NIA Project Registration and PEA Document

Date of Submission

Dec 2015

Project Reference Number

NIA_SGN0091

Project Registration

Project Title

Incident Management (Stage 1)

Project Reference Number

NIA_SGN0091

Project Licensee(s)

SGN

Project Start

December 2015

Project Duration

0 years and 5 months

Nominated Project Contact(s)

Oliver Machan, Innovation Project Manager

Project Budget

£25,197.00

Summary

The focus of this first stage of the project is to independently review our current practices against industry recognised blue-light standards. This platform will represent a state of the art improvement over existing methods of major incident response management by improving safety, repeatability, efficiency and onward recharge where appropriate and will set a new standard for the future of incident response and management. Although the aim of the review of SGN's Incident Management Process, is intended to identify candidate areas of interest for hybrid development, some possibilities have already been identified such as:

- Managing the mobilisation process of the response team once a major incident has been identified

- Managing of staff and vehicles on-site including 'tag-in – tag-out'

- Monitoring the availability of specialist equipment and making sure that staff skills match the role requirements

- Integration and monitoring of certain key equipment such as remote pressure monitors, with alarm thresholds where appropriate

- Support for Disconnect/Connect operations, using a map gazetteer to produce a list of properties which can be divided into sectors and shared with teams via hand-held devices and where status can be updated and client detail (contact or vulnerability data) entered.

- Time-on-task recording for staff and resources to provide data for the claim-back process

Nominated Contact Email Address(es)

sgn.innovation@sgn.co.uk

Problem Being Solved

Loss of supply incidents can affect hundreds or thousands of properties and the current software tools used to support the process of managing the incident response are not integrated or fit for purpose. More significantly, a major loss of supply incident (affecting 100,000 properties) will currently present significant challenges to a GDN in managing the incident.

Incidents that place a high demand on resources to investigate and manage are not limited to 'actual' loss of supply. In January 2013 the 'French Gas Cloud' resulted in a period of high call volumes to the national emergency number and onward to the GDN OCC's. Subsequent investigation work was also carried out by regional depot staff. Approximately 50% of the cost of the incident was spent on admin staff having to capture and process data to ensure every customer had a visit or had some form of contact from a GDN. This also had an ongoing financial impact of other depot staff having to back-fill and additional assistance to maintain on-going depot activities during the incident.

A major incident (of any kind) will require the GDN to provide significant resources, and come at a considerable cost. Operations require a comprehensive solution to manage information and resources during a large scale incident and to enable a quicker decision making process on resource requirements. The information captured by the solution will also help to provide accurate cost information after the incident's resolution and onward recharge where appropriate to ensure the GB Gas customer is not paying for other companies' errors when working or operating near gas mains and assets.

SGN are now looking to assess the possibility of introducing a more advanced innovative incident management platform solution to improve the operational processes, specifically around customer interaction, people and resource management and incident recharge (where appropriate) using the fire service incident response methodology as a starting point. This was identified as the best in practice fit following an earlier PQQ exercise.

Method(s)

- Visit to OCC, review of sample previous major incidents
- Review of Policy and Process documentation, discussions with SGN staff, analysis of possible improvements and writing up
- Analysis of technical Enhancements, discussions with SGN staff, feasibility and preliminary system design, use case analysis, cost estimation and presentation material (storyboard, mock ups)
- Business case analysis of possible enhancements and report
- Presentation of findings to SGN and final discussions

Scope

The focus of this first stage of the project is to independently review our current practices against industry recognised blue-light standards. This platform will represent a state of the art improvement over existing methods of major incident response management by improving safety, repeatability, efficiency and onward recharge where appropriate and will set a new standard for the future of incident response and management. Although the aim of the review of SGN's Incident Management Process, is intended to identify candidate areas of interest for hybrid development, some possibilities have already been identified such as:

- Managing the mobilisation process of the response team once a major incident has been identified
- Managing of staff and vehicles on-site including 'tag-in – tag-out'
- Monitoring the availability of specialist equipment and making sure that staff skills match the role requirements
- Integration and monitoring of certain key equipment such as remote pressure monitors, with alarm thresholds where appropriate
- Support for Disconnect/Connect operations, using a map gazetteer to produce a list of properties which can be divided into sectors and shared with teams via hand-held devices and where status can be updated and client detail (contact or vulnerability data) entered.
- Time-on-task recording for staff and resources to provide data for the claim-back process

Objective(s)

The objective of this work is to develop a sound understanding of the requirements to take forward to a development stage. To do this the project will engage professionals from the incident management arena and the Network departments involved in incident management to review and bring forward process designs and operating best practices. This will ensure that at the end of the overall project the industry has a robust and complete incident management solution that is ready for implementation.

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

n/a

Success Criteria

Specific success criteria are:

- To investigate and fully understand SGNs existing Incident Management Process
- To develop and propose changes and technical enhancements to the Incident Management Process.
- To demonstrate potential technical solutions to improve the Incident Management Process, through mock ups and use cases, and to

present those solutions to SGN for usability feedback.

Project Partners and External Funding

n/a

Potential for New Learning

n/a

Scale of Project

This project has been designed to be the initial stage of a larger project developing a Gas Industry system. Adopting a stepwise approach allows the costs and risks to be managed whilst at the same time gauging the technical viability for the following stage.

Technology Readiness at Start

TRL2 Invention and Research

Technology Readiness at End

TRL3 Proof of Concept

Geographical Area

The feasibility study will be undertaken at the VectorCommand offices with visits to SGN staff and location as and when required. No trials are anticipated during this stage.

Revenue Allowed for the RIIO Settlement

There are no direct saving benefits anticipated.

Indicative Total NIA Project Expenditure

The total predicted project expenditure is £25,197, 90% of which is allowable NIA expenditure (£22,678).

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)

It is difficult to accurately quantify the actual financial benefit at this stage; as indicated by the low start TRL shows the Method is at an early stage of development and cost estimates will be refined as it is further developed. However, It is envisaged that deployment of this technology may lead to financial benefits in the following areas:

- More efficient use of resources during an incident
- Better customer visibility during an incident
- Full value recharge where a third party is responsible
- Reduction of administration post incident

Please provide a calculation of the expected benefits the Solution

N/A

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

This method could be applied across the whole of GB and applies to all network licensees.

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

This is not currently known.

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

By undertaking this development work the gas industry as a whole can share the overall cost, knowledge, risk and subsequent benefit from development and testing.

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

☑ 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.

n/a

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