

Energy Systems Catapult response to Ofgem's open letter on the next network price control review process¹

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Key messages

- **Whole-systems approach.** Ofgem's initial analysis suggests greater fragmentation of price controls may be necessary. However, it will be crucial for Ofgem to ensure whole systems thinking across the energy system, and to incentivise innovation to exploit synergies across the system and between energy vectors.
- **Wider strategic alignment.** Price controls are a central part of building and maintaining networks for the future but there needs to be close alignment with other complementary areas of reform – including with Climate Change Committee trajectories, as well as the emergence of the Future System Operator, local governance, planning consent, network tariffs / wholesale price signals, etc. This will be crucial for unblocking opportunities for anticipatory investment.
- **Innovation.** Need to bolster incentives for developing and disseminating new and improved approaches and technologies – including through retaining/strengthening the Strategic Innovation Fund and Network Innovation Allowance. Positive outcomes from publicly funded innovation project should be widely disseminated and adopted at scale.

About Energy Systems Catapult

Energy Systems Catapult was set up to accelerate the transformation of the UK's energy system and ensure UK businesses and consumers capture the clean growth opportunities.

The Catapult is an independent, not-for-profit centre of excellence that bridges the gap between industry, government, academia and research. We take a whole systems view of the energy sector, helping us to identify and address innovation priorities and market barriers, to decarbonise the energy system at the lowest cost. We work with innovators from companies of all sizes to develop, test and scale their ideas. We

¹ https://www.ofgem.gov.uk/sites/default/files/2022-09/Open%20Letter%20FINAL_20220929.pdf

also collaborate with industry, academia and government to overcome the systemic barriers of the current energy market to help unleash the potential of new products, services and value chains required to achieve the UK's net zero ambitions.

Part 1: strategic issues

We welcome this strategic review of the price control framework. A level-playing field across energy networks and fair competition between different sustainable energy resources is key to supporting innovation. ESC advocates for a strategic and whole systems approach to energy system infrastructure investment.

Ofgem's open letter accurately recognises many of the major changes and challenges facing the energy system in the coming years. Future regulatory frameworks must ultimately support the development of clean and secure energy while keeping costs down. A central challenge that should be emphasised and prioritised is the need for power system flexibility and the important role the price control framework has in helping to facilitate this.

Strategically, future price controls will need to demonstrate full alignment with the Climate Change Committee Carbon Budgets, to help build confidence in the UK's pathway to net zero. We would recommend that subsequent phases of this review of price controls maps out this alignment. Also, and as recognised in the open letter, the role and status of the Future System Operator will need to be carefully considered to ensure alignment.

It is important to note that price control reform is a necessary but not sufficient condition to achieve the objectives set out. It will be important to understand how it fits in context of what Ofgem is doing in other areas, such as system planning / governance at the local level, planning permissions, code governance, distribution visibility / smart metering, etc.

Part 2: case for change

We strongly agree that the focus for the future must be to take a whole-systems approach. Significant change in the energy system is expected and there remain many unresolved questions (e.g. the role of hydrogen; how much gas; etc). This all suggests a more flexible approach is needed, building on the current approach. As such, we share the view expressed in the open letter that a "one size fits all" is unlikely to be sustainable.

However, there is an implicit presumption in the open letter that way to deal with these challenges is for Ofgem to fine-tune its price control decisions (e.g. through extensive use of within-period mechanisms). This makes sense if the objective is to minimise the difference between what network companies are funded for and what they spend: we note this was the predominant theme in the RIIO2 reforms.

However, there is an alternative approach in which decision-making is pushed down to the lowest operational level, while Ofgem sets a framework of expected outcomes and high-level funding - with clear conditions for use-it-or-lose-it, roll-forward, scaling, etc. This would be consistent with the view in the open letter that the Future System Operator may be able to take on some of the functions previously performed by price controls. Such an approach would involve more potential divergence between costs and funding, but can be more effective at delivering outcomes amid uncertainty, promoting innovation and other desirable outcomes.

