_DRO_3d_T-D Boundary Operational Data Exchange, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 1: Do Minimum - Progress with data sharing at necessary sites where we have already signed offers to connect under technical limits at the cheapest possible cost (using technical limits).
- Option 2: 2. Share data at all GSPs - Build systems to share data at all GSPs (using technical limits).
- Option 3: 3. Share data at selected GSPs - Build systems to share data at selected GSPs, prioritised by customer benefit.

Summary of CBA and engineering justifications

8.60. The CBA results for the technically feasible options are summarised in Table 26.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
1. Do Minimum	3.82	3.71	3.65	3.60	3.60
2. Share data at all GSPs	2.98	2.25	1.81	1.48	1.43
3. Share data at selected GSPs	5.88	5.01	4.49	4.09	4.03

Table 26: CBA results for T-D Boundary Operational Data Exchange: NPV at different intervals (£m, 2020/21 prices)

8.61. The option with the best NPV is Option 3. Option 3 is therefore our recommended solution.

Preferred option

8.62. Option 3 looks to build the systems required to share operational data at GSPs that have the highest number of eligible customers and therefore releases the most MW of capacity. We have identified [redacted] GSPs in our SEPD region and [redacted] GSPs in SHEPD where this can be delivered within the RIIO-ED2 period and that have a combined [redacted] customers which, if they all connected, would add 1.2GW of renewable generation to our network.

8.63. [redacted] MW is within our SEPD region and relates to existing signed technical limits offers, whilst the remaining [redacted] MW is from our SHEPD region and represents the total number of eligible customers at the [redacted] in-scope GSPs. These volumes / customer numbers are likely to change as a result of Connections Reform, but while some customers may drop out we expect the overall number of customers eligible for technical limits to increase.

Project delivery

8.64. The overall delivery programme is scheduled from June 2026 to [redacted] 2028, with key milestones including the delivery of the first [redacted] SEPD tech limits DERMS modules in June 2026, DNO Primacy Functionality [redacted], and the first [redacted] SHEPD tech limits DERMS modules [redacted]. Additional activities, such as monitoring and infrastructure improvements at shared GSPs, are dependent on the outcome of Connections Reform and present medium-high risk due to design work yet to commence.

Benefits to customers

8.65. This project aims to deliver significant enhancements by deploying [redacted] additional DERMS modules to support early customer connections and facilitating [redacted] connections ahead of network reinforcement, representing [redacted] MW of capacity. It will also enable up to [redacted] eligible customers, totalling [redacted] MW, to benefit from improved access. The initiative involves expanded data sharing with NESO - estimated at 300 to 400 new signals - and supports the implementation of [redacted] additional Transmission DERMS systems. Furthermore, it offers opportunities for innovation in DERMS and Intertrip development, maximising network capacity, and introduces improved functionality to ensure all DERMS modules comply with new DSO Primacy Rules.

Outlook to ED3

8.66. Although the current project aims to complete delivery within ED2, further work will be necessary in the next price control period. Specifically, [redacted] additional T-D boundary DERMS systems out of a total of [redacted] will likely need to be delivered in ED3.

8.67. Moreover, as more customers become eligible, additional GSPs may be brought into scope for both data sharing and technical limits. The impact of Connections Reform could accelerate these requirements, particularly if customers with firm offers for 2035 and beyond seek technical limits arrangements. Delivery of NESO primacy functionality is also expected within ED3, with DNO primacy developments acting as a key enabler for these future enhancements.

T-D Boundary Operational Data Exchange – recommendations

8.68. We recommend the implementation and funding for Option 3. Our estimated costs for the remainder of RIIO-ED2 are £3.19m.

Allowance adjustment

8.69. Table 27 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3d: T-D Boundary Operational Data Exchange[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**3.19**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 27: T-D Boundary Operational Data Exchange allowance adjustment summary

Project 3e: Dynamic Voltage Management

8.70. The detailed proposals and justification for Project 3e are set out in EJP Appendix DPF37_SSEN_DRO_3e_Dynamic Voltage Management and CBA Appendix DPF37_SSEN_DRO_3e_Dynamic Voltage Management_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.71. Our ED2 business plan noted the benefits of improved voltage management (as demonstrated via the CLASS innovation project). However, no allowances for dynamic voltage management were included in our business plan.

8.72. This paper outlines the proposal to deploy voltage management system at a central location during the RIIO-ED2 period. The planned intervention would assist with the voltage challenges on our network and accelerate targeted strategies to meet rising demand and evolving customer expectations. We anticipate to then evolve and build on this approach in ED3, as per the outline provided in the Smarter Networks section of the SSMC.

Needs case

8.73. The needs case for this project arises from the increasing complexity of voltage management on the distribution network, which is creating operational challenges and posing obstacles to the integration of clean energy technologies and the broader energy transition.

8.74. High voltages can cause disconnections of electric vehicle chargers and photovoltaic inverters, effect current operations and hindering further deployment. This situation necessitates enhanced control and optimisation at the distribution level to maintain safe and reliable network performance, support the transmission network, and ensure statutory voltage limits are met.

8.75. The proposed investment in a dynamic Voltage Management central control system aims to address these challenges by enabling real-time, coordinated voltage control, supporting the adoption of LCT, improving system security, and ultimately reducing costs for consumers.

8.76. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (c) – implementing Mature Innovation related to data and Digitalisation to fulfil obligations in the conditions of the Distribution licence.

Optioneering

8.77. We developed three options, including a ‘do minimum’. The options considered are summarised in EJP DPF37_SSEN_DRO_3e_Dynamic Voltage Management, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 1: Do Minimum - No change to our existing network voltage management.
- Option 2: Build voltage management (VM) dynamic voltage control capability [redacted] - Develop a voltage management central control system [redacted] that will dynamically manage voltage setpoints by integrating real-time data from multiple sources.
- Option 3: Build voltage management dynamic voltage control capability [redacted] - Develop a voltage management central control system [redacted] that will dynamically manage voltage setpoints by integrating real-time data from multiple sources.

Summary of CBA and engineering justifications

8.78. The CBA results for the technically feasible options are summarised in Table 28.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
1. Do Minimum					
2. Build VM dynamic voltage control capability [redacted]	(0.11)	0.18	0.36	0.51	0.57
3. Build VM dynamic voltage control capability [redacted]					

Table 28: CBA results for Dynamic Voltage Management: NPV at different intervals (£m, 2020/21 prices)

8.79. The option with the best NPV under the deterministic CBA is Option 2. Option 2 is therefore our recommended solution.

Preferred option

8.80. The preferred option is to build VM dynamic voltage control capability [redacted]. This approach [redacted] to introduce dynamic voltage management, aggregating data from network assets and calculating optimal voltage setpoints that can be dispatched to field devices. It supports a fast deployment, aligns with SSEN's digital infrastructure, and enhances operational efficiency, statutory compliance, and readiness for future grid demands. This option is recommended as it offers a flexible, data-driven solution suitable for future network requirements.

Project delivery

8.81. The preferred option, Option 2, proposes an installation and commissioning date [redacted] following successful procurement and design work.

Benefits to customers

8.82. The project facilitates the validation of dynamic voltage management as an effective solution, delivering measurable customer benefits such as enhanced operational efficiency through optimised voltage control. Customers will also experience greater reliability and cost-efficiency, as the initiative supports targeted voltage regulation and maximises whole-system value.

8.83. Furthermore, the project enables increased capacity and flexibility for LCT, thereby supporting an adaptable energy infrastructure. Enhanced voltage control also ensures compliance with the Electricity Safety, Quality, and Continuity Regulations (ESQCR) and reduces the risk of voltage non-compliance.

8.84. Additional societal advantages include improved system security, reduced consumer costs, and increased system flexibility through LCT integration, as highlighted by Ofgem in the ED3 SSMC.

Outlook to ED3

8.85. By accelerating the deployment of dynamic voltage control capabilities via the Active Management System, SSEN aims to address regulatory requirements and support the integration of LCT. This approach not only enhances network flexibility and security but also

aligns with the key policy drivers and recommendations set out in Ofgem's ED3 SSMC. Furthermore, the initiative is designed to complement additional investments in modern Automatic Voltage Control (AVC) relays, reinforcing the network's readiness for future challenges and delivering tangible stakeholder benefits such as improved compliance, reduced consumer costs, and increased system resilience.

Dynamic Voltage Management – recommendations

8.86. We recommend the implementation and funding for Option 2. Our estimated costs for the remainder of RIIO-ED2 are £2.00m.

Allowance adjustment

8.87. Table 29 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3e: Dynamic Voltage Management[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.00**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 29: Dynamic Voltage Management allowance adjustment summary

Project 3f: Real time Resilience

8.88. The detailed proposals and justification for Project 3f are set out in EJP Appendix DPF38_SSEN_DRO_3f_Real time resilience and CBA Appendix DPF38_SSEN_DRO_3f_Real time resilience_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.89. This proposal is not funded within the RIIO-ED2 baseline. The original functionality was developed as an NIA project. At the outset of RIIO-ED2 the capabilities of this innovation were unknown or low. As time has progressed, the innovation has matured to the point where it is now ready to be implemented at scale across our network.

8.90. We received baseline funding in RIIO-ED2 for the installation of LV monitoring which is facilitating the deployment of 20,000 low-cost LV substation monitors. These monitors collect several simple data sets such as voltage and current root mean square (RMS), which are extensively used and available in near real-time for network loading information, but with limited operational usability. During the first part of RIIO-ED2, we have been working with the manufacturers of these devices to add additional functionality to their devices under an NIA funded project. This period of innovation is now complete, and we are in a position where we can begin to deploy and integrate these additional features into our systems.

