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## NIA Project Registration and PEA Document

### Date of Submission

Oct 2016

### Project Reference Number

NIA\_ENWL018

## Project Registration

### Project Title

Project Avatar

### Project Reference Number

NIA\_ENWL018

### Project Licensee(s)

Electricity North West

### Project Start

October 2016

### Project Duration

5 years and 3 months

### Nominated Project Contact(s)

Electricity North West Innovation Team

### Project Budget

£1,600,000.00

## Summary

**Engagement with ENWL customers, GB suppliers with learning applicable to all licensed operators.**

**Experts:** consultation with a range of specialist service organisations and manufacturers of innovative technologies and relevant trade associations.

**Customer engagement:** research across the full range of ENWL customers: domestic and commercial customers with specific quotas on sub-segments including but not limited to urban, rural, the young (18-24 years) and customers who have made previous contact with their DNO.

**Staff engagement:** frontline ENWL customer service staff.

### Nominated Contact Email Address(es)

innovation@enwl.co.uk

## Problem Being Solved

The customer service landscape is changing. Wide spectrums of political, economic, social, demographic and technological factors are accelerating a shift in customers' needs and expectations, with some sectors adopting more radical customer service solutions to match to their customer base. Customers today are better informed and more empowered than ever before. DNO's need to understand and predict customers current and future needs to ensure they maintain and improve upon the level of service provided. Continuous investment is required in the right technologies and techniques that best meet the needs of different customers. An understanding of functional and emotional service needs, by specific customer group, will be key in informing DNO policies and investment plans for ED2 and beyond.

## Method(s)

To facilitate a comprehensive understanding of the future of customer service, the method will encompass six key phases of customer and stakeholder engagement:

### Phase One: Current Trends

A literature/desktop review to gain contextual understanding regarding the future of customer service from a range of different industry sectors. This will consider existing data and literature on future needs and possible customer service concepts and/or known solutions from the UK and other international sources. Learning will be transferred from initiatives that have already and are expected to radically change customer service, such as online self-serve (financial sector) and 'on demand' services (transport, travel and tourism) and remote interactive services.

Phase one will culminate in the publication of the proposed project methodology statement which will be peer reviewed. The methodology will be refined as a result of consultation with key experts in phase two.

### Phase Two: Expert Thinking

This phase of research will involve workshops and consultation with a range of specialist organisations to understand in detail potential new and future innovations in customer services, building upon the knowledge developed in phase one.

Discussion with leading manufacturers of innovative technologies and relevant trade associations will identify developments that could if required be in production during ED2 and beyond. The emphasis will be on technical innovations that hybridize commercial considerations with customers' service expectations, applicability and acceptability.

We will also consult with organisations, identified in the desk research, that are embracing new techniques, along with experts in the field of customer service e.g. Institute of Customer Service, to understand longer term strategies and visions of future service. Finally, engagement with Electricity North West (ENWL) customer service staff, closest to the current issues and needs of the customer, will advise the project 'from the bottom up'.

Expert thinking in phase two will assist in evaluating the proposed approach and refining the research questions that will be explored with customers in subsequent stages.

### Phase Three: Exploratory Research with Customers

Qualitative research will be conducted in the form of an engaged customer panel (ECP); a series of focus groups with a range of customers from target segments, including, but not limited to, domestic, commercial, urban, rural and the young (18-24 year olds). Supplementary depth interviews will also be conducted with representatives of specific customer sectors such as vulnerable customers.

This phase will explore customer needs, both current and future, and reactions to specific customer service concepts identified and techniques evaluated in phase two. This will take place in partnership with experts in the field of customer service and technical innovation..

Initial discussions will evaluate short, medium and long term macro customer service requirements. Subsequent discussion will focus on micro needs, with an exploration of future customer service expectations by DNO touch point (including but not limited to supply interruptions, connections and general enquiries). Reactions to potential new services and techniques, designed to improve standards and efficiency, and make customers lives easier or more enriched, will be assessed.

### Phase Four: Pilot Survey

A draft quantitative questionnaire will be piloted with the ECP. The instrument will be revised as necessary, based on ECP feedback, before being piloted with previously unengaged domestic and commercial customers. The survey will also be peer reviewed before it is finalised and rolled out more widely in phase five.

### Phase Five: Quantifying Customer Needs

A large scale statistically robust quantitative survey amongst ENWL customers will quantify customer service requirements. The survey will be designed to test how existing customer service needs and expectations vary by customer segment and/or touch-point and how they may evolve in the future. The survey will also quantify which needs and expectations are most important in driving current measures of customer satisfaction and therefore warrant investment.

