Innovation Annual Report

2021-2022

www.ssen-transmission.co.uk

Scottish & Southern Electricity Networks

TRANSMISSION

Scottish Hydro Electric Transmission plc

Contents

About this report

This report is an insight into the activities SSEN Transmission (SSEN-T) has undertaken around innovation in the financial year 2021-22. It covers innovation across four key funding streams and is supplementary to the Annual Network Innovation Allowance Summary.

The purpose is to provide a detailed look into the innovation highlights within SSEN-T, but not focusing on any single funding mechanism, rather a holistic view of innovation across the business.

We define innovation as 'Identifying and proving new ways of working for the long-term benefit of our stakeholders and ourselves'. That is why we feel it is important to grow a portfolio of projects that is wide-ranging and covers innovations from quick wins, all the way through to large transformational projects. It is the first time this report has been published, and we aim to continue further iterations on an annual basis.

Our innovation strategy sits at the core of our innovation activities. The foundation of this strategy is a framework (Figure 1) that centres on being a 'responsible innovator'. It is a core principle that aims to ensure we are focused on delivering benefits for our customers and stakeholders, through transferring successfully proven innovation into Business as Usual (BaU). This allows us to identify and prioritise the most appropriate innovations. We use this framework as we develop our innovation opportunities and as a result, we are able to create a balanced portfolio across multiple funding streams.

Through this report, we aim to demonstrate how we are delivering this balanced portfolio, and hope it gives you an insight into our commitment to deliver a network for net zero.

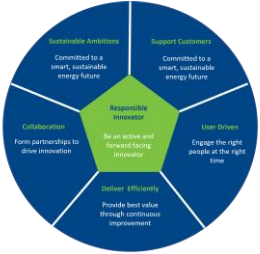


Figure 1. Innovation Framework

Foreword

Andrew Urquhart
Head of Whole System

In 2019, we published our Innovation Strategy that focuses on delivering long-term benefits for our customers and wider stakeholder groups. Embedded within this strategy is our overarching business priority of delivering a network for Net Zero. Innovation is a way of supporting this, and through our innovation projects, we can de-risk a number of the uncertainties that the challenge of Net Zero presents. We want to ensure we get the most out of innovation, that is why we have designed a five-stage process within our business, that incorporates Cost Benefits Analysis (CBA) along each stage, providing a clear and consistent method of identifying, developing, and delivering innovation with maximum benefit for the consumer.

This report covers the first full year of the RIIO-T2 price control. During this time, our focus has been on creating the foundations of our innovation portfolio. In alignment with our innovation strategy, we have taken a 'User Driven' approach to identify new opportunities and continue to use the structure of our Innovation Framework as a principal guide.

We see that the innovation landscape is continually changing and that's why we will be revising our innovation strategy over the coming year, ensuring we are strategically focused on the challenges that matter most. It is a truly exciting time within our industry, the electrical networks are seeing rapid growth, and as we build our network for Net Zero, innovation will sit as a cornerstone to support the energy system of the future.

1. Summary of CNIA Progress

Carry-over Network Innovation Allowance

During the RIIO-T1 period, we delivered a wide portfolio of innovation projects funded through the Network Innovation Allowance (NIA). Through NIA Governance requirements, it stipulates that these projects should be concluded by the end of the RIIO-T1 period. However, a number of factors, including the global Coronavirus pandemic prevented some of our projects from concluding on time. To maintain consistency and continuity, and to prevent a need to reregister these projects in the RIIO-T2 period, Ofgem granted the network business an extension that allowed projects to be delivered beyond the RIIO-T1 timeline. As a result, this section will summarise these projects, we refer to them as the Carry-over Network Innovation Allowance (CNIA).

|1.1 Refase

KEY ACTIVITIES

Refase is a new control product that allows measured values from up to 50 current transformers to be acquired using a single optical fibre core over distances up to 50km. By centralising current measurements, this method negates the need for multiple protection relays, complex time synchronisation systems at measurement points, and telecommunications equipment among the distributed protection and control devices. This project is sector-leading for new technology, with the aim of conducting a series of desktop trials, which if successful, will progress into the field where the performance of the Refase system will be benchmarked against traditional protection methods.

The approach demonstrated that this trial has the potential to save approximately £250,000-£350,000 in capital expenditure per installation, compared to conventional approaches to multi-ended circuit protection. The savings come from reduced need for equipment space in substations, the minimising of civil engineering work, less copper wiring, and the ability to leverage existing Optical Phase Ground Wiring (OPGW) which creates a ready-made network for Refase passive sensors.