Needs case

8.91. This investment works to address three specific drivers identified through Ofgem's recent ED3 SSMC: 1) the importance of improving visibility and measurement, particularly at the LV level; 2)

increase resilience by real time management of data and 3) minimise repeated supply interruptions to the same customers

8.92. The needs case for continued investment in substation monitoring technologies arises from the rapidly changing patterns of electricity demand, driven by increased electrification through electric vehicles, heat pumps, and other low-carbon technologies. These shifts create new challenges for network operators in maintaining system stability and require more dynamic, data-driven approaches.

8.93. The proposed investment will enable real-time collection and analysis of reliability and pre-fault monitoring data at targeted sites, supporting proactive fault repair, targeted LV investment, minimising repeated supply interruptions, and aiding the decarbonisation and digitalisation of the network. Without further investment, the deployment of enhanced software on LV monitors will be limited, hindering the ability to turn increased data availability into actionable insights necessary for a resilient and future-proof LV network.

8.94. With this investment, we will target [redacted] of the 20,000 monitors funded within RIIO-ED2 to upgrade to be capable of supplying pre-fault data by the end of RIIO-ED2. With an assumed [redacted] circuit coverage per monitor this would give a total coverage of [redacted] feeders monitored.

8.95. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (c) – implementing Mature Innovation related to data and Digitalisation to fulfil obligations in the conditions of the Distribution licence.

Optioneering

8.96. We developed two options, including a 'do minimum'. The options considered are summarised in EJP DPF38_SSEN_DRO_3f_Real time resilience, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 0: Do Minimum - No change to the existing LV Data or Network Visibility Strategy
- Option 1: Incorporate reliability and pre-fault data available from 9897 targeted monitoring devices into single platform - [redacted] to capture reliability and pre-fault data, incorporating into a single platform.

Summary of CBA and engineering justifications

8.97. The CBA results for the technically feasible options are summarised in Table 30.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
0. Do Minimum	0.19	0.10	0.04	0	(0.01)
1. Incorporate reliability and pre-fault data available from 9897 targeted monitoring devices into single platform	2.71	1.47	0.74	0.17	0.05

Table 30: CBA results for Real time Resilience: NPV at different intervals (£m, 2020/21 prices)

8.98. Table 30 shows that the option with the best NPV under the deterministic CBA is Option 1, and is therefore our proposed solution.

Preferred option

8.99. The preferred option is to incorporate reliability and pre-fault data from [redacted] targeted monitoring devices into a single LV management platform. This approach enables the integration of diverse data sources, such as smart meters and LV monitors, to provide advanced functionality including fault distance calculation, enhanced voltage visualisation, asset health indexing, and access to historical fault data.

8.100. As an internal, continuously evolving system, it supports ongoing improvements and adaptability to network changes, delivering long-term benefits for both the organisation and its customers beyond the current price control period. This option has been identified as the recommended solution following its progression through cost-benefit analysis.

Project delivery

8.101. The preferred option, Option 1, is forecast to span an [redacted] period, commencing delivery once the outcomes Digitalisation uncertainty mechanism is known.

Benefits to customers

8.102. By enhancing real-time visibility and measurement at the LV level, customers will experience improved reliability and fewer repeated supply interruptions. The integration of advanced monitoring and data management supports more targeted LV network investments, ensuring efficient responses to network issues. These improvements contribute directly to greater network resilience, minimising disruptions and supporting the evolving needs of energy users

Outlook to ED3

8.103. The Programme will be delivered in totality in RIIO-ED2. There is currently no further project activities planned for ED3 but we will keep this under review as we prepare our ED3 business plans. This works to address three specific drivers identified through Ofgem's recent ED3 SSMC: 1) the importance of improving visibility and measurement, particularly at the LV level; 2) increase resilience by real time management of data and 3) minimise repeated supply interruptions to same customers.

Real-time Resilience – recommendations

8.104. We recommend the implementation and funding for Option 1. Our estimated costs for the remainder of RIIO-ED2 are £2.57m.

Allowance adjustment

8.105. Table 31 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3f: Real-time Resilience[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.57**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 31: Real-time Resilience allowance adjustment summary

Project 3g: Predict4Resilience

8.106. The detailed proposals and justification for Project 3g are set out in EJP Appendix DPF43_SSEN_DRO_3g_Predict 4 resilience and CBA Appendix DPF43_SSEN_DRO_3g_Predict 4 resilience_RIIO-ED2_Cost Benefit Analysis_P4R- final. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

8.107. This proposal is not funded within the RIIO-ED2 baseline, the functionality was developed under a SIF Discovery project and is currently in the Beta phase with a completion date of January 2027. At the outset of RIIO-ED2 the capabilities of this innovation were unknown. As time has progressed, the innovation has matured to the point where it is now ready to be implemented for full business as usual adoption.

Needs case

8.108. The needs case for the Predict 4 Resilience (P4R) tool is founded on its proven ability to enhance operational planning and response during extreme weather events, as demonstrated through live trials and feedback from SSEN staff. P4R provides earlier and more accurate fault predictions, enabling the control room to position resources proactively and communicate restoration times to customers with greater confidence.

8.109. Recent severe weather events, such as Storm Arwen and Storm Amy, highlighted the significant customer impact of power outages and the value of improved forecasting and resource allocation. P4R facilitated more effective deployment of welfare facilities and restoration teams, helping to reduce costs and improve customer outcomes. Removing P4R would risk increasing restoration times and inefficiencies, making full deployment and integration essential for ongoing network resilience and customer service improvements.

8.110. This project qualifies for the Digitalisation re-opener under both Special Licence Condition 3.2.59 part (c) – implementing Mature Innovation related to data and Digitalisation to fulfil obligations in the conditions of the Distribution licence.

Optioneering

8.111. We developed two options, including ‘do nothing’. The options considered are summarised in EJP DPF43_SSEN_DRO_3g_Predict 4 resilience, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 0: Do Nothing - Continue to operate under existing procedures and respond largely reactively to faults with lower confidence on restoration times and on where these will occur.
- Option 1: Embed P4R platform - Embed the centralised weather and fault prediction SAAS tool. Transition P4R into BAU and enable data-driven, proactive responses that reduce downtime, operational costs and customer impact.

Summary of CBA and engineering justifications

8.112. The CBA results for the technically feasible options are summarised in Table 32.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
0. Do Nothing					
1. Embed the centralised weather and fault prediction SAAS tool. Transition P4R into BAU and enable data-driven, proactive responses that reduce downtime, operational costs and customer impact.	7.71	7.38	7.51	7.61	7.63

Table 32: CBA results for Predict4Resilience: NPV at different intervals (£m, 2020/21 prices)

8.113. Option 1 has a positive NPV and is our proposed solution.

Preferred option

8.114. The preferred option is to embed the P4R centralised weather and fault prediction SAAS tool into SSEN's business as usual operations. This approach will enable proactive, data-driven responses to severe weather events, reducing downtime, operational costs, and customer impact. The integration involves transitioning the tool from its pilot phase to full deployment, supporting staff training, tailored enhancements for SSEN, and process development to maximise consumer value and operational efficiency.

Project delivery

8.115. The preferred option, Option 1, is forecast to span a [redacted] period, commencing delivery at the end of the SIF project. The SIF Beta project end date is January 2027.

8.116. Although the solution is in pilot stage within the project life, it has been recognised that this innovation should be taken to BaU without loss of continuity. This round 1 SIF Beta project does not have provision built in to integrate the platform so funding is sought to do this with no gap between the end of the project and the use of P4R by control rooms and wider staff.

Benefits to customers

8.117. The quantified benefits of the P4R platform are based on both historical data analysis and real-world trials. Using five years of weather-related fault data, the platform demonstrated reduced restoration times for faults requiring on-site intervention, translating into financial savings (like lower diesel generator fuel and storm support costs), environmental gains (improved air quality from less diesel use), and societal value (minimised disruption to homes and businesses).

8.118. Live trials further showed operational improvements, such as fewer emergency contractor call-outs, better welfare resource planning, earlier and more effective communication with customers, more accurate restoration time estimates, and enhanced staff wellbeing due to less last-minute stress. Overall, these benefits contribute to faster customer reconnections, reduced costs, and improved outcomes for both networks and society.

Outlook to ED3

8.119. By funding deployment through this mechanism, SSEN can accelerate the rollout of the new tools at the end of the P4R SIF-funded project, ensuring continuity and further enhancement of tool

outputs. This approach positions SSEN to “fast follow” and maintain a seamless transition into ED3 and beyond, maximising the value and technical benefits provided by the solution.

Predict4Resilience – recommendations

8.120. We recommend the implementation and funding for Option 1. Our estimated costs for the remainder of RIIO-ED2 are £0.49m.

Allowance adjustment

8.121. Table 33 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 3g: Predict4Resilience[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.49**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 33: Predict4Resilience allowance adjustment summary

9. THEMATIC AREA 4: DATA SHARING INFRASTRUCTURE (DSI) - DATA SHARING INFRASTRUCTURE

Background to DSI - Data Sharing Infrastructure

9.1. Currently, data sharing in the energy sector is inefficient and reliant on bespoke agreements, causing duplication and inconsistent standards. The Data Sharing Infrastructure (DSI) seeks to eliminate these inefficiencies by providing a secure, trusted platform using decentralised technology and a clear trust framework.

9.2. SSEN's collaboration with NESO and industry partners will leverage prior RIIO-ED2 investments and pilot projects to facilitate connection with internal systems and identify relevant data-sharing use cases. The project prioritises the MVP stage and Type 1 and 2 use cases, while also investing in advocacy for Type 3 use cases involving broader stakeholders.

