

Decision on the governance, funding and operation of an Event Driven Architecture for Market-Wide Half-Hourly Settlement

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Contact	Rachel Clark, Deputy Director Retail
Team:	Retail Directorate
Telephone	020 7901 7371
Email:	halfhourlysettlement@ofgem.gov.uk

On 20 January 2022 we consulted 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). We sought views on the criteria that should inform Ofgem's assessment, on the objectives that the EDA governing body should have, and on arrangements for representation and funding. We consulted on the basis that either the Balancing and Settlement Code Company (BSCCo) or Retail Energy Code Company (RECCo) would be well placed to take on governance responsibilities and sought views both about that and about whether any other party might be better placed to do so. The deadline for responding was 17 February. We received 20 responses and we have published the non-confidential ones on our website with a summary of the transcript of the event for stakeholders that we held on 3 February.

This decision document summarises respondents' views. It also sets out and explains the policy decisions we are making in the light of that feedback. We have decided that, initially, BSCCo should govern the EDA through the Balancing and Settlement Code (BSC). We will review the matter as part of our conclusions to the BEIS/Ofgem Energy Codes Reform. We have already taken steps to facilitate the implementation of the MHHS EDA by proposing an Authority Led SCR modification to BSC that would, if approved, enable the MHHS Implementation Manager to undertake activities relating to the development of the EDA. In due course, there will need to be a detailed modification of the BSC to introduce bespoke ongoing governance, representation and funding mechanisms for the EDA. Ofgem expects to raise such a modification using the Authority's SCR powers.

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Any enquiries related to the text of this publication should be sent to Ofgem at:
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Executive summary

Introduction

In December 2021 Ofgem decided that, as recommended by the Architecture Working Group (AWG), the industry should develop a hybrid architecture comprising the Data Transfer Network (DTN) with minor modifications and a new Event Driven Architecture (EDA) platform to meet the requirements of the Target Operating Model (TOM) for Market-Wide Half-Hourly Settlement (MHHS).¹ In January 2022, Ofgem consulted on which party should be responsible for the ongoing governance, funding and operation of the MHHS EDA.² We sought views on the criteria that should inform Ofgem’s assessment, on the objectives that the governing body should have, and on the arrangements for representation and funding. We consulted on the basis that either BSCCo or RECCo would be well placed to take on EDA governance responsibilities. We sought views about that and about whether any other party might be better placed to do so.

Assessment criteria

We proposed 11 criteria for making our assessment. The criteria covered organisational remit; strategic long-term fit within the energy system architecture; relevant experience and capabilities; funding and governance arrangements; stakeholder relationships; value for money, efficiency and cost effectiveness; synergy with other services; security and privacy; information security and quality assurance capability; and operating in a non-discriminatory manner. Most respondents agreed with all the proposed criteria and several said they were all important and/or a minimum requirement. Many stated that value for money was a vital consideration, along with relevant experience, synergy with other services, strategic long-term fit within the energy system architecture, and service security and privacy. We have decided to use these criteria, with only minor modifications, to make our assessment.

Objectives

We proposed that the EDA governing body should have objectives to provide accurate and timely support for the settlement process and to further consumers’ interests through the appropriately controlled use of data.

¹ Ofgem, [Decision on the reference architecture of the MHHS Target Operating Model](#), December 2021.

² Ofgem, [Consultation on the governance, funding and operation of an Event Driven Architecture for MHHS](#), January 2022.

All respondents agreed with the first objective. Most agreed with the second; supplier agents and one network business did not. Supplier agents argued that energy system and consumption data can be obtained via other means under the TOM and that commercialisation should not feature at all in the governance of the EDA, especially when existing competitive markets could be adversely affected.

As set out in our Final Impact Assessment³, providing access to HH consumption data (in line with privacy rules) will greatly strengthen retailers' incentives to offer new products and services for individual consumers and local communities. Making this data available will, therefore, bring substantial benefits for consumers. Ofgem has, accordingly, decided that both objectives should be placed on the EDA governing body. Our position is that access to data for third parties must be provided on fair and non-discriminatory terms and that use of the data itself should be available on the same basis. We expect that these important matters will be properly articulated in the detailed BSC code modification about EDA governance such as to ensure that data is made available to drive innovation in a manner that does not distort competition.

Representation

Suppliers, supplier agents, DNOs, generators and National Grid ESO have an operational interest in providing accurate and timely support for the settlement process. These parties, plus consumers and innovative third-party service providers, have an interest in furthering consumers' interests through the appropriately controlled use of data. We proposed that the governance of the EDA should include an active role for all these interested parties. Respondents agreed. Ofgem has decided that flexible, bespoke arrangements should be established, in line with industry best practice, that enable all these interested parties to take an active role in governance. It will be for BSCCo to develop and consult on the detailed changes to the BSC that will be required to give full effect to Ofgem's decision. We expect BSCCo to bring forward proposals in a timely manner.

Funding

In our consultation we stated that activities related to the objective of providing accurate and timely support for the settlement process should be directly funded by industry parties. Respondents agreed, though some said it would be inefficient to require funding from

³ See in particular pages 94-96 of Ofgem's [MHHS Final Impact Assessment](#), April 2021.

network businesses and supplier agents as they would simply pass on those costs to suppliers. We are minded to decide that these 'core' activities should be funded by suppliers only.

