

SIF Alpha Round 2 Project Registration

Date of Submission

Jan 2024

Project Reference Number

NPG_SIF_007

Initial Project Details

Project Title

Inform

Project Contact

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Challenge Area

Accelerating decarbonisation of major energy demands.

Strategy Theme

Net zero and the energy system transition

Lead Sector

Electricity Distribution

Other Related Sectors

Electricity Distribution

Project Start Date

01/10/2023

Project Duration (Months)

6

Lead Funding Licensee

NPg - Northern Powergrid (Northeast) Limited

Funding Licensee(s)

Northern Powergrid

NPg - Northern Powergrid (Northeast) Limited

NPg - Northern Powergrid (Yorkshire) Plc

Funding Mechanism

SIF Alpha - Round 2

Collaborating Networks

Northern Powergrid

Technology Areas

Commercial

Low Carbon Generation

LV & 11kV Networks

Modelling

Distributed Generation

Energy Storage and Demand Response

Resilience

Project Summary

The Inform Alpha proposal is to develop a Proof Of Concept (POC) self-serve online connection tool for HV sites wishing to decarbonise their heating systems through electrification. It will include innovative optioneering functionality, considering how energy efficiency measures, flexible connections and on-site energy storage can be used to reduce necessary network reinforcement to facilitate a connection and therefore costs of connection. This will remove barriers to decarbonisation by suggesting ways to reduce connection costs and decrease connection times. At beta, it is intended to role out the functionality throughout Northern Powergrid's licence areas, and fully automate all processes.

Add Preceding Project(s)

NPG_SIF_001 - Inform

Add Third Party Collaborator(s)

EA Technology

Energy Systems Catapult

Kensa Contracting

City of York Council

Newcastle Hospitals

Project Budget

£449,000.00

SIF Funding

£388,000.00

Project Approaches and Desired Outcomes

Problem statement

The Inform project's goal remains to develop a self-serve automated connections tool for larger sites/non-domestic buildings, that can be accessed in the early stages of decarbonisation project development. The Inform Discovery phase hypothesised that fewer projects will fail or be delayed if the connections costs and options are easily accessible early in project development. Stakeholder engagement identified the challenges faced by a variety of customers in regard to connections, and their impact on projects that form critical parts of stakeholders' decarbonisation plans. Stakeholders agreed with our hypothesis and provided suggestions on how the industry could help prevent this with easy to use, digital tools.

The proposed tool responds to the Innovation Challenge 'Accelerating decarbonisation of major energy demands', ensuring connection requirements do not provide a barrier to decarbonisation projects, focusing on heat electrification. The optioneering proposed in the tool will ensure energy efficiency is proactively promoted as a solution to reduce electrical demands from large energy users, responding to the 'Improving energy efficiency at all levels in the system' theme.

The project captured feedback from stakeholders including site owners or developers from the public and private sector, pursuing decarbonisation projects impacting network connections. It assessed how solutions could be incorporated into the tool. Various user journeys for the tool were tested with stakeholders. This provided a clear understanding of the initial key functionality and outputs required and how the Alpha Phase can best test innovative aspects of the tool.

The self-serve tool will provide users with an improved understanding of capacity and associated costs. During Discovery, proposals were developed for optioneering options that could be included. These would include energy efficiency improvements, flexibility, and on site energy storage to help reduce the network capacity requirements. The tool will facilitate dialogue between the DNO and applicant. Inform would help an applicant prioritise projects that could proceed within existing capacity constraints. This is useful when seeking Public Sector Decarbonisation Scheme (PSDS) or other funding which requires quick project implementation. The DNO would have a way of capturing projects in the local area, assisting strategic planning. A strategic and efficient approach to network reinforcement and investment is particularly pertinent now since the Significant Code Review reapportioned these costs to the DNO, effectively socialising costs and distributing them across all electricity bill payers.