New requirements arising in relation to DSI - Data Sharing Infrastructure

9.3. SSEN was the first DNO to pilot the DSI, a key initiative by Ofgem designed to address the current inefficiencies in manual and uncoordinated data sharing within the energy sector. This infrastructure is critical to managing the evolving energy system, which incorporates renewables, electric vehicles, heat pumps, and batteries, by enabling faster response times, enhanced resilience, and improved security of supply.

9.4. DSI and related open data initiatives will continue evolving through RIIO-ED2 into ED3, with an expanding range of use cases. Ofgem anticipates a licence requirement for DNO participation once the DSI MVP is operational.

Projects to address requirements

9.5. We recommend progressing one project under this thematic area:

- Project 4: Data Sharing Infrastructure (DSI) Collaboration

Project 4: Data Sharing Infrastructure (DSI) Collaboration

9.6. The detailed proposals and justification for Project 4 are set out in EJP Appendix DPF39_SSEN_DRO_4_DSI Collaboration and CBA Appendix DPF39_SSEN_DRO_4_DSI Collaboration_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

9.7. DSI is not part of RIIO-ED2 base funding.

9.8. SSEN is proud to have been the first DNO to pilot DSI, having acted on our own initiative to support NESO and Ofgem's work to make fast progress in this space. Ofgem's DSI a key

component in creating a smarter more flexible energy system and unlocking wider societal value from this energy system.

Needs case

9.9. The needs case for the DSI centres on the transformation of the energy system, driven by the increasing integration of renewables, electric vehicles, heat pumps, batteries and other distributed assets. Efficient operation and optimisation of this evolving system require improved data access and sharing.

9.10. The DSI will enable a more responsive, resilient, and secure energy supply through standardised and automated data exchange, facilitating coordination between organisations and supporting national clean power objectives.

9.11. By progressing towards an 'Open Energy' model, similar to Open Banking, DSI promotes asset interoperability, service innovation, and better customer offerings. It is anticipated that this will also unlock new opportunities such as green finance, allowing non-traditional energy participants to introduce innovative products and services to the market.

9.12. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) a change in legislation, licences, regulatory requirements, or industry codes, where as a result there is a requirement for the licensee to provide new, or significantly altered, digital or Data Services.

Optioneering

9.13. We developed three options, including ‘baseline – do nothing’. The options considered are summarised in EJP DPF39_SSEN_DRO_4_DSI Collaboration, where we include more detail on our cost assumptions and the estimated cost of each option.

- Option 0: Baseline - Do not support DSI MVP.
- Option 1: Support the DSI MVP - Support the technical development and non-technical identification of use cases for the MVP DSI – focusing on Use Case types 1 and 2
- Option 2: Support the DSI MVP and develop wider adoption - As option 1 with additional engagement and advocacy work to support Type 3 use cases to create a broader, more innovative ecosystem

Summary of CBA and engineering justifications

9.14. The CBA results for the technically feasible options are summarised in Table 34.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
0. Baseline – Do Nothing	0.06	0.30	(0.26)	(0.68)	(0.73)
1. Support the DSI MVP	(0.71m)	(1.16m)	(1.42m)	(1.62m)	(1.65m)
2. Support the DSI MVP and develop wider adoption	(0.70m)	(1.20m)	(1.50m)	(1.72m)	(1.76m)

Table 34: CBA results for DSI Collaboration: NPV at different intervals (£m, 2020/21 prices)

9.15. A key consideration of ED3 is how to enable greater data sharing across network companies. Ofgem believes that this will be achieved through the adoption and utilisation of the DSI. It is for that reason our recommended option is Option 2 with the inclusion of Type 3 use cases to create a broader, more innovative ecosystem.

Preferred option

9.16. Option 2 focuses on delivering comprehensive data engineering, governance, security, and digital engagement. This approach supports both essential energy industry use cases and broader innovation by enabling effective data sharing, collaboration, and advocacy. The option aims to improve data access, standardisation, and interoperability across the sector, aligning with SSEN's digital strategy and supporting national net zero objectives. Participation in this project will help reduce inefficiencies in data exchange and foster the development of critical data sharing infrastructure through a new industry-wide trust framework.

Project delivery

9.17. NESO, appointed by Ofgem as the DSI coordinator, is responsible for managing the overall development of the DSI project, aligning stakeholders, and maintaining the Trust Framework and its governance. Project delivery involves robust monitoring, procurement strategies, and adherence to the processes set out by NESO, ensuring that all activities are coordinated efficiently to reach the MVP stage ahead of ED3.

9.18. The project's resource requirements are determined based on NESO's recommendations and tailored to SSEN's internal capabilities, facilitating timely and effective implementation aligned with industry standards and regulatory expectations.

Benefits to customers

9.19. By improving data integration and operational efficiency, the project will help facilitate more customer connections to the network, supporting increased demand and new technologies. Customers can expect improved reliability, better service quality, and the ability to connect distributed energy resources more easily, ultimately leading to greater flexibility and resilience in the electricity supply network. Participation in the DSI project will deliver a variety of benefits to customers. By improving data access and interoperability, customers will benefit from more streamlined and efficient services, as energy providers can make quicker and better-informed decisions. The reduction in data sharing inefficiencies means resources can be allocated more effectively, ultimately reducing operational costs that could be reflected in customer bills.

9.20. Furthermore, faster adoption of renewable energy solutions will support a cleaner, more sustainable energy system, directly contributing to national net zero targets. Enhanced collaboration and standardisation in data sharing will enable whole systems planning, which can lead to improved reliability and resilience in energy supply, delivering long-term value and increased customer satisfaction.

Outlook to ED3

9.21. A key consideration of ED3 is how to enable greater data sharing across network companies. Ofgem believes that this will be achieved through the adoption and utilisation of the DSI. This solution will facilitate secure and efficient exchanges of data.

9.22. The growing complexities of the energy system to support net zero means that sector participants require more efficient access to data. In RIIO-ED2, organisations began to share data openly

through a system visual interface as part of the smart optimisation output licence condition. As we move towards ED3 the focus is likely to shift more towards ensuring there is greater interoperability and consistency in the data that users have access to. This will be enabled by initiatives such as the DSI.

Data Sharing Infrastructure Collaboration – recommendations

9.23. We recommend the implementation and funding for Option 2. Our estimated costs for the remainder of RIIO-ED2 are £1.83m.

Allowance adjustment

9.24. Table 35 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 4: DSI Collaboration[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.83**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 35: DSI Collaboration allowance adjustment summary

10. THEMATIC AREA 5: RADIO TELESWITCH SERVICE (RTS)

Background to RTS

10.1. The Radio Teleswitch Service (RTS) is a long-established legacy service that enables electricity meters to switch between peak and off-peak tariffs using radio broadcast signals. The service operates via the BBC Radio 4 long-wave frequency and associated control systems to transmit switching instructions, supporting both tariff arrangements and load-management functions for heating and hot water. RTS has been in operation for several decades and continues to serve over a million properties across Great Britain.

10.2. As the energy system transitions towards smarter and more flexible arrangements, the retirement of RTS represents a complex and nationally significant programme affecting networks, suppliers and customers. The service underpins critical customer functions, and its continued reliable operation is essential to avoid loss of heating or hot water during the transition to smart-meter-based alternatives. The safe and orderly wind-down of RTS therefore requires careful coordination across industry participants and sustained operational oversight.

New requirements arising in relation to RTS

10.3. SSEN has a uniquely significant role in the RTS transition as the sole access provider to the national Radio Teleswitch Control System (RTCS), responsible for managing broadcast schedules, group codes and switching logic on behalf of all UK DNOs. This places SSEN at the centre of ensuring system reliability, customer protection and continuity of service while suppliers undertake the replacement of RTS meters with smart alternatives.

10.4. The transition away from RTS is a multi-year, multi-stakeholder programme with material technical, customer and regulatory complexity. New requirements arise from the need to continue operating RTS reliably until shutdown, to manage supplier-directed switching changes, and to prepare for and mitigate potential service failures during the transition period. In parallel, SSEN is required to support the safe and controlled decommissioning of RTS infrastructure once migration is complete, ensuring customer detriment is avoided and the service is withdrawn in a coordinated and secure manner.

Projects to address requirements

10.5. We recommend progressing one project under this thematic area:

- Project 5: Radio Teleswitch Service (RTS)

Project 5: Radio Teleswitch Service (RTS)

10.6. The detailed proposals and justification for Project 5 are set out EJP Appendix DPF40_SSEN_DRO_5_Radio-tele switch and CBA Appendix DPF40_SSEN_DRO_5_Radio-tele switch_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

10.7. This project will enable new capabilities not currently funded in our RIIO-ED2 baseline allowances.

Needs case

10.8. RTS continues to support switching for over a million properties across Great Britain. As the service approaches end of life, continued operation is required to avoid incorrect switching and the loss of heating or hot water for customers during the transition to smart-meter-based alternatives.

10.9. SSEN holds a unique role as the sole access provider to the RTCS, managing broadcast schedules, group codes and switching logic on behalf of all UK DNOs. While energy suppliers are responsible for replacing RTS meters, SSEN is required to continue operating RTS to ensure continuity of service until customer migration is complete. Without this activity, customers would be exposed to significant detriment during the transition period.

10.10. The proposed option is to continue operating and maintaining the RTS infrastructure through to service shutdown, alongside delivery of the activities required to support a safe and controlled decommissioning of RTS systems. This includes maintaining system reliability, implementing supplier-directed switching changes, and preparing for potential service failures during the wind-down period, as set out in the EJP.

