SIF Alpha Round 2 Project Registration

Date of Submission

Nov 2023

Project Reference Number

10079058 (1)

Initial Project Details

Project Title

NIMBUS

Project Contact

Adnan.mahmood@sse.com

Challenge Area

Improving energy system resilience and robustness

Strategy Theme

Optimised assets and practices

Lead Sector

Electricity Transmission

Other Related Sectors

Electricity Distribution

Project Start Date

01/10/2023

Project Duration (Months)

6

Lead Funding Licensee

SSEN - Scottish Hydro Electric Transmission

Funding Licensee(s)

SSEN - Scottish Hydro Electric Power Distribution Plc

Funding Mechanism

SIF Alpha - Round 2

Collaborating Networks

Scottish and Southern Electricity Networks Distribution

Technology Areas

Active Network Management

Asset Management

Maintenance & Inspections

Condition Monitoring

Electricity Transmission Networks

Project Summary

NIMBUS (Network Innovation and Meteorology to Build for Sustainability) will make meteorological data e.g., rainfall, wind speeds and temperature, available at an asset-specific level of detail, and usable by energy networks to improve the ability to model and predict the impacts of weather and climate change across the whole life of a network asset.

NIMBUS will reduce costs to consumers by extending the life of network assets, avoiding the costs of replacing assets early, and minimising costs of unnecessary interventions and emissions for maintenance. The outputs could also extend to other infrastructure providers such as transport and telecommunications.

Add Preceding Project(s)

10020514 - NIMBUS - Network Innovation and Meteorology to Build for Sustainability

Add Third Party Collaborator(s)

Icebreaker One

IBM

Palantir

Project Budget

£574,921.00

SIF Funding

£499,879.00

Project Approaches and Desired Outcomes

Problem statement

Problem Summary

NIMBUS, a collaborative project between SSEN-Transmission, SSEN-Distribution, Icebreaker One (IB1), IBM and Palantir aims 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.

NIMBUS is seeking to solve the limitations of current weather and climate (meteorological) data. It is impossible to predict, with any great degree of accuracy, the impact that weather and climate change will have during the lifetime of individual electricity network assets and fittings. Accurate meteorological data will transition networks to a more accurate and reliable risk-based approach to condition assessment, involving prioritising assessments based on the risk associated with each asset. The ability to forecast asset and component degradation with greater accuracy will provide valuable insight into the condition of the assets, enabling existing infrastructure to stay in place. This, in turn, reduces unnecessary emissions and supports the networks' pursuit of achieving Net Zero, addressing the challenge of improving energy system resilience and robustness.

Project evolution

In Discovery, NIMBUS developed a business-driven use case to be demonstrated in Alpha. The aims have been addressed during Discovery by developing the use case to demonstrate the methodology for the Alpha phase, investigating how to improve data availability, quality, interoperability, access, and insights to third parties to improve the efficiency, security, and resilience of the network. This work will continue during the Alpha phase by delivering a proof concept that will be an app demo and allow 'learning by doing', refining the proposed methodology and gaining a better understanding of expanding to additional use cases. This will also help identify a range of use cases to be developed during the Beta phase.

During the Alpha phase, the project will also investigate how to best share data and identify future challenges for data interoperability, including technical feasibility, cost and regulations. A key deliverable for the Alpha phase is a further developed CBA that will help uncover every potential cost and benefit associated with NIMBUS.

Our perception of the problem has evolved by:

- Recognizing the significance of considering degradation over time rather than just asset failure
- Understanding the importance of considering general weather impacts and extreme weather events
- Highlighting the need to address asset degradation rather than focusing solely on specific components

Innovation Challenge alignment

This shift in perception led us to refine our project's objectives and scope, aligning them with the primary Innovation Challenge aim of Improving energy system resilience and robustness under project scope 2, Strengthening UK's energy system robustness to support the efficient rollout of new infrastructure.

