

Consultation

Governance, funding and operation of an Event Driven Architecture for Market-Wide Half-Hourly Settlement

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We are consulting on which party should be responsible for the ongoing governance, funding and operation of the Event Driven Architecture (EDA) for Market-Wide Half-Hourly Settlement (MHHS). In this document we have set out the criteria that will inform our decision. We are consulting on the basis that Elexon or RECCo would be well placed to undertake these responsibilities given their respective roles under the Balancing and Settlement Code and the Retail Energy Code in relation to managing settlement processes and access to retail energy data. We welcome views on these matters from all interested parties. In order to facilitate this, alongside today's consultation document we are publishing self-assessments from Elexon and RECCo against the criteria in this document.

We will also hold a stakeholder event on 3 February. Please email halfhourlysettlement@ofgem.gov.uk if you wish to take part. We look forward to your input. Once the consultation is closed, we will consider all the feedback we have received. We want to be transparent in our consultations. We will publish the non-confidential responses we receive on our website at [Ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations). If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential and, if possible, put the confidential material in separate appendices to your response.

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Executive summary

In April 2021, Ofgem published a decision¹ that there should be an industry-led implementation of MHHS. In July 2021, Ofgem published a preliminary decision² in support of the Architecture Working Group's (AWG) recommendation³ that the industry should develop an Event Driven Architecture (EDA) to enable the MHHS Target Operating Model (TOM), subject to further information supporting this conclusion.

We considered new information about system development and operation costs, interactions with other industry systems, and data security. We also considered the potential for future innovation and wider developments on data handling in the energy sector. Ofgem then decided in December 2021 that, as recommended by the AWG, the industry should develop a hybrid architecture comprising the Data Transfer Network (DTN) with minor modifications and a new EDA platform to meet the requirements of the MHHS TOM.⁴

We are now consulting on the issue of which party should be responsible for governing, operating and funding the EDA. This will be a critically important role. The transition to a low carbon energy sector will drive increasing complexity as the number of energy markets, assets, services and market participants proliferate, and the benefits of clear communication and data sharing grow. The smart creation, collection and use of energy system data is fundamental to managing this complexity, and for unlocking new sources of value for all energy stakeholders, including improved consumer protection.

We are consulting on the basis that either Elexon or RECCo would be well placed to fulfil these responsibilities given their respective roles under the BSC and REC in relation to managing settlement processes and access to retail energy data. We have carefully considered the criteria on which we propose to base our decision. We invited Elexon and RECCo separately to set out how they meet these criteria and for transparency we are publishing their submissions, unedited and without assessment from Ofgem, alongside this document. Amongst other things, we now seek your views on the assessment criteria, their relative importance, and on whether Elexon, RECCo or some other party best meets those criteria.

¹ Ofgem, [MHHS Decision Document](#), April 2021.

² Ofgem, [Preliminary decision on the AWG TOM recommendation reference architecture](#), July 2021.

³ Elexon, [AWG recommendation on reference architecture to support MHHS](#), June 2021.

⁴ Ofgem, [Decision on the reference architecture of the MHHS Target Operating Model](#), December 2021.

We will hold a stakeholder event on 3 February so interested parties can provide early feedback and ask questions of Ofgem, Elexon and RECCo. Please email halfhourlysettlement@ofgem.gov.uk if you wish to take part. Responses to the consultation must be submitted by 17 February 2022. We expect to publish our decision in March 2022. If we decide that either Elexon or RECCo is best placed to govern, operate and fund the EDA, we would expect that decision to be implemented via a modification to the BSC or the REC.

1. Introduction

Section summary

This section sets out the matters on which we are consulting and the specific questions on which we are seeking views. It also gives notice of the stakeholder event on 3 February for stakeholders to raise issues and ask questions about the consultation.

What are we consulting on?

1.1. The purpose of this document is to seek views on which party should be given ongoing responsibility for governing, operating and funding the Event Driven Architecture (EDA) for Market-Wide Half-Hourly Settlement (MHHS). We are consulting on the basis that either Elexon or RECCo would be well placed to take on these responsibilities.

