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Ofgem

Our ref: RIIO2

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### **RIIO-2 framework consultation: EA Technology's Response**

Dear James,

EA Technology welcomes the opportunity to respond to Ofgem's consultation on the RIIO-2 framework. EA Technology is an employee-owned SME with a long history of innovation in the electricity distribution industry.

While we do not feel qualified to address all of the questions in the consultation, we would like to respond to questions 11-15, under the heading 'Innovation'.

**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?**

We agree with this proposal. In light of the intention to reduce the price control length to five years, we believe it is more important than ever to ensure that effective innovation continues to deliver benefits beyond this relatively short time horizon. In particular, we believe that high risk, high reward innovation that delivers long-term benefits would be considerably reduced if dedicated innovation funding is not available under RIIO-2.

**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)?**

Yes. We agree that all three specified areas require reform.

**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?

In our view, the objective is to achieve the three broad areas of reform referred to in question 12 while maintaining a simple and effective innovation regime. Therefore, we believe the following key issues need to be addressed:

- 1) *Identification of the frameworks that are necessary to ensure effective, efficient innovation.*

We believe it is necessary to have a framework that recognises and understands that innovation is inherently risky and long term, and works to deal with those risks and timescales effectively. We believe that existing, proven frameworks (such as that used by BEIS and InnovateUK) should be used whenever possible, rather than designing something specific for use in a regulatory context.

- 2) *How to maintain alignment of network innovation activities with wider UK objectives.*

We believe the existing RIIO innovation framework is too focused on networks and is insufficiently aligned or integrated with wider UK objectives such as the published Industrial Strategy<sup>1</sup> and Carbon Plan<sup>2</sup>. We believe that it would be more effective for innovation priorities to be determined and funded outside of the regulatory context, with Ofgem providing essential input into this process.

- 3) *Recognition that the benefits of network innovation may be realised beyond the network itself.*

The benefits of lower energy costs for the UK economy are considerable and reach well beyond the regulated networks (and their directly-connected customers). We believe that the focus should be on returning benefits to the economy as a whole, rather than narrowly focusing on returning benefits directly to network customers. This will require a much wider perspective and we propose a mechanism for achieving this in our response to question 15.

- 4) *How to enable competition and market forces to drive successful innovation and deployment.*

The existing framework is very focused on innovation inputs, in the form of ideas, funding and projects. We would like to see a move towards an output-based approach, whereby the rewards are realised not just for “doing” innovation, but also for effectively implementing new ideas. We believe that regulated network companies, third party providers and customers should all share in the rewards that result from successful innovation. We find that the existing framework does not promote effective competition and we propose some measures to address this in our response to question 14.

- 5) *How to report and measure successful innovation.*

We do not believe that the success of innovation can be measured by inputs alone. It is more important to measure the outputs to ensure that customer’s money is being used effectively in a way that delivers tangible benefits to the UK economy. We propose a framework to address this issue in our response to question 15.

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<sup>1</sup> <https://www.gov.uk/government/policies/industrial-strategy>

<sup>2</sup> <https://www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2>

**Q14. What form could the innovation funding take. What would be the advantages and disadvantages of various approaches?**

We believe the key to successful network innovation is to unleash the potential of the entire energy value chain, rather than focusing exclusively on the networks themselves. However, we recognise that there are inherent challenges in enabling 3rd parties to access regulated innovation funding. Nevertheless, we think the current approach of trying to “do more innovation” within the strict confines of a regulatory framework is misguided. For example, under RIIO-ED1, network companies routinely ask 3<sup>rd</sup> party suppliers to submit their innovation ideas, before going out to the market to find an (exclusive) developer of the solution. We think this approach is fundamentally flawed, as this actively discourages the submission of genuinely innovative, transformative ideas and inhibits competition at the development and deployment stages - to the detriment of both network customers and the wider economy.

We would propose an alternative form of innovation funding, in which a predetermined level of innovation funding is agreed and taken from network companies as part of the regulatory framework. These funds would contribute towards a wider energy innovation funding mechanism that sits completely outside the regulatory framework, and ideally forms an integral part of GB or UK innovation funding. Stakeholders, such as Ofgem (on behalf of network customers) and network companies would clearly have a role to play in guiding how such funds are allocated, but they would not be the direct recipients in this model.

Instead, competition for innovation funding would be open, transparent and integrated with existing funding frameworks (such as that used by BEIS and InnovateUK). This would largely replicate the existing RIIO innovation funding, but with the added advantage of greater alignment with the needs of the UK economy.

However, that is not the end of the story; at this point, no tangible value has been returned to customers...

We said earlier in our response that it is essential to focus on innovation *outputs*, rather than funding mechanisms. There must, therefore, be a complementary mechanism to incentivise network owners to adopt, implement and deploy the results of previously-funded innovation activity. We would therefore like to see strong, enduring incentives on network operators to

- a) adopt and deploy innovative solutions on a large scale; and
- b) ensure that money is returned to customers as a result.

These incentives should transcend price control periods, ensuring that network companies are appropriately rewarded for continuous innovation deployment and customers receive enduring benefits. This would contrast with the existing price control regime, whereby the benefits of innovation are effectively “reset” at the start of each price control period. This results in excessive focus on short-term innovations and leads to a cyclical pause in innovation towards the end of each price control period (to the inevitable detriment of the innovation supply chain).

