

ENA Benefits Reporting Framework – Delivery Plan

December 2019

1. Introduction

This document has been prepared by ENA on behalf of all Great Britain Gas & Electricity Networks, including GDNs, DNOs, TOs and the SO. In this document, when referring to all networks, they will be referred to as Licence Network Operators (LNOs). Under the ENA Gas Innovation Governance Group (GIGG) and Electricity Innovation Managers (EIM), Gas and Electricity Networks have worked collaboratively in preparation for RIIO-2 to inform the wider industry of the adoption of a benefit tracking methodology that delivers a wide range of benefits to network customers and wider stakeholders. This has been designed to increase transparency on the benefits of network innovation projects.

Every idea that is proposed from our innovation pipeline will be assessed for its potential to deliver beneficial outcomes for customers. This is for the licensee proposing the project, other network operators, their shareholders and stakeholders. It is also for the wider energy supply chain and for network customers, both the vulnerable and those able to actively participate in the low carbon transition. This document details how the industry proposes to report innovation benefits for RIIO-2, the next price control period starting 1 April 2021 for Gas Networks and Electricity Transmission, and potentially for Electricity Distribution from 1 April 2023.

2. Purpose of Benefits Reporting

Within the RIIO regulatory framework, several innovation funding mechanisms are available to Networks, primarily the Network Innovation Allowance (NIA) and the Network Innovation Competition (NIC). All networks undertake additional innovation programs that are funded via a range of mechanisms such as InnovateUK or their own internally funded innovation programmes.

As NIA and NIC are funded by Gas and Electricity customers, it is essential that we maximise the benefits of innovation and deliver these to customers. As such, it is important to ensure that as much as possible we report the associated costs and benefits in a transparent and consistent manner.

Internally funded innovation is at the discretion of individual LNOs and in order to encourage competition this framework cannot mandate sharing of this work. Where internally funded innovation results in business plan outperformance this will be noted in the relevant regulatory submissions. Some LNOs may at their sole discretion choose to provide visibility of their internal programmes.

The purpose of creating an ENA Benefits Reporting Framework is to:

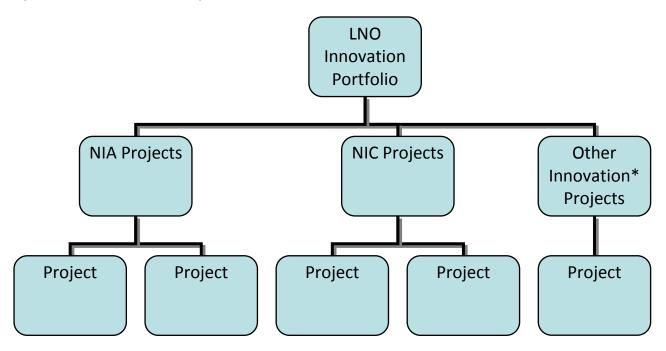
- Enable consistent and transparent measurement of innovation costs and benefits delivered across GB
- Demonstrate progress against innovation strategies, both individual network and sector wide



- Report on innovation that has been transferred to Business as Usual (BAU), both within the network working on a project and how it has been adopted across other networks where relevant
- Ensure mechanisms are clear so that Ofgem can incorporate these into the relevant RIIO-2 innovation governance documents

3. Approach - Overview

In order to understand the benefits from full range of relevant innovation, we believe it is important to measure the full suite of innovation projects that a Network undertakes. The figure shows this suite of projects:



* This includes projects funded internally by networks themselves, and projects funded from other external sources, such as BEIS, InnovateUK or Horizon 2020.

Assuming RIIO-2 NIA allowances are issued on a portfolio basis, best visibility and value is maintained if reporting continues on a project basis. For each individual innovation project, we also believe that all stages of the innovation cycle should be assessed, monitored and reported:

- Project initiation (Project Eligibility Assessment with CBA)
- Annual reporting during delivery
- Project closedown reporting, including sharing learning, updated version of original CBA based on project learning, follow on innovation work or deployment to BAU where appropriate
- Actual benefits to customers and wider stakeholders



Reporting the benefits of innovation for each of these steps takes different forms. We also believe that an overall balance scorecard for demonstrating the benefits of an entire LNO portfolio is critical to highlight the full suite of benefits.

The following table summarises ENA proposals for RIIO-2 and beyond. The section following the table will describe each aspect in detail. In order to develop this proposal, we have analysed the existing industry framework, which combines decades of operational excellence experience together with 'lean thinking', innovation and exceptional service design. We have also considered existing regulatory reporting systems and Industrial reports, such as the Pathways for the Great Britain Electricity Sector to 2030 and the Wholesale Market Report 2019.

