RIIO-2 Framework Consultation

About IGEM

IGEM (Institution of Gas Engineers & Managers) is a chartered professional body, licensed by the Engineering Council, serving a wide range of professionals in the UK and the international gas industry through Membership, events and a comprehensive set of Technical Standards. The organisation operates under the Royal Charter of the Institution of Gas Engineers granted in 1929.

In support of the organisations that design, install and maintain gas transmission, distribution and utilisation infrastructure, IGEM produces a large range of Technical Standards. These are recognised as trusted industry Standards, used to assist in compliance with national legislation and official approved codes of practice and guidance. The Standards are drafted by expert Panels representing a cross section of the relevant parts of the gas industry. Regulatory bodies such as HSE, Ofgem and Gas Safe Register contribute as appropriate to the drafting process. The drafts are issued to the industry and other stakeholders for review and comment prior to publication. The professional status of IGEM ensures its Standards reflect the best possible levels of safety, practice and quality within reasonable cost.

IGEM also facilitates seminars, conferences and other events, to help maintain the high level of engineering competence and capability that has been a hallmark of the UK gas industry for decades.

IGEM Response

The IGEM response is concentrated on the questions related to our areas of expertise and focus, which are primarily covered by Section 5 of the Consultation. Innovation and efficiency across the wider energy industry will be imperative if future UK demand for gas and power continues to be met, while also supporting an evolution to a more sustainable, decarbonised supply.

IGEM supports the promotion and provision of incentives through both the NIA and NIC and would support the retention of both in some form. IGEM would be concerned if future potentially valuable projects were lost, or adversely affected by exclusion due to being re-classified as "business as usual". There is clearly a need to establish transparent qualification criteria that can establish what may be considered true innovation, and IGEM would support any approach based on that model, believing that the incentive to focus on a more ambitious programme would result.

Q11. Do you agree with our proposal to retain dedicated innovation funding, limited to innovation projects which might not otherwise be delivered under the core RIIO-2 framework?

IGEM supports the proposal to retain dedicated innovation funding and would extend, rather than restrict, the available provision to any projects that are able to demonstrate true innovation. There are many examples from history where long term benefits were derived almost incidentally and were certainly not anticipated or planned.

It is highly likely that significant progress in the efficiency of the energy sector could occur through the unintended consequences of innovative projects. IGEM believes that the support of broad Innovation should be encouraged wherever possible.

Q12. Do you agree with our three broad areas of reform?

i. increased alignment of funds to support critical issues associated with the energy transition challenges
ii. greater coordination with wider public-sector innovation funding and support and
iii. increased third party engagement (including potentially exploring direct access to RIIO innovation funding)?

i. increased alignment of funds to support critical issues associated with the energy transition challenges

IGEM is concerned that increased alignment of funds to one designated area, may restrict the potential to benefit consumers in the long term by reducing support in others. The Gas Network Innovation Strategy Model identifies a much broader scope for innovation.

IGEM supports the establishment of innovation project criteria, rather than limiting projects to specific categories. If a project or programme demonstrates new thinking, a different methodology, the use of new technology or scientific theory and has a clear aim and set of SMART objectives that will deliver potential benefits, then it should be eligible for NIA or NIC support.

ii. greater coordination with wider public-sector innovation funding and support

IGEM welcomes the idea of greater coordination of public sector innovation funding and support if such arrangements result in a greater overall contribution to a worthwhile project or programme.

One clear example is the approach to the decarbonisation of heat; significant funds are required to demonstrate hydrogen technologies and associated carbon capture and storage, and other green gases. Enabling deployment of these technologies at an appropriate scale will undoubtedly require public sector innovation funding in addition to existing Ofgem innovation funding.