**Q15. How can we further encourage the transition of innovation to BAU in the RIIO-2 period? How can we develop our approach to the monitoring and reporting of benefits arising from innovation?**

We believe it is essential to incentivise and reward the successful *outputs* from innovation i.e. through the return of benefit to customers, network owners and 3<sup>rd</sup> party solution providers. These incentives should be based on effective adoption of innovative solutions, rather than simply providing an incentive to “innovate”.

We think that customers should provide some of the initial funding for innovation (as a proportion of use of system charges, for example), but we do not believe that this funding should be exclusively spent within the regulated network businesses. On the contrary, this funding should form part of a coherent energy innovation funding programme that sits outside of the regulated network businesses. This programme should be openly accessible to all potential participants (i.e. regulated network business and 3<sup>rd</sup> parties) and should be competitive.

However, unlike existing RIIO innovation funding, the focus should not be on finding an exclusive provider of a particular solution. In fact, the opposite should apply, and multiple solution providers should be sought, thereby promoting a competition or race to deploy the best solution. In this framework, while there may be modest returns for participants in developing the technology (necessary to address the inevitable degree of technical risk in any development), the real rewards will only occur on mass deployment.

Likewise, network owners will not have any special incentive to invest in innovation (i.e. an “input” incentive), rather they will be rewarded for effective implementation and deployment that returns value to customers (an “output” incentive). In this way, network owners will be rewarded for successfully managing innovation risk and will be encouraged to move beyond technological trials.

A notional framework for business-as-usual innovation with incentives for deployment is shown in Figure 1.

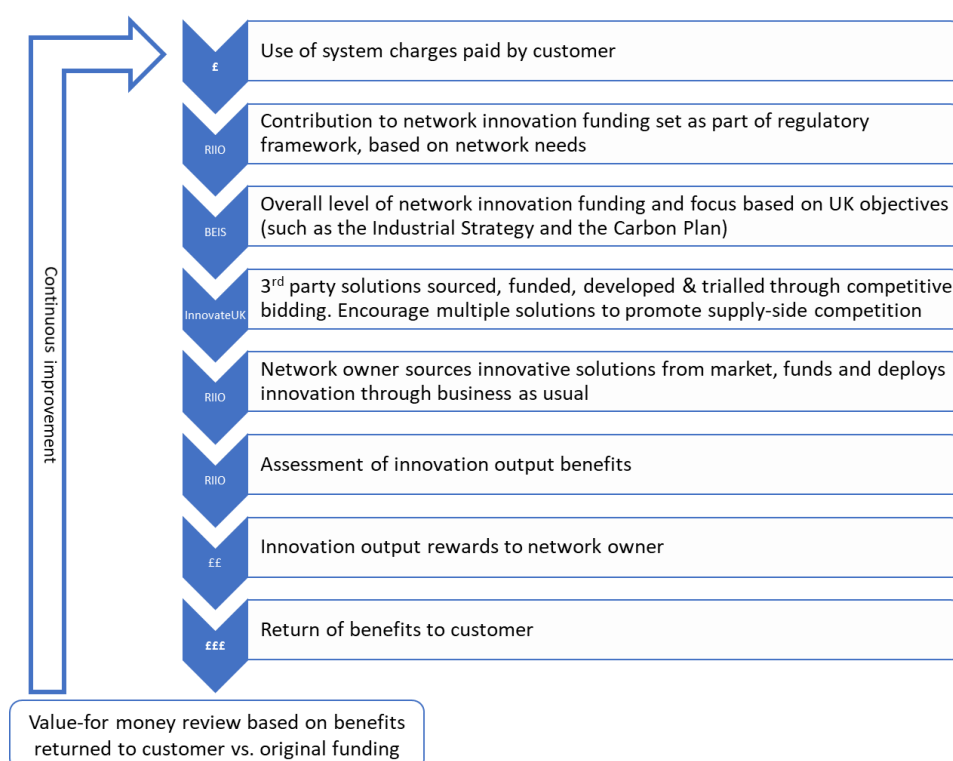


Figure 1 Notional framework for business-as-usual innovation with incentives for deployment

This framework provides an illustration of how we think it would be possible to ensure effective, efficient innovation while maintaining alignment of network innovation activity with wider UK objectives.

By extending the scope of the innovation funding beyond the networks, we believe this framework recognises that innovative solutions (and benefits) may exist outside the regulatory landscape. We also believe that this framework would encourage open competition and market forces to drive successful innovation and deployment, without the need for complex regulatory arrangements.

Finally, in clear recognition that customers' money is at stake, the framework enables clear evaluation and reporting of the level of benefit returned to customers, thereby providing a clear evidence base for increases or decreases to innovation funding, as the needs of the networks evolve.

We hope you find our response to this consultation useful. We believe passionately that innovation has the potential to drive down costs and enable the transformation of the energy system. We would therefore be delighted to discuss any of these points in more detail (if required) and look forward to seeing the outcome of the consultation process.

Yours sincerely,



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