Proposed Innovation Benefits Reporting (RIIO-2)*

Bi-Annual:

- Electricity/Gas Network Innovation Strategies (ENA)
 - Review of priorities and progress against objectives

Annual Reporting:

- Annual ENA Industry report
 - Cumulative reporting tables
 - Narrative section from each LNO
- LNO Specific Annual Summary Reports
 - Including ENA agreed Innovation balance scorecard
 - o Including Implementation Log (BAU rollout) Summary
 - \circ Evidence of collaboration, knowledge sharing and fast following
- Consistent Innovation Benefits Tables with detail behind scorecard
- Individual Project Completion Reports
 - Individual Project Progress to be captured in Annual Summaries
- Annual Innovation Conference
- Smarter Networks Portal
 - With improved project templates and analytics to provide enhanced visibility of innovation benefits

* New work areas in italics

4. Bi-Annual Reporting

4.1. Electricity/Gas Network Innovation Strategies

It is proposed that these will broadly continue in their current form, with a continued focus on reviewing benefits and progress made against the various themes within the strategies.



5. Annual Reporting

This section outlines the proposed approach to benefits reporting framework which is under development.

5.1. ENA Innovation Balance Scorecard

It is important that innovation outcomes from each LNO portfolio are reported in an open and transparent manner. An innovation stakeholder overview framework has been jointly developed by a number of Gas and Electricity companies over the course of the last two years, with extensive stakeholder engagement, facilitated by the Energy Innovation Centre (EIC). These initial project outputs have now been transitioned over to the ENA, and it will be progressed further, with input and support from all ENA Members, to ensure agreement amongst all UK Gas and Electricity companies. The balance scorecard for each LNO from the existing framework can be seen in the figure below. This will be further refined after discussions with the other LNOs at ENA.

		Initiation & Evaluation (ideas - I)	Demonstration, Iteration & Learning (trials - T)	Deployment & Optimisations (build -B)	
	Results and	 % of innovative ideas taken forward as projects 	delivered by each TRL 7-8 project • % of TRL 2-6 projects leading to a further project	% of TRL 8 projects moved into BAU	Implemented innovation driving improvements for network consumers through: • Lower bills • Improved levels of service • Better safety record • Broad environmental benefits • Facilitating improved social outcomes
Capabilit & Technol (CT)	· .	 Total number innovative ideas generated 	Graphic showing the TRLs where network companies money and projects are focussed Net benefits which could be	Average time from TRL 8 to BAU	
	<i>.</i> .,		Average score on culture of innovation staff survey Average score on culture of innovation external survey	on the network	
Organisation & Culture (OC)		 Number of external parties involved in trials 	innovation trials Number of FTE working on innovation projects 	 % of annual revenue spent on deploying innovative solutions 	
	Strategy & Vision (SV)	 Whether a strategy is in place and has been approved by Ofgem 	 Extent to which the strategy focuses on improving the areas of service which consumers value % network company funding in 	 Extent to which innovation trials align with the strategy 	_

The definitions of the outcome measures and secondary deliverables have been captured separately. It is important to note that these measures will be supported with a detailed narrative for each LNO, which will further highlight the benefits delivered to customers across each LNO portfolio.

Once the template for the scorecard and underlying data tables have been agreed by all relevant ENA Members, this will be trialled and tested by the various LNOs, some of whom have trialled them already. The ENA templates will then be finalised. The completed dashboards will be made available by each LNO within their Annual Innovation Summary Reports (see below). They will form the basis for cumulative reporting in the annual ENA Innovation Summary, and can also be made available on the Smarter Networks Portal once they have been published. It is expected that the reporting will be funded through RIIO-2 innovation mechanism.



5.2. Innovation Benefits Tables

To support the population of this scorecard, ENA Gas and Electricity Companies have agreed to develop template Innovation Benefits Tables, which capture data for each individual LNO innovation project or solution, and can be used for each stage in the project. The work commissioned through the EIC has begun creating these tables, but will need further refinement following testing and ongoing stakeholder engagement to obtain agreement from all LNOs.

These tables can be populated as a project starts, updated during its development (if required) and finalised once the project has been completed. These tables will essentially contain the information from a Cost Benefit Analysis (CBA) for each innovation project including, but not limited to:

- Costs for the project
- Benefits (financial and other benefits, such as environmental, customer, safety, etc)
- Technology Readiness Level (TRL)
- Stakeholders involved
- Etc

This will help form the dashboard view. The Tables will be agreed at ENA and reviewed with our stakeholders. A number of tools and best practice guides will be agreed at GIGG and EIM to support the population of these tables, including common ENA CBA and TRL calculators.

Before project start and at project close we will develop an estimate of the financial benefits of a project if it is rolled out. The LNO leading a project will develop this and use proxies to expand individual forecast benefits to the whole of Great Britain. We will develop both technical and commercial proxies such as:

Technical – length of overhead, underground and submarine circuits and number of substations.

Commercial: These include constraint costs, ancillary service costs, DSO transition costs and benefits, large outage impacts and associated mitigation value as well as the impact on vulnerable customers.

