

Smart Data Repository Consultation

Deadline: 19 October 2026

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The Centre for Sustainable Energy (CSE) welcomes the opportunity to respond to Ofgem's statutory consultation on the proposed regulatory framework for the Smart Data Repository (SDR).

CSE is a national energy charity working to tackle the climate emergency and end the suffering caused by cold homes. We use evidence, research and practical experience to influence policy and improve energy systems so that they are greener, smarter and fairer.

We support the creation of a Smart Data Repository and consider it a potentially transformational component of the future energy system. However, the consultation underplays both its long-term significance, the need for consumer involvement in its evolution and monitoring of outcomes for consumers.

The data repository is likely to be foundational to realising the full value of smart meters by enabling access to granular energy-use data. Retaining and allowing access to aggregated half-hourly electricity consumption data has significant potential to support more effective network and energy-system planning, inform policy development, enable innovation and research and support flexible energy use. This could potentially be extremely useful for place-based energy planning both at local area level and through Regional Energy Strategic Plans.

Half-hourly consumption data could help third parties understand when households use electricity, how consumption changes over time, how different households respond to tariffs, their flexibility potential, whether flexibility interventions change behaviour, and differences between demographic and geographical groups.

This could support development and evaluation of time-of-use tariffs, demand response and flexibility services.

Furthermore, the ability of individual households to allow third parties to access their households MPAN data offers huge potential to inform the comparison of different tariffs, support informed choice in the market and consumer-led flexibility.

However, the repository will hold highly sensitive information about how households and businesses use energy, and it is not fully clear how the data will be used or how the repository will expand in the future. Its value will therefore depend not simply on the existence of the repository, but on how access is governed, how data is used and who benefits from it.

We welcome the proposal that households must provide explicit consent before third parties can access individual energy-usage data, and also that material expansion of the repository will require prior approval from Ofgem and the Digitalisation Board. However, given the potential significance of the repository on how the energy system operates, we raise concerns that there appears to be no explicit consumer representative, consumer organisation or civil-society representative on the Board.

Furthermore, whilst we consider it likely that the repository will have largely beneficial effects on the energy system, we are concerned that monitoring and auditing arrangements appear focused on operational compliance and access controls, rather than consumer outcomes and distributional impacts.

Recommendation

A formal framework should be established for monitoring and evaluating the SDR once operational, assessing how the repository is being used, the benefits it delivers and any unintended consequences or consumer harms. This evidence should inform periodic review of the SDR, the regulatory approach taken and decisions about any future expansion of its scope.

Q1.

Do you agree with the changes we are proposing to make to the ESO licence?

We agree that the SDR requires a clear legal and regulatory basis beyond the existing arrangements for electricity settlement.

We particularly support the proposal that:

- The SDR should initially be limited to electricity consumption data received in connection with settlement and associated data approved by Ofgem.
- Material expansion should require prior approval and consultation, though we have concerns as to how that approval is given, see below.

- Access should be provided on an efficient and non-discriminatory basis.

These safeguards are important because the SDR could otherwise develop incrementally into a much broader energy-data repository without sufficient consideration of its implications for consumers.

We recommend, that the regulatory framework should make consumer benefit and public interest explicit objectives for the SDR, rather than relying principally on the wider objectives of the Energy Digitalisation Framework. We welcome digitalisation, however, are concerned that it should deliver benefits for all consumers, not just those able to engage confidently with smart tariffs, apps and flexibility services.

CSE's Smart and Fair Programme¹ has demonstrated both the potential of smart energy data to enable participation in flexibility services and the risk that benefits are unevenly distributed. The SDR should therefore be evaluated not only on uptake and market activity, but also on who benefits from the resulting market developments, and how well they serve lower-income, digitally excluded and vulnerable households.

Ofgem's earlier decisions and impact-assessment work on Market-wide Half-Hourly Settlement recognised that access to half-hourly consumption data could support new tariffs, products and services, encourage more flexible energy use and help consumers lower their bills. We consider these objectives should be carried through explicitly into the SDR's regulatory objectives and performance framework.