We said it should be possible for activities related to the objective of furthering consumers' interests through the appropriately controlled use of data to be self-funded via appropriate, fair, reasonable and non-discriminatory access charges. Most respondents agreed that some form of subscription model should be introduced to pay for value-added services. It will be for BSCCo to develop and consult on the detailed changes to the BSC that will be required to give full effect to Ofgem's decision. We expect BSCCo to bring forward proposals in a timely manner.

Governing body/mechanism

We consulted on the basis that BSCCo via the BSC or RECCo via the REC would be well placed to take on EDA governance responsibilities. Almost all respondents agreed that either of these bodies and codes would be capable of undertaking this role and functions. Almost half of the respondents were, however, unable to choose between the two. Of those that did express a clear view, those favouring BSCCo/BSC tended to emphasise BSCCo's experience of managing the existing settlement framework and its central role in implementing MHHS. Those respondents sometimes contrasted BSCCo's lengthy track record with that of the newly-formed RECCo, and suggested that placing governance of the MHHS EDA with an organisation that - in the view of those respondents - was still, quite understandably, contending with delivering its core requirements, was a risk that should not be taken. The respondents that favoured RECCo/REC tended to argue that RECCo/REC would be a better strategic long-term fit with the future energy architecture and, potentially, better able to leverage the EDA to provide services across the energy sector.

After careful consideration of stakeholder feedback, and a thorough evaluation against the assessment criteria, we have decided that, initially, BSCCo should govern the EDA via the BSC. However, we will review the matter as part of the conclusions from the BEIS/Ofgem Energy Code Reform. It will be for BSCCo to develop and consult on the detailed BSC changes that will be required to give full effect to Ofgem's decision. We expect BSCCo to bring forward proposals in a timely manner to ensure that all parties have certainty about the governance arrangements. Ofgem expects to raise such a modification using the Authority's SCR powers.

1. Introduction

Context

- 1.1. Ofgem is committed to paving the way for the energy sector to decarbonise.⁴ We need to make sure this happens at the lowest cost to consumers. Market-wide half-hourly settlement (MHHS) will ensure that electricity suppliers and other retailers face the true costs of serving their customers, incentivising the development of new tariffs and services.
- 1.2. MHHS is a key building block for our Decarbonisation Action Plan and the Ofgem/BEIS Smart Systems and Flexibility Plan.⁵ With other reforms, such as those to the access and charging arrangements, and network tendering for flexibility services, MHHS will enable system-wide benefits by incentivising more efficient use of existing and future electricity infrastructure. This will, for example, help integrate intermittent renewable generation and reduce the need for expensive new investment. We estimate that MHHS will save consumers £1.6 billion to £4.5 billion by 2045.⁶
- 1.3. In April 2021, Ofgem published a decision⁷ that there should be an industry-led implementation of MHHS. In July 2021, Ofgem published a preliminary decision⁸ in support of the Architecture Working Group's (AWG) recommendation⁹ 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. 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.¹⁰

What did we consult on?

- 1.4. In January 2022, we invited views on which party should be given responsibility for governing, operating and funding the MHHS EDA. We consulted on the basis that either BSCCo or RECCo would be well placed to take on these responsibilities.

⁴ See Ofgem's [Decarbonisation Programme Action Plan](#), February 2020.

⁵ See [Transitioning to a net zero energy system - Smart Systems and Flexibility Plan](#), July 2021.

⁶ See our [MHHS Final Impact Assessment](#), April 2021.

⁷ Ofgem, [MHHS Decision Document](#), April 2021.

⁸ Ofgem, [Preliminary decision on the AWG TOM recommendation reference architecture](#), July 2021.

⁹ Elexon, [AWG recommendation on reference architecture to support MHHS](#), June 2021.

¹⁰ Ofgem, [Decision on the reference architecture of the MHHS Target Operating Model](#), December 2021.

- 1.5. We set out our proposed assessment criteria and sought views on them, their relative importance and on whether BSCCo, RECCo or some other party would be best placed to assume responsibility for governing, funding and operating the MHHS EDA. We also sought views on the objectives that the EDA should promote, which types of party should be represented in the governance of the EDA, and on EDA funding arrangements. We published self-assessments by BSCCo and RECCo to inform stakeholder responses.¹¹
- 1.6. On 3 February 2022, we held an event for stakeholders to hear from Ofgem, BSCCo, RECCo and MHHS and to ask questions. The consultation closed on 17 February 2022. We have published a summary of the transcript from the stakeholder event and the non-confidential responses to the consultation. These are on our website.¹²
- 1.7. The present document summarises the views expressed by respondents to our consultation and sets out and explains our policy decisions arising from it.

Related publications

- 1.8. Links to the documents that relate to this decision are available in footnotes 3 to 11.

