ELEXON

27 November 2024

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

Dear Future Retail Markets Team,

Re: Consultation on Innovation in the energy retail market

Thank you for the opportunity to respond to your consultation on “Innovation in the energy retail market”.

Elexon is an independent, not-for-profit organisation that has been operating for 25 years, playing a critical role as an expert delivery body, supporting the transition to a net zero energy system.

We provide governance, settlement and data platforms (Elexon Kinnect), and 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, enabling a more flexible and innovative energy system. Our end-to-end expertise in governance, assurance, technology platform development and electricity market data, are available to support the industry, Government and Ofgem, as the energy sector transitions to clean power and 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 Implementation Manager for the Market-wide Half Hourly Settlement (MHHS) Programme, a key enabler of the flexibility required for the transition to net zero.

Once Market-wide Half Hourly Settlement (MHHS) is fully implemented, Elexon will be managing 500-billion-meter readings per year, and we have built a smart meter data messaging service – the Data Integration Platform (DIP).

Recently, we utilised our domestic and non-domestic half-hourly consumption data, alongside our extensive knowledge, to administrate the Government’s Energy Price Guarantee and Energy Bill Discount Schemes, processing up to £650m of subsidy payments per week - providing vital support to consumers.

We also calculate, collect and distribute payments that incentivise investment in low carbon generation and energy security for the Capacity Market, Contracts for Difference (CfD) and Nuclear RAB schemes, on behalf of the Low Carbon Contracts Company (LCCC).

In July 2024, Elexon has was appointed by Ofgem as the Market Facilitator for distributed flexibility. The Market Facilitator will simplify the process for flexibility service providers to access and navigate local flexibility markets to support an increase in participation and liquidity in these markets, leading to lower system costs and reduced consumer bills.

Summary of our response

1. **Elexon is fully committed to playing a leading role in supporting innovation and consumer protection in the energy markets.** In the last few years, we witnessed the increase in the offer of innovative services such as energy as a service, advisory and energy management services, load control activities and demand side response, and the operators who provide them. This is certainly a positive and encouraging sign, which also demonstrates the need for a general review of the retail market which is becoming increasingly complex.

2. **Despite these positive changes, there is still much to be done to fully unlock the value of data and flexibility**, and Elexon is committed to work with Ofgem, the Government and wider industry to ensure that the system is prepared to meet the future challenges of the energy transmission.

3. **The rollout of smart meters and the introduction of half-hourly data are key building blocks for the future retail markets**, and an important enabler for offering the right price signals and boosting new and innovative products which create opportunities for consumers, including increased control over bills, and tailored services that better meets their needs in the transition to a net zero energy system.

4. **We believe that unlocking the value of data is the main innovation of the retail markets, which will bring further opportunities and changes to the system**, and at Elexon we are proud to play a pivotal role in enabling this transition and we are committed to supporting the sector on improving the accessibility, discoverability, and interoperability of half-hourly data.

5. **The new ambition to achieve Clean Power by 2030 requires further effort from the whole society**, an acceleration of investments and an increase in flexibility, as well as an important shift in terms of consumer engagement and behaviour.

6. **To achieve these new challenging goals, an acceleration of the pace of delivery is also necessary.** For these reasons we support Ofgem's intentions to focus on options to enable innovation in the retail market that can be implemented quickly and easily, without the need for legislative change.

7. **We believe that access to half-hourly data, simplification of consumers journey, financial incentives, and digitalisation are the appropriate levers** through which companies and innovators can offer increasingly tailored services or refine profiling and forecasting techniques. These are also the areas where regulatory changes are desirable and needed and that should be prioritised.

8. **It's important to reward consumers who are providing their flexibility and, in doing this, are helping the whole system.** By reducing the costs of balancing, all the consumers - also those unable or unwilling to participate - will benefit, ensuring that the decarbonisation will be a fair and just transition.

9. **Elexon support regulatory initiatives aimed at removing barriers for innovators, operators and flexibility service providers.** For instance, we welcome the introduction of a unique, centralised and trusted Flexibility Market Asset Register (FMAR) which will eliminate the complexity of the myriad of platforms and processes operators are facing today.