Inform would assess the impact on site capacity of a decarbonisation solution, and generate estimates for necessary network upgrades and associated indicative costs. These will be based on modelling of the local network including its current demand. Site owners could use Inform to make early and informed decision about optimum decarbonisation routes.

The Alpha Phase proposes to develop a Proof-of-Concept (POC) tool that utilises data from pre-calculated scenarios to demonstrate the intended optioneering functionality of the BAU product. It will comprise a subset of Low Carbon Technologies (LCTs) for a limited area of NPg's network

Inform would be hosted on NPg's website during the Beta stage. It would intuitively be combined with the existing connection tool, AutoDesign (initially developed through NIA funding), providing one seamless experience to all connection customers. Inform will extend AutoDesign's capabilities to support non-domestic and HV connections, enabling the user to test the viability of different solutions to minimise their costs while accelerating the deployment of their scheme.

Innovation justification

This application is submitted under the challenge theme 'accelerating decarbonisation of major energy demands'. Heating is the most significant contribution of UK building emissions; heat electrification is anticipated to be widely deployed.

To support heat decarbonisation, large, complex sites (hospitals, local authority buildings, military estates, universities, etc.) will need upgraded connections to support increased demand and renewable generation. For each site an initial design, a feasibility study and business case is required prior to engaging with the DNO regarding connection possibilities. Lack of knowledge around the optimum point of connection can mean the customer's preferred option is unviable and selection of an alternative option earlier in the design phase would have been preferable; this is a central cause for project failure.

AutoDesign provides Northern Powergrid's customers with budget quotations for new connection requests for domestic properties or single sites up to 210 kVA. This proposal is to extend the tool's functionality which does not consider:

Existing connections

Larger, complex sites

High Voltage (HV) connected sites

Modern Energy Partners (2018-2021) was a DESNZ funded innovation programme. It assessed 42 large campus-style sites. Decarbonisation potential and emissions were considered at building and site level. Typical costs to decarbonise such a site was approximately £12.6m, likely requiring heat electrification. Connection upgrade costs were outside its remit.

The Charge Project (SP Energy Networks) modelled network utilisation to determine where existing capacity was available, focusing on EV charging. Replication for heat pumps, particularly in combination with other LCTs, has not been undertaken.

Stakeholder engagement was conducted to promote, challenge and refine the project through confirming requirements for the proposition and understanding of necessary functionality for accelerated heat electrification projects. Initial user journeys were created based on requested functionality and reverted to stakeholders at a second workshop who provided further feedback. Appendix 3 contains supportive quotes from DESNZ from this engagement.

Combining existing knowledge and large site energy demand data sets within an innovative toolset will improve understanding of the impact on electricity networks and the efficiency and transparency of the distribution networks connection process. Inform Alpha combines existing new connection estimation software, with the ability to consider revised customer requirements, accounting for potential options (e.g. flexibility, on site energy storage, energy efficiency), to minimise network impact. These capabilities could be applied across the GB DNOs to facilitate decarbonisation of complex sites.

Inform capability is currently TRL-2; we would expect it to reach TRL-3 at Alpha, and 8/9 at Beta. The development required to produce a POC tool (Alpha stage) is £449,341. This will demonstrate key methodology for tool implementation required for the Beta Phase. The project Beta Phase will include innovative optioneering to offer HV customers reduced connection costs through proposed energy efficiency measures, flexible connections and on-site energy storage to avoid network reinforcement.

SIF projects allow for sharing risk between the DNO, partners and customers, and to build on learning from previous innovation projects. Software development in this context is too risky and expensive for a SME, but has potential for significant customer savings. Since DNO, and hence customers, are the primary beneficiaries of a successful BAU implementation, SIF is the most appropriate funding source for this project. Development of the ConnectMore tool via NIC demonstrates this with great effect. Appendix 3 further explains why innovation funding is required to develop Inform, for which a clear need has been identified by NPg, stakeholders and the assessors.