1.2. We set out our proposed assessment criteria and seek views on them, their relative importance and on whether Elexon, RECCo or some other party would be best placed to assume responsibility for governing, funding and operating the MHHS EDA. We also seek views on the objectives that the EDA should promote, which types of party should be represented in the governance of the EDA, and on the EDA funding arrangements. The specific questions on which we seek views are as follows:

Question 1: Do you agree with the proposed criteria for making our decision?

Question 2: Do you have any views about the relative importance of the criteria?

Question 3: Are there any other criteria we should consider in making our decision?

Question 4: Should the EDA governing body have objectives to provide accurate and timely support for the settlement process and to further consumers' interests through the appropriately controlled use of data? If not, please provide reasons and set out alternative objectives, also with reasons.

Question 5: Do you agree that electricity suppliers, supplier agents, DNOs, generators, National Grid (NG) ESO, consumers and energy service innovators should be represented in the governance of the EDA? If not, please give reasons. Should any other categories of party be represented in the EDA governance?

Question 6: Do you agree that electricity suppliers, supplier agents, DNOs, generators and NG ESO should all take a share in funding the EDA? If not, please provide reasons. Should any other categories of party take a share in funding the EDA? We would be interested in any proposals as to the proportions by which the funding requirement should be shared between these parties.

Question 7: With reference to each of the criteria and objectives, including any additional ones you propose, to what extent do you agree that the governance, operation and funding of the EDA should be managed through BSC and delivered by Elexon?

Question 8: With reference to each of the criteria and objectives, including any additional ones you propose, to what extent do you agree that the governance, operation and funding the EDA should be managed through the REC and delivered by RECCo?

Question 9: Is there any other governance mechanism and party that you consider would be better placed than BSC/Elexon or REC/RECCo to govern, operate and fund the EDA? If there is, please substantiate your response by reference to each of the criteria and objectives (including any additional ones that you propose).

Publications related to this document

- Ofgem, [Decision on the reference architecture of the MHHS TOM](#), December 2021
- Ofgem, [MHHS Preliminary decision on the AWG recommendation](#), July 2021
- Elexon, [AWG recommendation on reference architecture to support MHHS](#), June 2021
- Elexon, [MHHS Architecture Working Group \(AWG\) consultation](#), April 2021
- Ofgem, [MHHS Decision Document](#), April 2021.

Consultation stages

We are holding a stakeholder event on February to enable early feedback and questions. Responses are due by 17 February. We will consider them all carefully and, in due course, will publish non-confidential responses on our website. We will publish our decision in March.



2. Assessment criteria

Section summary

This section briefly describes the main features of an EDA for MHHS. It then sets out our proposed criteria for assessing which code and party should be responsible for governing, operating and funding the MHHS EDA.

Questions

Question 1: Do you agree with the proposed criteria for making our decision?

Question 2: Do you have any views about the relative importance of the criteria?

Question 3: Are there any other criteria we should consider in making our decision?

Event-Driven Architecture for MHHS

2.1. In December 2021, Ofgem published its decision to support the Architecture Working Group's recommended reference architecture for the MHHS Target Operating Model. The AWG's recommended architecture is based on 'business events' such as new meter readings or changes in registration (hence 'event driven architecture' or EDA). The new architecture will be a hybrid comprising ElectraLink's Data Transfer Network with minor modifications and a new EDA platform to meet the requirements of the MHHS TOM.

2.2. The EDA will deliver real-time message exchange, modern 'cloud' architecture and a new strategic platform from which further industry change may be undertaken at reduced time and cost. The EDA will have the potential to process millions of messages per second and be dynamically scalable in response to heavy volumes. For more detail about the EDA and the intended benefits, see the AWG section of the Elexon website.

Assessment criteria

2.3. The table below lists the criteria that we propose to use for our assessment of which code and organisation would be best placed to govern, fund and operate the MHHS EDA.