10. **Elexon also welcome initiatives aimed at developing a digital solution allowing consumers to share their data and maintain control over consent (Consumer Consent Solution).** We are committed to working collaboratively with the delivery body Ofgem appoints to integrate our smart meter data service with a standardised and trusted consent solution. This will empower consumers to make informed choices in a conscious and transparent way.

11. **Overall, it is paramount that the work on innovation is coordinated with key workstreams for inclusive and trasparent digitalisation which will trasform the energy's system foundation, making it more data driven:** e.g. Smart Secure Energy System (SSES), Data Best Practices, Data Sharing Infrastructure (DSI), Asset Visibility and Flexibility Asset Manager Register (FMAR), Consumer Consent Solution.

12. Elexon believe that the new regulatory framework resulting from a review of the retail markets should pursue the following **primary objectives:**

    - **Reducing administrative and financial barriers** to innovation and domestic and small-scale flexibility.
    - **Stimulating consumer trust and awareness** about the new opportunities offered by the evolution of the system.
    - **Unlocking the value of half-hourly data** in a secured and trusted way.
    - **Ensuring that consumers will receive adequate protection** and incentives for up-taking new **products and services.**
    - **Improving energy management services**, particularly comparison websites.

In our detail response we outline what are the main changes that we believe can successfully determine the achievement of these primary objectives.

We note that although the consultation is very broad in scope and addresses both business and domestic consumers and vulnerable consumers, the majority of proposals appear to be directed towards domestic consumers.

It would be desirable to define more specific measures to try to stimulate the

engagement of vulnerable consumers so that they can have greater awareness and potentially be able to benefit from the advantages deriving from tariffs and innovative products and services.
Business consumers should also be considered with more specific measures, aimed for example at stimulating their greater participation in flexibility markets.

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 Marta Milan, Senior Advisor (marta.milan@elexon.co.uk).

Yours sincerely,

Francis Dike,
Head of Market Intelligence and Advisory

Elexon's consultation response

Section 1 - Innovation in the retail energy markets

Questions

Q1. What innovation is currently happening in the domestic and non-domestic retail markets? What is the scale of this innovation?
Q2. What innovation should happen to meet consumers' needs and meet net zero?
Q3. What will be the impact on consumers of new, innovative products and services? How can we maximise the benefits and minimise the risk?

Q1. What innovation is currently happening in the domestic and non-domestic retail markets? What is the scale of this innovation?

We agree with Ofgem that as technology, consumer preferences and the transition to net zero drive changes, new types of business models are emerging, which can be summarised in tree main categories:

- **New types of energy supply** (e.g. "type-of-use" tariffs which have different prices for different types of consumption, time-of-use tariffs with different energy prices at different times of the day, local tariffs designed for consumers living close to renewable generation that aim to match local demand and generation, data as a service).

- **Advisory services,** characterized by the presence of third parties or platforms that offer consultancy services or information to help the consumer make informed, smarter and/or personalised decisions (e.g. using consumer data). This includes, for example, smart price comparison websites which analyse consumption data shared by the consumer to determine which smart energy tariffs or energy management services are most optimal for the customer (e.g.

specialist EV tariff comparison platforms).

- **Energy Management Services** which can include the provision, installation, operation, management and/or maintenance of technology and services to reduce or optimise a consumer's energy consumption, generation or storage. This includes, for example:
  - Flexibility products and services like demand side response (DSR) and energy management services aimed at delivering or driving flexible asset or user behaviour, and
  - Behind-the-meter asset installation and management. Via these services, companies install and help the consumer finance energy assets (e.g. solar, battery or heat pump) and maintain and optimise the use of these assets which delivers benefit to consumers through efficient self-consumption and exports of generated energy.

In the last years, we witnessed the increase in the offer of advisory and data management services, and the operators who provide them. This is certainly a positive and encouraging sign, which also demonstrates the need for a general review of the retail market which is becoming increasingly complex.