The counterfactual solution to Inform is to "Do Nothing". The forecast increase in HV budget estimate volumes would require significant additional staffing in the absence of the development of an efficient self-serve connections software tool

Impact and benefits (not scored)

Financial - future reductions in the cost of operating the network

Financial - cost savings per annum on energy bills for consumers

Financial - cost savings per annum for users of network services

Environmental - carbon reduction – indirect CO2 savings per annum

Impacts and benefits description

Financial - future reductions in the cost of operating the network – Through to 2050, DNOs anticipate increasing volumes of applications for new and upgraded connections to support achieving the UK's decarbonisation targets. Current processes require skilled expertise, the costs of which will commensurately increase without alternative approaches being developed. Inform will reduce the necessary DNO effort for estimates, through preventing nugatory effort, and allowing skilled resource to focus on more complex connections.

Financial – reduction on network reinforcement requirements – following Ofgem's access and charging reform (Apr 2023), network reinforcement costs are more socialised than previously; this reduces the customer incentive to minimise their capacity requirement, whilst supporting efforts to decarbonise. Supporting customers at an early stage of project scoping to determine their impact on the network, and how consideration of flexible connections, or peak demand reduction could allow accelerated deployment of their plans has potential to reduce overall network reinforcement. Improved understanding of customers' plans also

supports DNO predictions of future constraint issues, enabling efficient management of their costs.

Benefits analysis has shown that avoided network reinforcement due to the Inform tool could save £6.3million annually by 2028 in the central scenario, with savings split between site developers and the network operator (hence all electricity billpayers through reduced distribution network charges). Sensitivity studies have shown that in a highly electrified, rapid heat decarbonisation scenario, total annual savings could total £13.5million by 2028.

The £6.3million annual savings across NPG's licence areas by 2028 in the central scenario, is achieved through:

Mobilisation savings (£2.25million)

Flexible connections (£1.35million)

Energy Efficiency reducing required connection capacity (£1.35million)

On site energy storage (£1.35million)

Financial - cost savings per annum on energy bills for consumers -- providing insight of network reinforcement costs and timelines to consumers for the available options will encourage consideration of energy efficiency benefits, and building fabric improvement investments. This supports ongoing network management and operational efficiency.

Switching to heat pumps and installing energy efficiency measures is forecast to save site developers up to £22.5million annually by 2028 (if GSHPs are used) or up to £17million annually by 2028 (if ASHPs are used).

Financial - cost savings per annum for users of network services -- Applying for network upgrades is a time consuming exercise. Currently, high level indications of the need for an upgrade are available but a full review of capacity is often done later in a commissioned project. Reviewing capacity and budgetary estimates earlier in the project cycle and simplifying the process for the applicant saves on the consultancy fees, and application costs through only submitting applications likely to be progressed.

The Inform tool is intended to become a free to use software tool for budget estimate applications to NPG's distribution network. Avoided charges for obtaining HV budget estimates are anticipated to save site developers £1.1million annually by 2028. Additional (non-quantified savings) will come from saved staff time -- not spent pursuing projects where connection costs prove to be prohibitively expensive.

Environmental - carbon reduction -- indirect CO2 savings per annum against a business-as-usual counterfactual -- Often, as part of decarbonisation efforts, sites install a heat pump without improving building fabric; whilst this saves CO2e through reducing fossil fuel usage, required electrical capacity is higher than necessary due to a high residual heating load. Improved energy efficiency can improve overall cost and timelines associated with decarbonisation plans. There are around 30 million buildings in the UK; these are responsible for 30% of our national emissions, with 75% of emissions due to heating buildings with fossil fuels. Supporting the ability to rapidly decarbonise buildings via this tool will provide significant benefit.

This application is submitted under the challenge theme 'accelerating decarbonisation of major energy demands'. Heating is the most significant contribution of UK building emissions; heat electrification is anticipated to be widely deployed.

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Teams and resources

This Alpha project will be led by Northern Powergrid (NPg), the DNO for North East England, Yorkshire regions and the North Lincolnshire area. NPg will oversee overall project direction (though not detailed project management) and provide network data, insights and knowledge enabling the Inform project to deliver quality outputs.

