

Neil Copeland
Networks Team
Ofgem
9 Millbank
London
SW1P 3GE

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Re: The network innovation review: our consultation proposals

Please find attached the Institution of Engineering and Technology's written response submission to the above consultation.

About the IET

The IET is one of the world's leading professional societies for the engineering and technology community, with more than 167,000 members in 150 countries and offices in Europe, North America and Asia-Pacific. The IET provides a global knowledge network to facilitate the exchange of ideas and promote the positive role of science, engineering and technology in the world.

This submission has been approved on behalf of the IET's Board of Trustees, and takes into account the views of IET Members under the guidance of the IET's Energy Policy Panel and should not be taken as representing in any way the individual views of the organisations for which the panel members work.

The IET would be keen to have the opportunity to explore these points further with Ofgem.

Yours sincerely,



Gordon Attenborough
Head of Strategic Engagement Partnerships
Tel: 01438 765630
Email: GAttenborough@theiet.org

Chapter 3

Proposals for delivering greater value for money

Question 1: What are your views on our proposals to introduce a requirement for the network companies to jointly develop an industry-wide innovation strategy?

- **If you agree, should companies retain their own strategies, and in addition should there be a single system strategy, or one for gas and another for electricity?**
- **How often should the strategy be updated?**

The IET is very supportive of initiatives that recognise the importance of innovation in the energy sector and the need for longer-term, strategic thinking. In this regard, we have been pleased to see how Ofgem's RIIO initiatives embrace innovation.

The challenge presented by this consultation is how best to achieve strategic co-ordination, where many parties are involved, without net detriment due to introducing further bureaucracy and complexity. Innovation differs from other areas of business decision-making in that outcomes cannot be known with certainty and, indeed, great value may come from 'failed' initiatives. Recognising this and resisting the usual and understandable drive for optimality requires leadership from the regulator and the government if true innovation is not to be stifled.

We would expect the network companies to be supportive of strategic thinking because this benefits them as well as their customers. We already see constructive interactions taking place between the network companies, for example through the Smart Grid Forum working groups, LCNF knowledge dissemination, and the annual LCNI exhibition and conference. Development of an industry-wide strategy is not such a big step beyond what can be observed now, provided that strategy is kept at a high-level and does not become bureaucratic or a formal decision-making mechanism. Also, there must be clarity about its objectives and scope.

We recommend that:

- a) For the time being, gas and electricity strategic initiatives are kept separate, but this is reviewed from time to time and, indeed, other energy vectors are considered for integrated working in the future. In the meantime, this should not preclude 'electricity' or 'gas' projects that explore arbitrage opportunities (for example a 'flexibility' project that involved hybrid heat-pumps).
- b) Any industry-wide strategy should involve a spectrum of stakeholders and in particular the new 'grid edge' technology and commercial parties who operate 'beyond the meter'. Ofgem should consider and agree with the companies the scope of this strategy and how its production should be led and funded before it is made a requirement. There needs to be an

industry/sector consensus that its value significantly exceeds its bureaucratic 'cost'.

- c) The structure of an industry-wide approach reflects the change that is now evident for requiring whole-system thinking, rather than thinking that is confined to a company's geographic or licence-condition boundaries.
- d) Stakeholders such as academia, research organisations, and established industry vendors are also party to the process.
- e) Existing mechanisms, such as those operated by Innovate UK, are integrated and not duplicated.
- f) An initiative of this nature should be consultative, not decision-making (for example approving particular projects).
- g) The frequency of updating for a national strategy should be examined carefully, especially as we are entering a time of ongoing change. We would recommend a mechanism that balances responsiveness to change, with sufficient stability to encourage investment. This might be done by, say, a two-yearly review of a plan that is structured around three time horizons (current 3 years, years 4-6, and years 7 and beyond). The short term period would be subject only to minor adjustments, the medium term only to 'mid-course corrections', and only the longer term subject to strategic shifts in content. This approach might be better described as a Roadmap rather than a Plan. Harmonisation with the timing cycle of RIIIO resets would also be helpful.
- h) The 'loop is closed' as regards regulatory oversight by requiring the network companies to demonstrate how they have contributed to the wider strategy, how their own innovation strategy aligns with it, and what actions they have taken to implement it.