The project has now closed. As a result, the Technology Readiness Level (TRL) was increased to TRL 8, and upon completion of compliance with SSEN-Ts General Requirements for Protection IED's document and ENA certification, Refase will be suitable for use in BAU.

Funding
£388,360

Start/end date
June 2019 / March 2022

Website
www.smarternetworks.org/project/nia_shet_0026

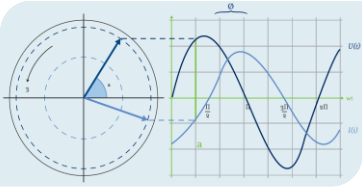
1.2 Phasor Based Monitoring

KEY ACTIVITIES

The GB electricity transmission system is expanding, driving the need for an increase in the number of High Voltage Direct Current (HVDC) circuits. This project aims to build upon learnings from our previous innovation projects VISOR and MIGRATE, to explore the potential of phasor-based Wide Area Network (WAN) monitoring that enables the communication of data over a large geographical area and its application in controlling the incoming power from HVDC connections. The present approach to controlling HVDC onto the Transmission System has worked well, however with more HVDC power sources being introduced, the system can become more complex to control. With the ability to have greater control, we will be able to grow our HVDC system with confidence and deliver a reliable network for the future.

The project has now closed, it successfully provided General Electric (GE) with remote access to their servers in the National HVDC Centre via a wireless Virtual Private Network (VPN) connection. In a safe environment that mimics the transmission system, it was possible for GE to develop and positively prove the operation and functionality of their wide-area phasor-based monitoring solution for HVDC control.

The results suggest the means of HVDC control is efficient in certain system situations such as electrically weak networks. However, it is recognised that there are research limitations and more testing on different network configurations is required to progress solution development. We plan to take the learnings from this project to enhance further research into future HVDC control schemes.



Funding
£321,000

Start/end date
October 2019 / April 2021

Website
www.smarternetworks.org/project/nia_shet_0029

1.3 Wake Vibration Monitoring

KEY ACTIVITIES

Most transmission onshore wind farms are connected to the wider electrical network via overhead lines. This can result in some wind generation schemes encroaching or coming close to existing infrastructure such as transmission overhead lines (OHL). This project was established to address the question "What effect and at what proximity do wind generators introduce an undesirable consequence on the existing conductor configurations and conductor types used on transmission overhead lines?"

From the guidance of literature research, a tool was produced that allowed the wind flow effects of a wind turbine in close proximity to an OHL conductor to be modelled. This can be used to provide a basis for appropriate recommendations and guidance for future proposed wind turbine installations. Adopting this approach, we can make better-informed decisions on the scale and impact that wind turbines may have on our assets. This in turn can lead to savings for the consumer by mitigating against early fatigue of our overhead line structures, conductors, and fittings.

The project has now closed and successfully produced an extensive literature review into the different ways of investigating the impact of a wind turbine on an OHL. It also made recommendations on how to approach this project, and generate guidance material on how to create a tool to help assess the impact of a turbine on an OHL. Our design teams will now take these learnings and incorporate them into their existing practices, as future OHL schemes are developed.

Funding
£310,000

Start/end date
April 2020 / June 2021

Website
www.smarternetworks.org/project/nia_shet_0031

1.4 TOTEM

KEY ACTIVITIES

Conventional phasor-based simulation tools, that use mathematical values derived from RMS (Route Mean Square) calculations, have limitations in studying weak, low-inertia electrical systems due to the level of detail that is represented. In conjunction with National Grid Electricity Transmission, National Grid Electricity System Operator and Scottish Power Transmission, there is a move to develop more detailed electromagnetic transient (EMT) based models which will address the present system modelling concerns.

Although the project has closed, the learnings achieved will be taken forward into the TOTEM Extension project and funded through the RIIO-T2 NIA stimulus. This new project will focus on the 'Development' of innovative tools and resources for power system modelling and analysis. It will produce a model that can mimic large-volume power electronics and enable the formulation of mitigation measures to future-proof the GB network associated with the energy transition. The end product will be a valuable modelling tool that will be validated and improved by studying actual system disturbances.

Working together with the other GB Transmission Owners brings great benefit, as the combined acquisition and validation of new system models can enhance, as well as de-risk the integration of technologies that result in lower system inertia. Our combined efforts allow the faster realisation of the challenges and solutions needed to develop a strong and resilient network for the future.