Your feedback

- 1.9. We believe consultation is at the heart of good policy development. We are keen to receive your comments about this report and to get your answers to these questions:
 1. Do you have any comments about the overall quality of this document?
 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. Are its conclusions balanced?
 5. Did it make reasoned recommendations?
 6. Any further comments?
- 1.10. Please send any general feedback comments to halfhourlysettlement@ofgem.gov.uk.

¹¹ Ofgem, [Consultation on the governance, funding and operation of an Event Driven Architecture for MHHS](#), January 2022.

¹² [Responses to the consultation on EDA governance, funding and operation](#), March 2022.

2. Assessment Criteria

Section summary

We proposed 11 assessment criteria. Most respondents agreed with all of them. Several stated that they were all important and/or were a minimum requirement. Many said that value for money was a vital consideration, along with relevant experience, synergy with other services, strategic long-term fit within the energy system architecture, and service security and privacy. We have decided to use these criteria, with only minor modifications to make explicit that contract and service management is part of the assessment.

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 1 – Proposed assessment criteria

2.1. The proposed criteria covered organisational remit; strategic long-term fit within the energy system architecture; relevant experience and capabilities; funding and governance arrangements; stakeholder relationships; value for money, efficiency and cost effectiveness; synergy with other services; service security and privacy; information security and quality assurance capability; and operating in a non-discriminatory manner. The criteria are set out in full at the end of this section.

Stakeholder views

2.2. Most respondents agreed with all the proposed criteria.

2.3. One supplier agent said, in relation to relevant experience and capabilities, that the EDA operator should not have “capabilities for data discovery, publishing and transparency processes”. The respondent argued that, under MHHS, there would be multiple routes to access consumption and wider energy data with processes to evaluate and respond to requests, and safeguards to ensure no discrimination or negative impact on competition. On that basis, requiring these capabilities of the EDA governance body was expensive and unnecessary.

- 2.4. Two respondents noted that governance and operational delivery did not have to be carried out by the same organisation. One of those respondents agreed with the proposed criteria but said they should be split between governance and operational delivery. Criteria to do with technical delivery could be for a central system delivery body and criteria on matters such as total cost and strategic aims would be for governance and delivery bodies. The other respondent said that Ofgem should not have considered the EDA in isolation because the DTN will still be used.
- 2.5. One respondent suggested amending criterion 1 (“extent to which remit can support EDA governance, funding and operation now and in the future”) in order to ensure that the governance body has legal “objectives” to “facilitate establishment and operation of the secure data transfer mechanism to support settlement and forecasting.”

Ofgem views

- 2.6. Access to data is essential to facilitate new and innovative products and services. As set out in our Final Impact Assessment¹³, providing access to HH consumption data (in line with privacy rules) will greatly strengthen retailers’ incentives to offer new energy tariff-only propositions, new third party managed energy services based on an energy proposition, new bundled ‘asset and tariff’ offerings managed for the consumer by a third party or directly controlled by actively engaged consumers, and more niche offerings that could be targeted at local communities. Making this data available will, therefore, bring substantial benefits for consumers.
- 2.7. Without access to the granular consumption data that will be held by the EDA, innovation will not occur at the scale and pace necessary to meet the UK’s net zero targets. It is, therefore, important that the EDA governing body should have “capabilities for data discovery, publishing and transparency processes”.
- 2.8. Our position is that access to data for third parties must be provided on fair and non-discriminatory terms and that use of the data itself should be available on the same basis. We would require any party responsible for governing the EDA to ensure that there is a level playing field in contestable markets, such as the market for value-added services. We expect that these important matters will be properly

¹³ See in particular pages 94-96 of Ofgem’s [MHHS Final Impact Assessment](#), April 2021.

articulated in the detailed code modification about EDA governance such as to ensure that data is indeed made available to drive innovation in a manner that does not distort competition. This should all be delivered in keeping with Ofgem’s Data Best Practice Guidance.¹⁴

- 2.9. We recognise that EDA governance and operation are distinct activities that could in principle be carried out by separate organisations. See paragraph 4.22 below.

Ofgem Decision

- 2.10. We have decided to use these criteria, with one minor modification as a result of responses to question 3. See paragraphs 2.20 and 2.23 below.

Question 2 – Relative importance of the criteria

Stakeholder views

- 2.11. Several respondents stated that all the criteria were important and, in many respects, should be seen as minimum requirements for the governance role. Many stated that value for money was the most vital consideration. Relevant experience, synergy with other services, strategic long-term fit, and service security and privacy were also seen as highly important.
- 2.12. One respondent, in the context of the criterion on strategic long term fit, mentioned the possibility of providing a dual fuel service as we move forward with aligning the gas and electricity market. One respondent said it was essential that EDA governance processes should be dynamic and responsive to changes seen as necessary by the market.
- 2.13. Supplier agents again emphasised the importance of the EDA providing a level field. One supplier agent added that service security, privacy and quality assurance, including disaster recovery, were vital, and noted that the EDA must be able to recover from outages or downtime quickly and robustly.
- 2.14. In its response, RECCo said the criteria sought to balance future market requirements and demonstrable capabilities. However, given MHHSP’s influence over

¹⁴ Ofgem, [Data Best Practice Guidance](#), November 2021.

the EDA's design, RECCo suggested that existing in-house capability on information security and disaster recovery might be less relevant than an ability to assure that service providers are delivering those capabilities as part of the procured service. The most important thing was the logical and strategic fit with other functionality, systems and processes under the relevant code to move industry towards a whole-of-system approach. BSCCo said that value for money was particularly important and would be closely linked to, and reliant upon, criterion 3 because efficiency and value for money are a function of established capabilities and experience.