We believe that consumers are the heart of the energy sector, and a driving force for achieving the net zero ambition. However, general trust in the energy sector remains low compared to other sectors. Moreover, the scale of consumer engagement and participation is not yet adequate and sufficient to ensure the revolution in terms of consumer behaviours and flexibility that is necessary to achieve the objectives of decarbonisation and Clean Power by 2030.

Market-wide Half Hourly Settlement (MHHS) is one of the biggest changes to energy markets since retail competition was introduced in the late 1990s.
Elexon has been appointed by OFGEM as the MHHS Implementation Manager and we are working with the industry and Ofgem to ensure that this revolution will bring all the benefits to consumers and the whole energy system and society.

By 2026 all electricity market trading in the UK, for both domestic and non-domestic customers will be based on accurate half-hourly data.
This date will mark a historic turn between a pre and post half hourly energy world. Half hourly settlement represents a revolution which can pave the way for the development of new, increasingly personalized products and services and is also a key enabler and building block to decarbonisation.

We believe that this revolution and unlocking the value of data is the main innovation of the retail markets, which will bring further opportunities and changes to the system, and at Elexon we are proud to play a pivotal role in enabling this transition and we are committed to supporting the sector on improving the accessibility, discoverability, and interoperability of data.

Our role in data provision will increase once half hourly Settlement is implemented, when we will be processing around 500 billion readings per year. We have built a smart meter data service (which is hosted on our Kinnect platform) to provide open access to half hourly data. This granular data can support the innovation needed to meet the Clean Power 2030 and net zero targets.

The half-hourly consumption and data recorded by smart meters unlocks new approaches to managing demand and more innovative digital services and products, such as more sophisticated smart 'time of use' tariffs which reward consumers for using energy away from peak times, turning up and down energy use and enable technologies such as electric vehicles and smart appliances to be cost effectively integrated with renewable energy sources, as well as allowing energy suppliers to accurately bill their customers.

Suppliers and third parties can leverage customer data to offer personalised experiences for energy-saving habits and efficiency products. Furthermore, by responding to specific customer needs on time, companies have the power and control to offer exclusive products, gamified experiences, and customised energy tips, significantly elevating customer engagement.

For this to be possible, however, it is **necessary to enhance customer experience, increase consumer awareness and trust, and ensure that the consumer journey is simplified and that processes and platforms for data management are secure, transparent and trusted by consumers.**

We recently responded to the Consumer Consent Consultation related to the development of a digital solution enabling consumers to share their energy data with trusted third parties so that they can receive tailored services to manage their energy bills.
The digital solution will allow consumers the ability to grant their consent to share data, together with the more complex aspects of managing, reviewing, and revoking consent, if necessary.
We fully support the need for a digital solution allowing consumers to share their data and maintain control over consent and are committed to working collaboratively with the delivery body Ofgem appoints to integrate our smart meter data service with a standardised and trusted consent solution.

We believe that for the success of this initiative it will be a critical to ensure that the data is shared in a lawful and secure way. To this end and to avoid duplications of costs and ensure value for money for consumers, we recommend that Ofgem will consider previous experiences such as MIDATA[1] where the Authority or other public authorities initiated projects aimed at providing a standardised and system-wide consent process for organisations and consumers. Lessons can be learned from these experiences and should be integrated into the development of the new framework.

Elexon would encourage Ofgem to take an industry wide view on data protection matters which provides a basis for the delivery bodies, the data providers, and the industry participants who are the data controllers to comply with data protection laws.

We believe that the new innovative platforms and solution like the Consent Solution should be developed by adopting a holistic approach and in considering how the new framework will be joined up/aligned with other initiatives such as the Smart Secure Energy System (SSES), the Data Sharing Infrastructure (DSI), and Energy Code

[1] https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/midata-energy-programme

Reform (ECR).

Q2. What innovation should happen to meet consumers' needs and meet net zero?

At the moment there are many offers and services available on the market, and, contrary to other stakeholders, we do not believe that the lack of offer or innovative services or products is the reason why energy consumers are still quite disengaged.

