

Network Innovation Competition (NIC) 2019

Proposal Guidance

The Role of National Grid Gas Transmission

We are the System Operator and Transmission Owner of the gas National Transmission System (NTS) in Great Britain. As System Operator our primary responsibility is to transport gas from supply points to exit offtake points safely, efficiently and reliably. We manage the day-to-day operation of the network including balancing supply and demand, maintaining system pressures and ensuring gas quality standards are met. As Transmission Owner we must make sure all of our assets on the NTS are fit for purpose and safe to operate both now and to meet future customer needs. We develop and implement effective asset management strategies, investments, maintenance plans and asset replacement schedules to keep the gas flowing.

Our network

The NTS plays a vital part in the secure transportation of gas and facilitation of the competitive gas market. We have a network of 7,600 km pipelines, presently operated at pressures of up to 94 bar, which transports gas from coastal terminals and storage facilities to exit offtake points from the system. At the exit offtake points, gas is transferred to eight Distribution Networks (DNs) for onward transportation to domestic and industrial customers, or to directly connected customers including storage sites, power stations, large industrial consumers and interconnectors (pipelines to other countries).

Our regulatory framework

The RIIO (Revenue = Incentives+ Innovation + Outputs) regulatory framework was implemented by Ofgem in 2013/14. RIIO uses incentives to drive innovation to develop and deliver more sustainable energy. We are currently within the RIIO-T1 period (2013–21); under this framework we have set outputs which have been agreed with our stakeholders. We deliver these outputs in return for an agreed revenue allowance from Ofgem.

For more information see: www.nationalgrid.com/gasinnovation

NIC Governance

There is a fund of up to £20m available each year to Gas Transmission and Distribution networks to fund projects we put forward. Projects must be innovative, save network customers money and have a carbon or environmental benefit. Proposed projects are subject to an Initial Screening Proposal (ISP) stage in which Ofgem will give a go/no go decision to proceed to full project submission. Costs for development of the project are not recoverable. Please bear in mind the expected proportion of the benefits of a project which will accrue to the gas transmission system and its customers, as opposed to other parts of the energy supply chain.

The full NIC governance document may be downloaded here:

https://www.ofgem.gov.uk/system/files/docs/2017/06/gas_network_innovation_competition_governance_document_version_3.0.pdf

Specific guidance

All proposals must be submitted on the Proposal Submission Form.

Please provide a title, list of suppliers/partners that will deliver the project, an estimated budget and duration, and select which idea from the themed list your proposal relates to. If your idea doesn't fit with a category then please add it at the end of the list.

We will assess your proposal against the 7 questions on the form. Guidance on answering the questions:

1. Summary of the proposal (assume a non-technical audience) **300 words maximum**

Summarise in no more than 300 words:

- what the problem or opportunity is
- how the proposal will approach it
- how and why the approach is innovative
- what the cost benefit to the transmission network is
- what the carbon/environmental benefit to the transmission network is

2. Outline of method/project stages and deliverables

Explain how the project will be structured and go about developing the solution. Explain what the stages of the project will be and the key activities in each.

Explain the outline cost and time for each stage.

Explain what the stage gates of the project are and what the success criteria and deliverables are from each stage.

3. How is the proposal innovative?

Explain how the proposal:

Is innovative (ie not business as usual) and has an unproven business case where the innovation risk warrants a limited Development or Demonstration Project to demonstrate its effectiveness

Further explain which specific requirement(s) is met by the project, as described in the NIC governance document:

4.9. A NIC Project must have the potential to have a Direct Impact on a Network Licensee's network or on the operations of the GB System Operator and involve the Development or Demonstration of at least one of the following:

- *A specific piece of new (ie unproven in GB) equipment (including control and/or communications systems and/or software);*
- *A specific novel arrangement or application of existing gas transmission and/or distribution equipment (including control and communications systems software);*
- *A specific novel operational practice directly related to the operation of the gas transportation system; or*
- *A specific novel commercial arrangement.*

4. Cost benefit analysis

Explain how the proposed project will:

b) Deliver[s] value for money for gas customers

Where possible give an example calculation of the cost saving or a method of calculating the saving. For example estimate the cost saving of the proposed method if the project is successful, and the scalability or number of potential instances of use. Estimate the payback period of the project.

5. Carbon/environmental benefit analysis

Explain how the proposed project will:

a) Accelerate[s] the development of a low carbon energy sector and/or delivers environmental benefits while having the potential to deliver net financial benefits to existing and/or future network customers

Where possible give an example calculation of the possible carbon/environmental benefit or a method of deducing the carbon/environmental saving. The saving could be in CO₂, CO, NO_x or other emissions, or any other environmental benefit that can be quantified.

6. Relevant expertise

Explain why you/your project partners are the best people to deliver this project and what unique expertise you can bring.

Explain what previous experience you have of working with National Grid or on NIC/NIA projects or other innovation projects.

7. Any other information (optional)

Provide any further supporting information that may be relevant to your proposal.

This question is optional.

Get in Touch

For any queries please contact Box.GT.Innovation@nationalgrid.com