- 2.15. One respondent said Ofgem should have a scoring mechanism to assess responses to the criteria and without seeing that it was hard to provide a view on importance.

Ofgem views

- 2.16. We agree that all the criteria are important and should be seen, in a sense, as minimum requirements for the governance role.

Ofgem Decision

- 2.17. Ofgem notes the points that have been made and has taken them into account. We have reached our decision on a balance of all the criteria, without giving undue weight to any individual criterion or subset of the criteria.

Question 3 – Additional Criteria

Stakeholder views

- 2.18. Three respondents suggested that Ofgem should assess the ability to manage the transition from the DTN to the EDA in a coordinated way, ensuring costs are minimised.
- 2.19. One respondent said Ofgem should assess the ability of any prospective governing body to keep the hybrid EDA separate and independent. This respondent said we should consider the ability to provide strategic oversight (including consulting EDA service market participants) and to provide a full set of test environments. Another respondent said we should consider the organisation's experience of the energy market, particularly of the balancing and settlement arrangements.
- 2.20. Several respondents suggested that the criteria should explicitly include references to contract and service management. Two of these respondents referred to the need

to consider the ability to commission independent audits of service provider performance.

- 2.21. One respondent said that future code consolidation and governance should be a factor in Ofgem’s decision. Indeed, given the implementation timescales, that respondent questioned why a decision on EDA governance needed to be made so soon.

Ofgem views

- 2.22. We agree that it is important to consider the ability to manage the transition from the DTN to the EDA in a coordinated way, ensuring that costs are minimised. We have considered this as part of criterion 7 on value for money, efficiency including ‘whole-of-system’ efficiency, and cost-effectiveness.
- 2.23. We agree that it is important to consider an organisation’s track record in relation to contract and service management. We have amended the criteria to make that explicit.
- 2.24. We agree that it will be important for the EDA governance body both to keep the hybrid EDA separate and independent and to have the ability to commission independent audits of service provider performance. We suggest that these points should be considered and consulted on in the development of the code modification introducing detailed governance arrangements for the EDA.
- 2.25. The BEIS/Ofgem review of codes governance reform will provide increasingly important context for the future of EDA governance. The proposed reforms will require primary legislation to implement, which Government plans to introduce when Parliamentary time allows. As we cannot yet be certain of timings for any legislation, it is not yet possible to set a firm timescale for the overall transition to the new code governance framework. In addition, the detailed design of the EDA will be agreed later this year and a code modification is required for the chosen governing body to be able to sign a contract with a developer. To prevent any unnecessary delay to the development of the EDA, therefore, Ofgem has sought to take a decision on EDA governance with all reasonable speed. For more about the Energy Code Reform and why it will provide an important opportunity to ensure the most appropriate alignment of the long-term governance of the EDA, see chapter 4.

Ofgem Decision

2.26. We have decided to use the assessment criteria on which we consulted with only minor modifications to make explicit that contract and service management is part of the assessment. See the new first bullet in criterion 3.

	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 procurement and contract management processes, including measures to manage the performance of service providers • 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

3. Objectives, representation and funding

Section summary

The EDA governing body should have objectives to provide accurate and timely support for the settlement process and to further consumers' interests through the appropriately controlled use of data. Access to data for third parties must be provided on fair and non-discriminatory terms.

Suppliers, supplier agents, DNOs, generators and National Grid ESO, consumer representatives and innovative third-party service providers should have an active role in governance. We are minded to decide that core activities related to providing accurate and timely support for the settlement process should be directly funded by suppliers only. Value-added activities related to furthering consumers' interests through the appropriately controlled use of data should be funded through fair, reasonable and non-discriminatory access charges. We expect detailed code modification proposals to bring all this about in a timely way.

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 4 – EDA objectives

Stakeholder views

- 3.1. We proposed that the EDA governing body should have objectives to provide accurate and timely support for the settlement process and to further consumers' interests through the appropriately controlled use of data.

- 3.2. All respondents agreed with the first objective. BSCCo said that the EDA was an intrinsic part of settlement so providing support for it should be the primary objective (while giving the opportunity to develop the EDA to support the wider market). One supplier stated accurate, timely support should not mean ‘real-time data’ at any cost. Rather, if accuracy could be achieved in near-real-time at more efficient cost, with no detriment to settlement or to the forecasting data available, this should be acceptable. This supplier also suggested that the objective be recast as “facilitating establishment and operation of the secure data transfer mechanism to support settlement and forecasting”.
- 3.3. Most respondents agreed with the second objective. RECCo said that it could be principles-based with discretion over how it is met so long as access was timely and cost-efficient. This respondent said the traditional permissions-based approach created a barrier to innovation.
- 3.4. Supplier agents and one network business did not support the proposed objective on data access. Supplier agents argued that energy system and consumption data can be obtained via other means under the TOM and that commercialisation should not feature at all in the governance of the EDA. They argued that the EDA’s remit should be kept narrow so as to bear down on costs and prevent scope creep detrimental to existing competitive markets. One other network business suggested an objective to ensure that the EDA is operated in a manner that does not distort competition.
- 3.5. Respondents suggested other objectives and/or obligations as follows:
- facilitating innovation in the energy sector and efficient delivery of services;
 - providing a reliable service that easily adjusts to the evolving needs of the market in the most cost effective way; and
 - ensuring the ongoing efficacy of central balancing and settlement systems, given the potential for sub-30 minute settlement periods in the future.