5.3. LNO Specific Annual Innovation Summary Reports

In RIIO-1 LNOs prepare annual innovation summary reports for their suite of innovation projects. It is proposed that this is continued and improved in RIIO-2. This will include:

- $_{\odot}$ ENA agreed Innovation balance scorecard
 - Includes summary of Innovation Benefits Tables
- Summary of solutions rolled out to BAU
- o Individual project progress for NIA projects

We propose to publicly report what innovations have been rolled out within each individual businesses as BAU activity, which will act as an Implementation Log. This will include solutions from the projects a LNO has led, as well as solutions that have been implemented as a result of 'fast-following' other LNOs and industry participants. We will also include examples of best practice and learning associated with the innovation projects, to maximise learning opportunities.

For ongoing or in-progress innovation projects, it is proposed that these are captured in the individual reports, as opposed to standalone reports. This will not only provide a single



document for reviewing the progress of ongoing projects, but ensure that they are reported in a more consistent manner.

As per current practice, the Annual Innovation Summary Reports will be published on the ENA Smarter Networks Portal, alongside the new industry wide report (see 5.7).

5.4. Individual Project Completion Reports

Following the completion of an innovation project an individual project closedown report will be produced to a timeline aligned with governance arrangements. This will be published on the ENA Smarter Networks Portal, and will include an updated version of the cost / benefit analysis information that was included in the PEA.

5.5. Annual Innovation Conference

ENA currently present innovation project learning at two annual events: Utility Week Live for gas networks and Low Carbon Networks & Innovation for electricity networks. These events meet the criteria for all networks sharing innovation learning as widely as possible at lowest cost. ENA are exploring future options for a main ENA annual dissemination event going forward, across Gas and Electricity. This annual event, along with other ENA events such as the Electricity Innovation Forum (EIF) and individual LNO dissemination events, will be used to further disseminate and highlight the benefits from the innovation projects undertaken by the LNOs.

5.6. Smarter Networks Portal

The Smarter Networks Portal [ref] is a database of all previous and current Ofgem funded innovation projects, across all Gas and Electricity Networks. This portal is free to use and contains all public information and outputs from a project, including initial Project Eligibility Assessment (PEA) and project closedown reports.

ENA has committed to upgrade the Smarter Networks Portal in 2020 to support this new innovation measurement framework, ready for the start of RIIO-2 in 2021. The upgrades will include better project templates and analytics, new fields to align to the innovation strategies and better summary 'dashboards' of the full GB suite of projects. This will help the LNOs more readily present the learning and benefits from innovation across their individual portfolios to each other and to wider industry globally.

5.7 Annual industry report

Each autumn, ENA will publish an innovation summary report. This will feature cumulative totals based on the innovation benefits tables, and a short narrative section from each LNO.

6. Governance of the Innovation Measurement Framework

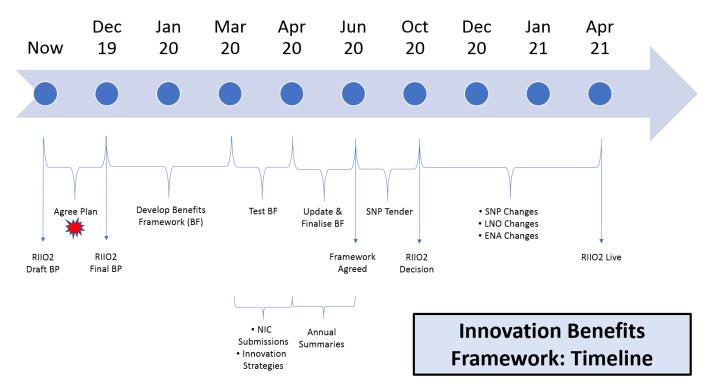
We propose that the Innovation Measurement Framework is adopted by Ofgem using the governance documents for the Innovation Funding Mechanisms. I.e. we believe that it should be governed in the equivalent documents of the NIA and NIC funding in RIIO-2. By governing the Framework in this manner, it provides confidence to Government and the industry around the transparency and consistency of application of the Framework by each LNO. We are willing to work with Ofgem to formulate the exact wording and rules for these governance funding documents.



From an ENA Gas and Electricity Company perspective, the Framework and all associated documents and tools, including the Smarter Networks Portal, will be governed by the Gas Innovation Governance Group (GIGG) and Electricity Innovation Managers (EIM) groups.

7. Deployment Timeline

We have developed the following high-level timeline to deliver the approach discussed above.



8. Stakeholder Engagement

To develop this Framework, ENA and its Members have committed to continue engaging with our stakeholders, to ensure that the way benefits are reported are transparent, digestible and relevant. As well as the participating Members, the existing EIC Framework underwent significant stakeholder engagement with a range of key industry parties including Ofgem, BEIS, Ofwat, Sustainability First, Energy UK and Citizens Advice. The feedback from these sessions was very useful and significantly shaped the format of the Framework.

Going forward, ENA and Members will continue this engagement with Government, the Regulator and Industry. We want to understand how this Framework will be most useful to them, and how it can be best displayed to ensure it is digestible. We want to use the ENA Smarter Networks Portal to help automate and visualise the reporting of benefits from Innovation projects within each individual LNO portfolio, as well as use it to show aggregated views across the country.

9. Contacts

If you have any queries about this document, please do not hesitate to contact the following ENA representatives:

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