10.11. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (a) section (i), as the expenditure is required to support SSEN's mandated role in the RTS transition and to protect customers during the period leading up to service shutdown. The RTS wind-down is a mandatory, time-limited activity arising from externally determined industry arrangements.

Optioneering

10.12. We considered 2 options:

1. Do Nothing (non-participation): Withdrawal from the operation and management of the RTCS, including cessation of broadcast schedule management, group code administration and switching logic.
2. Do-Minimum: Continue to operate and maintain RTS in its current form through to service shutdown, including managing supplier-directed switching changes and delivering the activities required to support a safe and controlled decommissioning of RTS infrastructure.

10.13. Only the Do-Minimum option is viable. As set out in the EJP, SSEN is the sole access provider to the RTCS and is required to continue operating the service until all RTS customers have been migrated and the service is formally shut down. Continued operation is necessary to maintain correct tariff switching and to avoid loss of heating or hot water for customers during the transition period.

Summary of CBA and engineering justifications

10.14. Ofgem's RIIO-ED2 standard CBA template was used to set out the costs of the Do-Minimum option. We have not attempted to quantify the benefits of this long-standing service, and obligation on SSEN, but we have included the benefits on a qualitative basis within the 'Workings baseline' tab.

10.15. While the costs have been mapped into CBA, as there are no alternative assessed options, no comparative CBA options analysis has been generated.

10.16. On the basis of our assessment and recommendations, the Do-Minimum option is preferred at an estimated cost of £0.48m.

Option	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Option – Do Minimum	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.48**

Table 36: Costs to deliver RTS (£m, 2020/21 prices)

Preferred option

10.17. Under the Do-Minimum option, SSEN will:

- Continue to operate and maintain RTS to ensure accurate tariff switching and continuity of heating and hot water services until service shutdown.
- Manage broadcast schedules, group codes and switching logic on behalf of all UK DNOs.
- Implement supplier-directed switching changes required during the migration of customers to smart-meter-based alternatives.
- Deliver the activities required to support the safe and controlled decommissioning of RTS systems once customer migration is complete.

10.18. The Do-Minimum option is the only feasible and cost-effective approach to maintaining system reliability and avoiding customer detriment during the RTS transition.

Project delivery

10.19. Delivery of the RTS activity requires SSEN to continue operating and maintaining the RTCS through to the nationally coordinated service shutdown, while supporting supplier-led customer migration and preparing for safe decommissioning.

Benefits to customers

10.20. The principal benefits are primarily protective and relate to the continued safe operation and withdrawal of a critical service. Specifically, the project delivers the following benefits:

- Compliance with regulatory obligations, ensuring RTS continues to operate reliably until the nationally coordinated service shutdown.
- Continued support for RTS customers for the duration of the service's operation.
- Comprehensive and timely decommissioning of RTS.

Outlook to ED3

10.21. The Programme is expected to be phased out in totality in RIIO-ED2. There are currently no further activities planned beyond year 2026/2027, or for ED3, but we will keep this under review as we prepare our ED3 business plans (including in relation to any further programme delays).

RTS Wind-Down – recommendations

10.22. We recommend the implementation and funding of the Do-Minimum option for the RTS. This involves the continued operation and maintenance of RTS through to the nationally coordinated service shutdown, alongside delivery of the activities required to support a safe and controlled decommissioning of RTS systems. Our estimated costs for the remainder of RIIO-ED2 are £0.48m.

Allowance adjustment

10.23. Table 37 summarises our adjustment request for RTS Wind-Down.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 5: RTS Wind-Down[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.48**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 37: RTS Wind-Down allowance adjustment summary

11. THEMATIC AREA 6: RESP AND LOCAL AREA ENERGY PLANNING

Background to RESP and Local Area Energy Planning

11.1. We have built strong internal capabilities in digital network modelling and data governance, allowing us to deliver technology that is both robust and operationally relevant. These capabilities underpin critical improvements including: advanced forecasting and modelling tools, provision of consistent datasets for RESP and local area planning activities; automated data pipelines to reduce manual intervention and ensuring timely, high-quality information for decision-making; and GIS-based visualisation platforms, offering clear spatial insights into constraints, opportunities and investment priorities. These capabilities ensure we are not only a reliable contributor to national and regional planning frameworks, but also a leader in how local system data is shared, consumed and validated.

New requirements arising in relation to RESP and Local Area Energy Planning

11.2. LAEP+ is an online platform facilitating local authorities in creating spatial Local Area Energy Plans (LAEPs) which can be shared with DNOs. It is designed for users with varying technical expertise and provides access to baseline datasets, modelling tools, and stakeholder engagement features. SSEN pioneered LAEP+ through the RESOP innovation project, and it is now used by 260 local authorities and four DNOs across GB, with over 500 registered users and 300 projects in SSEN's application.

11.3. LAEP+ has been incredibly successful in RIIO-ED2 utilising innovation funding to enhance its basic functionality to become a valuable tool for stakeholders across both of licence areas. It has proven to be demonstrably useful for local authorities helping them secure decarbonisation funding and developing LAEPs in an efficient manner. Further it has supported efficient insight gathering to SSEN enabling more accurate data acquisition.

11.4. As we move through the remainder of RIIO-ED2 the need for alignment and co-ordination with NESO in development of RESPs will increase. LAEP+ can potentially play a significant role, particularly through its standardised form across multiple DNOs, allowing many local authorities to input RESP-ready data in an accessible format that can also be used by DNOs in their planning.

11.5. There are clear benefits for all parties with its continued use in RIIO-ED2, and we have identified proposed further developments which will further improve its adoption and benefits. Our project seeks funding to progress these developments.

Projects to address requirements

11.6. We recommend to progress one project under this thematic area:

- Project 6: LAEP+ Integration

Project 6: LAEP+ Integration

11.7. The detailed proposals and justification for Project 6 are set out in EJP Appendix DPF33_ DPF41_SSEN_DRO_6_LAEP+ Integration and DPF41_SSEN_DRO_6_LAEP+ Integration_RIIO-ED2_Cost Benefit Analysis. The following sections cross-reference and summarise these documents.

RIIO-ED2 funding and commitments

11.8. This project will enable new capabilities not currently funded in our RIIO-ED2 baseline allowances.

Needs case

11.9. An increasing number of local authorities are now using the tool for energy planning activities and providing digital information into our DFES process. We have regular assurance requests from local authorities that LAEP+ will remain available through the price control period.

11.10. There is therefore stakeholder support for development of the tool and to provide more support for LAEPs. Feedback highlights the need for better coordination and consistency between LAEPs, enhancements to the LENZA / LAEP tool for better interaction, and support for local plan development and net zero planning.

11.11. There are a number of discrete developments within the LAEP+ tool that we believe would bring significant benefits and would be required within RIIO-ED2 timescales. We would seek to share the developments of this functionality with other DNOs through the establishment of an LAEP+ development forum as more DNOs transition to BAU with LAEP+.

11.12. This project qualifies for the Digitalisation re-opener under Special Licence Condition 3.2.59 part (c) as we are implementing Mature Innovation related to data and Digitalisation to fulfil obligations in the conditions of our licence.

Optioneering

11.13. We developed four options, including a ‘do minimum’ option:

- A baseline counterfactual where no additional funding is provided for LAEP+ and the service is discontinued within RIIO-ED2.
- Option 1 where sufficient funding is provided for continued service provision for local authorities in RIIO-ED2 but no additional funding is provided for either standardisation across DNOs nor any other development activities - this is a ‘Do Minimum’ option.
- Option 2 where sufficient funding is provided for continued service provision for local authorities in RIIO-ED2 and to enable standardisation across DNOs and ED3 mobilisation but there is no development of the tool’s capabilities.
- Option 3 where the full requested funding is provided such that standardisation across DNOs ED3 mobilisation, and additional developmental activities are delivered in RIIO-ED2 timescales.

Summary of CBA and engineering justifications

11.14. The potential benefits of LAEP+ extend beyond standard network benefits by enabling proactive planning, reducing the risk of duplication in energy insight gathering, and accelerating net zero delivery through improved data sharing and scenario modelling. Recognising this, we used the strategic CBA proxy bank to identify benefits on a specific case study for CBA Option 3, to demonstrate the potential benefits of a 1% change in DFES forecasting enabled by LAEP+.

11.15. The CBA results for the technically feasible options are summarised in Table 38.

Option	10 years	20 years	30 years	45 years	Whole life (55 years)
1. Baseline counterfactual – Cease service provision	-	-	-	-	-
2. CBA Option 1 – Do minimum – Move LAEP+ into BAU with no further development	21.54	21.47	21.43	21.40	21.39
3. CBA Option 2 - Move LAEP+ into BAU with standardisation and ED3 mobilisation but no further development of capability.	21.41	21.25	21.15	21.08	21.07
4. CBA Option 3 – Move LAEP+ into BAU with further development of capability, standardisation and ED3 mobilisation	38.11	37.72	37.48	37.31	37.28

Table 38: CBA results for LAEP+ Integration: NPV at different intervals (£m, 2020/21 prices)

11.16. This shows that the option with the best NPV under the deterministic CBA is CBA Option 3. This is therefore our recommended option.

Preferred option

11.17. Option 3 develops and implements the LAEP+ platform within the SSEN licence areas. The project will standardise the platform across neighbouring DNOs and prepare for integration with RESP in ED3, and will include the following enhancements:

- Scenario optimisation of grid scale generation, energy demand and new developments
- Optimised deployment of public EV charging infrastructure
- Automated and dynamic data views for net zero funding streams
- Externally publishable digital LAEP

11.18. The RIIO-ED2 funding request for this project is £1.43m.

Project delivery

11.19. Our product manager will work [redacted] over 2026/27 and 2027/28 to integrate the tool enhancements into our BAU environment and provide training and support for internal and external users.