Proposed Assessment Criteria	
1	Extent to which the organisation's remit can support the governance, funding and operation of the EDA, now and in the future
2	Strategic long-term fit of the EDA within future energy system architecture
3	Experience and capabilities relevant to procuring and overseeing a system similar to the EDA. The system may include: <ul style="list-style-type: none"> • Effective Data Governance and Compliance Processes • Maintaining Data Architectures including the personnel to make changes • Customer Onboarding and Issue Management Systems • Data Discovery, Publishing and Transparency Processes • Capability to provide data stewardship compliance services
4	Ability to put appropriate funding arrangements in place for the EDA in a timely manner
5	Ability to put appropriate governance arrangements in place (for example, handling change, role of parties in governance)
6	Stakeholder relationships
7	Value for money, efficiency including 'whole-of-system' efficiency, and cost effectiveness
8	Synergy with other services provided by an EDA operator, for example in terms of <ul style="list-style-type: none"> • Customer journey • Costs • Operations • Governance
9	Ability to ensure security and privacy of the service to an accreditable and certifiable standard
10	Information Security and Quality Assurance capability, covering Disaster Recovery and other Cloud Management capability
11	Ability to operate the service in a way that does not distort competition and provides a level playing field

2.4. We welcome views on whether the assessment criteria are appropriate and on their relative importance. We also welcome views on whether there are other criteria that Ofgem ought to take into account in making our assessment.

3. Governing body, objectives, representation and funding

Section summary

The section sets out our view that either Elexon under the BSC or RECCo under the REC would be well placed to govern the MHHS EDA. It seeks views on the objectives that should be placed on whichever body does so. It also seeks views on representation and funding issues. Finally, it invites views on which code and party should be made responsible for the governance, funding, and operation of the EDA.

Questions

Question 4: Should the EDA governing body have objectives to provide accurate and timely support for the settlement process and to further consumers' interests through the appropriately controlled use of data? If not, please provide reasons and set out alternative objectives, also with reasons.

Question 5: Do you agree that electricity suppliers, supplier agents, DNOs, generators, National Grid (NG) ESO, consumers and energy service innovators should be represented in the governance of the EDA? If not, please give reasons. Should any other categories of party be represented in the EDA governance?

Question 6: Do you agree that electricity suppliers, supplier agents, DNOs, generators and NG ESO should all take a share in funding the EDA? If not, please give reasons. Should any other categories of party take a share in funding the EDA? We would be interested in proposals for apportioning the funding requirement between these parties.

Question 7: With reference to each of the criteria and objectives, including any additional ones that you propose, to what extent do you agree that the governance, operation and funding of the EDA should be managed through the BSC and delivered by Elexon?

Question 8: With reference to each of the criteria and objectives, including any additional ones that you propose, to what extent do you agree that the governance, operation and funding the EDA should be managed through the REC and delivered by RECCo?

Question 9: Is there any other governance mechanism and party that you consider would be better placed than BSC/Elexon or REC/RECCo to govern, operate and fund the EDA? If there is, please substantiate your response by reference to each of the criteria and objectives (including any additional ones that you propose).

3.1. We have considered carefully which codes and organisations might be suitable and effective as governing bodies for the MHHS EDA. Our initial view is that either the BSC and Elexon (as the Balancing and Settlement Code Company, or BSCCo) or the REC and Retail Energy Code Company (RECCo) could fulfil this role.

Governance

3.2. The EDA is a new service, which will require an effective governance mechanism to ensure that it delivers the outcomes required and to manage change to the service. Should a code body be appointed for this role, given the number of existing industry codes, and the principle that consolidation is preferable to proliferation, we consider that it would be appropriate to include the governance of the EDA within an existing code.

3.3. We have considered which code could be the best fit and our initial view is that both the BSC and the REC are potentially appropriate. The EDA will form part of the settlement processes and, on that basis, the EDA could be considered within the scope of the BSC. Equally, the EDA will transmit and store consumption data with a view to that data being made available for a diverse range of purposes going well beyond settlement, primarily anticipated to be around retail product development and operation. This is consistent with the scope of the REC, with its focus on supporting good consumer outcomes and providing effective and well controlled access to retail energy data.

3.4. We recognise that the development of the EDA is taking place alongside the ongoing BEIS/Ofgem review considering fundamental reforms to the code governance landscape. The most recent consultation⁵ sets out the central system delivery functions that we have proposed to be included within the scope of our reforms. Given the anticipated role of the EDA, we consider there may be merit in exploring bringing it within the scope of these reforms in due course. However, we would expect to engage further with stakeholders ahead of any changes in this area.

