

Applies to: Future Networks	Network Innovation Allowance Project Registration & Eligibility Document	FO-PS-FNP-027
Classification: Public	Uncontrolled if printed	Rev: 1.02

The author / owner of this document is:	This document has been approved for issue by:	Date of Issue:	Review Date:
Kate L Jones – Programme Delivery Manager	Stewart Reid – Head of Future Networks and Delivery	July 2015	July 2018



Date of Submission

08-Mar-2019

NIA Project Registration and PEA Document

Notes on Completion: Please refer to the **NIA Governance Document** to assist in the completion of this form. Please use the default font (Calibri font size 10) in your submission. Please ensure all content is contained within the boundaries of the text areas. The full-completed submission should not exceed 6 pages in total. The fields denoted by solid borders are optional.

Project Registration

Research Area

Please highlight the most relevant research area from the table below

Distribution

Low Carbon and 11kV Networks
 Network Monitoring
 Low Carbon Generation and Connections
 Commercial
 Safety, Health and Environment
 Low Carbon Technologies
 Network Operations, Comms & IT
 Energy Storage and Demand Response
 High Voltage Networks
 Various

Transmission

Safety
 Reliability
 Environment / Low Carbon
 Enabling Connections
 Commercial
 Strategic
 System Operability
 Working Processes

Project Title

Social Constrained Managed Zones (CMZs)

Project Reference

NIA_SSEN_0036

Funding Licensee(s)

SSEN

Project Start Date

Mar 2019

Project Duration

9 months

Nominated Project Contact(s)

Joe McNeil – joe.mcneil@sse.com

Project Budget

£190,000

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Problem(s)

SSEN have released 5 CMZ zones to date, all structured around reinforcement deferral where the NPV of postponing reinforcement over a 4-6-year term provides the overall value of the service provision. To date, tender responses received from CMZ type procurement exercises have largely been from large scale I+C customers such as energy storage providers. Whilst, there has been an appetite from smaller community led initiatives to become involved CMZ, this has proven to be challenging for them due to the burden of conforming with the requirements of an OJEU procurement exercise and commercial barriers in place to protect the business such as Achilles registration.

In addition, SSEN's current tender assessment process does not currently consider the wider societal benefit of a community providing the Flexibility, generation or efficiency of a CMZ service. Although SSEN has established a clear case for communities and local organisations providing services to a DSO, local groups are currently behind the curve in understanding this business case and as a result need assistance to commit to the concept. In short, the market place at a community level needs assistance and stimulation.

Method(s)

The project will provide a stream of stakeholder engagement which will aid smaller community organisations to take part in the CMZ process, starting with two areas of Drayton and Coxmoor Wood. This will be achieved through the following:

- An initial event in each of the two geographical areas to gain information and opinions from the community groups about the project and the CMZ process
- A stakeholder engagement research piece in collaboration with National Energy Action (NEA) to identify the correct groups and methods of engagement
- Development of a materials pack to share with community groups
- A suite of internal processes for simplified legal and procurement documents for use with smaller community groups
- Running an informative workshop with community groups interesting in providing SCMZ services
- Providing support for community groups in the form of an option of seed funding or SSEN funded consultancy support to aid the production of procurement documentation and PQQ/ITT submissions

Scope

The project has three aspects:

- Work in the Drayton and Coxmoor Wood and will support community groups to submit tender responses to the ongoing procurement process for the CMZ zones in those locations. The project scope includes the provision of support in relation to the tender in these locations only (SCMZ Delivery Document)
- Work on the documentation of a longer-term process, to allow for the replication of this process in other areas
- Identify a method for accounting for the social and environmental benefits for the SCMZ providers participation

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The objectives of the project are:

- 1) To reduce the barriers of participation in the CMZ process for smaller community groups by:
 - Producing documentation that will aid smaller community groups in understanding the process and requirements of the SCMZ process
 - Providing direct support to interested providers in the Drayton and Coxmoor Wood areas, through seed funding and/or consultant support

- 2) Determining the internal processes required for a future rollout of SCMZ to encourage participants in other CMZ areas by:
 - Working with legal, planning, regulation, CMZ and procurement teams to design processes for the trial which pass approval from all these internal teams
 - Gain approval for use of these processes for BAU applications

- 3) Determine a method for calculating the social and environmental benefits of SCMZ provider participation to include in network planning decisions in future by:
 - Working with BEIS and Ofgem on calculations and approval

Success Criteria

The project will be deemed successful if:

- 1) SCMZ Providers are passed to the CMZ team to take part in a BAU process
- 2) The SCMZ processes are approved to be rolled out across other CMZ areas
- 3) A method for calculating the social and environmental benefits of SCMZ participation is developed and approved

Technology Readiness Level at Start

TRL5

Technology Readiness Level at Completion

TRL8

Project Partners and External Funding

NEA

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Potential for New Learning

The SCMZ project has potential for learning to share among the GB DNOs. The immaturity of the flexibility market is a major blocker to the utilisation of flexibility in managing distribution related constraints . The Social Constrained Managed Zones project will progress the understanding of the market and how to advance its maturity within smaller organisations.