Benefits to customers

11.20. This option delivers the following outputs and benefits:

- Access to LAEP+ for local authority stakeholders and related third parties.
- Development upgrades requested by users over RIIO-ED2.
- Standardisation of LAEP+ across DNOs including common logins for joint authorities.
- Alignment and co-ordination with RESP development ahead of first full RESPs in late 2028.

Outlook to ED3

11.21. As we move through the remainder of RIIO-ED2 the need for alignment and co-ordination with NESO in development of RESPs will increase. LAEP+ can potentially play a significant role, particularly through its standardised form across multiple DNOs, allowing many local authorities to input RESP-ready data in an accessible format that can also be used by DNOs in their planning. We believe that some targeted ED3 mobilisation funding will be required given that LAEP+ is now used by the majority of GB DNOs and that further works will be required to align and incorporate RESPs. We will seek additional funding for ED3 activities, as appropriate, in our Business Plan submission.

LAEP+ Integration – recommendations

11.22. We recommend the implementation and funding for Option 3. Our estimated costs for the remainder of RIIO-ED2 are £1.43m.

Allowance adjustment

11.23. Table 39 summarises our adjustment request for this project.

Adjustment summary (£m, 2020/21 price base)	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Project 6a: LAEP+ Integration[1]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.43**

NOTES:
[1] Adjustment before the application of Indirects (10.8%).

Table 39: LAEP+ Integration allowance adjustment summary

12. CONCLUSION

12.1. This funding application supports the development and operation of these projects through the RIIO-ED2 period to March 2028. It sets an intended direction for our work in ED3, supported by associated development activities.

12.2. The total funding adjustment requested in this application is £25.74m, summarised in Table 40.

Adjustment summary £m, 2020/21 price base	**2023/24**	**2024/25**	**2025/26**	**2026/27**	**2027/28**	**Total**
MHHS Extended Scope	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.39**
Scaled Local Network Modelling	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.36**
ConnectDirect Collaboration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.82**
Early Access Management at Scale	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.77**
ADMS Data-Fabric and Operational Analysis	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**4.03**
FMAR Enablement	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.27**
Situational Awareness in Near Real-Time	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.61**
T-D Boundary Operational Data Exchange	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**3.19**
Dynamic Voltage Management	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.00**
Real Time Resilience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.57**
Predict4Resilience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.49**
DSI Collaboration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.83**
Radio Teleswitch Service Wind-down	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**0.48**
LAEP+ Integration	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**1.43**
Adjustment before Indirects	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**23.23**
Indirects Adjustment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.51**
TOTAL ADJUSTMENT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**25.74**
SEPD (50%)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	12.87
SHEPD (50%)[3]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	12.87

Table 40: Total allowance adjustment summary

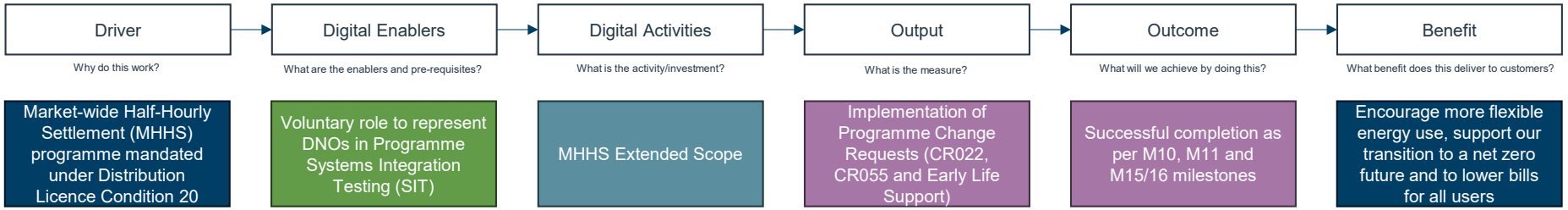
12.3. We welcome both engagement with Ofgem and stakeholders, and a swift determination process to facilitate our progression of these plans, recognising the short time left of the current price control.

APPENDIX 1 – DEFINITIONS AND ABBREVIATIONS

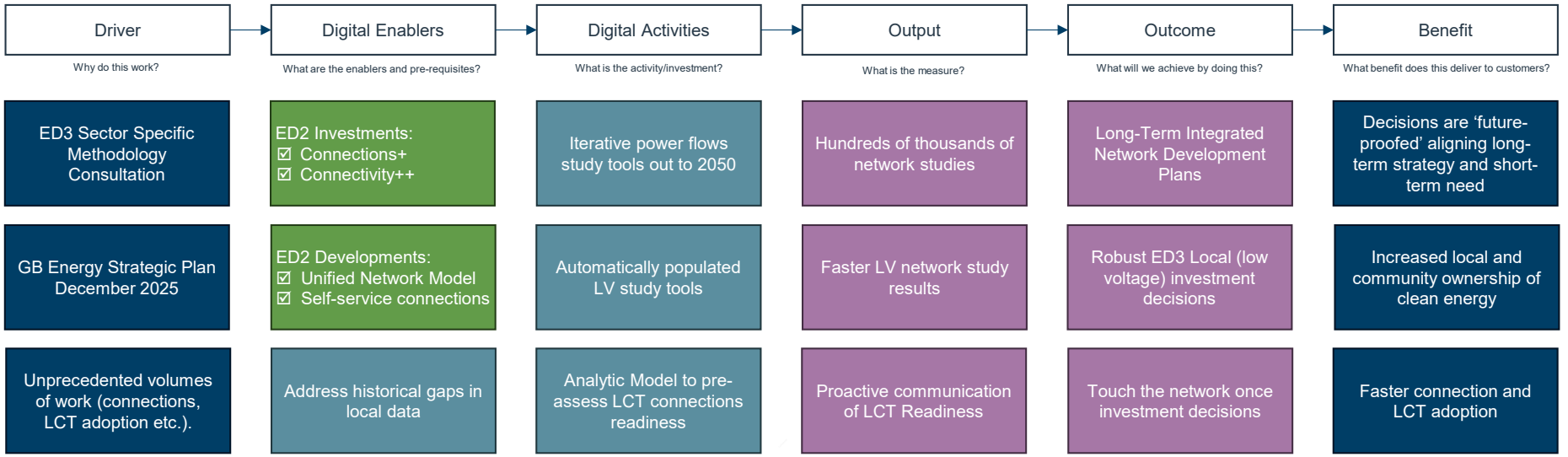
Acronym	Definition	Acronym	Definition
Access SCR	Ofgem's Access Significant Code Review	LENZA	Local Energy Net Zero Accelerator
ADMS	Advanced Distribution Management System	LINDPs	Long-Term Integrated Network Development Plans
ANM	Active Network Management	LPP	Local Power Plan
AVC	Automatic Voltage Control	LV	Low Voltage
BaU	Business as Usual	MHHS	Market-wide Half Hourly Settlement
BCA	Bilateral Connection Agreement	MVP	Minimum Viable Product
CAI	Closely Associated Indirect	NAL	Network Access Ledger
CBA	Cost Benefit Analysis	NeRDA	Near Real-time Data
CP2030	Clean Power 2030	NESO	National Energy System Operator
D	Distribution	NIA	Network Innovation Allowance
DERMS	Distributed Energy Resources Management Systems	NMS	Network Management System
DFES	Distribution Future Energy Scenarios	NPV	Net Present value
DESNZ	Department for Energy Security and Net Zero	P4R	Predict4Resilience
DNO	Distribution Network Operator	RESP	Regional Energy Strategic Plan
DSAP	Digitalisation Strategy and Action Plan	RMS	Root mean square
DSI	Data Sharing Infrastructure	RTCS	Radio Teleswitch Control System
DSO	Distribution System Operator	RTS	Radio Tele-Switch
RIIO-ED2	RIIO-ED2 electricity distribution price control period	SCADA	Supervisory Control and Data Acquisition
ED3	ED3 electricity distribution price control period	SEPD	Southern Electric Power Distribution
EJP	Engineering Justification Paper	SCADA	Supervisory Control and Data Acquisition
ESQCR	Electricity Safety, Quality and Continuity Regulations 2002	SEPD	Southern Electric Power Distribution
FMAR	Flexibility Market Asset Register	SHEPD	Scottish Hydro Electric Power Distribution
FSP	Flexibility Service Provider	SIF	Strategic Innovation Fund
HV	High Voltage	SSEN	Scottish and Southern Electricity Networks
LAEP	Local Area Energy Plan	SSMC	ED3 Sector Specific Methodology Consultation
LAEP+	Local Area Energy Plan Plus	T	Transmission
LCT	Low Carbon Technology	VM	Voltage management