Potential Users

Potential users of the solution include other Transmission and Distribution networks, and other linear asset networks and infrastructure providers such as transport and telecommunications. NIMBUS will allow users to apply meteorological effects to assets historically, helping them gain an understanding of which assets have been the most exposed or impacted over their lifetime. From Discovery user needs have been better understood, with Alpha focusing on enabling them to apply targeted inspections and maintenance routines as well as future intervention planning, such as refurbishment or replacement.

Within the Ofgem-regulated sectors, the outputs of NIMBUS could be incorporated into the NARM objectives and contribute to the Probability of Failure calculations, further refine the Risk-based approach to Asset Management. Users would be required to calibrate the meteorological data to the Assets in question as different factors will affect different assets and materials uniquely (i.e., Tower Fittings, Wood poles). The NARM Process is based in the OFGEM "NARM Methodology, SPT / SSENT Network Asset Risk Annex (NARA)".

Innovation justification

Challenge: Improving energy systems resilience and robustness.

Theme: Strengthening the UK's energy system robustness to support efficient roll out of new infrastructure.

The partner requirements for the theme have been met by including SSEN-Distribution, providing an additional Energy network licensee with SSEN-Transmission.

NIMBUS will identify assets that are at low-risk of failure of degradation and therefore require less frequent assessment. This allows the allocation of resources more efficiently, reducing the frequency and cost of assessments for low-risk assets and allowing the prioritisation of high-risk assets for more frequent inspections. This also allows us to understand and model expected degradation with a higher degree of confidence, understanding patterns and timelines, and avoiding unexpected asset failures and network disruptions.

Discovery to Alpha Learning

Lessons learned and recommendations were reported in the Discovery Phase Technical Report/Recommendations Document and have been considered in the Alpha project plan.

There are projects that investigate extreme weather events; however, NIMBUS is focused on prevailing weather conditions with a view on how these might change through climate change.

Stakeholders

NIMBUS was designed to centre open engagement and will continue to do so in Alpha. In Discovery, SSE and IB1 promoted NIMBUS through press releases, while IB1 shared project updates and sought feedback via their Website, LinkedIn, and Twitter. External input from UK Power Networks and SP Energy Networks was invited during the development of Discovery WP2 and WP3, exploring how climate and meteorological effects are considered by DNOs.

We furthered our understanding of the material challenges faced by the energy sector through stakeholder engagement, reaching 50+ participants via interviews/workshops. We considered user, market and societal needs, policy and regulatory issues, and operational/technical capabilities.

Innovative Aspects

Prevailing weather conditions are known to accelerate asset degradation, but little research has been done to understand how this can be quantified. The primary use-case explores and quantifies this by using historical weather data with the asset's service history to identify key weather factors that should be considered in the 'Probability of Failure' calculations within the industry-adopted methodologies.

The use-case is innovative as it seeks to improve risk modelling for individual assets so TSOs and DNOs can understand weather and climatic consequences on their assets' health, functionality, and resilience, using new data sources and methodologies, with clear benefits and cost-savings.

TRL/IRL/CRL

Changes in current and estimated TRL, IRL and CRL for the innovation at the end of Alpha Phase are:

TRL – start Alpha=1, end Alpha=5, end Beta=7

IRL – start Alpha=1, end Alpha=3, end Beta=6

CRL - start Alpha=2, end Alpha=3, end Beta=7

Size and Scale

The use-case and proposed Alpha proof of concept are intentionally narrow in scope to ensure achievability. The principles, methodologies, and tools developed and tested will produce guidelines for how other organisations within the sector can reuse this analysis, and how these processes and analyses can be retooled for different assets.

SIF Funding

The innovative nature of Nimbus means it cannot be funded through business-as-usual activities as there is no certainty of success. Additionally, the Project aims to accelerate net-zero, while delivering net benefits to consumers which is the fundamental purpose of SIF.

Counterfactual/Options:

Without NIMBUS, meteorological data would not be considered when determining an assets anticipated end of life. Other options were considered, including:

· Immediate and forecast weather events for a more accurate storm response to events in progress. However, this is already closely monitored by operational teams and not as innovative as it would aid in reactionary work, rather than proactive.

