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Graeme Barton
Network Price Controls
Office of Gas & Electricity Markets
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E14 4PU

30 June 2021

Dear Graeme,

Consultation on the Strategic Innovation Fund (SIF) Governance Document

I am writing on behalf of SGN with reference to the consultation on the above Governance Document detailed above and published by the Authority on 2 June 2021.

We welcome the appointment of UK Research & Innovation (UKRI) as support for the implementation and operation of the SIF. UKRI bring substantial experience in support of innovation and their involvement is a positive move. We also welcome alignment between Innovate UK and Ofgem on areas of innovation. We believe that the experience UKRI offers will help to drive Ofgem's innovation ambitions from discovery through to supporting projects becoming business as usual. In taking on this role we encourage UKRI to review its approach according to the unique challenges of the energy sector, and in particular, the gas sector, to ensure that the SIF's processes align with the needs of working in a safety-critical environment.

Since its initial introduction during the RIIO-GD2 Business planning process, we note that the SIF has changed substantially. The role this funding mechanism will look to play will help to partly address the funding gap for Open Data and Digitalisation initiatives which we fully support, however, there is a need to ensure these areas fit the SIF's criteria and are considered 'novel' and 'innovative'.

We also welcome the linkage to Ofgem's Strategic Innovation Challenges. We need to ensure that the SIF is fit to deliver on these innovation challenges, in particular, the SIF has targeted Net Zero through energy system transition objectives linked to Hydrogen feasibility and adoption. Accordingly, it needs to recognise the complexity of these problems and have the flexibility to accommodate complex solutions and the needs of multiple stakeholders to enable hydrogen to be progressed.

Fundamentally, unlike electricity, the safety case for hydrogen has to be demonstrated as a critical prerequisite prior to deployment. Delivering the innovation challenge of hydrogen feasibility and adoption cannot be separated from the safety requirements, as such, the process needs to accommodate that. There is a risk that the process does not take this into account and will create 'a barrier to' rather than 'support for' this innovation challenge. As such whilst we support the SIF, we are concerned that its structure will not adequately support all the innovation challenges and opportunities identified within our RIIO-2 Business Plan.

Considering whole-systems agenda and longer-term potential solutions for the various types of future network end states, regional variations, grid and network constraints to deliver these, the current SIF criteria comes with the leading factor of Net Benefit as a required output. However, in many cases, the energy system transition will require significant investment to deliver Net Zero through evidenced research where the benefits may be dependent on the final end-state or support the heat policy decision in 2025. These are well defined in national programmes; we would like clarification that SIF aligns to these national

programmes and that the challenges deliver evidence that supports that decision-making process and minimises potential duplications with mature work programmes already defined.

We are also concerned by the proposed variable contribution statements and the lack of clarity that determines the extent of contribution from networks and partners. We believe that reviewing and varying the level of Compulsory Contribution on a case-by-case basis as proposed by will risk constraining innovation. We urgently request clarity on this. Currently, the suggestion of increased contribution where projects are being delivered predominantly by partners risk could be counterproductive to stimulating the innovation ecosystem and broadening the scope of innovation partnerships.

Similarly, we are concerned regarding expectations of data best-practice standards to the SIF. It is important to recognise that data best practice standards are under development. Whilst we are comfortable and agree with the appropriate use of the ENA portal we are concerned with the extent to which data best practice standards could create burdensome requirements on innovation data which could include sample data (rather than live data), software scripts, data storage and archives and data quality maintenance. There could also be significant additional costs of ongoing platform subscriptions associated with maintaining data best practice standards.

You'll find answers to the questions posed within the consultation in the annex of this document. If you have any questions regarding our comments and responses, please do not hesitate to get in touch.

Yours Sincerely,

David Handley
Head of Regulation, SGN

Annex 1 - Response to consultation questions

Question 1: Do you agree that our proposals to appoint and remunerate UKRI as our delivery partner provide value for money to energy consumers? If not, please explain why.

This is a positive move as the experience UKRI offer will help to drive Ofgem's innovation ambitions from discovery through to supporting Projects becoming business as usual. UKRI will also support the introduction of new third-party innovators that will offer significant value to the networks that align with the challenges we have.

We would request clarity around the associated costs and resourcing required to facilitate this function to make an assessment of its value for money to energy consumers, SGN would assume Ofgem have conducted a clear needs assessment and CBA analysis to contract this function to UKRI and this should be made publicly available.