Ofgem views

- 3.6. We do not consider that ‘the provision of data in a timely manner’ implies anything specific in relation to whether real-time or near real-time data is required. This issue is being dealt with in the MHHS design process and managed through MHHS implementation governance.

- 3.7. We agree that the new settlement arrangements must be sufficiently flexible that they could be further adapted to deliver settlement periods below 30 minutes at reasonable cost, if the Authority decided that that would be in the interests of consumers. Again, this is being taken into account as part of the current MHHS design process.
- 3.8. We agree that it will be important for the EDA to facilitate innovation and competition but consider that these aims are addressed in our proposed objective on data access. We further agree that the EDA governing body will need to ensure that it provides a reliable, responsive and cost-effective service.
- 3.9. We suggest that further consideration could be given to how these aims are addressed in the development and consultation of the code modification introducing detailed governance arrangements for the EDA.

Ofgem Decision

- 3.10. Ofgem has decided that both of the proposed objectives should be placed on the EDA governing body. We note that access to data for third parties must be provided on fair and non-discriminatory terms and that use of the data itself should be on the same basis. This will ensure that data is made available to drive innovation in a manner that does not distort competition. As noted in our April 2021 MHHS decision, the new arrangements do not prevent other parties from providing aggregation services and we do not expect central settlement systems to take on the role of providing value-added services.

Question 5 – Governance

Stakeholder views

- 3.11. Respondents generally agreed that those parties with an interest in the objectives that we proposed for the EDA should be represented in the governance arrangements. Two respondents wanted us to make clear future users should be able to play an active role.
- 3.12. There was support for 'open governance' in which any interested party could raise a change request. In this connection it was noted that wider industry might in the future want to evolve or expand the scope of the EDA to include heat, electric vehicles, or other sectors, such as water. One respondent said there should be a mechanism to expand access to the EDA without necessitating changes to or

accessions to codes, such as the REC or BSC, that do not represent their sector. BSCCo said it would be inconsistent with the BEIS/Ofgem Energy Code Reform objectives to require parties to accede to a code in order to access the EDA if they would not otherwise have had to accede to that code.

- 3.13. Some suppliers commented about voting rights. One called for clear measures to avoid conflicts of interest and argued that voting rights should follow the existing change processes for whichever code is selected. For example, it was suggested that industry innovators might include companies that could bid for key industry contracts or code changes and might receive an unfair competitive advantage by being a full participant with voting rights and the ability to raise changes. Another suggested that representation and voting should be proportional to funding levels, which may not result in a level playing field. This supplier said that further discussion would be needed after the appointment of the EDA and that this should take place at a subsequent code modification workgroup.
- 3.14. BSCCo noted that any BSC party can raise a modification proposal, that non-BSC parties can raise issues and make representations to the BSC Panel to be designated to raise a modification, and that the Panel can close what it sees as spurious or vexatious mods. BSCCo argued that this was a flexible but controlled mechanism that avoids wasting time and money. On the other hand, RECCo said that fragmented and compartmentalised industry governance had inhibited effective change management, and that the EDA governance should be the sort of model industry is expected to work towards, rather than having to fit within the constraints of any given historic model.

Ofgem views

- 3.15. Our view remains that all those parties with an interest in providing accurate and timely support for the settlement process and/or in furthering consumers' interests through the appropriately controlled use of data should play an active role in the governance of the EDA. This includes having the right to propose and express views on modifications to the rules surrounding access to, and use of, the EDA.
- 3.16. We do not agree that voting rights and the ability to propose changes should be linked to the level of funding provided for EDA services. Where there is voting on proposed changes, all industry groups should have a vote, and consideration should be given to establishing voting rights for a consumer representative and an innovation representative.

Ofgem Decision

3.17. Suppliers, supplier agents, DNOs, generators, National Grid ESO, consumers and innovative third-party service providers all have an interest in the EDA meeting its objectives. Ofgem has decided that flexible, bespoke arrangements should be established, in line with industry best practice, that enable all these interested parties to take an active role in governance. We expect the governing body to develop and consult on proposed code modifications to bring this about in a timely way. We suggest that the views expressed by respondents to this consultation should be taken into account in developing those proposals.