The project will continue working with project partners from the Discovery phase, strengthened by expert energy efficiency partners.

Existing project partners

EA Technology - developed the AutoDesign tool to determine the network capacity and associated upgrading connections costs for EV and domestic connections to the LV network. In the Alpha phase EA Technology will develop a POC tool based on AutoDesign functionality that will demonstrate the potential for non-domestic sites to determine the network capacity and associated upgrading connections costs. The intention is to base this on a single site and network area and a limited set of LCTs to test and demonstrate tool viability.

Energy Systems Catapult (ESC) - the Modern Energy Partners programme (MEP) run by ESC gathered an immense insight into the costs and planning of decarbonisation and found that there wasn't a way to solve the problem identified. They will provide expertise and knowledge of complex sites and buildings, and support the Alpha project through engaging with key stakeholders to help develop a tool that is fit for purpose and with the biggest impact.

The Newcastle upon Tyne Hospitals NHS Foundation Trust – The Trust participated in the MEP Programme. They will support the Alpha project by being a possible test area that the tool will be built around. The Trust will input into testing scenarios to allow the MVP to test different inputs from a real-life customer.

City of York Council – York called a climate emergency in 2019 and aim to be a net zero city by 2030. They have been working with surrounding local authorities to develop a local area energy plan (LAEP) to understand how net zero will be met. In the Alpha project York Council could be one potential test area and will be part of the stakeholder engagement group that will test assumptions and validate approaches.

New project partners for Alpha (pre-existing relationships)

Kensa Contracting -- Kensa is a specialist installer for Fifth Generation District Heating networks featuring Ground Source Heat Pumps and Shared Ground Loop Arrays. They use innovative Ambient Shared Ground Loop Array systems deployed in social housing retrofits and social and private new build developments. They bring specialist knowledge and experience scoping and installing heat pumps. They will undertake desktop analysis to assist in generating the various profiles to be utilised as input for the POC tool based on the technologies they specialise in. They will validate assumptions and inputs to the tool and its outputs.

Renewable Energy Networks (REN) -- Founded in 2019, industry experts REN designs, installs and maintains renewable energy systems. They are a supplier and installer of renewable energy technologies, primarily ground source heat pumps, air source heat pumps, solar PV and battery storage. REN will support with the development of the various profiles through desktop analysis to be used as an input to the POC tool based on the technologies they specialise in. They will validate assumptions and inputs to the tool and its outputs.

Additional resources, equipment and facilities

No additional resources, equipment and facilities are expected to be needed.

Additional external parties, network users or consumers

We intend to leverage the project teams existing relationships with industry groups and network users to contribute to stakeholder engagement. This stakeholder engagement will provide external feedback on the user journey and POC tool outputs.

Project Plans and Milestones

Project management and delivery

Delivery of the Inform project will be project managed by EA Technology. A Project Manager will be appointed with responsibility for ensuring that the project delivers in line with the bid, and that the efforts of the project partners are co-ordinated. In turn the project partners will each manage the delivery of their inputs in the most cost-effective ways. Different elements will be managed using the most appropriate and lowest risk project management methodology for the task. Regular on-line meetings between the project partners will be held to oversee project delivery. The Project Manager will also have regular on-line update meetings with the Project Sponsor.

There are interdependencies between the work packages, requiring overall delivery coordination between the partners, which will be achieved through regular project team meetings, and a project plan outlining the critical delivery path. Specifically, the software environment and network connectivity model requires timely provision of data from Northern Powergrid, implementation of loading and low carbon technology profiles requires them to be modelled and created by ESC.

EA Technology utilise an Agile project management methodology to deliver software development projects, and this approach will be utilised to create the POC version of the Inform tool. This project management style is highly effective for software development delivery, allowing flexibility in the delivery process and high interaction between stakeholders. EA Technology have a strong track record of combining this with more traditional 'waterfall' project management styles, when combining software development with other project outputs for example in the development of ConnectMore and AutoDesign. The software development will look ahead to the beta stage by ensuring that wherever possible code is written in such a way that it can be efficiently transferred into a fully automated software tool covering all of NPg's licence areas.

