

NIA Project Registration and PEA Document

Date of Submission

Aug 2022

Project Reference Number

NIA_SPEN_0079

Project Registration

Project Title

PSR Communication Review

Project Reference Number

NIA_SPEN_0079

Project Licensee(s)

SP Energy Networks Distribution

Project Start

September 2022

Project Duration

0 years and 6 months

Nominated Project Contact(s)

Robbie MacQuarrie

Project Budget

£125,000.00

Summary

Establish whether behaviourally informed approaches in communications can improve consumer engagement with the PSR and understand any differences between consumer groups requiring bespoke approaches according to need.

This will allow DNOs to make better informed choices about how, when and who to target, thereby supporting investment and resource allocation to those most in need.

Third Party Collaborators

Frazer-Nash Consultancy Ltd

Nominated Contact Email Address(es)

innovate@spenergynetworks.co.uk

Problem Being Solved

Distribution Network Operators (DNOs) must actively engage with consumers in vulnerable circumstances and maintain accurate records of the PSR. These requirements are part of ensuring all consumer needs are supported, particularly during the transition to net zero, and to ensure the PSR provides an accurate reflection of those consumers. It is understood that, with some exceptions, consumers are generally required to self-identify their circumstances and additional needs. DNOs adopt a standard communication approach for all consumers, rather than tailoring communications according to consumer needs and/or demographics.

To engage with consumers and maintain the PSR, operators must be able to effectively communicate with consumers in vulnerable circumstances and, where applicable, encourage sign-up to ensure the right support can be provided. However, comparisons of PSRs

with the best available population records regarding vulnerability typically reveal large discrepancies between those on the PSR and the those deemed vulnerable in the general population. This suggests that consumers are either not aware of the PSR, or not motivated or capable of joining it, and that operators and suppliers may struggle to engage with consumers in a way that can accurately ascertain this information.

Moreover, there are certain groups of consumers that appear particularly under-represented on the PSR, such as those of pensionable age and families with young children. The PSR may also not currently be geared towards wider vulnerabilities, such as the digitally excluded and those in fuel poverty. This poses a problem for operators and suppliers in ensuring a representative and accurate picture of consumers in vulnerable circumstances. By trialling different communication approaches, operators and suppliers can make better informed choices about how, when and who to target, thereby supporting investment and resource allocation to those most in need.

Method(s)

This research project will aim to establish whether low-cost behaviourally informed 'nudges' in communications can improve consumer engagement with the PSR, and understand any differences between consumer groups necessitating bespoke approaches according to need. Consumer groups with the greatest under-representation on the PSR – according to national statistics – will be targeted, and wider vulnerability will also be considered (e.g. digital exclusion).

The approach will comprise a literature review and stakeholder engagement, trials deployment, and data analysis. The literature review will seek to establish prior relevant behavioural insights research, especially within the energy sector and relating to consumer communications, to allow for the development of a number of candidate interventions to trial. Meanwhile, engagement with vulnerability experts and customer services stakeholders will allow for a deeper understanding of consumer and organisational requirements. Potential interventions and coordination support will also be agreed upon, with any barriers to delivery and data access considered. Consumer communication trials will be designed according to the outcome of the literature review and stakeholder consultation, and will be implemented over an extended period, depending on the nature and complexity of the interventions. Data collection and analysis, through adoption of appropriate statistical techniques, will aim to draw out the main findings, and make clear recommendations for consumer communications approaches and suggestions for future research.

Reports will be provided following the literature review and data analysis; a summary presentation will also be delivered following completion of the project.

Scope

The project will be split into three phases:

Phase 1: Literature Review and Stakeholder Engagement

- Task 1.1: Literature Review: Review of academic and grey literature relating to behavioural insights research within the energy sector and relating to consumer communications. Best practice relating to applied trial design will also be considered.
- Task 1.2: Stakeholder Engagement: 2-3 workshops with a vulnerability expert panel and the customer service team. This will allow for a depth of understanding of the existing barriers to consumer engagement, current approaches and possible solutions. A second workshop with the customer service team is suggested to take place to allow further input into the suggested trials designs, and to identify any commercial or logistical constraints to trials implementation and data access.
- Task 1.3: Phase 1 Report: Report summarising the approach, findings and outcome of the literature review and stakeholder engagement. Suggested trial interventions will be indicated in this report.