· Exceptional events including wildfires/landslips impacting assets. While these events do happen, they are rare and unlikely to drive as much benefit as the chosen option.

Impact and benefits (not scored)

Financial - future reductions in the cost of operating the network

Financial - cost savings per annum for users of network services

Environmental - carbon reduction – indirect CO2 savings per annum

Others that are not SIF specific

Impacts and benefits description

NIMBUS fulfils a clear user need, utilises new data sources and methodologies, with clear benefits and cost-savings to consumers.

For the preliminary cost benefit analysis (CBA) NIMBUS whole life cost assessment shows a net NPV reduction of ~4% when compared with the baseline approach. This NPV reduction significantly increases when the original capital costs of the asset are excluded from the calculation.

The CBA (using the Ofgem RIIO-T2 CBA Template) shows the potential benefits of NIMBUS, using average T1 costings and estimated NIMBUS benefits. The CBA assumes a RIIO-T2 refurbishment intervention on the overhead line (OHL) and then models the whole life costing under two scenarios:

1. Inspection & Condition Assessments are undertaken in line with current policies and modelling capabilities. Including:

· Inspection & condition assessment of the whole OHL across the lifetime of the asset

· Fittings only replacement after 20 years – whole circuit

· Fault repair – once during the lifetime of the asset

· Full OHL refurbishment of towers and replacement of fittings and conductor after 40 years

2. Enhanced predictive modelling from NIMBUS which, over time, influences changes to lifetime intervention policies. Including:

· Inspection & condition assessment of the whole OHL across the lifetime of the asset, with 5-year reviews resulting in a risk-based approach that reduces the annual cost over the life of the asset

· Fittings only replacement after 15 and 30 years – targeted replacement of highest wear fittings only

· Fault repair costs avoided, due to risk-based interventions

· Targeted refurbishment of towers and replacement of fittings and conductor after 40 years

The key metrics used to track benefits are shown below:

Economic

The Discovery business-driven use case will reduce the costs of penalty due to network downtime, improve grid connectivity and avoid high-risk/urgent repair operations for network operators subject to regulatory requirements of keeping the network running and delivering power to the end customer. The ability to forecast asset degradation more accurately enables a risk-based approach to condition assessment that has the potential to reduce assessment frequency (and therefore cost) for low-risk assets.

Lowering the number of interventions, the scale of them and enabling new, more efficient technologies will also generate savings, potentially translating into savings for customers.

Resilience

The use case will enable better asset resilience by improving the accuracy of grid-wide risk scoring within the asset risk models and methodologies used within the UK energy systems.

Accurate forecasting will help us understand our network better, as well as new failure patterns. We can then focus our interventions enabling longer life cycles, reduced maintenance requirements and therefore lower environmental impact. By being more strategic, replacing high-risk, inefficient assets with more sustainable alternatives, we can make significant progress towards carbon zero targets.

Environmental

NIMBUS has the potential to accelerate the transition to net zero by prolonging the life of assets and reducing the requirement for interventions and temporary fixes. This reduces materials used and the number of contractor mobilisations, decreasing the carbon footprint. Also, as fewer interventions are needed, the impact on the landscape is minimised by avoiding disruption from site works.

Early failure detection and intervention will also allow better planning and therefore more time to invest in sustainable solutions. Instead of defaulting to carbon-intensive methods we can explore innovative technologies, materials and practices.

We propose to fully explore and quantify these consumer benefits during the Project Alpha Phase using the Ofgem RIIO-T2 CBA Template to model the Whole Life Cost to the consumer using current policies & methodologies against the perceived/modelled benefits expected to be delivered by application of NIMBUS.

No benefits have been realized through Project delivery to date.

Teams and resources

During the Alpha Phase of the NIMBUS project, the delivery team will consist of the following partners: SSEN Transmission, SSEN Distribution, Icebreaker One, Palantir, and IBM.