Innovation inevitably carries risk and, in view of the uncertainties involved, we would urge Ofgem to ensure that accountability remains strongly focused at individual company level and that there is no sense created of innovation decisions being 'taken elsewhere' or 'over-ruled from above'.

Question 2: What are your views on our proposals to help facilitate increased involvement of third parties in the NIC via the network companies?

We support the concept of involvement of third parties in innovation projects and note your para 3.13 which states that third party involvement is currently 'significant' in the big NIC projects. Third parties bring wider thinking, new skills, and provide an added edge to project management through joint working.

In view of the largely satisfactory situation, we suggest that 'little may be more' in this case and that some simple steps should be taken, particularly to engage wider third party thinking in strategic direction and the ideas for specific projects.

To achieve this we suggest:

- a) The mechanism for creating a national innovation strategic roadmap includes a call arrangement for third party ideas and their engagement in workshops or other events.
- b) Ofgem's new Innovation Link approach should have an element for capturing new thinking and feeding it into the road-mapping. We observe that some of the best innovative thinking comes from SME and start-up companies, yet these are the people most hard-pressed to attend workshops or submit consultation responses. It's therefore important that Ofgem makes the Innovation Link mechanisms for capturing ideas as light-touch as possible for these parties.
- c) Ofgem signals its continuing interest, on behalf of consumers, to promote third party engagement and uses its available mechanisms such as RIIO descriptions and the recent Regulatory Stances. This is preferable to actions to mandate or otherwise formalise third party involvement, which we believe would be likely to have unintended consequences and add complexity for little benefit.
- d) Closer strategic alignment with existing incentive mechanisms aimed at less mature, lower technology readiness level (TRL) innovation, such as the BEIS Energy Entrepreneurs Fund and Innovate UK's Infrastructure Systems competitions. These competitions provide support for micro-SMEs and start-ups to develop 'good ideas' to a level that enables prototypes to be built and trialed in facilities such as the Power Networks Demonstration Centre prior to demonstration on live networks through NIA / NIC projects. Closer strategic alignment would enable emphasis to be given to low TRL projects that have the potential to form the basis of new solutions that address strategic priorities.

Question 3: What are your views on providing direct access for third parties to the NIC?

As described in our response to Question 2, we believe this to be an unhelpful development of uncertain returns. As noted earlier, it is an important principle that network companies are fully accountable for their innovation plans and projects; it would be invidious to develop a framework under which third party projects were 'forced upon' a company in any sense. As Ofgem describes in the report, the present situation is far from broken, so at this stage it is unnecessary to embark upon contentious and complex new mechanisms such as this.

Indeed, many successful LNCF and NIC projects have demonstrated that DNOs have openly embraced new parties who demonstrate a willingness to form partnerships and bring fresh thinking. The benefit for third parties is that they do not then carry the cost and risk of bidding for project funding or the project management overhead in delivering a funded project. Such risks and costs might be an insurmountable barrier to SMEs and start-ups constructing a bid (especially in light of Ofgem's proposal to discontinue the SDRC and bid cost recovery provisions).

Question 4: What are your views on our proposals to remove the Successful Delivery Reward and the provision to recover Bid Preparation Costs?

We are concerned about this proposal for a number of reasons and would recommend that Ofgem reconsiders its intentions here.

Specifically:

- a) The current recovery of Bid Preparation costs would appear to be a reasonable provision in view of the high costs of NIC bidding that are created by Ofgem's NIC mechanism. If the mechanism is considered justified in the interest of protecting customers' interests, then it would appear reasonable that this is appropriately funded.
- b) Para 3.32 refers to these costs being treated in a different way to other industry funding mechanisms, but only the NIC has such a high measure of complexity and overhead. Differing treatment therefore appears reasonable.
- c) The present SDR mechanism provides a clear incentive, both to specify project milestones accurately and to deliver them in full. The fact that material amounts of money are linked to the milestones is a powerful and simple mechanism that should not be lost.
- d) If the SDR mechanism for contribution recovery is removed, presumably Ofgem will need to allow this as a reasonable cost in setting DNOs' regulated revenues when finalising price control review settlements. Therefore there seems little to be gained in moving the allocation of these costs, and the potential to create a barrier to new projects and to engaging with third parties.

Chapter 4

Proposal for future funding level of the electricity NIC

Question 1: What are your views on the rationale for reducing the level of electricity NIC funding pot?

