

NIA Project Registration and PEA Document

Date of Submission

Mar 2020

Project Reference Number

NIA_NGN_254

Project Registration

Project Title

Street Score – Customer Navigational Experience

Project Reference Number

NIA_NGN_254

Project Licensee(s)

Northern Gas Networks

Project Start

March 2020

Project Duration

1 year and 1 month

Nominated Project Contact(s)

Steve Dacre

Project Budget

£105,000.00

Summary

The problem to be addressed is that vulnerable customers and wider public at best are inconvenienced by street works and at worst are prevented from going about their normal daily routines. More specifically, access can be denied, stress levels increased and as such the relationship between public and utility companies eroded.

Preceding Projects

NIA_NGN_338 - Street Score 2

Third Party Collaborators

Steer Energy

Nominated Contact Email Address(es)

innovation@northerngas.co.uk

Problem Being Solved

Necessary signing, lighting and guarding are placed around street works and conform to strict standards stated in 'Safety at Street Works and Road Works: A Code of Practice'. There is an ambition to improve street works accessibility for vulnerable customers, reducing disruption without compromising the existing standards.

The problem to be addressed is that vulnerable customers and wider public at best are inconvenienced by street works and at worst are prevented from going about their normal daily routines. More specifically, access can be denied, stress levels increased and as such the relationship between public and utility companies eroded.

The project will engage with a small number of specialist organisations with an insight into service design with customer vulnerability groups. These will be selected to suit the geography and project time scales.

Method(s)

The project will take the time to assemble and work closely with a user group, including those on the Priority Service Register, as well as wider public groups. Many members of the public are challenged or inconvenienced by street works.

It is essential to a project like this to have user engagement within all stages to ensure both sound concepts, as well as rigorous testing. This group will support the development of a list of challenges as currently observed. This will then be expanded out into a scoring matrix for each.

A journey through or around street works could then be scored based on the total score of all the challenges face (different users may score significantly different, and this will be considered). With an original journey score, it is proposed that the design work is targeted on reducing to a new optimised score. The assumption being, a moderate amount of disruption is tolerable, but there is a limit. Whilst it is not felt that challenges can be removed, it is hoped that significant reductions can be made.

The approach proposed herein, would be similar to a typical Risk Assessment, initial scores are generated, changes and mitigations made, and new lower scores arrived at. The new scores hopefully lower than an agreed maximum limit. With some key target areas, the project will develop some desk-based concepts and briefly trial them with the user group.

Scope

Phase 1 of the project will Define the challenge and start to develop a concept for the methodology.

Objective(s)

Objectives – Problem Definition and Concept

1. To define the current challenge with the User group
2. Quantify the observed challenges
3. Develop a scoring matrix
4. Explore concept avenues

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

n/a

Success Criteria

The project will be considered a success if it can demonstrate better engagement with customer vulnerability groups and wider public in the ongoing upgrade and development of the network's street work designs

Specifically, success will be judged on the timely delivery of a report stating:

1. Key challenges of selected User Groups
2. Understand "go" / "No go" areas of business appetite for the GDN
3. Assign a "score" to each of these challenges
4. Development of 'agreed' 'desktop' concepts

Project Partners and External Funding

Northern Gas Networks, Wales and West Utilities, SGN and Steer Energy.

Northern Gas Networks- £52,500

Wales and West Utilities -£ 50,200

SGN (Internal costs only) - £2,300

Potential for New Learning

The project will identify challenges our vulnerable customers face, when navigating street works. This will inform how future street works are designed, highlighting areas where enhancements can be made, improving the overall customer experience.

Scale of Project

The project will develop an informed risk like assessment for the challenges currently experienced by our vulnerable customers and wider public; when navigating street works. This will priorities areas of the street works design that could be enhanced to improve the customer experience.

The scale of the project is reflective of the minimum requirements to produce a multi stakeholder assessment.

Technology Readiness at Start

TRL3 Proof of Concept

Technology Readiness at End

TRL4 Bench Scale Research

Geographical Area

The project will be constrained to Northern Gas Networks geographical area.

Revenue Allowed for the RIIO Settlement

N/A

Indicative Total NIA Project Expenditure

External funding = £ 95,800

Internal cost = £9,200

Total Cost = £105,000

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)

The project will contribute to reduced social costs to the community, through an informed outlook of the current challenges faced by our vulnerable customers. It is intended the outcome of the project will be used to inform the future design of streetworks.

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

The challenge being addressed by the solution is applicable to all GDN's and therefore could be readily adopted across the entire GB gas network.

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

N/A

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

RIIO-2 Projects

- ☐ A specific piece of new equipment (including monitoring, control and communications systems and software)
- ☐ 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 novel commercial arrangement

Specific Requirements 4 / 2a

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

The current design of street works is informed foremost by safety. This doesn't necessarily mean that it offers positive experience for our vulnerable customers and wider public.

The project is intended to further enhance the street works design, complementing it with an informed customer stakeholder view.

The challenge is applicable to all GDNs; therefore the learning can be readily adopted.

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

Safety and Emergency

- ☒ 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.

Several checks have been undertaken to ensure no current solution exists to address the outlined challenge.

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

The project places customer at the heart, redefining the design of the street works to improve the overall customer experience. Historically, the safety of street works has been the key driver, but as the industry is committed to increasing its wider social responsibility, customer experience should also be considered in the navigation of street works.

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

The project is a feasibility study, with the outcome relatively unknown. It is possible the project may identify challenges that cannot be practically addressed in the future. It is this that presents the project has a 'risky venture'; beyond the current level of risk appetite.

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

The project presents uncertainty in both the commercial and operational undertaking. Whilst, it is the ambition that the project will enable the improvement of the customer experience for the navigation of street works, the practicality of overcoming the discreet challenges, both commercially and operationally are unknown. Therefore, the project is considered above the internal risk appetite threshold.

This project has been approved by a senior member of staff

☒ Yes