APPENDIX 2 – DIGITALISATION PROJECT THEORY OF CHANGE LOGIC MODELS

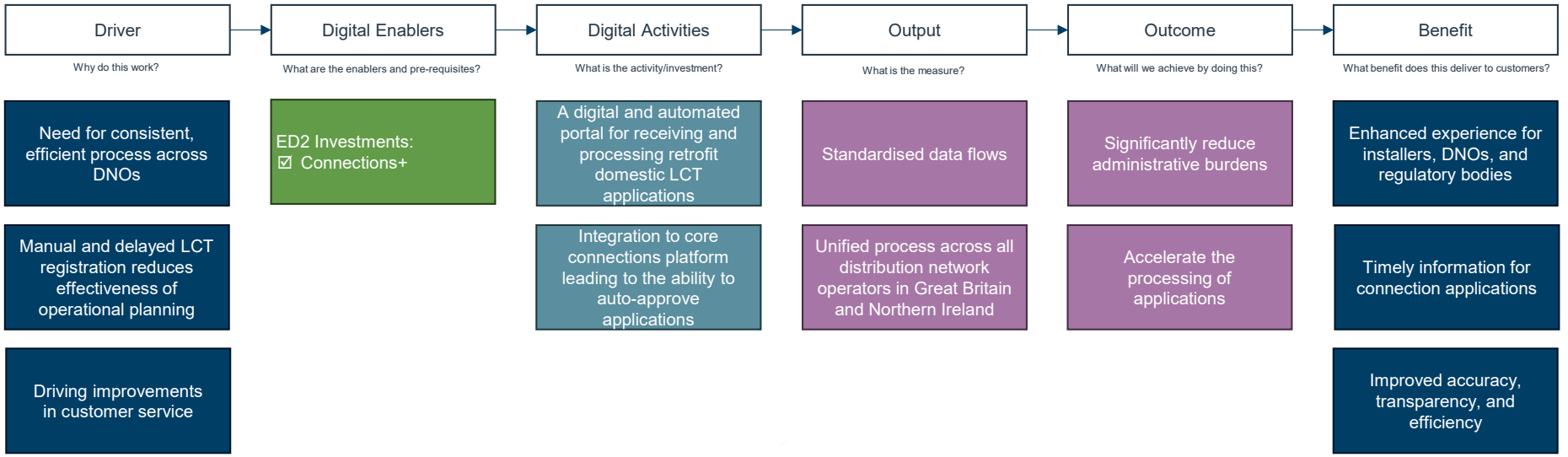
DPF29_SSEN_DRO_1 **MHHS Extended Scope**



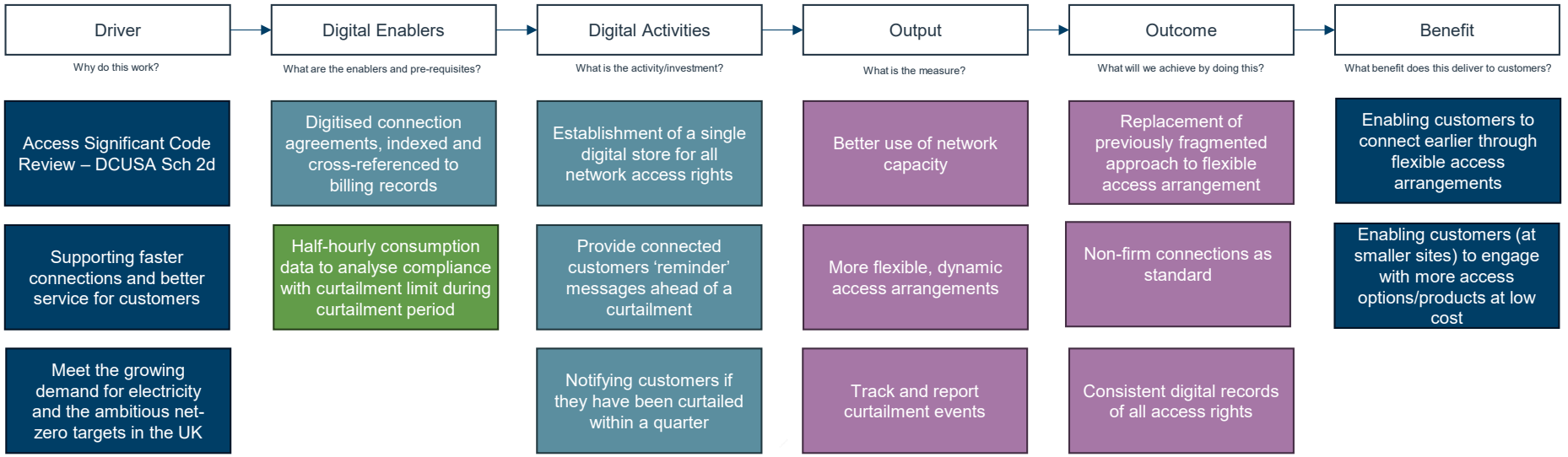
DPF30_SSEN_DRO_2a **Scaled Local Network Modelling**



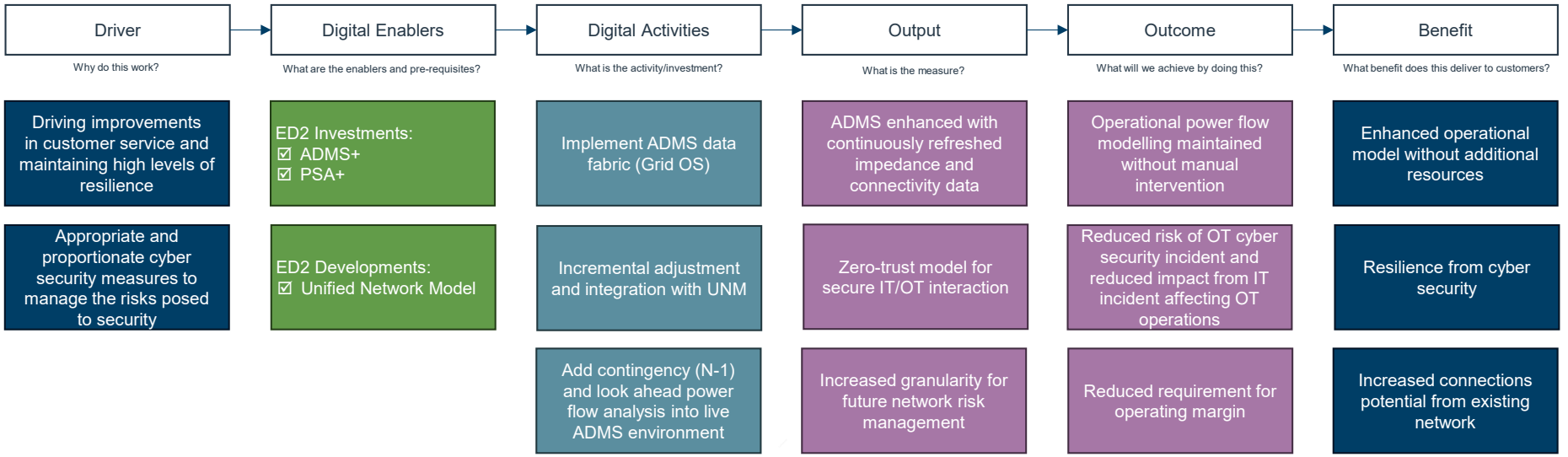
DPF31_SSEN_DRO_2b **ConnectDirect Collaboration**



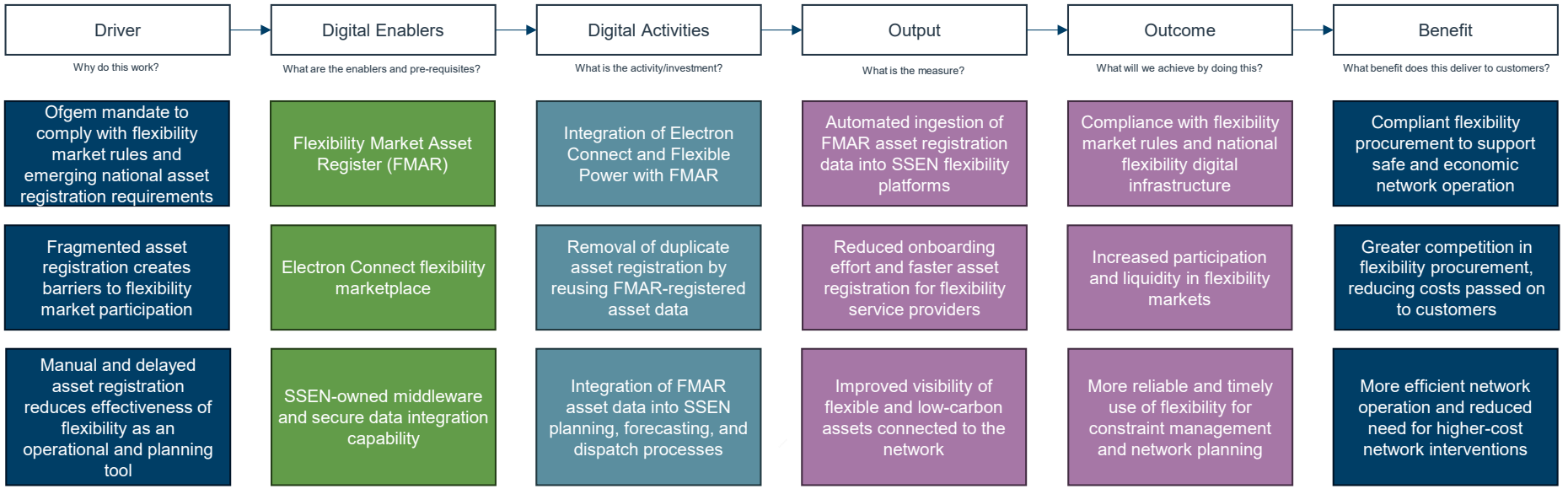
DPF32_SSEN_DRO_2c **Early Access Management at Scale**