Following completion of the Discovery phase in SIF round 1, the weather data partner did not progress with the Alpha phase. The Project was not in a position to suitably resource the scope of work and therefore the decision was made to delay Alpha phase until the SIF round 2 timeline.

SSEN Transmission as the project lead, will continue to provide strategic direction, project management, and domain expertise. They will also facilitate the integration of the NIMBUS innovations into their existing systems and processes, such as the Condition-Based Risk Management (CBRM) system and ArcGIS.

SSEN Distribution will contribute their knowledge and expertise in distribution network operations, asset management, and risk assessment. They will collaborate with SSEN Transmission to ensure the scalability and applicability of the innovations developed in the Alpha Phase across the distribution network.

Icebreaker One will continue to play a crucial role in analysing sector needs, user requirements, and data standards to inform the development of the business-driven use case. They will ensure that the innovations align with industry challenges and promote interoperability across different network operators.

Palantir is key to providing data-driven end-to-end use-case delivery via integration of internal and 3rd party data and models building an Ontology. Palantir will use asset data and meteorological data to enhance the accuracy and effectiveness of asset risk assessment methodologies.

Palantir will deliver an operational Proof of Concept (POC) in Alpha, developed using an agile methodology to enable learning through doing. We believe that 2 sprints are feasible to enable the wider stakeholders to do, learn and then iterate. Palantir will deliver the necessary data integration between data sources and models bringing the data from existing systems (e.g. the asset management system) and third party data (e.g. the weather data) into a centralised Ontology based in Palantir Foundry (our central platform for data-driven decision making and situational intelligence). The Ontology, by providing a semantic layer that is action and decision aware, will enable accelerated POC development and data troubleshooting capabilities which will form part of the POC deliverable. A Decision Support Interface will form the main part of the POC deliverable developed in an agile, iterative way. This Interface will allow a Single Operating Picture of the network data and any other data to be overlayed and compared to enable stakeholders to drive scenarios to better understand and contrast decision impact and the operational nuances to achieve project goals. to achieve project goals.

IBM will provide weather data, which is a key component of the NIMBUS project. They will deliver meteorological data that will be used to analyse the impact of weather conditions on asset degradation. IBM are one of the world's biggest weather data providers and their expertise in weather forecasting and data provision will ensure the availability of high-quality and relevant weather data for the project.

While the core team consists of the project partners, the successful delivery of the NIMBUS project may also require collaboration and engagement with external parties, network users, and consumers. Webinars and consultations will be conducted to gather feedback, share project learnings, and ensure the solutions developed are aligned with the needs of the wider industry. The external stakeholders of NIMBUS play a vital role in validating the project's outcomes, providing real-world insights, and facilitating the adoption and uptake of the innovations across different networks.

Project Plans and Milestones

Project management and delivery

Approach

Alpha will focus on the development of a proof of concept (PoC) for the priority use case identified during Discovery. An agile framework has been used to develop a project plan and deliver the project.

The Alpha Phase will be split into 10 work packages. Details of the work packages:

WP0: Project Management

Lead: SSEN-T

Links/Dependencies: None

Overall project management with responsibility of delivering project milestones and deliverables

WP1: Business objective and value

Lead: Palantir

Links/Dependencies: None

Reviewing and aligning the use case value scope and establishing KPIs and success metrics to ensure the project aligns with business objectives and provides value

WP2: Statement of Requirements & Architecture

Lead: Palantir

Links/Dependencies: WP1

Agree on system requirements and architecture for PoC

WP3: Data Assessment (Content & Availability)

Lead: SSEN-T

Links/Dependencies: WP1

Identify and evaluate available weather and asset data sources. This assessment will help determine the suitability and availability of data necessary for the PoC development

WP4: Proof of concept development

Lead: Palantir

Links/Dependencies: WP2, WP3

Demonstrate how integrating relevant weather and climate datasets into SSEN-T's asset management processes can significantly improve resilience and deliver cost saving benefits through the identified Use Case