Based on the experience of projects to date, the proposed moderate reduction in total funding appears to be a reasonable mid-course adjustment and should not inhibit good projects being proposed and taken forward.

Question 2: What are your views on the proposed funding level of the electricity NIC?

The total of £70m appears to be a sufficient funding pot. However, this level of funding should continue to be reviewed in light of project proposals submitted. If, for example, it became clear that high quality projects that promised valuable

learning were repeatedly being turned down due to a lack of funds that would be a matter of concern.

Chapter 5

Other proposals for governance arrangements

Question 1: Do you agree with our proposals to clarify the circumstances we do and do not expect change requests are submitted to us?

- **If you agree, do you think our proposed draft explanation of material changes is clear?**
- **If you think alternative drafting would achieve this more effectively please provide this drafting.**

We support Ofgem's goal of reducing the administrative burden associated with innovation funding and, in view of the emerging changes ahead in the sector combined with whole-system interactions, we would recommend positive action to make such mechanisms more agile and responsive. Indeed, an ability to take advantage of interim learning during the life of a project, and explore new avenues or take a subtle change of direction without undue bureaucracy, would be helpful. DNOs would be expected to have sound project risk and change management processes in place, and demonstrate sound judgement in deciding changes.

There is much evidence internationally that the emerging situation in the energy sector is a watershed and is likely to include tipping points, closer customer interaction, and the engagement of third parties who will 'go round' the established mechanisms rather than engage with them if they are burdensome.

Specifically, we would suggest:

- a) Where changes are potentially disruptive and fast-moving, as in the context of this consultation; we would welcome Ofgem reconsidering its approaches to decision-making. For example, demonstration of 'cost benefit' in the traditional sense has limited meaning where technology costs are moving rapidly and where benefits have strategic value, beyond factors that are straightforward to 'cost'. Put in another way, there is likely to be significant longer term benefit in some ring-fenced 'sub-optimality'.
- b) There may be a helpful opportunity created here by Ofgem's Innovation Link sandboxes.
- c) Ofgem note the work currently taking place in the Future Power Systems Architecture project (FPSA), led by the IET and the Energy Systems Catapult, which is revealing the pressing requirement for moving to more agile change mechanisms and sector governance. Closer working between Ofgem, the FPSA parties and the stakeholder community would be beneficial here.

Question 2: Do you have any feedback on our proposal to publish a plain English guide to our default intellectual property (IP) requirements?

This appears to be a helpful development. Further clarity would be welcomed by stakeholders. Of course, as in 5.12, value for money for customers is important. However, we would ask that Ofgem balances its views here to recognise the realities of life for innovators, especially SMEs, for whom IP is key to securing investment and being able to engage in the next project. Consumers' interests should be considered in both the immediate and long-term contexts of projects.

Indeed, allowing innovators to protect foreground IP is an important incentive as it provides a higher probability of the innovation reaching the market and hence being available to DNOs and their supply chain for the benefit of customers.

Question 3: Do you have any views on our proposals to improve the visibility of the NIA projects? What are your suggestions for a proportionate way to get assurance that the NIA is being used by network companies in an appropriate way?

We support the sharing of project data, where necessary in an anonymised form, as this may open new lines of thinking and provide academia and other R&D parties with current information, which will be increasingly important as consumer habits and engagement start to change.

We are concerned that possible changes to the use of NIA funds may result in greater detriment than might be anticipated. Ofgem's para 5.17 says *'In a few instances it's not clear to us why some activities aren't being carried out by network companies as part of their business as usual rather than as a NIA project.'* NIA (and NIC) funding has been used by the network companies to facilitate valuable cross-industry work, such as the Smart Grid Forum WS7 project 'DS2030'.

We would propose:

- a) That companies should be required to increase visibility of NIA projects, prior to implementation and then throughout their lifetime, through regular and timely updates to the ENA Smarter Networks Portal.
- b) That the role of the ENA in gaining agreement to all-party engagement is protected as it would become significantly more problematic if each company has to agree to fund the work from its own budgets, rather than through the innovation funding mechanisms. In view of this practical consideration we would recommend that cross-sector projects remain eligible for innovation funding. This would be consistent with supporting greater agility, the growing requirement for whole-system working, and the value of third party participation that these larger projects facilitate.

Question 4: Do you have any comments on any of our other proposals?

We have no further points to add, thank you.