In a similar manner, the terms of reference of the UKRI should be made explicit along with the metrics that will be used to assess the value for money that they provide. Clarity on these points is important from the outset as the metrics used may influence the selection of projects.

Whilst the UKRI seems like a logical choice to perform this function, however, the SIF structure UKRI want to implement appears very similar structure to an academic research framework and not a critical funding mechanism to aid the energy system transition for large scale complex projects. UKRI do not appear to have taken account of feedback from the networks or concessions to take any learning from the NIC structure or how SIF can work symbiotically with NIA as NIC did.

The clarity of the innovation project, based on timing, flexibility and scalability which could be planned into the NIC framework doesn't seem to be incorporated into the SIF, the proposed process slightly blurs the lines in the early stages with NIA which offers more flexibility to get the project right and deliver more benefits from the outputs through a clearly thought out feasibility study and benefits definitions, rather than a potentially rushed 8 question 400 word per pitches (proposed 4 per challenge per network licensee) .

Question 2: Do you have views on the means by which we can gather stakeholders' insight into strategic innovation priorities before developing a challenge?

The networks, in conjunction with the ENA, have been running stakeholder events to define strategic innovation priorities as fully documented in the Networks joint innovation network strategies, which included a significant amount of stakeholder feedback to help develop, critically evaluate, and define those strategies. These also align with our obligations under our Licence, specifically Standard Special Condition A28: Gas Network Innovation Strategy.

We have found this stakeholder insight to be valuable in terms of helping to shape our strategic innovation priorities. However, to have enduring value the engagement needs to feed through directly to those who are setting the strategy. As such we are concerned that the joint innovation strategies risk losing their relevance if they are not directly aligned with the questions being asked by the Net Zero Innovation Board.

Whilst we hope this does not happen, there is a risk that those innovation strategies will be considered to be an irrelevance and securing high-quality stakeholder insights will be increasingly more challenging. As such either it is important that stakeholder engagement is carried out directly by the NZIB, or there should be a clearly defined role for the Joint Innovation Strategies to inform the decision making of the NZIB, and there are clearly associated outcomes.

Question 3: Do you consider our proposed three-phase approach suitable to support large-scale strategic network innovation projects, while encouraging learning and mitigating risk? If not, please set out your reasons why.

The key challenge is the timing associated with each phase. The three-phased approach brings an element of risk, where the stop-start nature of SIF will bring significant challenges to its usability from a contracting resource and management perspective. This approach may make the process much harder to manage rather than being one clear entity of work from start to finish and those timings will not be suitable where third party stakeholder permissions (local authority planning or HSE) or long-lead-time items are required. As it is stated it sounds as though there is limited flexibility to accommodate these and the implications of exceeding a time threshold are not clearly established.

We support the Milestone assessments through the phases, but the SIF structure to fund each phase independently and deliver each phase on a time-locked basis for each challenge makes it harder to plan project delivery overall. If each phase has to be independently funded through the proposed process and time-locked for delivery, this will likely drive up costs to deliver the proposed outputs in the allotted time by increasing resource requirements significantly but with no commitment to deliver the next phase.

The clarity of the innovation project, based on timing, flexibility and scalability which could be planned into the NIC framework doesn't seem to be incorporated in the SIF three-phase approach, the proposed process slightly blurs the lines in the early stages with NIA which offers more flexibility to get the project right and deliver real benefits from the outputs through a clearly thought out feasibility study applying the learning to realise the benefits, by definition SIF will potentially be an initial rushed 8 question 400 word per question pitch.

On this basis, we remain concerned that this new approach does not fully reflect the learnings and the practice realised through the development of the NIA and NIC.

Question 4: Do you consider that the indicative value and length of the different Project Phases will accommodate a wide range of network innovation projects to support net zero?

The range of projects will be dictated by the Innovation Challenges Document, this will be determined by Ofgem and UKRI. Smaller-scale projects will likely be more suitable, based on value and length of project phases, whereas supporting larger-scale projects, such as those aligned to the energy system transition - which we believe was the original policy intention of the SIF - will become less probable because of these constraints.

To note, we do not think that it is the targeted Innovation themes that will restrict the scope of the project, rather it is how specific the challenges are going to be set and the thresholds that are going to be required that are more likely to limit the scope of the project and currently, we do not have visibility of the details or examples to gauge this.