WP5: Lessons Learned from PoC

Lead: SSEN-T

Links/Dependencies: WP4

Understand lessons learned from the Use Case and other similar projects. Refinement of the process to integrate weather and

climate data to mitigate the impact of weather-related business impacts identified during the Discovery Phase

WP6: Data accessibility

Lead: Icebreaker One

Links/Dependencies: None

Identifying additional data sources and data sets to improve risk modelling and management at individual asset level, and, wherever possible, increase accessibility by adding to Open Energy

WP7: Standards for interoperability and data operability

Lead: Icebreaker One

Links/Dependencies: None

Support the energy industry to apply NIMBUS. In particular, for network and transmission organisations to apply the Open Energy data sensitivity classes (developed under the Modernising Energy Data Access programme) to help the energy industry understand what data can be shared, and how

WP8: Understanding benefits to consumer/customer

Lead: SSEN-T

Links/Dependencies: WP4

Further developing the cost-benefit analysis (CBA) to evaluate the economic viability of the project and understand the benefits it brings to consumers or customers

WP9: High-level plan for Beta

Lead: SSEN-T

Links/Dependencies: WP4, WP5, WP6, WP7, WP8

Developing plan for the Beta Phase of the project, using lessons learned from Discovery and Alpha to develop scope

Risk Management Strategy

The Nimbus risk management strategy comprises of:

Risk Identification: identify potential risks and issues that may arise during the project. Involves engaging with stakeholders, partners and lessons learned from previous phases and similar projects.

Risk Assessment and Prioritization: Each identified risk will be evaluated based on its probability, impact, and urgency. This enables prioritisation of risks and allocation of resources for mitigation.

Risk Mitigation: For each identified risk, a specific mitigation strategy and action plan will be developed. These plans outline the necessary steps, resources, and timelines to minimize the likelihood and impact of risks. Regular monitoring will ensure the effectiveness of mitigation measures.

Risk Monitoring and Control: Regular project status updates, progress reports, and stakeholder meetings will facilitate ongoing risk monitoring and ensure timely interventions if required.

Proposed Stage-gates

A stage gate will provide a Beta application go/no go.

Planned or unplanned supply interruptions

No planned or unplanned supply interruptions.

Customer Interactions

Nimbus has no interaction or engagement with consumers at this stage and no foreseeable impacts to energy consumer premises.

Key outputs and dissemination

Key outputs

NIMBUS will build a demonstrator by taking the most recent developments in detailed locational meteorological data and associated predictive technologies and integrate this data alongside other asset and environmental data. After the Beta Phase, it is anticipated that the data will be accessible via the Open Energy Search and Access Control and in a format that is ready to use in visualisation tools (such as ESRI ArcGIS). This would allow them to be accessible across the whole of the distribution and transmission sector (subject to licensing agreements).

Outputs could also be extended to other linear asset networks such as transport and telecommunications and offer similar benefits to such sectors.

This phase extends the work conducted in the Discovery Phase and intends to:

1. Develop the use case to demonstrate the methodology

2. Learn by doing – to refine the methodology

3. Understand how the methodology can be applied to other use cases and identify a range of use cases that could then be developed during the Beta Phase

4. Investigate how to best share data and identify future challenges for data interoperability, including technical feasibility, cost and regulatory

5. Further develop the Cost-Benefit Analysis using recommended methodologies

6. Set out a pathway to the commercial application through the Beta Phase

If successful a Beta phase project will look to continue developing the proof-of-concept model developed in Alpha by developing a prototype that could be applied to other use cases/networks, with consideration for sharing data on the Open Energy network.

Collaboration is critical to the development of this work from both a technical perspective (solutions must meet user needs) and a cultural perspective (solutions must be co-designed, adopted, used and iterated upon by market participants). Our approach to the development of NIMBUS will embrace these principles.