Greater coordination with other Public sector funding programmes does, however, pose some challenges that need to be born in mind. These include:

- **Restricted Scope**. Public sector funding bodies often have defined remits that may not include core energy proposals. One example that IGEM is familiar with is the hydrogen network demonstration, with roll-out not covered by BEIS funding currently. Other funding mechanisms are often limited to 50% funding contributions and may be insufficient on their own to warrant expenditure on early unproven technology
- **Network Collaboration.** The introduction of multiple sources of finance where funding bodies have different objectives could have a negative impact on the necessary strategic co-ordination required to deliver the more challenging innovation objectives. One of the strength of the NIA and NIC is the promotion of co-ordination across networks
- **Timescale Alignment.** Utilising multiple funding sources may work effectively, but only if any various time constraints imposed as a condition of the funding, are effectively coordinated and resolved to deliver an overall outcome
- **Intellectual Property.** Many sources of public funding put conditions on the IP rights generated that may constrain the willingness of technology providers to participate

iii. increased third party engagement (including potentially exploring direct access to RIIO innovation funding)?

IGEM supports the concept of increased third-party engagement but would suggest that there should always be a GDN or NGGT "partner" involvement to ensure that funding is not wasted on projects that have little chance of sustainable success. Under these conditions, direct access to Innovation

Funding could be appropriate, providing that any projects proposed met established criteria (as referred to in our introduction)

Q13. What are the key issues we will need to consider in exploring these options for reform at the sector-specific methodology stage, including:

i. What the critical issues may be in each sector and how we can mitigate the bias towards certain types of innovation through focusing on these issues?

ii. How we can better coordinate any dedicated RIIO innovation funding with wider public sector funding and support (including Ofgem initiatives such as the Innovation Link and the Regulatory Sandbox)?

iii. How we can enable increased third-party engagement and what could be the potential additional benefits and challenges of providing direct access to third parties in light of the future sources of transformative and disruptive innovation?

i. What the critical issues may be in each sector and how we can mitigate the bias towards certain types of innovation through focusing on these issues?

From an IGEM perspective, irrespective of (i) the type of projects or programmes supported under the umbrella of Innovation and (ii) whichever organisations can access RIIO (and/or other Public Sector) funding and support, there are two critical factors that should be considered:

- the availability of suitable robust Technical Standards that will support the programme and those organisations and personnel involved in all aspects of the work
- effective mechanisms to maintain, or possibly develop from scratch, the competence and capabilities needed to undertake the work safely and under robust management standards including the provision of necessary training

These two considerations are sometimes not identified as priorities early in the scoping of an innovation project, and this can create unnecessary delay or

even increase safety risks if decisions are made without reference to well established Technical Standards.

Potential problems associated with these critical aspects may be easily resolved by ensuring that IGEM is engaged in respect of RIIO Innovation projects and programmes as early as possible. In some cases, the necessary Technical Standards and engineering capability may already exist and so the risks may be minimised easily. In other cases, such as the broadening of the acceptable range of gases that may be introduced to the system, there may be a need to develop new Technical Standards to support that activity. To ensure that any such development and new Standards production is robust and delivers a well-considered outcome, a reasonable lead time is always preferable.

The same consideration applies in the case of competence and capabilities. Where new technology or work practices are being introduced, engineers and other personnel may need to be introduced to new equipment before being trained and assessed as competent to undertake activities. The earlier IGEM and other training organisations are clear about the potential skills impact of innovation projects, the better. Early engagement will enable robust training and assessment programmes to be developed in alignment with any roll out of a project.

ii. How we can better coordinate any dedicated RIIO innovation funding with wider public sector funding and support (including Ofgem initiatives such as the Innovation Link and the Regulatory Sandbox)?

In addition to our response to Q12 (ii) IGEM suggests that the establishment of clear and transparent project criteria to determine the eligibility of a specific project for RIIO Innovation Funding, could also facilitate the application for other sources of supplementary Public Sector funding.

iii. How we can enable increased third-party engagement and what could be the potential additional benefits and challenges of providing direct access to third parties in light of the future sources of transformative and disruptive innovation?

It is essential that any increased third-party engagement is coordinated to ensure that funding and other resources are targeted to contribute to an overall strategic outcome. The potential benefits of extending involvement and participation include:

- fresh thinking and innovative ideas
- development and/or application of new technology
- challenges to the traditional way of working
- cost efficiencies

However, without effective coordination and control, these benefits may instead create potential fragmentation, increased confusion and risk, and wasted funding and resource. For these reasons, and primarily to retain safety as the number one priority, IGEM recommends that for any third party project to be endorsed by RIIO Funding support, it must incorporate the partnership support of at least one GDN or NGGT

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2 May 2018