Funding
£580,000

Start/end date
May 2020 / April 2021

Website
www.smarternetworks.org/project/nia_shet_0032

2. Summary of NIA Progress

2.1 PSL-FC

KEY ACTIVITIES

The transition from traditional fossil fuels to renewable sources of energy is changing the transmission network characteristics due to a reduction in very large spinning machines. Renewable forms of energy are typically small machines, meaning huge numbers of units are needed to equal the power capacity of a single traditional fossil fuel unit. When a unit responds to a fault it sends a very large, sudden, single bolt of current, however, renewable generators can respond with a prolonged, marginal current spike as the individual units trip. Protection and Control (P&C) systems are presently designed to monitor and react to a very large and sudden current event.

The scope of this project is to simulate a future network where the fault current spike is marginal but prolonged and evaluate how current P&C products function and respond. Based upon the findings it will determine if a P&C solution can be further developed to address future network issues. Present mitigation measures use a device called a Synchronous Condenser. It replicates a traditional fossil fuel power source and in the event of a fault, respond with a single bolt of current. However, estimated costs to install these devices can be upwards of £15 million.

This project is addressing the challenges associated with areas exposed to lower levels of fault current via P&C products, which are more commonly procured and installed for around £200k. If this project can evidence that P&C products have the potential to be developed, then this starts to open up an alternative solution to a Synchronous Condenser at a fraction of the cost.

Funding
£671,000

Start/end date
July 2021 / October 2024

Website
www.smarternetworks.org/project/nia_shet_0033

2.2 Low Profile Poles

KEY ACTIVITIES

The objective of this project is to create a new low-profile structure design that can replicate the visual consenting envelope, reliability levels, insulation levels, and construction methods associated with our existing wood pole design. Our main driver is to bring down future construction costs and the overall timescales associated with the existing planning process.

The application of a new low-profile design within our existing design suite can also provide an efficient alternative to our current steel structure solutions. As a direct result, customers can benefit from a lower cost of connection and further savings through a reduction in the overall planning timescales. Our benefits case has determined that this innovation has the potential to return savings of up to £12m across three windfarm connection schemes on the SSEN-T network, and if successful, can be rolled out over many more future projects.

The project is in the early stage of development with initial concept designs created. Several workshops have been conducted with project partners to further focus on the design stage and the outputs have seen some positive outcomes. Detailed deployment plans are in place and will ensure that the final prototype is complete and ready for use on the future schemes identified within the benefits case.

Funding
£1,650,000

Start/end date
July 2021 / October 2024

Website
www.smarternetworks.org/project/nia_shet_0033

3. Summary of NIC Progress

3.1 Multi Terminal Test Environment

KEY ACTIVITIES

The Multi-Terminal Test Environment (MTTE) for HVDC Project, was submitted as a Network Innovation Competition (NIC) proposal in 2013, and subsequently funded in 2014. The project established 'The National HVDC Centre', which formally opened on 26 April 2017. The National HVDC Centre is GB's simulation and training facility for HVDC; supporting the integration and successful operation of all HVDC schemes connecting to the GB Network.

The HVDC Centre is also the National hub for HVDC knowledge exchange, expertise, and innovation. It uses state-of-the-art simulators to model and resolves potential issues in real-time before they impact the delivery (or operation) of HVDC projects, to ensure the integrity and security of the GB Network. With the rapid growth of our HVDC system, the MTTE is playing a vital role in identifying and de-risking the challenges associated with the energy system of the future.

The project has been a huge success and recently added to its capabilities, by completing the construction of an extension to the main building. This extension delivered a new Protection Workshop and a Test & Demonstration Workspace. The closedown report was submitted in April 2022 and its Successful Delivery Reward application in May 2022.

Funding
£12,773,000

Start/end date
December 2013 / October 2024

Website
www.hvdccentre.com

3.2 New Suite of Transmission Structures

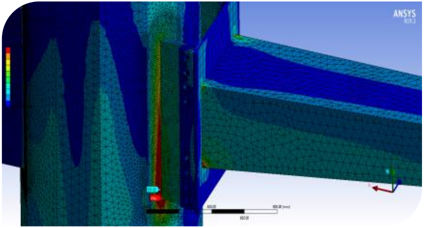
KEY ACTIVITIES

The New Suite if Transmission Structures (NeSTS) Project, was submitted as a Network Innovation Competition (NIC) proposal in 2015, and subsequently funded in 2016.

OHLs built using transmission structures are the most visible element of the transmission network. The impact OHLs have on the environment can cause huge concern for our stakeholders. Establishing new infrastructure is essential for the connection of renewable generation, so there is a need to develop a new type of structure that can address our stakeholder's concerns.