There is a risk that more ambitious pieces of work will likely not be achievable based on these constraints, furthermore, if the learnings and outputs evolve from the initial scope and don't meet the predetermined outputs to take forward then this becomes a problem. It is unrealistic and undesirable for an innovation process to predetermine the exact successes and outputs before the innovation learnings have taken place.

Networks believed this was a similar 'type' of mechanism to NIC for large scale innovation projects in their entirety, with minimum values in the millions, this mechanism has significantly reduced the scale based on the funding thresholds stated, as such we are no longer clear on the difference in objectives between the SIF and the NIA.

As previously noted, SIF seems to be structured as an academic innovation framework that is based on scientific methods of testing a hypothesis and detailing the findings of the measurements. This type of process may not be the easiest method to apply when you are dealing with Net Zero targeted projects as they need the flexibility to accommodate complex solutions to complex problems, especially considering whole systems and longer-term potential solutions for the various types of future network end states, regional variations, grid and network constraints etc.

Question 5: Do you agree with our proposed Eligibility Criteria? If not, please explain why.

Greater understanding is required regarding how the eligibility criteria will work in practice. Three months is a short time period and if there are significant and unexpected changes in the eligibility criteria, then it risks less developed proposals being submitted, at an extremity, this could result in projects being submitted on the basis of compliance to criteria rather than the value of outcomes. If there is good visibility of eligibility criteria then projects will be more established and more robust, particularly where they are dependent on third party participation.

The process starts at low-level feasibility projects up to practical demos through the discover, alpha & Beta phases and there appears to be an expectation of direct financial returns through each stage. This needs to be clarified as to what constitutes a return (ie the extent to which it include the social and environmental value and over what time period those benefits should be measured), what constitutes an appropriate baseline against which the return is measured, who realises that return (is it captured by the customer or the innovator). Understanding how these criteria will be applied is particularly important for the earlier discovery and alpha stage projects.

Question 6: Do you have views on which parameters Ofgem should consider defining when setting Innovation Challenges? In particular, the types of organisation that need to participate in a consortium as project partners?

As above it is important that as much clarity is provided in advance as possible to aid the discussion with potential project partners. This is important to support deeper project partnerships based on genuine shared understanding and common objectives. If there are sudden changes in requirements or there is not sufficient visibility, then this is likely to lead to shallower project partnerships that are more prone to having misaligned objectives.

When considering partnerships, we would also be cautious about being too prescriptive. It is important that the right partners are defined according to the skills that each partner brings and their relevance to that innovation. Having market research partnerships for example of an innovation project that is important to building the safety case could be considered of limited benefit. There is a significant risk that prescribed partnerships reduce the efficiency of innovation by increasing the time and resources dedicated to maintaining partnerships that have a limited benefit for the project.

We would support applicants being able to set out why they do not think a partnership would be value-adding in the context of their innovation proposal.

Question 7: Do you have views on the circumstances in which Ofgem may require a higher level of compulsory contribution towards projects?

We are not in favour of the proposed variable contribution statements given the uncertainty that it will

create with networks and any proposed Funding Party or Project Partners.

Creating and establishing effective partnerships across multiple stakeholders and funding parties is already particularly complex. Once those principles are agreed upon, then it is very difficult and damaging to the project to open them up again and renegotiate, particularly as the project develops through the different stages.

On this basis having a clear and upfront expectation on what level of contribution will be required is essential. If this is going to vary according to the contribution of other project partners, the source of funding or the potential financial benefits then it is very important that these are clearly established in advance so that partnerships can be established on that basis.

If different levels of funding are going to be applied according to different criteria, then it is also important to establish clearly what would the outcomes be if criteria are no longer met – i.e if a project partner pulls out mid-way through the project, or a third party funding application is unsuccessful.

Whilst this may appear to be a simple concept, it is because of the practical complexity that this introduces, the risk to project agreements and the commercial implications that we do not support this approach.

Question 8: Do you agree with our proposed requirements to encourage collaboration and share learning? If not, please explain why.

We agree with proposals of encouraging collaboration and sharing learning. Networks have worked together and with key stakeholders to update the Smarter Network Portal recently. This will be used to develop partnerships with stakeholders and to enable ideas to be generated from third parties for the consideration of networks. The ENA Smarter Network Portal will be used for Knowledge Transfer and dissemination of learning from each project to enable further benefits to consumers.

