ELEXON

15 January 2025

By e-mail to: RIIO3@ofgem.gov.uk

Dear RIIO-3 Team

Re: ED3 Framework Consultation

Thank you for the opportunity to respond to your consultation on the ED3 Framework.

Elexon is an independent, not-for-profit company that has been operating for 25 years, playing a critical role as an expert delivery body, opening up markets and supporting the transition to a net zero energy system. We provide governance, settlement and data platforms (Elexon Kinnect), and specifically manage the Balancing and Settlement Code (BSC). This enables the smooth and effective operation of the electricity market, which includes energy suppliers, generators, flexibility service providers and network companies across Great Britain. Over the past year, we have helped around 50 new companies enter the market, supporting the market to operate effectively, and enabling a more flexible and innovative energy system.

Our end-to-end expertise in governance, assurance, technology platform development and electricity market data is available to support the industry, Government and Ofgem, as the energy sector transitions to net zero. Building on our purpose of serving the industry, the electricity market data we hold is open, and available for anyone to access, analyse and distribute. As a trusted, independent and reliable market expert, we continuously look to evolve and innovate for the benefit of our customers and consumers.

Ofgem has appointed us as the Market Facilitator for flexibility markets across both local and national markets. The Market Facilitator will focus on reducing friction for all parties, aligning system, transmission and distribution arrangements, and developing these markets, ensuring better coordination and alignment. The Market Facilitator is planned to be operational by the end of 2025, with transitional arrangements already underway and continuing across the year. Ongoing engagement with all the network operators is critical to ensure that aligned and coordinated flexibility markets are effectively adopted to facilitate the connection of low carbon technologies and distributed energy resources while reducing the need of new physical infrastructure.

Ofgem has also appointed us as the Implementation Manager for implementing the Market-wide Half Hourly Settlement (MHHS) Programme, a key enabler of the flexibility required for the transition to net zero. Once MHHS is live, Elexon will manage up to 38m energy readings daily. Half hourly data is an important enabler for demand side response, and used effectively, can encourage more flexible use of energy – reducing household bills and rewarding customers. Ofgem estimates half hourly settlement will deliver up to £4.5bn of net benefits to consumers by 2045.

In our response, we are generally supportive of Ofgem's proposals for networks for net zero and smarter networks, agreeing with the reasoning behind them. **However, we believe there is an opportunity for Ofgem to enhance the strategic messaging around the transition from the RIIO-ED2 to RIIO-ED3 approach to ensure the critical role of flexibility as emphasised in the Government's Clean Power 2030 action plan is equally recognised.** While we strongly recognise the importance of network reinforcement, both network reinforcement and flexibility are key tools in the Distribution System Operator (DSO) toolkit and should be used as appropriate for net zero and consumers. Flexibility will remain crucial in RIIO-ED2, particularly with the development of flexibility markets, and will continue to be important in RIIO-ED3. Additionally, we make note that wider market developments like Review of the Electricity Market Arrangements (REMA) could impact the role of both network reinforcement and flexibility.

We have limited our response to areas where we feel we can add value. If you would like to discuss any areas of our response, please contact Francis Dike, Head of Market Intelligence and Advisory (Francis.Dike@elexon.co.uk) or Hussein Osman, Market Intelligence Advisor (Hussein.Osman@elexon.co.uk).

Yours sincerely,

Peter Stanley
Chief Executive

Elexon's consultation response

Context

In July 2024, Elexon was appointed as the Market Facilitator for local energy flexibility, encompassing both local Distribution System Operator (DSO) and National Energy System Operator (NESO) markets. The Market Facilitator will play a crucial role alongside NESO, DSOs, Flexibility Service Providers (FSPs), and the wider industry to develop flexibility markets that are open, fair, and coordinated. The aim is to enable FSPs to seamlessly offer their services across different markets while also ensuring that market operators can procure greater volumes of flexibility. Additionally, the Market Facilitator will support the Government's goal of achieving a clean power system by 2030, contributing to the flexibility required for this transition.

A key focus of the Market Facilitator will be working closely with NESO and DSOs to establish the rules governing local energy flexibility. These rules, which DSOs and NESO must comply with under their licence obligations, will form the foundation of flexibility markets. Given that local DSO flexibility markets are still in their early stages, the Market Facilitator will collaborate with stakeholders to develop and refine these rules throughout the remainder of the RIIO-ED2 period and beyond. The aim is to create coordinated and accessible flexibility markets that promotes greater participation and increases liquidity, particularly within local DSO markets.

Transitional and design activities are already underway, and the Market Facilitator role will formally go-live at the end of the year.

Networks for Net Zero and Smarter Networks

We have chosen to leave the specific questions on these two sections to DSOs and other stakeholders, particularly the DSOs who have been instrumental in shaping and delivering the RIIO-ED2 framework over its first 20 months. However, we will provide a general overview of our initial thoughts on these two sections, especially given their relevance to the Market Facilitator role.

As we transition to a clean power system by 2030—just five years away—and move towards a net zero economy by 2050, the role of networks must continuously evolve to align with the changing energy landscape. This evolution needs to be clearly reflected in each price control framework.

