Notes on Completion: Please refer to the appropriate NIA Governance Document to assist in the completion of this form. The full completed submission should not exceed 6 pages in total.

# **NIA Project Registration and PEA Document**

| Date of Submission  | Project Reference Number |
|---|--------------------------|
| Mar 2016  | NIA_NGN_142              |
| Project Registration  |                          |
| Project Title   |                          |
| Project Concur  |                          |
| Project Reference Number  | Project Licensee(s)      |
| NIA_NGN_142   | Northern Gas Networks    |
| Project Start   | Project Duration         |
| March 2016  | 0 years and 4 months     |
| Nominated Project Contact(s)  | Project Budget           |
| Eileen Brown, Lead Network, Northern Gas Networks<br>Project Advisory Team: Suzanne Taylor, SP Energy<br>Networks Debbie Mitchell, National Grid Jim Cardwell,<br>Northern Powergrid Richard Westwood, SSE Steve<br>Edwards, Wales & West Utilities | £206,458.00              |

#### **Summary**

Undertaking an initial feasibility study is financially very prudent as the industry recognises collaboration will create new types of initiatives in the customer service arena. However, after years of competition and running individual programmes, Networks need to understand the value, complexity and possible outcomes of any comprehensive project.

GDN's and DNO's collaborate with the EIC through a series of Strategic Innovation Summits, which brings together Company CEO's and Senior Leaders from across GB to recognise cross-sector challenges within the energy landscape and collaborate on major sector innovation projects. On September 14, 2015 the EIC held a Customer Service Collaboration Summit in London with over 30 senior leaders. The Summit revealed that there is a much stronger case for addressing customer service challenges together, rather than each GDN and/or DNO addressing them independently.

This feasibility study is a result of that summit.

The Project Advisory Team, made up of representatives from various Network Operators, will be designated to oversee the governance and outcomes of this study. The team will be made up of subject matter experts who will inform the project partners, Fahrenheit 212, to shape the conclusions, develop the solutions and make the final determination, alongside the EIC. Therefore, the partnership requires collaboration, availability and contribution to ensure completing the critical success factors.

Our partners will complete three phases of the project over a 12 week period covering: -

Preliminary Exploration; covering Customer, Category, Channel and Company which will generate preliminary insights across these four opportunity areas.

Discovery Stage; building on the exploratory work, deploy research around a chosen opportunity area to test primary research with a cross section of stakeholders.

Final Definition; from the discovery findings the team will define and develop an innovation solution on how collaboration across DNOs and GDNs would work in executing and running the final proposed solution.

This final solution will be presented to EIC, Project Advisory Team, Senior Leaders and key Stakeholders.

#### **Third Party Collaborators**

**Energy Innovation Centre** 

SSE Energy Solutions

# Nominated Contact Email Address(es)

innovation@northerngas.co.uk

## **Problem Being Solved**

Customer expectations are changing and will continue to change well into the future. The service networks deliver to customers must not only keep pace but outperform their requirements. Networks need to identify how the industry can collaboratively use consistent Customer data to deliver exceptional outcomes for customers.

Currently, Customers often only interact with networks during high stress situations or are passive with their feedback during controlled situations. "Gas and Electricity Networks" is a confusing concept to customers and interaction is seen as difficult.

Delivering "Great Customer Service" has always been a key requirement for GB Energy Networks. Meeting this requirement in an ever changing landscape and with rapid development of technology is a challenge all GB Energy Networks face. Each network has a mandate to transform its whole organisation into a more customer-centric environment, which pervades through the whole business. The challenge is how the energy networks can find new ways to collaborate to address these critical issues, build a customer-centric culture and remain competitive.

A summit was held across all GB GDN and DNOs with Senior customer and innovation representatives and it was revealed that there is a much stronger case for addressing some key industry challenges and opportunities together, rather than addressing them independently. Sharing customer data is seen as valuable, but return on investment needs to be established and consistent across Network Operators.

A key opportunity area arose for a new industry wide solution for customer data that would benefit from solutions that are built on a foundation of collaborative cross-industry resources.