We believe that the reasons for low consumer disengagement and trust are rather associated with the presence of barriers and the lack of adequate incentives, as outlined in more detail in section 2.

We also note that some of the innovation that is needed doesn't entirely sit within the energy sector. Some of the required innovation will need to come from third parties such as manufacturies (e.g. to make appliances more efficient and costs back down affordable levels), or from the digitalisation of systems and the creation of trusted data sharing solutions.
For this reason, it is paramount to encourage cross sector initiatives aimed at improving standards and reducing barriers. Initiatives like SSES are valuable as they pursue this direction.

We also believe that energy efficiency is another area where more investment and innovation is needed. Energy-efficient homes could be key to reaching net zero, however there is currently no legal requirement for existing homes to be retrofitted or for low-carbon heating technologies (such as heat pumps) to be installed in existing homes. Exceptions apply to privately rented homes and homes owned by local authorities and housing associations in some parts of the UK. To incentivise homeowners to retrofit their properties and install low-carbon heating technologies, the UK Government and the devolved administrations have various schemes that provide homeowners with financial support. These schemes and their eligibility criteria differ across the UK; some are administered by Ofgem.

Elexon believe that to meet the decarbonisation goals we must adopt holistic solutions and therefore further incentivize third parties and suppliers to provide innovative products and services aimed at making homes more energy efficient. The current schemes have certainly brought many benefits to the system and vulnerable consumers, but greater efforts are necessary in order to encourage the efficiency of homes, especially in cases of fuel poverty.

Q3. What will be the impact on consumers of new, innovative products and services? How can we maximise the benefits and minimise the risk?

The main risks deriving from the introduction of innovative products and platforms is that the consumer does not benefit from the service in terms of quality of the service or in terms of economic return (for example the economic return is not adequate or proportionate to the original investment, or the associated effort to change or the need to modify one's behaviour).

The other risk is that the consumer is not adequately informed about the way in which his consumption data is used, and receives unwanted, unsolicited marketing, generating discontent and the feeling of no longer having control of his data. This risk can be particularly high for digital service offered and delivered via digital platforms or technologies, or automated services where the services monitor and adjust an asset's consumption (e.g. a smart EV charger) to take advantage of cheaper electricity prices.

A disappointed consumer is a consumer who is more unlikely to want to take risks and venture out by adopting an innovative service or subscribing to an automated service allowing third parties to manage his asset or consumption.

This in turn could lead to a disengagement also on the part of engaged consumers, a result that would be disastrous, considering the need to stimulate a change in consumer behavior to achieve decarbonisation objectives.

To maximize the benefits and minimize the risks it is therefore essential that the new regulatory framework:

- **Ensures adequate incentives for both companies and consumers**. We believe that it is essential that engaged consumers are adequately remunerated/rewarded for the flexibility they provide to the system. One could argue that excessively rewarding the more engaged and environmentally-conscious consumers risks creating disparity between consumers, making the energy transition unfair, especially considering the fact that engaged consumers are often also consumers who have access to new and more expensive technologies (e.g. EVs). We believe that the benefits that these types of consumers bring to the system, both in the short and long term, are beneficial to all consumers and future generations, both in economic and environmental terms.

- **Protects the consumer by defining common service standards also for innovative businesses.** This also includes defining data management architectures and solutions that are secure and trusted. As previously outlined, Elexon would encourage Ofgem to take an industry wide view on data protection matters which provides a basis for the delivery bodies, the data providers, and the industry participants who are the data controllers to comply with data protection laws.

Section 2 - Enablers and barriers to innovation

Questions
Q4. Are there any additional enablers or barriers to innovation? Q5. What is the most significant barrier to innovation? Why? Q6. What innovation is not happening because of regulatory barriers? Q7.Should we do further work to improve routes to market?

Q4. Are there any additional enablers or barriers to innovation?

We believe that Ofgem has identified the correct enablers and barriers to innovation: Data and Technological enablers, Commercial enablers, Market and Regulatory Structure enablers, Consumers.
In the following section, we outline our view on key barriers and main areas that require change.