Based on new technologies and techniques, the Project has constructed and energised a trial OHL using the NeSTS 132kV Double Circuit suite of structures to repair the Quoich - Broadford OHL at Loch Quoich where it was damaged by a landslide. The trial OHL was energised in October 2021 and has operated satisfactorily to date. A survey and monitoring of the trial OHL has confirmed it has sustained its as-built condition.

Assessment of stakeholder response to the trial OHL has been delayed pending completion of the Dalchork – Loch Buidhe OHL; which will be used as a lattice steel comparison. This work is scheduled to be completed in 2022. On completion, we aim to draw a comparison against the Quoich repair, where a response will be obtained on the methodology used for the NeSTS design. This response will inform the future use cases of the NeSTS structure.



Funding
£7,428,000

Start/end date
January 2016 / March 2022

Website
www.nestsproject.com

4. Summary of SIF Progress

Strategic Innovation Fund

For RIIO-2, Ofgem launched the Strategic Innovation Fund (SIF), a new funding mechanism for networks that aims to find and fund ambitious, innovative projects with the potential to accelerate the transition to net zero. We participated in the first round of the SIF by identifying and developing three innovation proposals that had the potential to meet the challenge criteria's set out by Ofgem for participation in this scheme. The first phase, known as ‘Discovery,’ provides project funding up to a maximum of £150k, to deliver an early-stage feasibility over an 8-week period, and seeks to inform the approach for the later stages of the scheme.

Three project proposals were submitted to Ofgem in November of 2021 and were subsequently approved for funding to commence project delivery in March of 2022. The following section summarises the progress of these projects.

4.1 Network DC

KEY ACTIVITIES

The British Energy Security Strategy sets an ambition to deliver 50GW installed capacity of offshore wind by 2030, from a baseline of 10.5 GW at end of December 2020.

HVDC systems are an attractive solution to connect offshore wind power to existing UK electricity infrastructure, using converter stations to convert AC to DC at the offshore end and DC to AC at the onshore end, with DC cables to connect the converter stations. HVDC systems are currently being ordered with power transfer capacities of 1.2GW, and 2GW in development, exceeding the rating of the largest existing HVAC offshore substations.

The aim of the Network-DC project is to enable the use of DC Circuit Breakers (DCCB) in onshore HVDC hubs. DCCB allows the possibility of being able to combine, in a single hub, a high-capacity HVDC interconnection, and an export cable from a wind farm, thus diverting the offshore wind generation directly to the interconnection without an intermediate DC -> AC and AC -> DC conversion. The project will de-risk the implementation of DCCBs in an efficient manner using a simulation of DCCB performance informing specifications that Original Equipment Manufacturers (OEM) will require to enter the market.

The Discovery project delivered Cost Benefits Analysis (CBA) of three potential use cases for the implementation of DCCB in the UK. Coupled with this, the project proposed a route for Front End Engineering Design (FEED) that gave a way forward for stakeholders to collectively de-risk the first implementation of a DCCB in the UK.

Discovery Project Funding
£89,000

Start/end date
March 2022 / April 2022

Website
www.smarter.energynetworks.org/projects/10020383/

4.2 INCENTIVE

KEY ACTIVITIES

The INCENTIVE project builds on an Offshore Wind Accelerator (OWA) project ("BAT-STAT"), which discovered that technology solutions exist that can allow offshore wind farms (OWFs) to provide stability services, like battery storage, to stabilise the frequency of the grid. However, barriers existed in markets, technology, and regulation to allow deployment into the UK system.

The SIF Discovery project was aimed at evolving our understanding of the problem and opportunity of integrating these technologies. The project found that doing so requires a whole-systems approach to innovation. INCENTIVE is improving coordination between networks, generators, suppliers, policymakers, and regulators, by collaboratively investigating INCENTIVE solutions, with a view to developing a path to commercialisation. The large consortium (including nine Offshore Wind Farm (OWF) developers and networks) and the range of INCENTIVE solutions proposed provides an optimum approach to avoiding duplication of this work. Technology requirements are being developed that will reduce variation in the INCENTIVE solutions' capabilities. Complexity and bureaucracy for the INCENTIVE solutions are being reduced by studying regulation, whilst barriers to entry are being reduced by studying their value to the consumer and technical capabilities.