The project will provide a proven method of mobilising dormant flexibility (marginal cost) within an area and will maximise the likelihood of affordable flexibility being available to DSOs. This will include: opportunities, barriers to entry and recommendations for further market stimulation in the future. In addition, the learning associated with the quantification of societal and environmental benefits will allow for understanding of the wider impact and benefit of expanding the flexibility and DSR marketplaces.

There will be two main documentation outputs from the project which will be shared between the DNO’s are:

- SCMZ ‘delivery document’ (outlined process) will enable the replication of the process within BAU implementations of SCMZ in wider zones, without the need for additional resource. It will also be accessible for other DNOs and industry partners once completed and successful as an example of best practice
- SCMZ ‘Index’ Document to be utilised in future BAU implementations of SCMZ and circulated as an example of best practice among DNO’s, ENA, industry partners and potential SCMZ communities

Scale of Project

The project evaluates two unique Primary substation fed areas, for one CMZ tender period.

Geographical Area

The project will explore the two regions of Coxmoor Wood (Hampshire) and Drayton (Oxfordshire) The areas are located in SSENs Southern Electric Power Distribution (SEPD) patch. One located in the Ridgeway region and the other in the South East Region.

Revenue Allowed for in the RIIO Settlement

Indicative Total NIA Project Expenditure

£186,000

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Project Eligibility Assessment

Specific Requirements 1

1a. A 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 systems and 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

Specific Requirements 2

2a. Has the Potential to Develop Learning That Can be Applied by all Relevant Network Licensees

Please answer one of the following:

i) Please explain how the learning that will be generated could be used by relevant Network Licenses.

All network licensees are utilizing flexibility to defer network reinforcement and as part of their network planning suite of tools. All three aspects of the project provide learning for other DNOs. The societal benefits can be applied across the GB network, as can the learnings in engaging with smaller community groups in flexibility tendering.

ii) Please describe what specific challenge identified in the Network Licensee’s innovation strategy that is being addressed by the Project.

2b Is the default IPR position being applied?

Yes

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No

If no, please answer i, ii, iii before continuing:

i) Demonstrate how the learning from the Project can be successfully disseminated to Network Licensees and other interested parties

ii) Describe how any potential constraints or costs caused, or resulting from, the imposed IPR arrangements

iii) Justify why the proposed IPR arrangements provide value for money for customers

2c. Has the Potential to Deliver Net Financial Benefits to Customers

Please provide an estimate of the saving if the Problem is solved.

The savings will be the delay of reinforcement (and option to not invest if expected demand does not materialize)

Please provide a calculation of the expected financial benefits of a Development or Demonstration Project (not required for Research Projects). (Base Cost – Method Cost, Against Agreed Baseline).

Base costs include traditional reinforcement of Drayton and Coxmoor Wood – NPV @ 16 years = -£3.64m
Project – Implementation costs = £0.190m, Ongoing costs = £0.02m/year TOTAL after 4 year contracts= £0.198m
Investment delayed by 2 years at Drayton and 3 years at Coxmoor Wood – NPV @ 16 years £-3.37m

Total project benefit = £0.27m NPV @16 years

Please provide an estimate of how replicable the Method is across GB in terms of the number of sites, the sort of site the Method could be applied to, or the percentage of the Network Licensees system where it could be rolled-out.

Expected SSEN Rollout within RIIOD1 – 6 sites

Expected SSEN benefit within RIIOD1 assuming savings similar ~ £1.62m

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

It is expected that the costs of rollout will be much lower than the initial project costs.

The site-specific rollout costs will depend on availability payments for flexibility as decided by reinforcement costs and costs benefits by each DNO at the investment planning stage.

For SSEN, the cost will be a factor in the CMZ BAU process once the market is stimulated. This learning will be used in future sites.

The documentation and guidance will be available at project closure to all DNOs and interested parties.

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2d. Does Not Lead to Unnecessary Duplication

Please demonstrate below that no unnecessary duplication will occur as a result of the Project.

This project complements the suite of CMZ services that are being offered as BAU at SSEN, there is no duplication of work and the project team are working closely with the BAU team to ensure this. While there are a number of projects across GB on flexibility this project is specifically focusing on the methods of engaging with smaller community organisations.

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

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