ESC will lead the production of energy usage profiles for incorporation into the POC tool, building on their prior experience in this area, in particular their learning from the Modern Energy Partner (MEP) programme, and Local Area Planning. They will be supported by two companies (Kensa Contracting and Renewable Energy Networks) with combined extensive expertise in designing and installing heat-pump systems, implementing energy efficiency measures, generation and storage technologies in commercial properties, to ensure these energy profiles are representative. Management of this area will be via a 'waterfall' process, scheduled to feed into the POC development.

The project risk management strategy will maintain and regularly update a RAID (Risks, Assumptions, Issues and Dependencies) Log. This log will be available to all project partners, with new, critical and upcoming risks discussed by the project delivery board, with active management to avoid or mitigate potential issues.

The project partners are confident that the pre-planning of this project has sufficiently mitigated risk to the extent that stage gates do not need to be included. Specifically this has been achieved by focusing development on a very small geographic area of the network; producing a POC version of the tool rather than a full model; and building functionality around the tried and tested AutoDesign tool. This allows the focus to remain on the innovation, namely enabling user bespoke optioneering functionality.

The project will not cause any planned or potential unplanned supply interruptions and therefore will not impact consumers' access to energy services, or their interaction with the industry, nor will it directly impact any existing or future energy consumers, beyond supporting future new or connection variant applications, if a BAU tool is developed under the next (Beta) phase.

Key outputs and dissemination

Inform's Alpha Phase will develop a POC self-serve, HV connection software tool demonstrating the innovative optioneering functionality.

The tool will focus on a single discrete network section around a large public sector site where changes to the capacity requirements will impact network loading. The model will be based on pre-processed network data for this location and include specific load profile and potential LCTs for the site. This will allow the user to select various on-site options and view changes to the site's usage profile, and the impact on the distribution network. Subsequently, the tool will determine whether the existing service cable, and local network are suitable for the revised connection requirements. Where insufficient, reinforcement costs will be calculated.

This POC model will demonstrate the basic system user interface and optioneering functionality. The methodology will align with the approach undertaken by EA Technology when developing network connection tools such as AutoDesign and ConnectMore.

The portal will be developed to allow the user to identify an existing network connection at the specific modelled location. The user will be able to view the impact on the site capacity of specific existing site loads, and the consequences on the site capacity of the adoption of new loads or technologies. These outcomes include if the site's network connection needs amending, or if as a result of the new load or technology the network will require reinforcement.

If, as a result of the new load or technology selected by the user, the total site capacity alters, impacting the site network connection agreement, an estimate of the cost of the new connection including necessary reinforcement will be calculated. By changing options in the interface, resulting in different potential energy profiles, the user will be able to consider different solutions to minimise the cost of proposed decarbonisation activities. The POC tool will utilise pre-calculated load profiles for a limited range of options, such as implementation of heat pumps, PV, and battery storage; it is intended to demonstrate the feasibility of the approach, but will not include a fully comprehensive range of options due to time and budget limitations.

EA Technology will be responsible for software creation and development for the Inform tool, performing necessary local network assessments, specifically modelling the LV and HV network data local to the public sector site, that will be provided by NPg. This will include modelling network consequences of feasible load increases on the selected site. EA Technology will calculate cost estimates for connection increases and network reinforcement for necessary scenarios and perform an assessment of the site connection service cable. EA Technology will also be responsible for project management of Inform at Alpha.

ESC will define the logic and process for efficiency optioneering to be incorporated into the model. They will determine and define the algorithms for assessing and estimating demand change caused by on site heat electrification or electrical storage adoption. They will be supported by project partners, Kensa Contracting and Renewable Energy Networks.

EA Technology and ESC will together define potential flexible connection arrangements and LCTs for incorporation of a BAU deployed tool. This functionality is not intended to be incorporated in Alpha.