This project will aim to achieve new types of initiatives that deliver outstanding value, greater speed and better service to the industry, its regulators, and above all, the stakeholders at the very centre of this entire initiative - energy customers themselves.

#### Method(s)

This three stage feasibility study will focus on four key areas that impact on the Networks relationship with its customers by understanding;-

- The customer's relationship with the brand, as energy transportation is a confusing concept to most consumers.
- Existing company initiatives and the use of existing customer data (data handling, reliability, effectiveness to impact on behaviours)
- How adjacent industries define customer data, effectively utilise and resolve similar challenges faced by the energy networks.
- Explore existing and future channels of communication specifically single point, groups or community interactions. Face to Face, digital or historical / conventional channels and how these will change over different consumer architypes
   ?

The project partners will undertake exploratory research to uncover the opportunity to develop an innovative approach to a newly defined customer service. The research methodology will involve exploring consumer group's attitudes, In-depth interviews, expert (1-on-1) consultations, existing stakeholder conversions along with secondary desktop research and analysis.

Following this initial feasibility study the networks will use the findings to inform any future stages or project direction which may focus on existing consumers, cultural shift or far horizon customer requirements and technological impact.

If this is the case the Energy Innovation Centre (EIC) and the Project Advisory Team will make a determination with regards to moving

forward with a project change or new redefined project being registered.

#### Scope

Undertaking an initial feasibility study is financially very prudent as the industry recognises collaboration will create new types of initiatives in the customer service arena. However, after years of competition and running individual programmes, Networks need to understand the value, complexity and possible outcomes of any comprehensive project.

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This final solution will be presented to EIC, Project Advisory Team, Senior Leaders and key Stakeholders.

#### Objective(s)

The overall objective of this strategic approach is to investigate the proposition that creating a new industry-wide, customer-centric solution, using combined consumer data, networks will deliver greater benefits to existing and future customers.

Phase 1: Preliminary insights around the current and future needs and opportunities around New Consumer Data Scenarios. Provide sufficient stimulus to the network stakeholders and advisory team to complete an exploratory workshop. This phase will be completed off-site by the project partners completing independent research.

Phase 2: Complete Stakeholder Research. With guidance from the Advisory Team, the project partners will design and execute a research methodology to address the specific areas of exploration.

Phase 3: Define and develop a solution for Customer Data in accordance to the exact needs of the feasibility assessment for the industry which has the necessary dimensions and information to decide whether or not the idea meets the evaluation criteria set during the Project Kick-off.

Completed Stage gate:

- Week 2: Complete an exploratory workshop with relevant stakeholders.
- Week 6: Complete a Research Debrief & Solutions Workshop with EIC & Project Advisory Team.
- Week 8: Complete a Solutions Workshop with EIC, Project Advisory Board, Senior Leaders and Major Stakeholders.
- Week 12: Final determination and rescope of project.

#### Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

#### **Success Criteria**

Present a compelling vision, value proposition with baseline features and functionality as well as key benefits for customers and other key stakeholders, the industry, and regulators. This vision must consider, and account for, the operational implications of an industry collaboration initiative.

Presentation of clear opportunity areas as a result of the phase 1 research containing compelling clarity to assist the Advisory Team to direct phase 2 research.

Deliver a high level, but comprehensive, Research Debrief outlining key insights and implications gleaned from detailed stakeholder research. Delivering comprehensive debrief as part of a larger Solutions Development Workshop, which will allow the Project Team to immediately translate the learning from the research into a solution recommendation.

Provide an outline of the operational, financial, regulatory, and technological and communication considerations of deploying a collaborative approach to consumer data to a "solutions workshop".

Completing an assessment of each solution against the criteria set out at the beginning of the Feasibility Study together with strengths, weaknesses, viability and opportunities.

EIC and the Project Advisory Team decision-making facilitated and clear pathway to move forward.

#### **Project Partners and External Funding**

n/a

#### **Potential for New Learning**

n/a

# **Scale of Project**

The project will be carried out across seven DNO's and GDN's to ensure the service we are delivered to customers is consistent and collaborative. If done at individual level there would be inconsistences and the customer would suffer as a result.