The findings show promise for INCENTIVE solutions, but significant risks remain in developing a pathway to the commercialisation of INCENTIVE technologies. To bring the technologies to market, we aim to progress the learning from the Discovery project and continue to build upon this through the next Alpha phase of the SIF scheme. We remained focused on the overall objective to bring a suite of technology solutions to commercialisation that can accelerate the rollout of offshore wind.

Discovery Project Funding
£105,000

Start/end date
March 2022 / April 2022

Website
www.smarter.energynetworks.org/projects/10024879/

4.3 NIMBUS

KEY ACTIVITIES

NIMBUS is an ambitious project between SSEN Transmission, SSEN Distribution, and Icebreaker One (IB1) with the potential to accelerate the transition to net-zero by prolonging the life of assets, improving reliability and management through the introduction of new, granular data sources and improvements to asset design, investment, and operations. The project will revolutionise the way meteorological data and models are used in the design and decision-making of electricity assets, through innovative uses of the data and predictive modelling techniques.

Our aim is to develop a methodology or toolkit that is repeatable for different decision problems that can be repeated across other weather risk and climate change problems. In this Discovery Phase, we identified that we should focus on a specific use case to develop further methodologies that can form the basis of methods and a toolkit, including how to manage and integrate data.

Critical to the success of the proposed Alpha Phase project, there is a need to bring in an experienced data provider. We have recognised the importance of bringing expertise to integrate data into decision models, however we were unable to reach an agreement with partners in time to meet the first round SIF Alpha Phase application. Over the coming year, we will work to identify the right expertise with a view to continue into the second round Alpha Phase application.

Discovery Project Funding
£139,000

Start/end date
March 2022 / April 2022

Website
www.smarter.energynetworks.org/projects/10020514/

5. Summary of BaU Progress

Business as Usual Funding

Business as Usual or BaU, is funding that is applied to innovation outside of the regulated funding mechanisms, such as NIA and SIF. We see BaU as low risk, high maturity innovation, that has the potential to deliver benefits to our business and the consumer a lot faster than progressive Research & Development innovation.

As a business, we feel that it is important to have a balanced portfolio of innovation, and this section covers some of the work we are doing in BaU innovation.

5.1 DLR

KEY ACTIVITIES

With significant renewable generation expected to connect to our network over the coming years, we face challenges where our existing network may not be able to deal with this huge uplift in power. Electricity passing through our conductors causes heat, and the greater the heat the more our conductors will expand and ultimately sag. This is a real issue, if it sags too much, we could run the risk of having live conductors close to the ground, which poses huge safety issues. To mitigate against this, we design our lines to a static rating. Essentially designating a maximum power limit that allows us to be confident that the lines will not sag beyond their safety-critical limits. The only downside is that this restricts the amount of generation we can connect to our network to stay within these static ratings.

Dynamic Line Rating (DLR) is a tool we can use to overcome this challenge. By monitoring environmental weather conditions, such as wind speed, direction, and temperature, we can determine a level of cooling on our lines when the conditions are right. With this cooling, an uplift in capacity can be achieved without any compromise to safety.

Findings from our North of Scotland (NoS) Future Energy Scenario (FES) analysis, suggest the NoS will require upwards of 24GW of renewable generation by 2030 to meet net-zero targets. This in turn will drive a large number of new connections onto our network. As some of these connections are contingent on a number of overhead line upgrades, taking time to design, develop and deliver. This could result in some generators facing delays to their connections or constraints to the level of power they can transmit.

Over the past year, we have been developing a project that seeks to deploy DLR on some critical areas of our network. DLR is not a new concept, we have conducted extensive research into the subject, including engagement with the other GB Transmission Owners. However, as DLR is new to us, we are prioritising this project as one of our key BaU innovations.

DLR was originally submitted as part of SSEN-T RIIO-T2 business plan, however it was rejected by Ofgem as the cost was deemed too risky at that stage. It was proposed that the Medium Sized Investment Project (MSIP) re-opener would be a more appropriate funding mechanism, once cost certainty could be achieved. We remain confident with the benefits expected from DLR, as the solution will provide necessary constraint cost alleviation; enabling additional transport of renewable electricity from the very north of our system; and potentially allow for earlier connection of some contracted onshore wind farm schemes. In support of this, we continued to develop the project over the year, which we then submitted to Ofgem under the MSIP re-opener in January of 2022.