The project outputs will be disseminated via project partner digital media. ESC will create a webpage containing project information hosted on their website. This information will be included in their newsletter (circulation 13,500 subscribers). All project partners will issue information about project outputs on LinkedIn. Stakeholder engagement will further disseminate outputs. The partners will provide a thirty-minute presentation for the Show and Tell Alpha dissemination event.

Commercials

Intellectual property rights, procurement and contracting (not scored)

All Project Partners are happy to comply with the default IPR requirements of the SIF Governance Document.

Please note that most IP developed is anticipated to be built into the EA Technology ConnectGrid family of Commercial Products and made available for sale. As such it will be Foreground IP and not Relevant Foreground IP as per the SIF governance.

ESC's MEP material has been produced as part of an innovation project funded by BEIS and as such is publicly available. ESC would retain the rights to the background IP as derived through the MEP programme.

Procurement and Sub contracting

We don't expect to sub contract any work under the Alpha project.

Commercialisation, route to market and business as usual

Route to market

This proposal is to develop innovative new self-service connections support for specific customer categories. Inform is envisaged as either an expansion of an existing software product, or an additional platform in response to competitive tender. This approach has previously been undertaken for software platforms providing services into UK DNOs by multiple companies. This approach has proven success for products that provide demonstrable value for money.

EA Technology already have a commercial relationship with Northern Powergrid for the provision of AutoDesign, a software tool designed to provide LV self-service connection budget estimates, and so have a direct route to market with a first client within the project partners. This will enable the fastest possible route to BAU and enable a demonstrable system for other DNOs to emulate.

There is clear value to the DNO for this product now, especially since the Significant Code Review was implemented on 1st April 2023. There is greater value to a DNO if large scale public sector and commercial customers can be steered to energy efficient options that reduce their network impact. This accelerates connections and reduces the necessary network reinforcement. Reinforcement costs are socialised among all electricity billpayers, including those least able to pay, so minimising reinforcement requirements is advantageous to all. This approach also reduces the impact of deploying new LCTs to the network, enabling more customers to benefit. Reducing the cost and time associated with early stage optioneering is valuable to both customers and DNOs as more sites make plans to decarbonise.

Once deployed to NPg, and available for use through the connection's portal, the tool will in the first instance be demonstrated to other GB DNOs, acknowledging that the tool will require tailoring to their specific network and operational requirements.

The Alpha Phase is intended to create a basic development environment, using detailed, but highly localised network data, with modelled energy profiles for a complex non-domestic HV connection, and LCTs. This will demonstrate core outputs and functionality. The Beta Phase will take learning from the Alpha phase, combined with feedback from stakeholders, to develop a fully functional tool suitable for deployment to GB DNOs. This BAU tool will enable consumers to undertake bespoke modelling and optioneering to determine the most cost effective approach to implement their decarbonisation plans. These customers will gain earlier notice if their scheme is likely to impact their connection allowing them to alter schemes or plan for the time taken for necessary reinforcement works to be undertaken. The DNO will receive advanced warning of network 'hotspots'.

Stakeholder engagement carried out during the Discovery with potential users demonstrate support for the tool concept. Stakeholders could see value to using the finished product when formulating future site developments and were keen to use the end product.

There is significant potential for the tool outside GB, however the barrier should not be underestimated. New connectivity models would be required to accommodate differing design standards, asset types, and operational methodologies. Differences in network usage result from differences in climate, building design and building use. Research will be carried out into appropriate overseas markets.

Involvement of Senior Sponsor

Northern Powergrid have been involved in the Inform project from the start of its lifecycle and support its progression. They see the value that it will bring to them and their customers. NPg will oversee project direction (though not detailed project management), provide network data, insights and knowledge enabling the Inform project to deliver quality outputs.

Policy, standards and regulations (not scored)

We do not foresee any regulatory barriers to this proposal.