Given the substantial growth in distributed low-carbon technologies expected over the next five years, it is essential to build distribution networks that can accommodate this increase in demand and generation. Failure to do so could result in challenges similar to those faced by the transmission system, e.g. connection queues and increasing balancing actions. NESO's analysis in the Clean Power 2030 (CP2030) report shows that, without the required network development, constraint costs could increase significantly under the 'Further Flex and Renewables' and 'New Dispatch' pathways. These costs could reach £12.7bn and £10.9bn, representing increases of 813% and 627%, respectively, compared to the 2023/24 constraint costs, which were just over £1.5bn[1]. Network development, both at the transmission and distribution levels, will play a crucial role in reducing system congestion and the need for balancing actions, which will help lower balancing costs for consumers.

However, flexibility should remain a fundamental tool in the DSOs' toolkit throughout the RIIO-ED3 period, especially for services like post fault and restoration. While the consultation places considerable emphasis on deferring network reinforcement, we would like Ofgem to explore whether flexibility has the potential to entirely avoid the need for reinforcement in certain cases.

[1] NESO (2024), Clean Power 2030 Advice: https://www.neso.energy/document/346651/download

Strategic Messaging

While we acknowledge that Ofgem has reaffirmed their support for flexibility in the consultation, we feel there is an opportunity to better articulate the strategic messaging around the transition from the RIIO-ED2 emphasis on "flexibility first" to a greater focus on network reinforcement in RIIO-ED3. This is crucial to ensure the continued recognition of flexibility's critical role, as outlined in CP30, particularly as these changes are introduced.

The first year of RIIO-ED2 saw significant progress in the flexibility space, with DSOs tendering and contracting record amounts of flexibility (6.4GW and 3.2GW respectively[2]), deferring over £362 million worth of traditional network upgrades, delivering substantial savings to consumers. Additionally, many other initiatives have been progressed within local flexibility markets. While reinforcing networks to accommodate increased volumes from distributed low-carbon technologies is essential, it is equally important that flexibility continues to be prioritised. Undervaluing its role, even unintentionally, could risk sending mixed signals to DSOs as they develop their respective flexibility markets, especially as we are only in the second year of RIIO-ED2.

Flexibility remains a critical tool for market operators and will only grow in importance as markets mature. The introduction of the Market Facilitator role aims to support the growth of local flexibility markets and support market liquidity. As the Market Facilitator focuses on these efforts during the 2026–2028 (first delivery period), we expect improvements in tendered and contracted flexibility volumes, further emphasising its role as a key market mechanism.

We strongly recommend that all Ofgem teams maintain alignment in their approach to flexibility and continue to prioritise its development throughout the RIIO-ED3 period.

Network Reinforcement

The consultation highlights the debate around the risks and downsides of underinvestment and overinvestment. While we agree with the logic that unnecessarily deferring reinforcement to the future could lead to higher costs, we believe that neither underinvestment nor overinvestment delivers efficient or optimal outcomes for consumers.

On one hand, underinvestment can result in higher future costs for reinforcement and alternatives, burdening consumers. On the other hand, overinvestment may lead to an overdesigned network that is underutilised, again at a cost to consumers. While uncertainty plays a significant role in planning, we believe effective planning is essential. DSOs should establish a robust baseline to build out their networks effectively, avoiding the extremes of underinvestment or overinvestment.

However, network reinforcement alone is not a silver bullet. It should be complemented by other tools, such as network flexibility.

With RIIO-ED2 focused on saving consumers money and RIIO-ED3 aimed at creating networks capable of delivering net zero, we see this as an optimal moment to merge these objectives. **RIIO-ED3 should focus on achieving both outcomes: cost efficiency for consumers and the development of networks aligned with net zero goals.**

We also believe that, given the close relationship between network planning and flexibility, there needs to be clearer and more defined interactions between the Market Facilitator and Regional Energy Strategic Planners (RESP). While this has not been explored in the consultation, we anticipate that as we move into RIIO-ED3, there will be a growing need for coordination and information sharing between these two entities.

[2] https://www.energynetworks.org/publications/open-networks-2024-flexibility-figures

Role of flexibility

In the current landscape, flexibility plays a crucial role in DSO regions by managing constraints, deferring, and sometimes avoiding network reinforcement. With the Government's recent CP2030 publication and its target of achieving 12GW of consumer-led flexibility by 2030—just five years away—this role is expected to grow significantly during RIIO-ED2. This growth will be driven by the maturation of local flexibility markets and the introduction of the Market Facilitator to support their development. Again, it is essential that Ofgem ensures its strategic messaging supports this focus and avoids sending mixed signals to DSOs within the price control framework.

Looking ahead to RIIO-ED3, flexibility will continue to play a critical role in local markets, particularly in post-fault and restoration scenarios. However, taking a whole-system approach, effective network planning and development by DSOs can unlock flexibility that could benefit the system, rather than limiting its use to the local level. As markets evolve and coordination improves, the value of flexibility will shift from deferring network reinforcement to delivering benefits across the entire system.

Additionally, industry changes, such as the Review of Electricity Market Arrangements (REMA), may influence flexibility and network reinforcement. For instance, network investments must consider how evolving markets might reduce the need for reinforcement, while planned network upgrades may, in turn, lessen the need for market-based solutions to address locational issues.