National Grid Electricity Transmission

Network Innovation Competition (NIC)

Call for proposals **2018**

Proposal guidance

The role of National Grid Electricity Transmission

We are the Transmission Owner of the Electricity Transmission System in England and Wales. As Transmission Owner we must ensure all our assets on the system 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 deliver safe and secure energy to our customers.

Our network

Our networks are made up of about* 7,200km (4,474 miles) of overhead line, 1,500km (932 miles) of underground cable and 342 substations.

Our regulatory framework

Ofgem implemented the RIIO (Revenue = Incentives+ Innovation + Outputs) regulatory framework in 2013/14. RIIO uses incentives to encourage 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 that have been agreed with stakeholders. We deliver these outputs in return for an agreed revenue allowance from Ofgem.

For more information click

NIC 2018 - Call for proposals

We are calling for innovative proposals that will help to transform Great Britain's electricity transmission network. To help focus your ideas we have mapped out some key themes and challenges where we would welcome proposals. Please see the 'NIC Call for proposals' flyer for a full description of the themes and ideas on our Website

NIC governance

There is a fund of up to £70m available each year to electricity networks to fund projects we put forward. Projects must be innovative, save network customers money and have a carbon or environmental benefit. Proposed projects go through an Initial Screening Proposal (ISP) stage in April 2018. This is when Ofgem will give a go/no go decision to proceed to full project submission. Costs for development of the project are not recoverable. Please consider the expected proportion of the project's benefits which will accrue to the electricity transmission system and its customers, as opposed to other parts of the energy supply chain.

The full NIC governance document may be downloaded here: NIC Governance

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 category 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 seven questions on the form. Here is some 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:

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

2. Outline of method/project stages and deliverables

Explain how the project will be structured and will develop the solution. Explain the stages of the project and the key activities in each.

Explain the outline cost and time for each stage.

Explain the stage gates of the project, and the success criteria and deliverables for 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) are 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 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 electricity transmission and/or distribution equipment (including control and communications systems software);*
- *A specific novel operational practice directly related to the operation of the electricity transportation system; or*
- *A specific novel commercial arrangement.*

4. Cost benefit analysis

Explain how the proposed project will:

b) Give value for money for electricity 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) Speed up 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 CO_2, 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 your previous experience 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.eto.innovationteam@nationalgrid.com