Networks need to undertake five segment methodology research to cover the four main areas of Customer, Channel, Category & Company these are:

- Focus Groups; Consumer focus groups using diverse open ended exploratory techniques.
- Ethnography; In-depth interviews with consumers where they live, work, and lead their lives.
- Expert Advice; 1-on-1 consultations with relevant subject matter experts from within and outside the industry.
- Stakeholders; Ongoing conversations with stakeholders from the Project Team and the wider industry.
- Desktop; Continuous supportive secondary and desktop research.

The research will be a mix of seven in-depth-interviews and three focus groups with a variety of different energy consumers, together with the desktop research. This will provide a sufficiently broad and deep study for the advisory team to make a detailed assessment of any proposed final solution.

## **Technology Readiness at Start**

TRL2 Invention and Research

#### **Technology Readiness at End**

TRL3 Proof of Concept

# **Geographical Area**

All work will be carried out on GB consumers or data related to network customers. Any face to face, digital or other survey activities will be conducted across GB with all energy users.

## **Revenue Allowed for the RIIO Settlement**

None

## **Indicative Total NIA Project Expenditure**

These are indicative costs associated with all partners involved in the projects, including internal Network costs.

| Network                                    | Partners Costs | Internal Cost[1] | Total    |
|--|----------------|------------------|----------|
| National Grid Gas Distribution             | £22,143        | £7,351           | £29,494  |
| Northern Gas Networks                      | £22,143        | £7,351           | £29,494  |
| Wales & West Utilities                     | £22,143        | £7,351           | £29,494  |
| UK Power Networks*                         | £22,143        | £7,351           | £29,494  |
| SP Energy Networks                         | £22,143        | £7,351           | £29,494  |
| Scottish Hydro Electric Power Distribution | £22,143        | £7,351           | £29,494  |
| Northern Powergrid                         | £22,143        | £7,351           | £29,494  |
| Total                                      | £155,000       | £51,457          | £206,458 |

<sup>[1]</sup> Internal costs estimated to be 25% of overall project cost.

<sup>\*</sup>UK Power Networks' contribution will not be funded via the Network Innovation Allowance.

# **Project Eligibility Assessment Part 1**

There are slightly differing requirements for RIIO-1 and RIIO-2 NIA projects. This is noted in each case, with the requirement numbers listed for both where they differ (shown as RIIO-2 / RIIO-1).

#### **Requirement 1**

Facilitate the energy system transition and/or benefit consumers in vulnerable situations (Please complete sections 3.1.1 and 3.1.2 for RIIO-2 projects only)

Please answer at least one of the following:

#### How the Project has the potential to facilitate the energy system transition:

n/a

#### How the Project has potential to benefit consumer in vulnerable situations:

n/a

# Requirement 2 / 2b

Has the potential to deliver net benefits to consumers

Project must have the potential to deliver a Solution that delivers a net benefit to consumers of the Gas Transporter and/or Electricity Transmission or Electricity Distribution licensee, as the context requires. This could include delivering a Solution at a lower cost than the most efficient Method currently in use on the GB Gas Transportation System, the Gas Transporter's and/or Electricity Transmission or Electricity Distribution licensee's network, or wider benefits, such as social or environmental.

# Please provide an estimate of the saving if the Problem is solved (RIIO-1 projects only)

This is an early stage feasibility study to establish benefits of a larger, in-depth focused project. This future project will define the overall benefits to GB consumers and the industry of "Great Customer Service", consistent use of customer data and collaborative approach to new services.

# Please provide a calculation of the expected benefits the Solution

This is a research project

#### Please provide an estimate of how replicable the Method is across GB

Seven network operators are collaborating on this project and are committed to delivering a better service to their customers. However, the outcomes and learning will be share with all Network Operators providing an opportunity for wider collaboration on future stages.

#### Please provide an outline of the costs of rolling out the Method across GB.

These costs would be available later in the project owing to the current low TRL level.