The survey will include psychographic, demographic, geographic and behavioral related questions. Analysis will identify how needs and expectations vary across different customer segments to inform the development of a blueprint for future customer service provision.

### **Phase Six: Meeting Customer Needs**

Engagement with ENWL customers to test solutions using delivery technologies identified in project that will inform a blueprint for customer delivery to address future customer service needs. Insight generated from phases one to five will be utilised to develop the design concepts for testing in phase six. The quantitative survey will be piloted before it is rolled out more widely.

This research will identify how ENWL can satisfy/best serve currently unmet needs and tailor their services according to the bespoke future expectations of specific customer segments. Medium and long term customer service concepts will be evaluated to establish the acceptance of a range of technologies and approaches to meet the future needs of ENWLs' customers. Any variation in appeal and acceptability by key customer segment will also be assessed.

The survey will also identify the likely level of support and behaviour change required by DNOs to facilitate implementation.

## **Scope**

**Engagement with ENWL customers, GB suppliers with learning applicable to all licensed operators.**

**Experts:** consultation with a range of specialist service organisations and manufacturers of innovative technologies and relevant trade associations.

**Customer engagement:** research across the full range of ENWL customers: domestic and commercial customers with specific quotas on sub-segments including but not limited to urban, rural, the young (18-24 years) and customers who have made previous contact with their DNO.

**Staff engagement:** frontline ENWL customer service staff.

## Objective(s)

Delivering customer interactions in a technologically advanced seamless system manner will only impact on the costs and quality of a system operators operations if the customer responds positively to that interaction.

- To broaden the level of understanding concerning customer service needs and future expectations
- To have a robust measure of anticipated future attitudes, behaviours and needs by customer segment
- To integrate customer research with existing service provisions and innovative solutions to optimise a customer service approach, enabling a strategy for DNOs to meet the future needs and expectations of its customer base
- To facilitate the creation of bespoke customer service solutions targeted at specific customer groups to meet their unique medium and long term future needs
- A blueprint for implementing bespoke customer service solutions incorporating a link to network control systems and data

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

n/a

## Success Criteria

The project success criteria are:

- An understanding of current and future customer service needs and how unmet needs might be addressed
- Identification of a range of innovative solutions that best meet customers increased servicing expectations
- Reactions to mass customer contact capabilities and identification of the optimal strategy in terms of automation and interactivity
- An appreciation of the variations in acceptability and applicability of innovative technologies and solutions across key customer segments and groups
- A customer service blueprint, which incorporates data from existing network control systems, to best meet existing and future needs of specific customer groups and leverage higher levels of customer satisfaction
- A demonstration of how innovative technologies and solutions can assist DNOs to better plan their customer investment strategy

## **Project Partners and External Funding**

Impact Research  
3 The Quintet  
Churchfield Road  
Walton on Thames  
Surrey  
KT12 2TZ

## **Potential for New Learning**

The following new learning is anticipated:

- Understanding how customer service needs vary by different customer segments and touch-points
- Quantifying how needs and expectations are likely to change in 2020 and beyond
- Utilising the blueprint to guide investment decisions for ENWL and other DNOs
- Informing optimal communication with customers and methods of disseminating information

## **Scale of Project**

If the approach is credible, can provide solutions tailored to, and accepted by specific customer groups, it could be implemented by all DNOs as a business as usual model; provided the approach is easily applicable and affordable. This blueprint is expected to inform long term customer strategy and investment planning.

### **Technology Readiness at Start**

TRL3 Proof of Concept

### **Technology Readiness at End**

TRL5 Pilot Scale

### **Geographical Area**

Customers involved in this research will be from ENWL's operating region.

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

Zero

### **Indicative Total NIA Project Expenditure**

£1.6 million

## 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)

By using new technologies to collate and present information to a varied customer base in a manner most suitable to an individual we would anticipate an increase in efficient service delivery and customer satisfaction whilst being able to deliver that service at a much reduced cost.

We estimate a potential reduction of 50 FTEs, resulting in an annual savings of £1,500,000.

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

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

The new method and learning developed would be applicable to every DNO. The learning will also be beneficial to licensed operators in other industries.

We would estimate a saving in other Network licenses proportionate to the customer base, ie approximately £2m pa across all electricity licenses

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

### **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**

An understanding of service needs and expectations, by specific customer group, and the future technology available to process and present information to meet these needs will be key in informing DNO policies and investment plans for ED2 and beyond.

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

Customer service is a key theme in ENWL's Innovation Strategy



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.

A review of the innovation portal and other network license projects has not highlighted another project that this work will duplicate

### 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