Objectives

3.5. We have begun to consider what objectives should be promoted through the EDA governance arrangements. Our initial view is that governance of the service should have objectives to provide accurate and timely support for the settlement process and to further

⁵ See the [consultation on reform of the energy code governance framework](#), BEIS/Ofgem, July 2021.

the interests of consumers through the appropriately controlled use of data. We welcome views on whether these objectives are appropriate and, if not, what other objectives should be placed on the organisation responsible for EDA governance.

Representation

3.6. Our initial views on representation should governance sit under either the BSC or the REC are as follows. The membership of both codes includes all electricity suppliers. The REC additionally includes DNOs and supplier agents as parties. The BSC includes DNOs and generators. We consider that suppliers, supplier agents, DNOs, generators and National Grid ESO have an operational interest in the objective of providing accurate and timely support for the settlement process and that these parties, plus consumers and innovative service providers, have an interest in the objective of furthering the interests of consumers through the appropriately controlled use of data. We therefore consider that the governance of the EDA should include an active role for supplier, supplier agents, DNOs, generators and National Grid ESO consumer representatives and third-party innovators. Similar considerations should apply if another governance mechanism and body were to be considered more appropriate. We welcome views on this and on whether there any other categories of party you think should be represented in the EDA governance arrangements.

3.7. A specific EDA governance regime would need to be established within either the BSC or the REC to support this arrangement. Our current understanding is that each code is sufficiently flexible to support the creation of appropriate bespoke arrangements for EDA governance with the support of code parties and Ofgem.

Funding

3.8. The build, test and operation of the EDA will need to be funded. We expect this to be managed through whichever code and body have the operational and governance responsibility for the EDA. Whilst the EDA will be replacing some functions currently provided by the Data Transfer Network (DTN) there will be a net additional cost, at least in the medium term while the DTN is still required for other industry data flows.

3.9. We have identified above two proposed objectives for the EDA. We consider that it should be possible for the objective of furthering the interests of consumers through the appropriately controlled use of data to be self-funded through appropriate, fair, reasonable and non-discriminatory charges for access to data. The objective of providing accurate and timely support for the settlement process will need to be directly funded by industry parties. We have identified above the parties that we think have an interest in the provision of timely

and accurate provision of data into the settlement system. We consider that the build, test and operation of the EDA should be funded by some or all of those parties. For clarity, MHHS EDA design and build costs will be budgeted for and paid by MHHSP and recovered from BSC parties in line with Ofgem's decision on P413. (The decision on who operates the MHHS EDA is irrelevant to that process.) MHHS EDA operational costs will be budgeted and paid for by the appointed operator and recovered via the relevant code in a manner that will need to be determined.

3.10. We note that the BSC is funded by suppliers and generators. Special provision has been made to limit the funding of the MHHS programme costs to suppliers alone, which demonstrates that it is possible to create bespoke funding arrangements under the BSC. We note that the REC is primarily funded by suppliers. However, the REC has a number of bespoke funding arrangements for specific services that allow it to charge the parties that benefit most from a service for the provision of that service. This demonstrates that it is possible to create bespoke funding arrangements for different services under the REC.

3.11. As stated above, we consider that electricity suppliers, supplier agents, DNOs, generators and NG ESO have an operational interest in the accurate and timely provision of consumption data into the settlement system. It may be appropriate for all of those groups to share in the funding of the EDA, just as those parties should be represented in the governance of the EDA. For clarity, we do not consider that energy service innovators need to be included in the funding arrangements for the provision of the EDA. Rather, they should instead be subject to appropriate, fair, reasonable and non-discriminatory charges for access to the service. We welcome views on which parties should take a share in funding the EDA and we welcome views on the best means of apportioning the funding requirement between those parties.

Operation

3.12. Our initial views on why the BSC/BSCCo or REC/RECCo would be appropriate mechanisms for the governance and operation of the EDA are as follows. The BSCCo is responsible for administering the existing settlement system. Given that the MHHS EDA will have to facilitate the accurate provision of disaggregated consumption data into the settlement system and processes, the BSCCo could be well placed to administer it.

3.13. RECCo is responsible for management of the Retail Energy Code, including providing access to retail energy data to authorised parties. A significant benefit of the EDA will be the ability to provide appropriately controlled and protected access to usage data to enable

market participants and innovators to understand consumption behaviours to design and offer new products and services to support behaviour change that to help deliver net zero. For this reason we consider that there could be material synergies in RECCo being responsible for the operation and governance of the EDA alongside other retail energy data services.