Q5. What is the most significant barrier to innovation? Why?

We believe that the main barrier to innovation in the retail markets is the low rate of consumer engagement compared to other sectors. If consumers are active and more inclined to experiment with new offers and products, companies will have more incentives to invest in innovation.
Otherwise, investment costs might not be adequately covered from the perspective of a limited and still 'niche' market. The best way to stimulate innovation in the retail market is to offer incentives to consumers who positively contribute to the balancing of the electricity system. More engaged, informed and rewarded consumers will attract greater investments in innovation.

Q6. What innovation is not happening because of regulatory barriers?

The absence of regulation for some services and products (e.g. load control activities, asset management automated services) entails risks in terms of consumer protection . This in turn leads to low levels of participation in these markets, and a limited tendency for companies to innovate in these markets.

As already highlighted elsewhere in this response, we believe that some of the initiatives Ofgem and DESNZ are taking are going in the right direction. In particular we refer to the proposal to introduce a new licensing regime for load control activities (SSEE programme), the consumer consent solution initiative and the Flexibility Market Asset Register (FMAR).
All these initiatives pursue the aim of making markets more trasparent and inclusive, removing barriers to access to markets and consumer participation, and we believe that they should be prioritized by the Regulator together with all the initiatives relating to improving data visibility and interoperability, or aimed at defining common standards and trusted digital architecture and products and stimulating consumer engagement.

Q7.Should we do further work to improve routes to market?

In the following paragraph we summarize what we believe should be the improvements and/or changes necessary to increase participation in flexibility markets, consumer awareness, and engagement.

1. **Reduce barriers to flexibility markets by improving asset visibility.**
   Reducing the barriers to access load control activities is essential to ensure and increase the flexibility needed to achieve and maintain the goal of a decarbonised, reliable and secure energy system. At present owners and operators of small-scale energy assets (smart devices such as heat pumps, electric vehicle chargers, and home battery energy storage systems) must register the same data multiple times in different ways to access different flexibility markets. This is a barrier to entry for millions of small-scale energy assets trying to access flexibility markets and it prevents consumers from obtaining the maximum value from their assets.

   Elexon supports programs aimed at reducing unnecessary barriers, simplifying access and competition in flexibility markets, and improving asset visibility

especially at domestic and small-business scale.

For example, through the Flexibility Market Asset Register (FMAR) initiative, operators will be able to register for markets in a one-stop-shop, eliminating the complexity of the myriad of platforms and processes they are facing today. The Flexibility Market Asset Registration policy sets out proposals to overcome these challenges in a common, coordinated way by the creation of a digital infrastructure where data is collected once, stored as a single source of truth by a trusted entity, and can be accessed by multiple users who need it. Elexon welcomes this workstream and the introduction of a Flexibility Digital Infrastructure (FDI) and we are supportive of Ofgem's iterative approach to delivering the FDI with focus initially being on a Flexibility Market Asset Register. We also believe that Elexon as the Market Facilitator[2] is best suited as a delivery body of this initiative, as part of an integrated model.

This approach and its benefits are demonstrated by Elexon's role where we are both the Code Manager and Delivery Body for BSC central systems, and the relationship with existing wholesale asset registration. To ensure these synergies and also speed of delivery of this critical program, we recommend that Ofgem opt for an integrated model to ensure alignment between the Market Facilitator and the FMAR function for both delivery and operation.

2. **Reduce upfront costs**. The upfront cost of low-carbon technologies can be high. Innovators are developing financial solutions to help customers overcome this barrier like leasing (rental) and debt (ownership) arrangements for low-carbon technologies (e.g. EVs, heat pumps) or household alterations (e.g. energy efficiency measures). However, this it may not be enough to stimulate a greater number of consumers to opt for low carbon solutions. Following a Cost-Benefit Analysis, further government incentives may be necessary to stimulate these markets which are still niche.