Question 6 – Funding

Stakeholder views

- 3.18. There was general support for the principle that those who benefit, should pay. Many respondents drew a distinction between core settlement services which should be subject to a shared industry funding mechanism, and non-core services that benefit subgroups or individual parties which should be funded on a user-pays subscription basis. Several respondents said the funding arrangements would need to be flexible to allow for adaptation as the market and energy system changes.
- 3.19. Respondents agreed that suppliers should contribute a significant proportion of the total costs because funding should be largely based on usage of the EDA infrastructure and the numbers of messages sent through it. Suppliers, though, generally believed that other EDA users should also make a contribution. However, there were questions as to the proportion each different party type should fund. One supplier said further discussions on funding mechanisms and proportionality should be take place, after the appointment of the EDA, at a workgroup when the necessary modification is raised under the relevant code.
- 3.20. Supplier agents and some network businesses said it would be inefficient to require funding for core EDA activities directly from them as they would just pass the charges through to suppliers. One supplier agent added that suppliers would see financial gain in bringing agent roles back in-house to 'absorb' the agent-related funding share under their supplier role, which would be anti-competitive.
- 3.21. One RECCo agreed that 'stable Business as Usual' activities should be funded by the ultimate beneficiaries, suppliers, thereby avoiding the transaction costs of passing monies through the value chain. RECCo added that risky, non-stable activities

should be funded by parties best placed to manage that risk, passing through only what the regulator or the market deems efficient. Thus, we should consider a hybrid funding model with fixed costs borne by regular users on a predictable basis, with marginal costs of additional use on a transaction volume basis. This respondent said that funding parties should have an appropriate degree of influence over the level of those charges, given that EDA will be a de facto monopoly service but not subject to price control. BSCCo said that while it was not for them to say who should fund the EDA and how, the code for which they are responsible could adopt various combinations and introduce a User Pays arrangement.

- 3.22. One IDNO expressed concern about EDA costs and that DTN costs might increase significantly. The respondent stated that our decision to proceed with the EDA did not assess the volumes of data to be transmitted over the DTN, which drives cost allocation. The concern was that the DTN might be prohibitively expensive for the limited future data traffic it would manage and that more transparency needed to justify the hybrid approach.
- 3.23. One supplier wanted Ofgem's view on how EDA funding should be integrated into the price cap calculation. Two respondents wanted to understand how any additional EDA development funding beyond the £90m of costs already identified would be recovered.

Ofgem views

- 3.24. We have considered the alternative views expressed in relation to the funding of core EDA settlement-related services. In our view, cost recovery from the demand side (suppliers only) rather than from all BSC parties is likely to be more efficient in the particular context of these 'business as usual' services. We are mindful that other BSC Parties may benefit from the implementation of MHHS, and that it is not just suppliers and generators who currently contribute towards the costs of BSCCo. Non-physical Trading Parties, such as financial institutions may also have an interest in MHHS, and we note that Virtual Lead Parties – who are able to aggregate multiple MSIDs to participate in balancing and/or ancillary markets – rely on half-hourly settlement to participate in commercial activities.
- 3.25. As stated in our decision on the reference architecture, MHHS only impacts 30% of the current flows in use on the DTN. There would be a significant body of work to deal with the additional 70% of DTN flows which would greatly extend the critical path of the programme and increase costs in the delivery of the EDA platform. This

would also place a large additional cost burden on all users of the DTN given the scope of the internal changes that parties would need to make to configure all flows to use the new platform.

- 3.26. All EDA development costs will be recovered from suppliers pursuant to BSC modification P423. In relation to supplier costs, the default tariff cap includes an allowance for operating costs, and a headroom allowance for residual uncertainties. However, if a supplier subsequently considers that the cap level is proving insufficient to take into account the costs of MHHS, it may make representations to the price cap team. In so doing, the supplier should explain why MHHS has led or is leading to a material increase in its operating costs, and why this increase would not be covered by the existing cap allowances.

Ofgem Decision

- 3.27. Ofgem is minded to decide that suppliers only should fund core EDA activities relating to providing accurate and timely support for the settlement system. The funding mechanism should be based on connection fee and usage. We have decided that value-added services relying on the provision of half hourly consumption data should be funded on a subscription basis via appropriate, fair, reasonable and non-discriminatory access charges.
- 3.28. We expect BSCCo to develop and consult on a code modification proposal to establish the detail of the funding arrangements in a timely way. As part of this process, we expect BSCCo to consider whether it would be appropriate for Virtual Lead Parties and non-physical traders to fund core EDA activities. We also suggest that the views expressed by respondents to this consultation should be taken into account in developing those proposals.

4. Governing body

Section summary

We consulted on the basis that BSCCo via the Balancing and Settlement Code (BSC) or RECCo via the Retail Energy Code would be well placed to take on EDA governance responsibilities. Almost all respondents agreed that either of these bodies and codes would be capable of undertaking the role.

After careful consideration of stakeholder feedback, and a thorough evaluation of the assessment criteria, we have decided that, initially, BSCCo should govern the EDA via the BSC. However, we will review the matter in the context of the BEIS/Ofgem Energy Code Reform. It will be for BSCCo to develop and consult on the detailed BSC changes that will be required to give full effect to Ofgem's decision. We expect BSCCo to bring forward proposals in a timely manner to ensure that all parties have certainty about the governance arrangements.

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 BSCCo?

