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## NIA Project Registration and PEA Document

### Date of Submission

Sep 2021

### Project Reference Number

NIA\_WWU\_2\_06

## Project Registration

### Project Title

Consumer Vulnerability Impact Assessment Tool

### Project Reference Number

NIA\_WWU\_2\_06

### Project Licensee(s)

Wales & West Utilities

### Project Start

September 2021

### Project Duration

0 years and 4 months

### Nominated Project Contact(s)

Lucy Mason

### Project Budget

£35,467.00

## Summary

This spend will create a Consumer Vulnerability Impact Assessment Tool that can be used on every NIA funded project.

### Nominated Contact Email Address(es)

innovation@wwutilities.co.uk

## Problem Being Solved

Consumers are not all equal and there are many financial and non-financial barriers that exist. Networks need a tool to identify the distributional impacts (technical, financial & well-being related) of all NIA projects and assesses their impact.

From April 2021, network companies and the electricity system operator are required to assess the impact of all new RII02 projects registered on the Smarter Networks Portal in accordance with the requirements of Section 3.37 of the RII02 NIA governance document, which states that:

'Gas Transporter and Electricity Transmission Licensees must assess the expected effects of the Method(s) and Solution(s) upon consumers in vulnerable situations. This assessment forms part of the PEA and must include an assessment of distributional impacts (technical, financial and wellbeing-related) on consumers in vulnerable situations'.

This project will fulfil that obligation.

## Method(s)

We envisage the tool will operate as follows (technical method): a range of yes / no questions with respect to project characteristics. Sitting behind this is an automated decision tree that, based on the answers, returns a report of distributional impacts of each project on the affected customers. The tool itself will be simple and can be used quickly and efficiently to report consistently measured results.

A stakeholder engagement programme will be designed and implemented to ensure the tool accurately reflects issues that vulnerable customers face.

**Phase 1 (engage):** Co-creation sessions (e.g. virtual dashboard sessions), an online survey and bilateral engagement with a range of identified stakeholders through which we present different project scenarios (i.e. outcomes) to collectively brainstorm the varying impacts on different vulnerable consumer groups.

**Phase 2 (define and validate):** Following triangulation of the findings from Phase 1, validate and test the conclusions with key expert stakeholders.

**Phase 3 (evolve):** Ongoing engagement on an annual basis to refine the tool as required and to ensure it continues to offer an accurate assessment of the situations of vulnerable customers. This would be held via an annual event to be held with stakeholders, after which relevant modifications can be tested. This will also form part of the governance, as it will allow for the tool to adapt to changes and measure its continued success.

The above method has been selected because:

The envisaged tool permits a quick, repeatable method to assess the varying impact of innovation projects on vulnerable consumers (commercial method).

The stakeholder engagement not only feeds into and greatly strengthens the accuracy of the tool but also serves as a means through which its continued success can be measured, ensures the tool is kept in line with shifting vulnerable customer needs and allows for the tool to be refined in a transparent manner should any mitigations arise (technical method).

## Data Quality Statement

The project will ensure that data used is of sufficient quality to deliver project objectives via engaging with key stakeholders in the consumer vulnerability space (stakeholder lists are to be circulated and signed off internally prior to Phase 1 taking place). The feedback that they provide will directly inform the outcomes of the tool.

Data will primarily be captured in the following ways: (1) through detailed transcripts of workshops or bilateral meetings with stakeholders and (2) via survey answers as provided by stakeholders. Raw data will be stored and held by Sirio.

## Measurement Quality Statement

The above data quality objectives will be measured and confirmed in a transparent manner via Phase 2 (define and validate) to retrieve final sign-off as to whether the triangulated findings (and subsequent data inputs / quality) are wholly relevant. This ensures the traceability and reliability of results. Year on year comparability of results will be at the forefront of Phase 3 (evolve), where they will be refined on an annual basis to represent the ever shifting needs and situations of vulnerable customers.

Following completion of the common risk assessment this project will need a peer review from another network.

## Scope

The project will develop, trial and deliver a consumer vulnerability impact assessment tool, which will be developed within Microsoft Excel and require simple inputs (Y/N). The outputs of the tool will produce a clear heatmap of the impact of each project on customers affected by a wide range of situations.

In unison, a stakeholder engagement programme will be designed and delivered to inform the building of the tool.

At the end of the project a fully functional tool will be made available to the networks.

There is a lot of ongoing work to identify the most effective route to meet net zero in the UK, to support the challenge of the climate change act. However, it is imperative that all customers are included in this journey to net zero, by including the most vulnerable in assessments at the beginning of each project we ensure that future investments are to the correct level.

## Objective(s)

To create a tool that will allow networks to assess the impact of a project on vulnerable customers.

