

National Grid Gas Transmission

**Network Innovation Competition (NIC)
call for proposals 2018**

We want your ideas for a 2018 gas transmission NIC programme

We're calling for proposals to develop substantial innovations for the UK's gas transmission network. To help focus your ideas we have mapped out some key themes and ideas where we would welcome proposals. Read on to learn what our challenge areas are and the process for submitting your ideas.

- » Up to £20m funding available
- » Submission deadline 30 November 2017

The 2018 themes



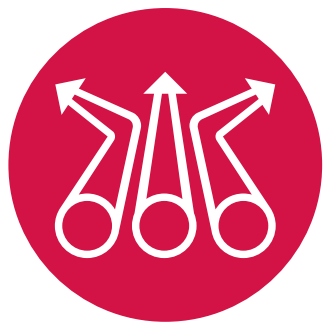
The Efficiency Challenge

There's always room to improve – and our customers expect us to do it. How can we deliver the same work but a step-change cheaper, faster or significantly more flexibly? Can we find and prove new methods to isolate, modify, repair, divert or decommission our assets better than legacy industry standards?



Asset Management

By 2021 more than 70% of our sites and pipelines will be over 40 years old. What are the new and smarter techniques to collect and exploit data about these assets? What new technology and methods are there for the repair and replacement of aging assets? Are there new solutions to old problems that give more flexibility?



Future of the National Transmission System (NTS)

All futures will require a more flexible and responsive network. What do we need to investigate and develop now in order to operate a more distributed gas system? How can we welcome unconventional gas sources and design for future gas transmission network demands? And how do we allow flex between the gas and electricity vectors?



Safety and Environmental Impact

We aspire to be a low emissions operator. How can we further cut CO₂, CO and NOx emissions, reduce venting and leakage, and minimise our wider footprint? What new technology could monitor, detect and identify third party interference to protect the network? How can we better deliver physical security, cyber security and network resilience measures for the gas transmission?

A proposal leading to a successful bid in 2018 would join our cutting edge NIC innovation portfolio alongside projects GRAID and CLoCC:

GRAID
Gas Robotic Agile Inspection Device
Find out more: projectgraid.com

Project value:
£6.3m

CLoCC
Customer Low Cost Connections
Find out more: projectclocc.com

Project value:
£5.4m

How to apply for funding ►

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Theme	Challenge
The Efficiency Challenge 	Cheaper faster valve remediation (no dig, less dig, keyhole robotics and automation)
	Cheaper faster decommissioning (deviation from T/D1, alternatives)
	Cheaper faster diversions (deviation from T/D1, alternatives)
	Cheaper faster network change and modifications
	Flexible isolations (no dig, less dig, inline, mobile, faster, cheaper)
	Inline isolations
Asset Management 	Smarter methods and data for optimising asset management
	New techniques and materials for asset repair and replacement
	Flexible and mobile compressor station solutions
Future of the National Transmission System (NTS) 	Operating a more distributed gas system
	Designing for a future gas transmission network
	Facilitating unconventional gas sources
	Gas/electricity network interactions
Safety and Environmental Impact 	Low emissions
	Third party interference
	Physical security, cyber security and network resilience

NOTES ON NIC There is a fund of £20m available each year to Gas Transmission and Distribution networks. 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 April 2018 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. To find out more please visit our website www.nationalgrid.com/innovation

The process



In the event that your proposal shows merit but is not progressed via NIC we will look at whether it can still be funded as an NIA project from our £5m/year allowance

Next steps

A proposal submission and guidance document form can be downloaded from www.nationalgrid.com/innovation (follow the links to Network Innovation Competition and then NIC Ideas and Collaboration). If you have any questions, require subject matter expert (SME) advice on completing a proposal, or to submit your proposal please contact us at Box.GT.Innovation@nationalgrid.com

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