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/BSCCo 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).

Question 7 – Suitability of BSCCo/BSC

Stakeholder views

- 4.1. Most stakeholders did not address all of the 11 proposed criteria explicitly. Rather, they tended to concentrate on the criteria that they felt were most important and/or where they felt that there was a point of differentiation between BSCCo and RECCo.
- 4.2. Almost all stakeholders considered that BSCCo met the proposed assessment criteria and would be well capable of undertaking the EDA governance role. Many respondents particularly noted, in relation to criterion 3 about relevant experience

and capabilities, BSCCo's proven experience of delivering the existing settlement processes and systems, including delivering and leading changes to those systems. One respondent commented that BSCCo's established governance arrangements ensure that planned changes are appropriately developed, costed, and consulted on which leads to clear, rigorous, and justified decisions and actions.

- 4.3. BSCCo is regarded by most stakeholders as the settlement industry expert. It benefits from significant corporate and industry memory, deriving from its long experience in managing services and data for settlement.
- 4.4. One respondent said that the EDA falls within scope of the BSC as its introduction will require changes to existing settlement data flows and interfaces, which all form part of BSCCo's management of settlement processes. The respondent argued that the BSC is sufficiently flexible to create bespoke provisions for a new EDA governance mechanism, with modifications to the framework, such as contract amendments, allowing for recovery of costs from normal funding arrangements. On that basis, the respondent considered that it would be prudent, efficient and cost-effective for the EDA to be managed by BSCCo.
- 4.5. One respondent said that the EDA should be closely aligned to the BSC, MHHS and wider reforms in utilising metering to enable innovative settlement solutions. This respondent noted that another key factor in delivering the EDA is securing the trust and engagement of the industry. Given the continued strong performance of BSC in Ofgem's code administrator's survey and the broad scope of MHHS project, this respondent felt the BSC presented a more established governance model.
- 4.6. One respondent noted that BSCCo is a good strategic fit for the EDA as a core feed-in to settlement and that BSCCo has synergies with the services that an EDA operator would provide, including providing data to industry participants at scale, providing governance and change management services for complex systems and contracting services for operating Cloud-based systems. However, in terms of achieving long-term strategic fit within energy system architecture, the respondent stated that BSCCo and the BSC would need to develop outside their current scope, for example in sharing consumption data for retail product development and operations.
- 4.7. In similar vein, another respondent stated that, if BSCCo were chosen to govern the EDA, its code and company objectives would need to focus not only on the pure science of settlements and forecasting, but also efficiently driving the right outcomes

for consumers. Two respondents stressed that responsiveness was vital: the governing body and code must be outcome-focused and able to respond quickly to changing market conditions. One respondent said that it may be beneficial to extend EDA data access to any non-BSC party, such as third party innovators, where consumers will benefit.

4.8. One respondent said that EDA governance and funding should be under the BSC and managed by BSCCo. However, the respondent said that in due course the benefits to industry and consumers will increase as the EDA encompasses wider industry processes and also gas. Once this has happened (and the DTN has been replaced and the UNC transition plans approved) EDA governance could be transferred from the BSC to the REC. The respondent said that any such future transitions should not be discounted into the initial arrangements for EDA until they are certain and they comprise the majority of EDA dependencies. In the meantime, concluded this respondent, BSCCo should govern the EDA.

4.9. Further to the self-assessment published in February, BSCCo summarised why, in its view, it was best placed to govern the EDA:

- the EDA is primarily a function of MHHS. EDA data is intrinsic to settlement and essential for BSCCo's BSC processes. Though there are indeed wider benefits and interfaces with other central systems, the EDA will fit best with BSCCo's settlement systems and processes, thereby reducing friction and improving delivery of end-to-end changes. BSCCo said that having direct control over the EDA service provider would be more efficient and help assure settlement accuracy;
- BSCCo has a well-established understanding not only of MHHS in general and the EDA in particular, but also of market and system trends, and of customer and consumer expectations. It provides information free of charge via the BM Reporting Service and this could be used to provide data to interested parties to develop product offers, and other insights reporting based on market trends. BSCCo has also recently set up its new cloud platform, Elexon Kinnect;
- BSCCo said it has proven experience and established capabilities relevant to procuring and overseeing system similar to EDA, for example transitioning successfully to a multi-vendor IT delivery environment and service model. BSCCo said it has an agile methodology for most aspects of business and system change;

- BSCCo argued there were synergies with other services that it delivers to the industry and that would ensure high value for money. BSCCo said that synergies with its existing functions and capabilities could easily be extended and lead to efficiencies in developing (including faster development and deployment) and operating the EDA; and
- BSCCo pointed to a 20-year track record of commitment to a fair and open way of working that was totally embedded in the BSC Applicable Objectives, the composition of the BSC Panel composition, and its ways of working.

Ofgem views

4.10. Ofgem considers that BSCCo satisfies all the assessment criteria and scores particularly highly in respect of its organisational remit, relevant experience and capabilities, ability to establish appropriate funding and governance requirements, stakeholder relationships and synergy with other services.