We are concerned about the proposal to align Project Data with Data Best Practice Guidelines, including the Presumed Open requirement due to the additional operational and financial overheads that will be required to maintain what could be sample data that has been generated for an one-off phase of testing, development etc. We urge that this is looked into carefully and there is a careful assessment of the cost and benefits associated with implementing data best practice guidelines in this context. We agree with the principles of open data, but ask that it is balanced and proportionate.

Question 9: Do you have views on whether and, if so, how the ENA Smarter Networks Portal and annual innovation conference could be improved better to achieve its aims of effectively disseminating learning and enabling partnerships between licensees and third parties?

The ENA Smarter Network Portal is currently being updated and will continue to be improved in order to maximise knowledge transfer and dissemination of project information, the same can be said for that of the annual innovation conference. These are priority areas for networks and are regularly discussed at GIGG on a weekly or monthly basis, as well as on a monthly basis between both Gas Innovation Governance Group (GIGG) and the Electricity Innovation managers (EIM) working groups.

The collaborative efforts of network companies with that of external third parties were shown last year during the COVID pandemic, we had to cancel a face to face annual conference for that of an online / virtual event. This proved challenging but provided an opportunity to have a more focused approach to dissemination and this will continually be challenged in subsequent years.

Question 10: Do you agree with our proposals on requirements for project applications? If not, please explain why.

The proposals broadly have the requirements that we would expect from a project application and appear appropriate. It should be noted that this may need to be reconsidered when the initial applications are made.

For example, there appears to be a lack of an opportunity to discuss dependencies on third parties and associated timings. Similarly, there appears to be a lack of an opportunity to explain how learnings have been taken into consideration between stages and how this has informed the updated objectives and project plan.

Finally, we should note that 400 words is approximately half a page. Whilst this may be appropriate for stand-alone innovations, it is very limited to describe what can be a complex project and nuanced project. This will inevitably mean that either important detail is not communicated or is put into an appendix. Neither of these is a desirable outcome and are likely to sway the results to simple 'clean' which can be defined within the constraints rather than more challenging and complex projects.

Question 11: Do you agree with our proposals for the assessment process? If not, please explain why.

Whilst we agree, we need to ensure that the expert panel has expertise that is relevant to the innovation being considered in order to be valuable. An expert panel that does not have the relevant expertise can be particularly damaging by coming with misinformed positions on points of value associated with a particular innovation.

This is of particular concern when considering gas and electricity innovations. The points of value associated with energy system transition innovation change significantly between the two. For electricity, it may be that value is created through enabling and facilitating, whilst for gas it may be that value is generated through demonstrating and evidencing. There are positive examples of where this has worked well and the experts have recognised knowledge in the relevant field.

Question 12: Do you agree with our proposals on requirements for reporting, and our proposals to monitor projects? If not, please explain why.

Whilst we agree with the proposals these reporting requirements need to be aligned to the level of funding that is being requested and that the timings should also be adjusted accordingly. For instance, it would not be suitable to have to wait until the end of a 12 week period for a small project to determine whether any additional reporting requirements were required or not.

Question 13: Do you agree with our proposed funding arrangements for SIF projects? If not, please explain why and suggest whether there are alternative funding arrangements that may be preferable.

We think that is important to keep under review and would agree with the views expressed by our CEG at the time of business plan submission that the appropriate funding mechanisms should be evaluated appropriately.

As such whilst the funding mechanism may appear reasonable for smaller projects they do not appear to be reasonable for larger projects that we considered was the original focus of the SIF.

We would also like you to confirm the practicalities of the proposed approach in terms of giving the market visibility on bill adjustments.

Question 14: Do you agree with our proposed requirements regarding project administration for SIF projects? If not, please explain why.

We do not believe that there is any reason not to replicate the NIC governance document for the SIF.

Question 15: Do you agree with our proposed default rules for intellectual property rights and royalties for SIF projects? If not, please explain value.

We agree with the main principles contained in the governance document for treatment of IPR for SIF, this is a reasonable position for all parties concerned and will help to maintain openness to knowledge transfer and continue with clear dissemination of project outcomes. We would seek clarity with the default IPR position as this is unclear.

We would also like to understand the instances whereby we should be considering alternative arrangements to the default IPR position as referenced in section 9.2, we understand the reason for this but we should align to the conditions (or objectives) stated in Energy Network Innovation Process document (section 7).

Clarification is required in relation to the breakdown of directly attributable costs recoverable from any Royalties generated and the impact that this would have on the Retained SIF Royalties formula.