3. **Improve and simplify the consumer journey**. One of the major barriers to consumer engagement arises from the difficulty of the average consumer in understanding the complexity of the energy system. Therefore it is necessary to simplify the communication process between consumer and supplier by ensuring that the consumer receives the necessary information and is aware of the use of his consumption data by the supplier and third parties and, at the same time, is adequately informed of the economic benefits arising from the choice of new products and/or services.
   The introduction of a licensing regime also for aggregators and flexibility services providers is a fundamental step to ensure adequate protection and also the correct relationship with the suppliers (in case there is no coincidence between the parties).

4. **Improve energy management services, particularly comparison websites, to enhance competition, trust and consumer engagement.** Comparison website often have incomplete information and do not contain all offers available on the market. It would be desirable to create a platform managed by a trusted entity that guarantees the quality and accuracy of information relating to all the

[2] In July 2024 Elexon has been appointed as Market Facilitator

energy deals available on the market.

Section 3 - Options to improve routes to market for products or services that involve selling energy

Questions

Q8: Which routes to market are most attractive and why?
Q9: If you think that we need to improve routes to market, which option do you think should be our top priority and why?
Q10: What are your views on the options presented for amending routes to market? What would be the risks and benefits of each option?
Q11: To facilitate innovation, which supply licence conditions would most benefit from being reformed (e.g. adding derogation powers)?
Q12: Are there any other improvements to routes to market which should be considered as part of enabling significant innovation in the retail market?

Licensing

We believe that adopting a more flexible approach to licensing (and in particular, broadening the derogations regime, enabling restricted or individual licences, or improving 'Licence Lite') present both risks and opportunities.

We believe there is little benefit to restricted licences, given that suppliers are already able to operate in a geographically restricted way (e.g. advertising and targeting specific customers).
To strengthen consumer trust, awareness, engagement and, ultimately, domestic flexibility, it is essential to increase the levels of customer's satisfaction and the quality of the services provided by suppliers and innovators.

Elexon supports all regulatory initiatives with these purposes, such as, for example, the Consumer Confidence work programme focused on improving supplier standards of service and providing more clarity about the consumer outcomes Ofgem expect suppliers to deliver. We believe that this should be the direction that the regulator should pursue.

One of the major barriers to the uptake of new products and technologies is the uncertainty on the part of the consumer regarding what the possible benefits/rewards are, and the fear of the risks associated with the change (e.g. change of tariff, change of supplier, change in the management of the electricity supply).

The identification of standards for all new products and services is a tool to strengthen consumer trust and protection, as is greater information through secure and trusted channels.

If consumer confidence increases, their propensity to change and experiment with new innovative products also increases.
Likewise, the propensity to entrust third parties (suppliers, aggregators, flexibility service providers) with the management of their assets will also increase, for example by allowing these parties to shift consumption in an automated way, with little or no

intervention by the consumer, who will only see the benefits of providing flexibility (e.g. price reduction) in a hassle-free way.

However, to achieve this final outcome, it is necessary to take some fundamental steps now aimed at simplifying the consumer journey, for example guaranteeing transparency and security standards in the management, access and storage of consumers data.

On all these aspects we refer to what has already been expressed in response to the consultation on the consumer consent framework.

Licensing regime for load control activities and SSES Programme

Elexon support the introduction of a new licensing regime for load control activities as part of the SSES programme.

We believe that regulating these new services and products will provide greater clarity and certainty to both innovators and consumers. This programme is also accompanied by consultations on tariff data interoperability and regulation of Energy Smart Appliances.

In particular, the Smart Secure Electricity Systems (SSES) Programme is designed to create the technical and regulatory frameworks to enable the untapped flexibility from small scale devices, such as domestic electric vehicle charge points and heat pumps.

We support both these initiatives as we believe that greater clarity and transparency will increase consumer awareness and trust, and, consequently, unlock part of the enormous potential relating to domestic flexibility and load control services (included automated load control services).

However, the regulation of these products and services is not sufficient in itself but must also be accompanied by an acceleration of the digitalization processes that will allow transparent and secure access to half-hourly consumption data.