Icebreaker One's communications team will scope and develop a strategy which will allow us to work in open, transparent ways and continuously seek industry feedback. Knowledge dissemination and open engagement to consistently ask for feedback is core to our methodology for this project.

We will engage in direct, open collaboration with the sector via the Advisory Group and accompanying workshops, and we will consult with stakeholders and incorporate their feedback into the development and implementation work. This will include co-identifying contacts and stakeholders within and beyond our existing 300+ energy sector connections with industry stakeholders, publishing a call for engagement with our wide and varied energy industry engaged stakeholders, and routinely validating that we are in contact with the right people and engaging with new contacts as required. All dissemination will be underpinned by Icebreaker One's core methodology of research and open engagement with desk-research and interviews being presented, reviewed, and adapted by the Advisory Group.

Icebreaker One publishes outputs often and openly, in ways which are publicly accessible, including drafts of work for open comment. We regularly monitor feedback and evaluate how it is incorporated into our work. We work with our communications team to develop external communication strategies that allow us to work in open, transparent ways and provide opportunities for industry involvement. We have a clear plan for knowledge dissemination (e.g. public posts, webinars) and will regularly and consistently ask for feedback to shape NIMBUS.

Knowledge Dissemination

To enable wider outreach and engagement with the sector, in this project we will:

- Run regular public consultation webinars to share progress and capture feedback
- Publish draft materials online, inviting comments
- Encourage development of further use-cases from those outside the research and user testing structure
- Participate and present at relevant Knowledge Dissemination events

Commercials

Intellectual property rights, procurement and contracting (not scored)

Default IPR arrangements will apply, except where stated below.

SSEN and Icebreaker One will follow the IPR as set out in the SIF governance document.

To ensure clarity is provided to the Project Partners, UKRI and Ofgem regarding the IP landscape, the Project is using an IP register to track the Background IP provided to the Project, the Foreground IP the Project generates, and the use and access rights to all this IP.

The collaborating parties recognise recognizes that Projects funded by SIF may create IPR for the Funding Party and/or for Project Partners. We also recognize and agree with the Knowledge Transfer goals of SIF and are keen to make sure all benefits of a Project can be maximized by other licensees being able to learn from the Project to create improved outcomes and/or reduced costs for consumers.

Palantir cannot use all the Default IPR and confidentiality arrangements. Palantir provides a commercially available SaaS solution (i.e. a Commercial Product) which may be configured through certain professional services under this Project. However, we are making every effort to make as minimal a change as possible reflecting the spirit of the SIF Project. Palantir is happy to negotiate in good faith with the Project Lead to reach definitive and binding terms governing the engagement contemplated in this application.

Palantir consider the following to be background IPR and subject to licencing to interested parties on a fair and reasonable basis:

1. Palantir includes all aspects of its own commercial software, Foundry, and services as Background IPR

2. Palantir excludes any modifications of algorithms and/or code or other IPR of, or running on, Palantir's services as part of the Project from Foreground IPR owned by Palantir whether "Relevant" or not and no royalties are applicable as a result

Further, the information in this application contains trade secrets and commercial or financial information which is proprietary and confidential to Palantir within the meaning of all relevant laws. There is no explicit requirement to make public or publish any detailed technical or commercial reports and any in-person audit should not be held, without the prior written approval of Palantir. However, these reports will be made available on request, and reasonably should not be withheld, subject to appropriate confidentiality agreements being in place and the reports and/or data being redacted where necessary.

Project summary documents will be uploaded to the ENA website including:

· The project summary as set out in the Application for SIF Funding

· End-of-phase project summary

· A list of relevant reports and data, that can be made available on request, subject to appropriate risk assessment, commercial agreements, and where required redaction of information

· Annual progress reports for Beta Phase

Commercialisation, route to market and business as usual

Commercialisation Plan and Route to Market

During the Alpha Phase, the NIMBUS project will develop a business-driven use case that addresses the sector's needs for improved network asset methodologies. The specific use case aims to explore and quantify the impact of weather conditions on asset degradation by combining asset service history with weather data provided by IBM. The objective is to identify key weather factors that should be considered in industry-adopted Probability of Failure calculations.