Recommendation

Expectations on suppliers should be strengthened to ensure they offer full use of the data repository to customers in selling them energy tariffs and products. Once the repository is in place, suppliers should be required to offer to model likely bills on a proposed tariff based on that customer's historic energy usage patterns.

The repository has the potential to support Ofgem's proposed Informed Choice regulatory outcome² by enabling suppliers to model likely costs under different tariffs using a customer's historic energy-use patterns, supporting more accurate comparisons and better-informed consumer decision-making.

Recommendation

¹ Smart and Fair programme - www.cse.org.uk/smart-and-fair-energy-transition/about-the-smart-and-fair-programme/

² Consumer Outcomes – Implementation consultation - www.ofgem.gov.uk/sites/default/files/2026-06/Energy-Consumer-Outcomes-proposed-implementation.pdf Proposed outcome 5 states: *Consumers get clear, accurate, and timely information to help them make informed choices.*

Ofgem should include an explicit requirement for the SDR to demonstrate how its operation and use are delivering benefits for consumers and the public interest, including benefits for vulnerable consumers and communities.

Q2.

Do you agree with our proposed approach on potentially including special licence conditions about the ongoing operation of the SDR within Elexon's Code Manager licence (if granted)?

Yes.

However, the SDR is different from a conventional industry-code function. It will become a major national data asset containing information about household energy use and has far reaching implications for how energy suppliers serve their customers. Its governance should therefore not be treated simply as an industry technical matter.

Recommendation

The governance framework should ensure that decisions about significant changes to the SDR are not determined solely by industry participants. Given the potential significance of the repository on how the energy system operates, there should be consumer representatives, consumer organisation or civil-society representative on the Digitalisation Board.

This recommendation is consistent with CSE's longstanding work on fairness in the energy transition, which has highlighted the importance of involving consumer and community perspectives in governance decisions where new market arrangements may create unequal costs, benefits or opportunities.

Q3.

Do you agree with the changes we are proposing to make to SLC47 to provide that suppliers may collect HH electricity consumption data from domestic and microbusiness consumers for storage in the SDR and access by third parties?

Yes.

The energy market is rapidly changing and becoming more diverse and sophisticated, with consumers having access to a wide range of smart and flexible tariffs, increasingly integrated with renewable and low carbon technologies such as solar panels, EV's and heat pumps. In this

market, the availability and use of half-hourly usage data by third parties can substantially increase the ability of consumers to understand and access products and tariffs which suit them best.

We support Ofgem's recognition that consumers need to understand that their half-hourly consumption data will be retained in a repository and may subsequently be made available to third parties where appropriate consent has been provided.

We also support the distinction between:

1. the processing and storage of data within the SDR; and
2. onward access to individual consumers' data by third parties.

Ofgem proposes that the latter should require express and informed consumer consent through the Consumer Consent Solution. We support this principle.

Q4.

Do you agree that the proposed governance and accountability arrangements provide appropriate oversight of Elexon's SDR functions?

We welcome the requirement for consultation and Authority approval before any material expansion of the SDR. However, we remain concerned that the proposed governance arrangements lack formal representation of consumer and civil-society interests and place insufficient emphasis on monitoring consumer outcomes.

Furthermore, we are concerned that monitoring and auditing processes appear to be limited to how the repository is operated and accessed, rather than the outcomes for consumers, including distributional impacts.

Recommendation

Ofgem should therefore create a structure for monitoring the use of the repository and outcomes for consumers. This would ideally include representation from organisations with expertise in fuel poverty, consumer protection, energy advice and local energy planning.

This recommendation is consistent with CSE's longstanding work on fairness in the energy transition, which has highlighted the importance of involving consumer and community perspectives in governance decisions where new market arrangements may create unequal costs, benefits or opportunities.

Q5.

Do you agree that the proposed regulatory approach is proportionate, taking into account the expected consumer benefits, delivery timescales, costs, security/privacy safeguards, and the availability of alternative delivery models?

We agree with Ofgem that using Elexon's existing infrastructure is likely to be more efficient and cost-effective than creating a duplicate repository.

We consider overall that the regulatory approach is proportionate, however we are concerned that the repository's scope and use of data is likely to grow over time, and that governance should be reviewed routinely over time to ensure it remains fit for purpose.