Part 3: changes and future frameworks

We agree that it will be important to consider alternative approaches to the current price control framework, including the options identified in the open letter.

Flexibility and adaptability will be needed to accommodate big system changes and challenges that are not yet resolved. Testing and piloting of approaches would be sensible and ESC's tools, such as the Living Lab², could usefully support this work. Similarly, utilising a "digital shadow" to scenario plan for differing outcomes would be highly valuable, allowing Ofgem to understand the likely impacts of a particular event – such as the impact of commodity price shocks – and test possible mitigations and interventions.

We note that RIIO2 already contains versions of each of the options presented in the open letter: the overall *ex ante* framework; indexation of general inflation and of real price effects; the use of consumer forums; and *ex post* mechanisms such as return adjustment mechanisms and re-openers. The open letter implies moving towards greater separation in how network companies' activities are regulated, so it is important that Ofgem is deliberate in ensuring cohesiveness and whole-systems thinking across differently-regulated activities.

The open letter points out that "there could be costs if these alternative regulatory approaches were less effective in delivering cost efficiency, and if changes to the regime were introduced in a way that was perceived to increase regulatory risk, and therefore the cost of capital for network companies". Other costs/risks of the proposed changes could include:

- siloed decision-making and a lack of coordination across differently-regulated activities, including potentially perverse incentives for the network companies;
- path dependency / lock-in if certain activities have been allocated to a particular approach and cannot be easily re-assigned and;
- lack of institutional capacity to make timely decisions if the new approaches rely on Ofgem making more "micro-level" expenditure decisions.

² <https://es.catapult.org.uk/tools-and-labs/living-lab/>

Furthermore, as well as engaging with key stakeholders, it will be important to understand how Ofgem is developing its own capabilities to deliver price controls – of any form – more effectively. e.g. knowledge retention, use of data and AI, etc.

The RIIO focus towards more environmentally and socially conscious objectives is positive and there are good steps being made to help customer engagement, such as the Enhanced Stakeholder Engagement Strategy and the use of Customer Engagement Groups. However, a truly collaborative process with the public is not yet widespread.

A shift to a more locally-based planning approach could support regulation for distribution networks evolve towards a more collaborative model. The RIIO-ED2 methodology recommends taking account of Local Area Energy Plans (LAEP), which is positive step because it involves a wider range of views being incorporated into network strategies. A constructive development in this regard has been Ofgem's recommendation that the distribution networks should take regard of LAEPs. Further clarity over the roles and responsibilities of networks, Consumer Engagement Groups and local authorities is required to ensure collaborative decisions and investments are made based on the needs of local areas.

Part 4: principles of reform

Specific principles of reform should include:

- **Encourage network innovation** through retaining/strengthening the Strategic Innovation Fund and Network Innovation Allowance, strong incentives for innovation, and ensuring that positive outcomes from publicly funded innovation project are widely disseminated and adopted at scale.
- **Improved coordination across energy vectors** through price control, licencing and other measures to enable sector coupling and to help optimise network investment (e.g. electrification of transport; hybrid gas/electric heat systems; hydrogen and storage).
- To that end, there needs to be a facilitation of much **better coordination between various parties** such as FSO, DNO/DSOs, Local Authorities, gas network operators, etc.
- The price control framework needs to evolve to encourage infrastructure providers, especially at distribution level, to **support active network operation**, with more granular price signals across time and location. It will be necessary to fund investment for improved visibility at low voltage levels, the use of smart technologies and data, and the creation of corresponding incentives on the DNOs.
- Last but not least, to will be very important to improve the **data submission process for networks** and to utilise more advanced, data driven methods for

making decisions on investments. Ongoing work by ESC³ on this can be shared upon request.

Looking ahead

Please let us know if there is any further ESC material we can share or if we can support Ofgem in other ways. We look forward to contributing to the full consultation next year.

³ Unpublished at the time of this response.