To ensure business as usual deployment within the network, SSEN Transmission will leverage its existing tools and systems, such as the Condition-Based Risk Management (CBRM) system and ArcGIS. The enhanced and more granular data outputs from

the NIMBUS project will be integrated into these tools, enabling seamless incorporation of the innovations into SSEN Transmission's operations. This integration will allow for improved asset risk assessment, decision-making, and intervention planning based on a more accurate understanding of asset degradation.

The commercialisation plan also includes engagement with other network operators and stakeholders to facilitate adoption across the industry. Regular webinars will be conducted to share project learnings and invite feedback. Transparent publishing, open consultation, and openly licensing the project outputs will encourage repeatability and uptake across the wider energy market. This collaborative approach will ensure that the benefits and innovations developed in NIMBUS can be applied to other networks, promoting industry-wide improvement in network asset methodologies.

Commercial Readiness and Investment Requirements

Each project partner brings valuable expertise and capabilities to the NIMBUS project, supporting its commercial readiness and capacity for scale.

SSEN Transmission, as the lead partner, is committed to the success of the project. They have the necessary resources, expertise, and organizational support to drive the commercialisation of the innovations developed. The integration of the enhanced data outputs into their existing systems demonstrates their readiness to adopt and implement the NIMBUS solutions within their network.

Icebreaker One, Palantir, and IBM are also key project partners with demonstrated commercial readiness.

Icebreaker One's analysis of sector and user needs ensures that the innovations are tailored to address industry challenges. Through Open Engagement with the energy sector via Work Packages 6 & 7, Icebreaker One will produce guidelines applicable to the energy networks on applying NIMBUS within their own organisations.

Palantir's expertise in advanced analytics and data-driven decision-making complements the project's objectives. IBM's provision of weather data enhances the accuracy and granularity of the asset risk models. The collaboration between these partners strengthens the commercial readiness of the NIMBUS project as they contribute their respective capabilities to support its successful implementation.

Involvement of a Senior Sponsor

The NIMBUS project benefits from the involvement of a senior sponsor from SSEN Transmission. The senior sponsor has provided strategic guidance, ensuring alignment with organisational goals and objectives. Their involvement demonstrates the commitment of SSEN Transmission to the project's success and indicates the importance placed on the commercialisation of the innovations developed within the organisation.

Policy, standards and regulations (not scored)

There are no barriers with regards to policy, standards and regulations in Alpha.

Value for money

The total project costs are £574,916.40 and the amount of funding requested from SIF is £499,874.76 with the remainder being funded through the 10% partner contribution.

At this current time there is no expectation for subcontractors to be employed on the project.

There will be no additional funding from other innovation funds.

No pre-existing assets or facilities will be involved in the project however it is expected that asset data currently held by the Transmission and Distribution partners will be used as well as weather data currently held by IBM.

Partners will be working at cost.

IBM will be the provider of comprehensive weather data to collaborate with Palantir to facilitate the development of a data platform. With IBM’s experience and the latest technology, IBM is committed to deliver accurate, reliable, historical weather data to empower the platform’s functionality and are interested in long term development and applications. IBM has a team of skilled

meteorologists and data scientists who can help any party to process and analyse the provided weather data.

For the NIMBUS Project, IBM will be providing a subject matter expert for 5 days in total that can be used anytime in 4 months period.

In addition to the subject matter expert, IBM will be providing the weather data via its product called IBM Environmental Intelligence Suite which is a subscription-based product.

Associated Innovation Projects

- ○ Yes (Please remember to upload all required documentation)
- ◉ No

Supporting documents

File Upload

10079058 NIMBUS - Alpha End of Phase Report.pdf - 291.2 KB
SIF Alpha Round 2 Project Registration 2023-11-14 10_10 - 82.3 KB

Documents uploaded where applicable?

☑