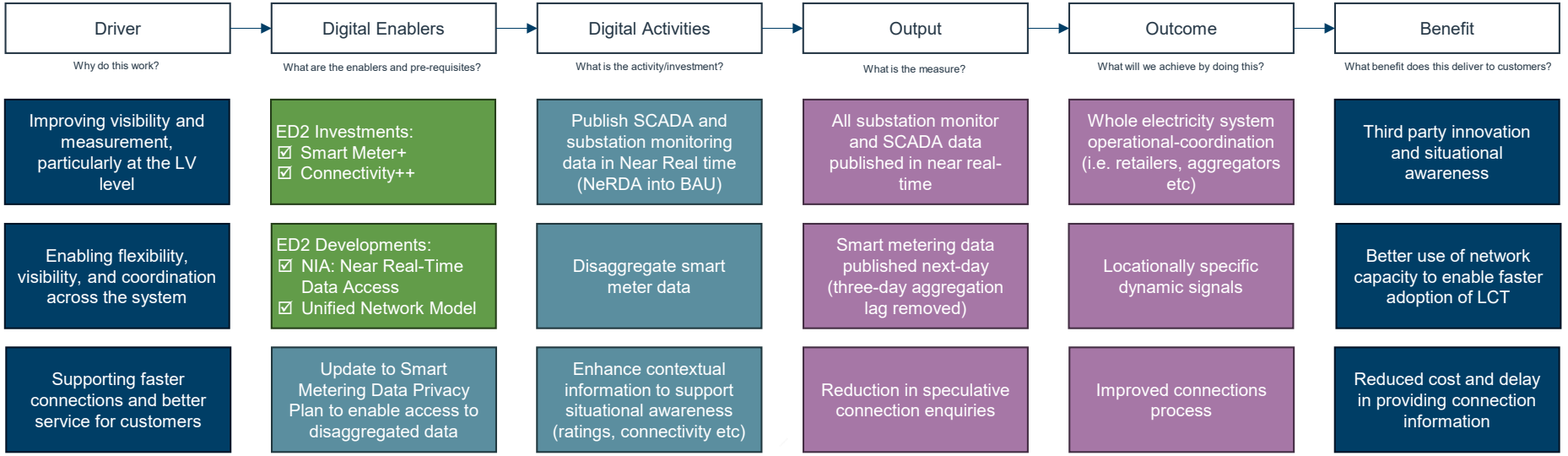
DPF33_SSEN_DRO_3a **ADMS Data-Fabric and Operational Analysis**



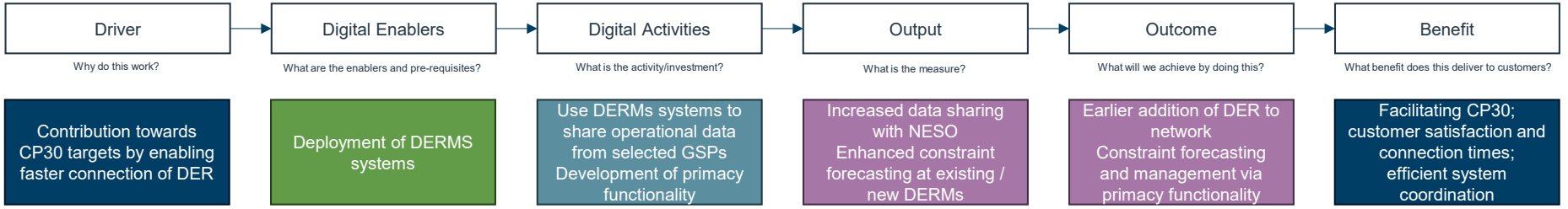
DPF34_SSEN_DRO_3b **FMAR Enablement**



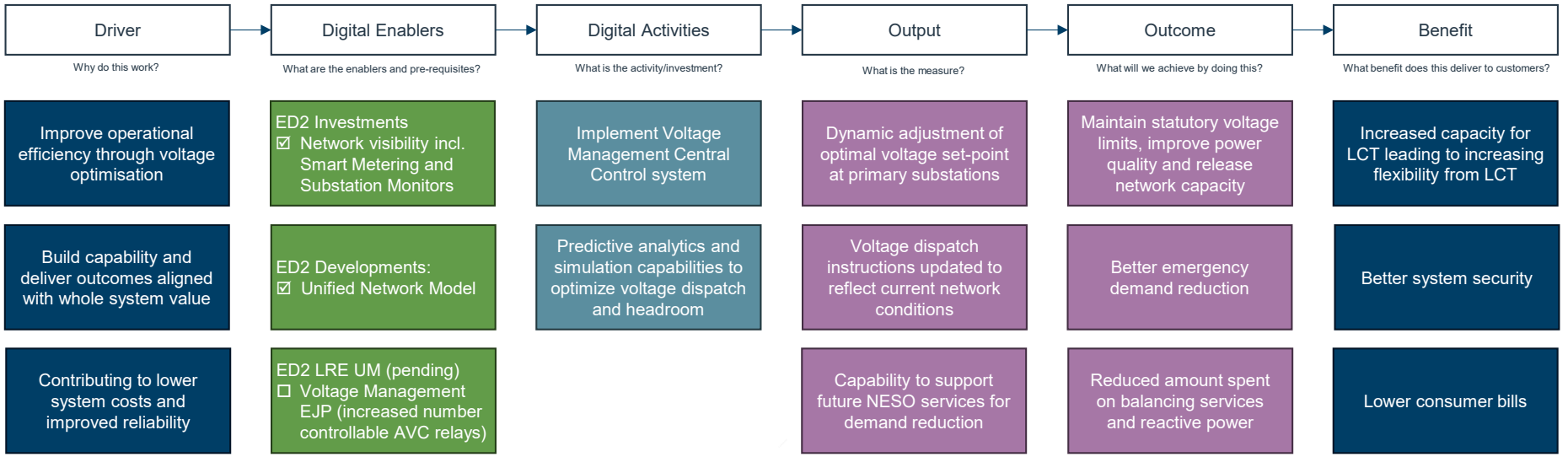
DPF35_SSEN_DRO_3c **Situational Awareness in Near Real-Time**



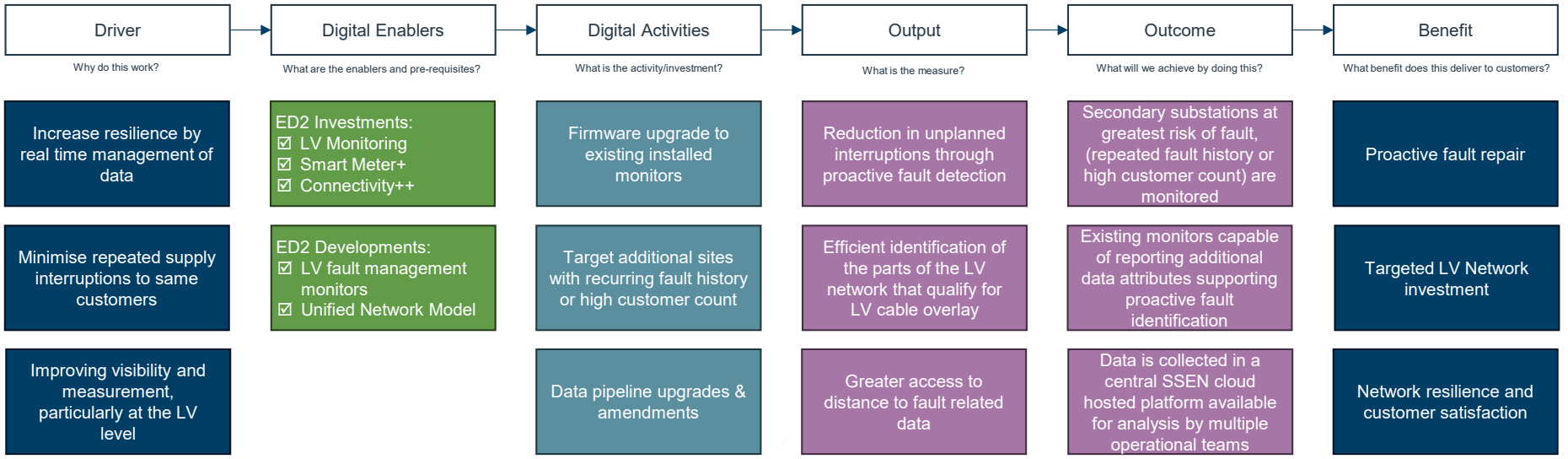
DPF36_SSEN_DRO_3d **T-D Boundary Operational Data Exchange**



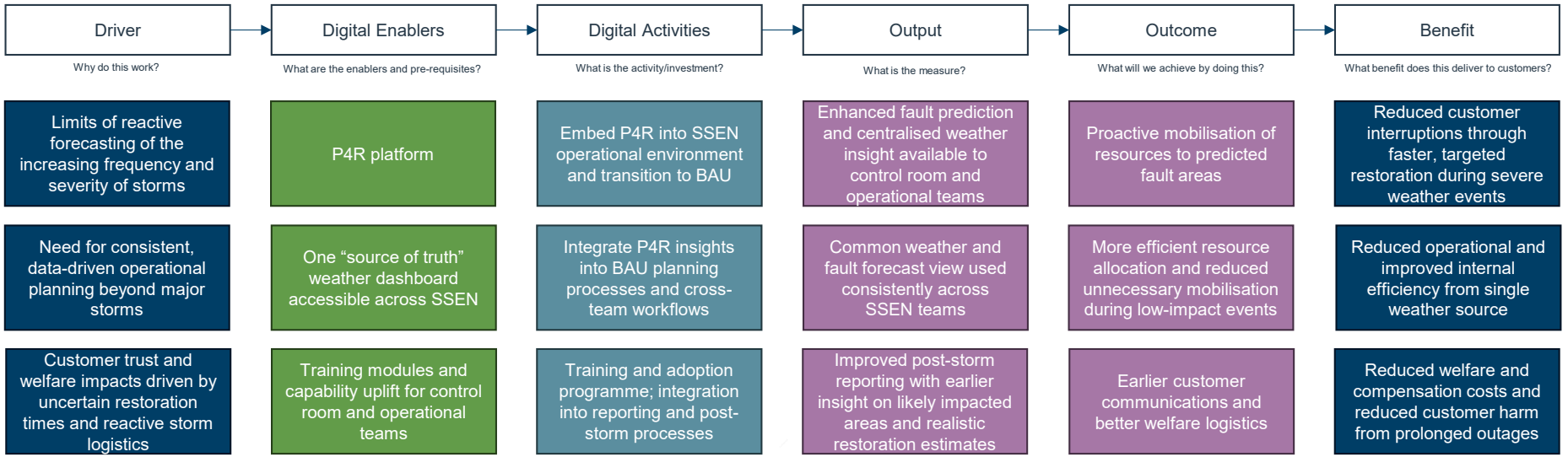
DPF37_SSEN_DRO_3e **Dynamic Voltage Management**