Phase 2: Trials Deployment

This phase will involve finalising the design of a series of consumer communications trials, and implementing and coordinating those trials to allow for effective testing of each of the interventions. This phase will be run in accordance with best practice in trials design. Interventions will take the form of small, evidence-based changes to communications, such as to their content (e.g. wording), format (e.g. communication channel), frequency and timing (e.g. in step with other important changes). These interventions will be designed with both potential impact and cost effectiveness in mind. Consumers will be randomly assigned to different treatment (intervention) or control groups. A sufficient number of trial consumers will be required to ensure adequate base rates of vulnerability within the sample, and to be capable of capturing any significant changes in PSR sign-ups.

Interventions will be geared towards improving consumer engagement with the PSR, and as such several trials will need to be run bearing in mind the wide-ranging nature of consumer circumstances and barriers. The length of the trial deployment will depend on the number and complexity of these trials, allowing for a sufficient period of data collection, but is recommended to be no less than six months.

Phase 3: Data Analysis and Reporting

- Task 3.1: Data Analysis: Comprehensive analysis of data, including the intervention condition and the PSR sign-up rate. This will

include, as appropriate, importing, cleaning, transforming and statistically analysing the collected data.

- Task 3.2: Summary Report: Report of the methodology, findings, conclusions and recommendations from the research.
- Task 3.3: Executive Presentation: A summary presentation for interested stakeholders, covering pertinent findings and recommendations.

Objective(s)

Phase 1: Literature Review and Stakeholder Engagement

- To understand the state of extant behavioural science research relating to the energy sector and consumer communications, and to understand current best practice in applied trials design.
- To recognise existing consumer barriers to engaging with the PSR.
- To identify potential enhanced communications interventions for targeting consumers in vulnerable circumstances, and to acknowledge hurdles to implementation.
- To report on the above, allowing for scrutiny of suggested communications trials

Phase 2: Trials Deployment

- To agree with stakeholders and finalise the design of a set of trials
- To administer and coordinate the running of trials over an extended period (at least 6 months)
- To make provisions for effective and accurate data collection.

Phase 3: Data Analysis and Reporting

- To analyse the trials data using appropriate statistical techniques (e.g. ANOVA).
- To produce a summary report outlining the methodology, findings, conclusions and recommendations of the research.
- To deliver an executive presentation, providing sufficient detail to allow for the approach and conclusions to be interpreted.

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

N/A - RIIO-1 project

Success Criteria

The project shall deliver success by developing the following key deliverables.

1. A literature review report, covering best practice and current research into behavioural insights research within this area, along with stakeholder engagement.
2. Successful delivery of a set of trials designed to evaluate the impact of small, cost effective communications interventions aimed at improving PSR engagement by consumers in vulnerable circumstances.
3. A summary report, covering the approach and outcomes of the research in a way that facilitates a strategy of communications interventions aimed at improving PSR sign-ups.
4. An executive presentation, to be attended by DNO and industry stakeholders, outlining the approach and possible strategic implications.

Project Partners and External Funding

Frazer-Nash Consultancy

Potential for New Learning

A variety of new learning shall be generated by conducting this research, including:

- A detailed understanding of the breadth of extant behavioural science research as applied to the energy sector and consumer communications, and broader relevant theory as needed.
- Improved understanding of the barriers (capability, opportunity, motivation) to consumers engaging with the PSR, and for operators engaging with consumers in vulnerable circumstances.
- Addressing the apparent gap in robust, behaviourally based research into consumer communications within the energy sector.
- An understanding of the quantifiable impact of behavioural interventions, along with the feasibility and requirements of conducting this kind of research within DNO customer services. This will allow for a business case to be made for testing and implementing further interventions.
- Development of a number of further potential interventions which can be trialled following completion of the present project.
- Improved awareness and wider interest in behavioural science research within the energy sector.

Scale of Project

Research into small-scale communications interventions within customer services to improve PSR engagement.

Technology Readiness at Start

TRL2 Invention and Research

Technology Readiness at End

TRL5 Pilot Scale

Geographical Area

Trial data will be gathered from SPEN's license area.

Revenue Allowed for the RIIO Settlement

None

Indicative Total NIA Project Expenditure

£125,000

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 - RIIO-1 Project

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

N/A - RIIO-1 Project

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)

Whilst difficult to estimate prior to conducting the research project, the proposed approach is designed to provide low-cost interventions that have significant impact, and are therefore capable of producing high return on investment. Some of the learning from this project would also allow for further, streamlined research to be conducted should this initial approach provide successful. Improving the registration rates and validation of the PSR will also have secondary benefits for consumers, in that it will allow SPEN to more efficiently manage its relationships and engagements with consumers in vulnerable circumstances.