Changes to the charging methodology set out in the Ofgem Access and Forward-Looking Charges Significant Code Review will reduce the reinforcement related connections costs experienced by customers. However, there will still be costs associated with the direct connection aspects alongside the timelines for any upstream reinforcement works to be considered. This project aims to ensure that all of that information is provided in a quick, clear and transparent way to the site owner so they can make an informed decision.

Additionally, providing this through an automated mechanism enables customers to carry out informed optioneering activities with minimal direct impact on the distribution networks whilst simultaneously ensuring the distribution networks are informed about the potential for future energy demand increases to consider in their longer term network planning.

We don't anticipate any derogations or exemptions needed to deliver the Alpha or Beta project.

Value for money

The total cost associated with the delivery of this project is: £449,341 of which £60,852 (13.5%) will come from Project Partner contributions broken down as follows:

Northern Powergrid = £15,900

EA Technology = £33,023

Energy Systems Catapult = £8,967

Newcastle upon Tyne Hospitals NHS Foundation Trust = £1,500

City of York Council = £170

Kensa Contracting = £642

Renewable Energy Networks =£650

The total SIF funding requested is £388,491.

Consumer Value for Money

Value for Money (VfM) in the proposed programme is about maximising the impact of each pound spent to ensuring success versus agreed objectives. The assembled partners and proposed work packages have been scrutinised by senior management colleagues across all partner organisations.

VfM can be expressed in terms of pursuing economy (careful management of available resources), efficiency (delivering the best level of service for less), effectiveness (delivering the right service) and equity (reaching different groups) to achieve desired outcomes and maximise the benefit of those outcomes. Achieving best value is not just about the price of an item or service but also about the effectiveness, added value, durability and quality.

The majority of this funding is provided to the specialist consultancy activities of EA Technology and ESC. These companies bring extensive background from working across the energy system, grid connection and building decarbonisation. To ensure value for money the project partners have focussed on opportunities to reduce unnecessary costs wherever possible. This has been achieved through the collaboration of EA Technology and ESC to tackle a recognised barrier to building decarbonisation. EA Technology and ESC would not be in a financial position to develop the proposed Inform software without innovation funding, as detailed in appendix 3.

The principles behind the software development will apply across GB, and full benefits to site developers and customers across the country will only be realised if the concept is widely adopted by GB DNOs. At Alpha, the intention is to develop a POC tool; at beta it is intended to bring another DNO on board to ensure the development of the tool is suitable for use across GB.

Complementary to Business as Usual Activities

The project will generate new learning, and represents VfM for the consumer because the project's primary focus is to enable existing customers connected to the distribution networks to optimise their decarbonisation plans. This will reduce costs associated with socialised network investment costs directly whilst also providing indirect savings from reduced costs associated with public services.

Normal Industry Rates

In the preparation of this proposal we have worked closely with our Project Partners to ensure their involvement is provided at a commercially competitive rate in line with those we've seen from projects delivery elsewhere. This has been achieved through careful discussion and consideration into where the Project Partners can increase efficiency, reduce risk and maximise the value they deliver to the project. As a result, this project offers excellent VfM to consumers whilst ensuring high quality, reliable outputs are achievable.

Contributions

Each partner will contribute to the project through a combination of day rate discounts and by offering days in kind to the project.

Subcontractors

We don't expect sub-contractors to be utilised in the delivery the Alpha Project.

Additional Funding

No additional funding will be required from other innovation funds.

Use of existing assets or facilities

EA Technology will use existing knowledge developing the user interface from their AutoDesign asset, and network capacity modelling from AutoDesign and ConnectMore. This will leverage learning captured during the development of these tools. ESC will use demand and loading profiles developed during the MEP programme and adapt them for use in the project.

Associated Innovation Projects

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

Supporting documents

File Upload

SIF Inform Mid-Term Update - Alpha.pdf - 689.7 KB
SIF Alpha Round 2 Project Registration 2024-01-17 3_13 - 82.6 KB

Documents uploaded where applicable?

