

NIA Project Registration and PEA Document

Date of Submission

Jun 2016

Project Reference Number

NIA_NGN_163

Project Registration

Project Title

Making every contact count – Enhancing protocols for disconnection and condemning 'in-house' appliances

Project Reference Number

NIA_NGN_163

Project Licensee(s)

Northern Gas Networks

Project Start

June 2016

Project Duration

3 years and 7 months

Nominated Project Contact(s)

Jill Walker

Project Budget

£113,220.00

Summary

NGN and NEA are to undertake a collaborative research project which would aim to provide NGN with a new set of cross tenure protocols that would ensure vulnerable customers are safeguarded when a GDN has to condemn an unsafe gas appliance.

The innovation in this proposal would be to identify and develop a referral mechanism to help manage a potentially significant issue for the social groups identified and link with the Priority Services Register.

Specifically, phase 1 of the project would seek to:

- Identify the types of housing where there is a higher probability of a gas leak or Carbon Monoxide (CO) risk
- Identify the most at risk groups that may be impacted by prolonged periods without a functioning gas appliance (space heating/hot water/cooking appliances)
- Establish current relevant practices/protocols within NGN's distribution territory and identify any good practices which would be replicated
- Establish other relevant current practices/protocols within other GDN areas
- Design and develop new draft protocols for disconnection and condemning 'in-house' appliances
- Provide a summary report which outlines the analysis above and disseminates the findings to relevant NGN employees, relevant agencies and organisations

We will ensure any draft protocols were developed to ensure they are operationally practicable and reflect the statutory duties on GDN, landlords and/or third parties to ensure the gas safety of a property and the appliance is either repaired or replaced within a reasonable time frame.

The scoping and analysis in Phase 1 of the project could also be built on in order that the new or enhanced protocols that have been identified could be operationalised within NGN's distribution area through a trial with further refinements made once practical learnings

have been applied.

However, regardless of the possibility of a trial phase, if the outputs for phase 1 were achieved, the impact across NGN's network could be profound and we estimate this could help deliver the following outcomes:

- Better forecasting of gas leaks or Carbon Monoxide (CO) risks
- Increased knowledge and understanding of the roles and responsibilities of GDNs amongst referral agencies
- Reduced morbidity of health impacts caused by cold homes
- Increased enforcement of housing legislation and action against rogue landlords that do not fulfil current duties
- An increase in onward referrals for other public sector services
- Potential for increased local economic activity where remedial goods and services are procured locally
- Shared learning across GDN networks
- Build on previous work by NEA with all the GDN which illustrated suitable referral pathways to support low income and vulnerable customers to relevant support schemes (including energy supplier trust funds and other grant making bodies)
- Further define the role GDNs play in addressing fuel poverty

Third Party Collaborators

National Energy Action

Phase

Nominated Contact Email Address(es)

innovation@northerngas.co.uk

Problem Being Solved

We are aware that there are instances when Gas Network Operators (GDNs) have to shut off or condemn an unsafe gas appliance within a domestic property. This is reasonably common in the case where a gas leak or Carbon Monoxide (CO) risk is identified by a gas engineer and the source is located inside the property.

Whilst it is undoubtable that such an action is in the interests of the occupant and the surrounding properties, at present, we believe there is little standard practice when this occurs and often this can leave a costumer needing to go without hot water and space heating.

If this situation is not quickly resolved this can prompt multiple issues, particularly for more vulnerable residents unable to afford to replace the affected boiler/space heaters:

- Health impacts caused by cold homes predominantly relate to exacerbating cardiovascular stress and low internal temperatures also diminish resistance to infection and encourage damp and mould growth in the home which causes respiratory problems
- Cold indoor conditions have also been linked to poor mental health resulting from anxiety and stress
- Social isolation can be exacerbated where the home does not present a welcoming environment and there is evidence that cold homes can reduce educational attainment
- Ill health as a result of cold homes puts a huge strain on already stretched public resources and services and each winter local health services struggle to cope with cold-related hospital admissions and repeat GP visits

In addition, where the property is either privately rented or social housing, tenants could be required to notify their landlord that the gas leak or Carbon Monoxide (CO) risk has been identified by a gas engineer and it can be some time until the gas appliance is either repaired or replaced.

Despite being in rented accommodation, the onus can also sometimes be placed on the tenant to arrange these works or in a limited number of instances to pay the costs. These instances are particularly the case when the landlord cannot be contact or there is a dispute over the nature of the works or the cost of ancillary works.

GDNs often provide small electric heaters as a stop gap measure where households would otherwise be left with no heating , but there is no consistent practice across the industry and no way of assessing how long residents depend on them, and whilst they are welcome in the short term, they are more expensive to run and provide limited heat.

Method(s)

Phase 1 To develop an understanding of current NGN processes, those for other GDNs and then design and develop a protocol for disconnection and condemning 'in-house' appliances which is operationally practicable and reflects wider statutory duties.

With further consultation with NGN, this report would then be disseminated via an internal and external dissemination strategy. Then, provided the aforementioned success criteria are met

Phase 2 of the project would look to embed the operation of these practices within the NGN network.