5.1 TReNDS

KEY ACTIVITIES

With the fast-paced technology changes driving digitisation of the industry, it is crucial to embrace these opportunities for improving our system and providing benefits for our customers and stakeholders. One such opportunity of integrating new technology is through development of a fully digital, multi-vendor digital substation. Digitising substation protection and control automation systems will enable us to modernise our network and build a Network for Net Zero. The core enabler for delivering digital substation is the IEC 61850 suite of standards, which define consistent communication and methodologies for the integration of substation high-voltage primary plant assets such as instrument transformers, circuit breakers and power transformers with various intelligent electronic devices into a hierarchical level. As the “smart grid” evolves to increase the capability of the network, digital substation is the core enabler for reaching a truly “smart grid”.

SSEN-T’s Digital substation development aka Project TReNDS (Transmission Network Digital Substation) is well aligned to our innovation strategy. The project consists of seven well defined work packages, namely: Station Bus Part 1, Station Bus Part 2, Station Bus Part 3, Process Bus Part 1, Process Bus Part 2 , Interlocking and MPLS.

Of these work packages, Station Bus Part 1 is complete with improvement programme, which standardises the implementation, nearing conclusion. The work package - Process Bus Part 2 is likewise under trial at several SSEN-T sites and further integration will be taken after further feedback is collated. Furthermore, MPLS work package is currently underway as a separate workstream with trials commencing in Q4’22. Consequently, the scope of this development encompasses four work packages - Station Bus Part 2, Station Bus Part 3, Process Bus Part 1 and Interlocking. These are the areas that will provide most capital benefit during new build digital substation.

It is estimated that to deliver the development over a tight fast-tracked timescale of 19 months, a budget of approx. £2M will be required. Project TReNDS will utilise best practices in innovation project management like stage gate reviews, risk mitigation strategies etc. to ensure successful delivery on time and within budget. Following the cost benefit analysis, it is anticipated that the cost saving from reduced footprint and reduced commissioning time will be more than £1M per project.

On successful implementation of Project TReNDS on our lead project, we will commence a scaling up process as a wider deployment plan of the fully inclusive solution, with the intention of this being ahead of our RIIO-T3 period.

6. The Year Ahead

The RIIO-T2 price control period is now very much underway and already we have established a strong footing with our innovation portfolio. We have a number of new projects in the pipeline that have been in development over the past year and expect to go live over the coming months. A summary of these projects is as follows:

|6.1 OHL Foundation Uplift

A research project with the University of Dundee to investigate combining modern, more efficient designs, with minor geometrical changes to the edge of tower foundation pads. In doing this it is expected that the foundation volume could be reduced by 25-30% resulting in significantly smaller, more efficient foundations that use less concrete.

|6.2 RIME

We are in the early stages of developing a concept that aims to explore existing methods of determining ice accretion on our overhead lines (OHLs). It is proposed to revise this method through the use of detailed meteorological data. It is anticipated that greater accuracy in weather data on the ground can help mitigate over design of our OHLs; thus reducing network development and construction cost.

|6.3 CASA

To give effective diagnostic information concerning the severity of Partial Discharge activity and the integrity of an insulation system, this future project will seek to identify defects in alternative gas mixtures. Currently very little is understood about the factors and trends in partial discharge data which best indicates the type, severity, and location of defects in systems insulated by the new alternative environmentally friendly gas mixtures. Therefore, a new technique needs to be developed to support our ongoing progress toward our low carbon future.

The SIF programme will continue into the year ahead, with the prospect of successful Round 1 Alpha phase projects. We have high confidence in our Round 1 SIF projects and remain optimistic that they will continue through to the future Beta round. At the same time, we will be exploring new ideas for the second round of Discovery projects under the SIF. With new challenges set by Ofgem, we will aim to take a fresh look at our priorities and focus on the challenges that need prioritised the most.

Our focus throughout the year was on establishing our NIA and SIF portfolios. With the foundation of our regulated innovation now in place, we will shift focus to BaU innovation, with the view to identifying a strong pipeline of new innovation ideas.

The final piece for the year ahead is our Innovation Strategy. We aim to revise our strategy to align with the changing landscape and priorities within our industry. From our innovation framework mentioned earlier in this report, there are a number of areas we believe remain relevant, however, maintaining a forward-looking position is vital for successful innovation. That is why a revised innovation strategy is essential to ensure we identify and overcome the challenges that mean the most to our customers and our business.

Contact Us

Would you like to know more?

If you are interested to learn more about innovation at SSEN Transmission, please find details for website and social media accounts below. Alternatively, you can reach the Innovation Team direct on the following email address:

transmissioninnovation@sse.com

SSEN TRANSMISSION AA1000 STAKEHOLDER ENGAGEMENT PERFORMANCE ADVANCED 2022

We are a Living Wage Employer

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