3.14. In light of all the above, we invite views on which organisation, whether BSC/Elexon, REC/RECCo or another code and body, should be made responsible for the governance, funding and operation of the EDA. To inform stakeholder views we are publishing, alongside this consultation document, self-assessments provided to us by BSCCo and RECCo.

4. Next Steps

Section summary

This section sets out how we will deal with the feedback on this consultation. We expect to publish our decision in March. If we decide that MHHS EDA governance should take place through BSC/Elexon or REC/RECCo, we would expect to implement this through modifications to the relevant code.

Providing feedback for this consultation

4.1. We will hold a stakeholder event on 3 February to enable interested parties to provide early feedback and ask questions of Ofgem, Elexon and RECCo. Please email halfhourlysettlement@ofgem.gov.uk if you wish to take part.

4.2. Responses to the consultation must then be submitted by 5pm on 17 February 2022. We want to hear from anyone who has a view on any of the questions in this consultation. Please send your response to halfhourlysettlement@ofgem.gov.uk. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data, and confidentiality

4.3. You can ask us to keep your response, or parts of it, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose.

4.4. If you want us to keep all of your response confidential, please clearly mark this on your response and explain why.

4.5. If you want us to keep part or parts of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

4.6. If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations at appendix 1.

4.7. If you wish to respond confidentially, we'll keep your response confidential. We will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses. Finally, we will of course evaluate each response on its own merits without undermining your right to confidentiality.

Publishing and implementing our decision

4.8. We expect to publish our decision in March 2022. If we decide that MHHS EDA governance should take place through BSC/Elexon or REC/RECCo, we would expect that decision to be implemented via a modification to the BSC or the REC. We will provide further information about this in due course.

General feedback

4.9. Consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

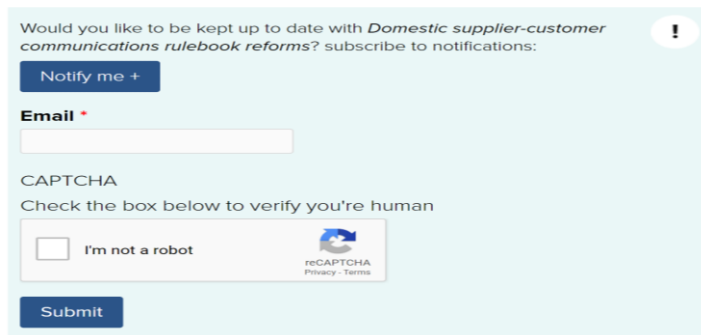
4.10. Please send any general feedback comments to stakeholders@ofgem.gov.uk.

How to track the progress of the consultation

4.11. You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website.

[Ofgem.gov.uk/consultations.](https://www.ofgem.gov.uk/consultations)


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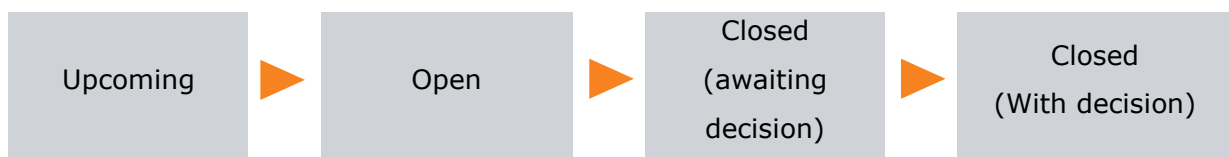
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4.12. Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:



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Appendix 1 Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the UK General Data Protection Regulation (UK GDPR).

Note that this section only refers to your personal data (your name, address and anything that could be used to identify you personally). It does not refer to the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk.

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the UK GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest, such as a consultation.

4. With whom we will be sharing your personal data

We will not share your personal data with any organisation outside Ofgem unless we are required to do so to fulfil a legal obligation.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will only be held for as long as is necessary for the purposes of the Market-Wide Settlement Reform project.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with third parties
- tell us your preferred frequency, content, and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at <https://ico.org.uk> or telephone 0303 123 1113.

7. Your personal data will not be sent overseas.

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system.

10. For more information on how Ofgem processes your data, see [Ofgem's privacy policy](#).