Please provide a calculation of the expected benefits the Solution

Research project only.

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

The project will be replicable across the customer service departments of all electricity network licensees in the UK.

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

If successful, similar communications and engagement approaches could be rolled out by other licensees across the UK with relatively low-cost. Adaptions to communications could be integrated within routine reviews or achieved through more proactive updates. In the longer term, deployment of this kind of behavioural science approach more broadly within licensee organisations would require access to SQEP, budget and appropriate data management.

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 learnings shall have a variety of uses including:

- Supporting the adoption of evidence based behavioural approaches for consumer communications more broadly.
- Identifying future research opportunities with behaviourally informed research.
- Wider application of an improved understanding of the barriers to engaging with consumers in vulnerable circumstances.

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

Generally, to improve overall engagement with the PSR for consumers in vulnerable circumstances. This relates to SPEN's ED2 objectives to meet an 80% PSR registration rate for the target populations and achieve 60% validation.

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 review of the smarter networks portal has revealed there are no other projects or initiatives in the UK with a similar focus to this project. It is understood that a related project is being led by Severn Trent Water, undertaken as part of the Ofwat Innovation Fund, 'Supporting Customers in Vulnerable Circumstances'. This aims to "understand consumer engagement needs and intends to re-engage consumers as trusted sources of information for the sector". The focus of that project is understood to be broader in scope than the proposed project. However, we will try to establish lines of communication between project delivery teams to diminish potential overlap and to create opportunities for shared learning.

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

The proposed project will aim to develop low-cost, small-scale interventions with the explicit aims of improving PSR engagement. The Ofwat project identified above is understood to be adopting a wider focus, aiming to understand consumer engagement channels and customer journeys. While both projects are planned to involve research and trials, it is unlikely that the interventions will share any similarities across the projects. Where possible, we will also try to build on the research and trials carried out as part of that project. Further, where any unintended overlap occurs, we will aim to identify any differences in findings between the target sectors, which would help inform approaches to sharing information on consumer vulnerability. Overall, there is potential for these two projects to complement one another, and recognise the need for greater behavioural research of this kind across the utilities more generally.

Additional Governance And Document Upload

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

To our knowledge, behavioural insights approaches have not been applied to consumer communications with the aim of improving PSR engagement for those in vulnerable circumstances. This kind of approach has been successfully applied in the energy sector more broadly. For example, consumers have been encouraged to reduce energy consumption, increase supplier switching behaviour and uptake 'green' initiatives. Ofgem have also played an important role in conducting research of this kind. Employing behavioural insights with consumers in vulnerable circumstances represents a novel and innovative strategy. This may not have been done previously due to the complex barriers in engaging with certain consumer groups, the potential risks associated with trialling different communication strategies, or a lack of budget to conduct this kind of research.

We believe the success of this approach within the sector and elsewhere in consumer communications warrants undertaking this initial applied research project.

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 impact of different consumer engagement strategies is not well understood by DNOs. It is not business-as-usual practice to conduct trials research with alternative communication approaches. An understanding of both the particular barriers faced by consumers and the evidence base for applied behavioural interventions is required. It is difficult to demonstrate a clear business case for conducting research over a longitudinal period.

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

There are technical, commercial and operational risks associated with the project that need to be further understood, as outlined below. NIA support will help mitigate some of this risk:

- This research requires a combination of applied technical knowledge, personnel with the ability to make amendments to customer services processes and access to consumer data.
- There ethical implications associated with carrying out this research, including the fact that participation will be largely unknown to consumers, and that participants in the control group will not be exposed to the potential benefits of those in the intervention groups. Additionally, there is a commercial risk that some of the interventions may have a negative impact on PSR engagement. However, since the impact of alternative communications approaches is largely unknown, this kind of research would be justifiable within this context.
- There are reputational risks if these research trials are judged by consumers to be unduly influencing behaviour.
- Mitigations for the above risks include transparency in the approach, aims and findings of the research; internal ethical consideration; and subsequent wider implementation of successful interventions following trials completion (covering those who were in control conditions or who did not form part of the research).

This project has been approved by a senior member of staff

Yes