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

This project will have a positive impact on consumers in vulnerable situations. The benefits of this project will deliver better outcomes

for vulnerable customers in the transition to net zero, identifying potential risks and blockers to the success of projects at an early stage and supporting networks in cost-effectively meeting the requirement to assess the impact of innovation projects on vulnerable customers.

## Success Criteria

A successful project will create a tool, that allows networks to assess the impacts of NIA project on vulnerable consumers.

## Project Partners and External Funding

Project partners delivering this project are Sirio, the project will be wholly funded via NIA.

The below networks will also be supporting the project:

1. Cadent
2. Electricity North West
3. National Grid Gas Transmission
4. National Grid Electricity Transmission
5. National Grid ESO
6. Northern Gas Networks
7. Northern Powergrid
8. Scottish & Southern Electricity Networks Transmission & Distribution
9. SGN
10. SP Energy Networks
11. UK Power Networks
13. Western Power Distribution

## Potential for New Learning

The project will assist networks in evaluating how projects may affect vulnerable consumers. WWU are leading this project on behalf of all networks. The tool will be made available to all upon completion of the project.

## Scale of Project

The proposed scale of the project is the minimum from which the tool can be developed, informed and deployed for its intended purpose of assisting all network companies and the electricity system operator in assessing the impact of innovation projects on vulnerable customers.

If the project were on a smaller scale, we would risk:

- Reaching fewer stakeholders, making the output of the tool less robust.
- Not triangulating the feedback gathered and therefore not being able to demonstrate that stakeholder feedback has been credibly interpreted.
- Not validating decisions made based on stakeholder feedback with key stakeholders, further lessening the validity and rigour of the tool's output.

## Technology Readiness at Start

TRL2 Invention and Research

## Technology Readiness at End

TRL8 Active Commissioning

## **Geographical Area**

The project is not defined by a geographical area, stakeholders will be engaged from a wide-ranging area.

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

N/A

## **Indicative Total NIA Project Expenditure**

External Cost: £26,600

Internal Cost: £8,867

Total Cost: £35,467

## 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:

The benefits of this project will deliver better outcomes for vulnerable customers in the transition to net zero, identifying potential risks and blockers to the success of projects at an early stage and supporting networks in cost-effectively meeting the requirement to assess the impact of innovation projects on vulnerable customers.

### 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)

N/A

#### Please provide a calculation of the expected benefits the Solution

The main driver for this project is not for financial benefits but to ensure vulnerable customers are not left behind during the energy system transition. However, by including the most vulnerable in assessments at the beginning of each project we ensure that future investments are to the correct level.

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

This tool will be used by all networks across GB

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

Roll out costs should be minimal, as the tool will be fully developed at the end of the project and updates will also be provided for the remainder of RIIO-2

### 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

All networks are required to assess the impact of all new RIIO2 projects registered on the Smarter Networks Portal in accordance with the requirements of Section 3.37 of the RIIO2 NIA governance document.

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

n/a

#### 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.

A tool of this kind does not currently exist, and all networks are involved in this 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

The need for such a tool is a new requirement that should be applied consistently across all networks. It relies on evidence gathered and triangulated from expert stakeholders. The development of a tool that assesses the impact of projects on vulnerable customers, that is easily accessible to networks is entirely unique.

#### Relevant Foreground IPR

The relevant foreground IPR generated for this project will be the assessment tool itself.

#### Data Access Details

Data for this project and all other projects funded under the Network Innovation Allowance (NIA), Network Innovation Competition (NIC) or the new Strategic Innovation Fund (SIF) can be found or requested in a number of ways:

- A request for information via the Smarter Networks Portal at <https://smarter.energynetworks.org>, to contact select a project and click 'Contact Lead Network'. Wales & West Utilities already publishes much of the data arising from our innovation projects here so you may wish to check this website before making an application.
- Via our Innovation website at <https://www.wutilities.co.uk/about-us/our-responsibilities/innovation/>
- Via our managed mailbox [innovation@wutilities.co.uk](mailto:innovation@wutilities.co.uk)

Details on the terms on which such data will be made available by Wales & West Utilities can be found in our publicly available "Data sharing policy relating to NIC/NIA projects" [here](#)

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

This project seeks to create, test and finalise a desktop evaluation tool that can be used as part of our project set up processes to assess the potential impact to consumers in vulnerable situations. The work is being conducted on behalf of all the GB energy companies and is the first time that it has been attempted. The tool will be made available for use by all network licencees.

### **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**

NIA enables networks to collaborate on common problems that seek a common solution. This project will provide a mechanism by which all networks are able to build a framework tool to assist in project setup processes that delivers societal benefit. Whilst the objectives of the projects are well defined, there are technical risks in being able to achieve the desired outcome.

### **This project has been approved by a senior member of staff**

Yes