# Requirement 3 / 1

Involve Research, Development or Demonstration

A RIIO-1 NIA Project must have the potential to have a Direct Impact on a Network Licensee's network or the operations of the System Operator and involve the Research, Development, or Demonstration of at least one of the following (please tick which applies):

- A specific piece of new (i.e. unproven in GB, or where a method has been trialled outside GB the Network Licensee must justify repeating it as part of a project) equipment (including control and communications system software).
- A specific novel arrangement or application of existing licensee equipment (including control and/or communications systems and/or software)
- A specific novel operational practice directly related to the operation of the Network Licensees system
- ☐ A specific novel commercial arrangement

| ☐ A specific piece of new equipment (including monitoring, control and communications systems and software)   |
|---|
| $\square$ A specific piece of new technology (including analysis and modelling systems or software), in relation to which the Method is unproven                        |
| ☐ A new methodology (including the identification of specific new procedures or techniques used to identify, select, process, and analyse information)                  |
| ☐ A specific novel arrangement or application of existing gas transportation, electricity transmission or electricity distribution equipment, technology or methodology |
| ☐ A specific novel operational practice directly related to the operation of the GB Gas Transportation System, electricity transmission or electricity distribution     |
| □ A specific povel commercial arrangement   |

# Specific Requirements 4 / 2a

RIIO-2 Projects

# Please explain how the learning that will be generated could be used by the relevant Network Licensees

Learning will be considered from the point of view of the needs of Customer (behaviours, tensions, pain points, category perceptions, expectations, unmet needs, etc.) and the requirements of the Industry (strategic imperatives, regulatory environments, operational constraints, competitive landscape, financial barriers etc.).

The Solution will provide knowledge around both the needs of the customer as well as the needs of the industry and include What it ls, What it Does, How it Works, and Who's it For.

For the Customer, the Solution will include an understanding of the customer benefit, the user journey for different stakeholders (from customers, to partners, to service personnel), the features, as well as point-of-view on sequencing of the development across the short, mid and long term.

For the Industry, the Solution will include an understanding of the strategic fit, operational and commercial requirements, and commercial opportunity, as well as key technological requirements.

Finally the Solution will explore how collaboration across DNOs and GDNs would work in executing and running the solution.

Operational, financial, regulatory, and technological communication considerations of deploying a collaborative approach to consumer data will be outlined.

# Or, please describe what specific challenge identified in the Network Licensee's innovation strategy that is being addressed by the project (RIIO-1 only)

Networks are measured on customer service performance not only by the regulator, but also by many other major stakeholders as well as consumers themselves. Comparison with other sectors and "top in class" businesses is core to measuring success. Within all network business strategies improving customer service is a major objective and will continue to be so throughout this and future regulatory periods.

After years of competition and running individual initiatives, the industry is ready to explore a new path: finding ways to work together through collaboration to create new types of initiatives that deliver outstanding value, greater speed and better service to the industry, its regulators, and above all, the stakeholders at the very centre of this entire initiative - energy customers themselves.

✓ Has the Potential to Develop Learning That Can be Applied by all Relevant Network Licensees

#### Is the default IPR position being applied?

✓ Yes

# **Project Eligibility Assessment Part 2**

#### Not lead to unnecessary duplication

A Project must not lead to unnecessary duplication of any other Project, including but not limited to IFI, LCNF, NIA, NIC or SIF projects already registered, being carried out or completed.

Please demonstrate below that no unnecessary duplication will occur as a result of the Project.

If applicable, justify why you are undertaking a Project similar to those being carried out by any other Network Licensees.

n/a

# **Additional Governance And Document Upload**

Please identify why the project is innovative and has not been tried before

n/a

**Relevant Foreground IPR** 

n/a

**Data Access Details** 

n/a

Please identify why the Network Licensees will not fund the project as apart of it's business and usual activities

n/a

Please identify why the project can only be undertaken with the support of the NIA, including reference to the specific risks(e.g. commercial, technical, operational or regulatory) associated with the project

n/a

This project has been approved by a senior member of staff

✓ Yes