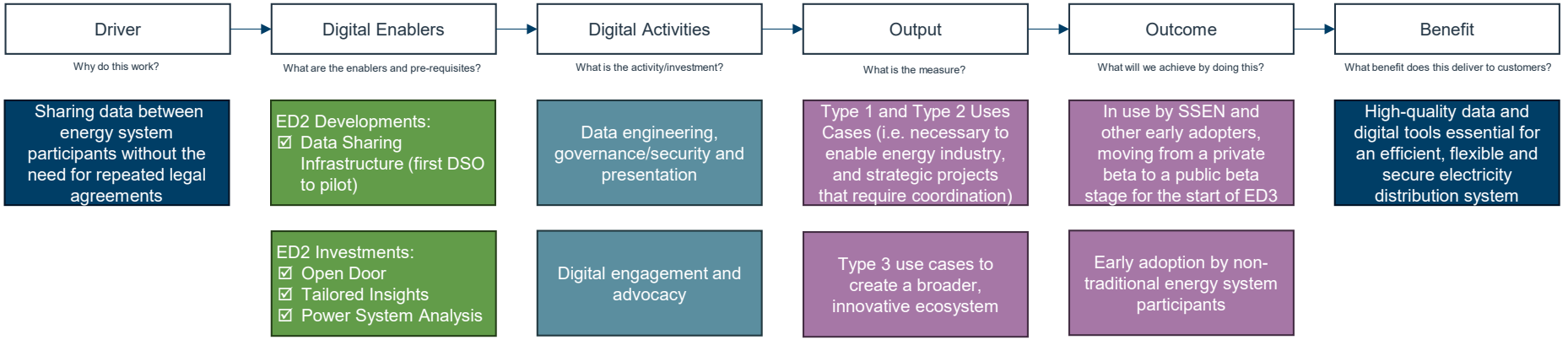
DPF38_SSEN_DRO_3f **Real Time Resilience**



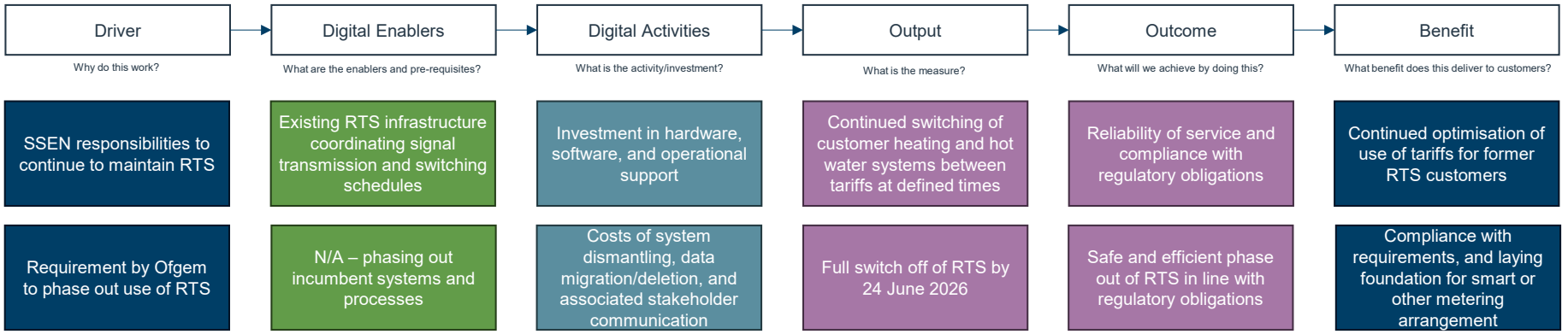
DPF43_SSEN_DRO_3g **Predict 4 Resilience**



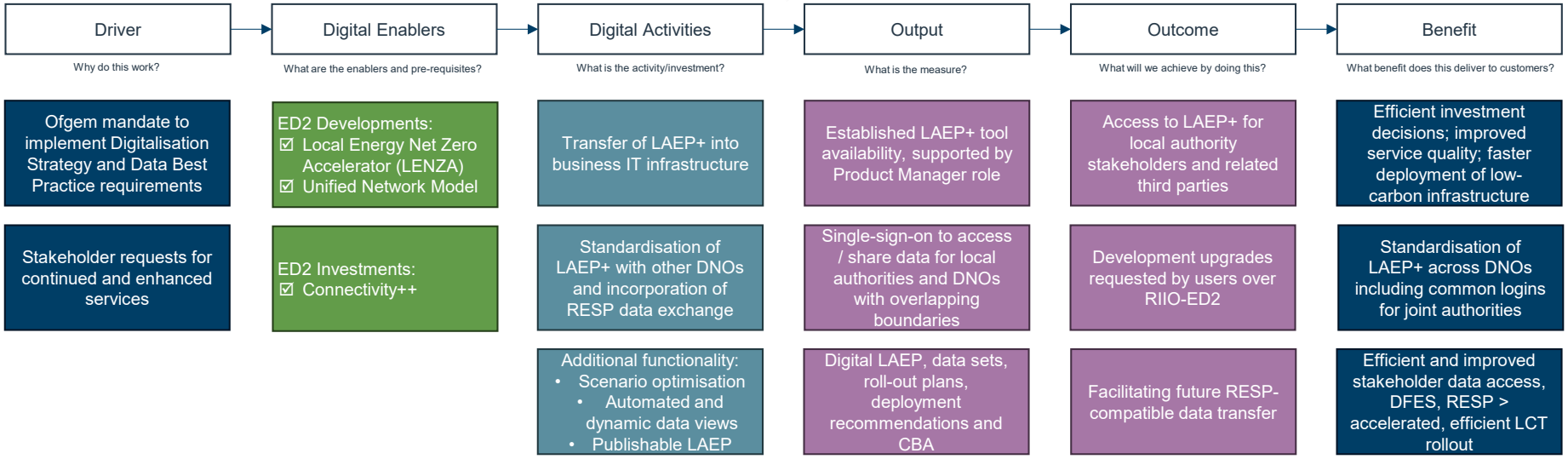
DPF39_SSEN_DRO_4 **DSI Collaboration**



DPF40_SSEN_DRO_5 **Radio Teleswitch Service Wind-down**



DPF41_SSEN_DRO_6 **LAEP+ Integration**



EXTERNAL APPENDICES

APPENDIX - DIGITAL STRATEGY

APPENDIX - DIGITAL ACTION PLAN

APPENDIX - DPF29_SSEN_DRO_1_MHHS EXTENDED SCOPE.DOCX

APPENDIX - DPF29_SSEN_DRO_1_MHHS EXTENDED SCOPE_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX

APPENDIX - DPF30_SSEN_DRO_2A_SCALED LOCAL NETWORK MODELLING.DOCX

APPENDIX - DPF30_SSEN_DRO_2A_SCALED LOCAL NETWORK MODELLING_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX

APPENDIX - DPF31_SSEN_DRO_2B_CONNECTDIRECT COLLABORATION.DOCX

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APPENDIX - DPF32_SSEN_DRO_2C_EARLY ACCESS MANAGEMENT AT SCALE.DOCX

APPENDIX - DPF32_SSEN_DRO_2C_EARLY ACCESS MANAGEMENT AT SCALE_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX

APPENDIX - DPF33_SSEN_DRO_3A_ADMS DATA-FABRIC AND OPERATIONAL ANALYSIS.DOCX

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APPENDIX - DPF38_SSEN_DRO_3F_REAL TIME RESILIENCE.DOCX

APPENDIX - DPF38_SSEN_DRO_3F_REAL TIME RESILIENCE_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX

APPENDIX - DPF43_SSEN_DRO_3G_PREDICT 4 RESILIENCE.DOCX

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APPENDIX - DPF39_SSEN_DRO_4_DSI COLLABORATION.DOCX

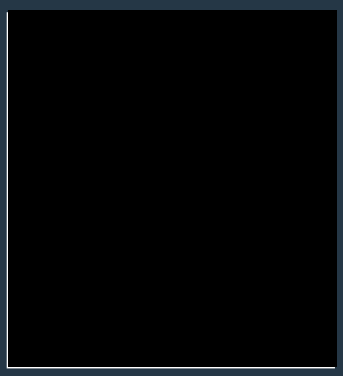
APPENDIX - DPF39_SSEN_DRO_4_DSI COLLABORATION_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX

APPENDIX - DPF40_SSEN_DRO_5_RADIO-TELE SWITCH.DOCX

APPENDIX - DPF40_SSEN_DRO_5_RADIO-TELE SWITCH_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX

APPENDIX - DPF41_SSEN_DRO_6_LAEP+ INTEGRATION.DOCX

APPENDIX - DPF41_SSEN_DRO_6_LAEP+ INTEGRATION_RIIO-ED2_COST BENEFIT ANALYSIS.XLSX



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