Phase 3, over the course of two heating seasons, an independent organisation would be appointed to evaluate the impact this has made on:

1. Forecasting gas leaks or Carbon Monoxide (CO) risks
2. Enhancing knowledge and understanding of the roles and responsibilities of GDNs
3. Morbidity and the health impacts caused by cold homes
4. Enforcement of housing legislation
5. Action against rogue landlords that do not fulfil current duties

Scope

NGN and NEA are to undertake a collaborative research project which would aim to provide NGN with a new set of cross tenure protocols that would ensure vulnerable customers are safeguarded when a GDN has to condemn an unsafe gas appliance.

The innovation in this proposal would be to identify and develop a referral mechanism to help manage a potentially significant issue for the social groups identified and link with the Priority Services Register.

Specifically, phase 1 of the project would seek to:

- Identify the types of housing where there is a higher probability of a gas leak or Carbon Monoxide (CO) risk
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We will ensure any draft protocols were developed to ensure they are operationally practicable and reflect the statutory duties on GDN, landlords and/or third parties to ensure the gas safety of a property and the appliance is either repaired or replaced within a reasonable time frame.

The scoping and analysis in Phase 1 of the project could also be built on in order that the new or enhanced protocols that have been identified could be operationalised within NGN's distribution area through a trial with further refinements made once practical learnings have been applied.

However, regardless of the possibility of a trial phase, if the outputs for phase 1 were achieved, the impact across NGN's network could be profound and we estimate this could help deliver the following outcomes:

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- An increase in onward referrals for other public sector services
- Potential for increased local economic activity where remedial goods and services are procured locally
- Shared learning across GDN networks
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Objective(s)

Phase 1 Feasibility study and summary report of the findings.

Phase 2 Tangible changes to the operations within NGN

Phase 3 Evaluation of effect of changes.

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

n/a

Success Criteria

NEA/NGN have identified the following output and outcome indicators to judge whether phase 1 of the project had delivered the planned objectives*:

- I. Number of housing types identified which present a higher probability of a gas leak or Carbon Monoxide (CO) risk
- II. Number and breakdown of groups identified that may be impacted by prolonged periods without a functioning gas appliance
- III. Number and extent of relevant practices identified within NGN's distribution territory
- IV. Number and extent of relevant practices identified within other GDN areas
- V. Number of cross tenure protocols developed verified by NGN and relevant agencies and organisations
- VI. Number of opportunities provided for shared learning across GDN networks
- VII. Data from local authority Environmental Health departments of any increase in enforcement of housing legislation
- VIII. Data from local authority enforcement and licencing teams regarding any increase in action against rogue landlords that do not fulfil current duties
- IX. Number of NGN employees provided with an overview of the research findings
- X. Number of third party agencies provided with an overview of the research findings

The scoping and analysis in Phase 1 of the project will be built on in order that the new or enhanced protocols that have been identified could be operationalised within NGN's distribution area through a trial with further refinements made once practical learnings have been applied.

Some outcome indicators would also be assessed using the independent evaluation noted for phase 3. This may require the third party to develop additional metrics, in particular to assess:

- I. Any increase in knowledge and understanding of the roles and responsibilities of GDNs
- II. Reduced morbidity of health impacts caused by cold homes

- III. An increase in onward referrals for other public sector services
- IV. Increased local economic activity where remedial goods and services are procured locally

Project Partners and External Funding

NGN – fully NIA funded

NEA - non-funding partner

Phase

Potential for New Learning

To provide internal NGN staff and the other GDNs with a new set of cross tenure protocols that would ensure vulnerable customers are safeguarded when a GDN has to condemn an unsafe gas appliance.

Scale of Project

The area affected as part of the project is the NGN network geography. This is to allow for robust testing to ensure that the protocols are suitable across a range of different locations and across a broad range of the social spectrum.

Technology Readiness at Start

TRL2 Invention and Research

Technology Readiness at End

TRL5 Pilot Scale

Geographical Area

The area affected as part of the project is the NGN network geography.

Revenue Allowed for the RIIO Settlement

N/A

Indicative Total NIA Project Expenditure

Stage gate reviews applicable:

Phase 1 - £35,000, Phase 2 - £30,000, Phase 3 - £20,000

Total external cost £85,000

Total Internal cost £28,220

Total project cost £113,220

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 aim of the project is to design new processes & protocols for the benefit of the customer(s), since this project start at a very low TRL level, it is not clear yet if the project will result in cost savings because the desired outcomes are of a social nature.

Please provide a calculation of the expected benefits the Solution

See above.

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

The processes and protocols could be adopted by all network licencees, across their entire networks.

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

The aim of the project is to develop a method so it is difficult to estimate the costs of rolling out the method at this stage.

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 issues addressed by this project affects all Network Licenses. The learning that will be generated is therefore relevant to all GDNs.

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

NGN's strategy encompasses the following focus areas: Asset & Network Management, EH&S, Future Role of Gas and Customer Service. The aim of this project is to improve our services for customers once their appliances have been condemned and therefore addresses the focus area of Customer Service.

- ☒ 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.

The Smarter Network Portal has been searched for similar projects and no similar projects were found. In addition the project initiator, NGN's head of Social Strategy engages with key stakeholders, such as NEA, who confirm that no such protocols at present for GDN's.

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