4.11. We expect BSCCo to consider the following matters as it develops the detailed BSC code modification:

- the ability to keep the hybrid EDA separate and independent;
- the ability to commission independent audits of service performance;
- the ability of all interested parties to propose and express views on modifications to the rules surrounding access to, and use of, the EDA;
- the ability, where there is voting on proposed changes, for all industry groups to have a vote, and, potentially, establishing voting rights for a consumer representative and an innovation representative; and
- developing a dedicated Code Manager function to prioritise and develop change proposals independent of what may be conflicting commercial interests.

Question 8 – Suitability of RECCo/REC

Stakeholder views

4.12. Most stakeholders did not address all of the 11 proposed criteria explicitly. Rather, they tended to concentrate on the criteria that they felt were most important and/or where they felt that there was a point of differentiation between BSCCo and RECCo.

- 4.13. Most stakeholders considered that RECCo met the proposed assessment criteria and would be capable of undertaking the EDA governance role. However, few respondents argued that RECCo was the best placed organisation to do so. Indeed, several stated that RECCo should focus on its existing remit rather than take on additional responsibilities.
- 4.14. These respondents argued that RECCo is still contending with delivering its core requirements effectively and that it should concentrate on embedding these services and supporting post-Faster Switching go-live rather than risk the efficient delivery of the EDA and MHHS. Doubts were expressed about RECCo's ability to deliver value for money: one respondent cited significant, unexpected increases in budget forecasts for 2022-2025 and a perceived lack of engagement about it.
- 4.15. Respondents generally also noted that RECCo, as a new body administering a new code, inevitably did not have a proven track record of delivery to compare with BSCCo, which has administered the settlement arrangements for more than 20 years. One of those respondents said that, although RECCo appears innovative and forward thinking, it does not have the expertise, experience or bandwidth to deliver the MHHS EDA as well as its existing remit. This respondent added that RECCo's outsourced service model involved people without experience of the settlement arrangements or an understanding of the needs of the MHHS implementation programme. One supplier said that, in its opinion, the REC governance process (amongst other things) had not worked well since go live.
- 4.16. On the other hand, several respondents noted that RECCo and the REC had been set up to promote positive outcomes for consumers while promoting more efficient and effective outcomes for market participants. This was important and could be built upon. One supplier stated that, if RECCo were chosen as the EDA governing body, the objectives of the REC should ensure that it supports electricity settlement and forecasting in an efficient, effective and cost-efficient way, and ensure that the MHHS hybrid architecture change processes work efficiently alongside the business and technical processes and systems in place under all MHHS code arrangements.
- 4.17. Two network businesses stated that RECCo was best placed to govern the EDA. One of them commented favourably on RECCo's early experience of managing IT service providers and its introduction of new arrangements for cross-industry governance of IT data flows. This respondent also welcomed the fact that RECCo had established the REC Code Manager service with a Technical Service. The respondent thought that this dedicated resource could provide an opportunity to leverage potential for

EDA to provide services across energy sector. On that basis, the respondent concluded, RECCo was probably a better long term home for the EDA. The other respondent noted that RECCo has DNOs and supplier agents as parties as well as funding mechanisms, that the new change processes had had a big impact, and that RECCo scored highly in terms of strategic long-term fit.

4.18. In its response to the consultation, RECCo reiterated many of the points that it made in the self-assessment that Ofgem published in January. In particular, that

- the EDA is an ideal strategic fit with RECCo since the REC is a dual-fuel gas and electricity code that could readily extended to include hydrogen, storage and heat, efficiently leveraging EDA capabilities for those areas as well as future data requirements that may emerge;
- RECCo already has the required governance and controls in place to meet its obligations effectively and efficiently (via the electricity and gas data enquiry services, the Energy Market Architecture Repository (EMAR) and our work with the switching service). RECCo provides consumer-centric governance with proportionate levels of access for each user. The REC has the broadest stakeholder participation and all parties can propose change;
- the vast majority of the data RECCo controls is consumer consumption data. As such, RECCo is best placed to govern and oversee the management of an EDA platform for activities utilising such data. There is scope for synergies by integrating it with RECCo's other services;
- whilst predicated on the need to transfer timely data to improve the accuracy of electricity settlements, the EDA is an opportunity to deliver a critical platform to facilitate the effective and real-time operation of the energy market. The changes to consumer behaviours necessary to deliver net-zero are essentially a retail value proposition, best managed at the interface between the industry and consumer; and
- RECCo could provide a 'whole energy system' view for energy data. RECCo's retail-wide remit enables it to take an end-to-end view of the security of data from the person to the meter to the network to the retailer. This reduces the risk of security issues.

Ofgem views

4.19. Ofgem considers that RECCo satisfies the assessment criteria and scores particularly highly in respect of its organisational remit, long-term strategic fit, ability to establish appropriate funding and governance arrangements and synergy with other services.

Question 9 – Alternative governance parties and mechanisms

Stakeholder views

4.20. Almost all the respondents agreed that no other party was better placed to govern, fund and operate the EDA than BSCCo or RECCo.

4.21. Two parties stated that EDA governance and delivery could be carried out by the different organisations, especially given the hybrid arrangements that will be in place. ElectraLink said that separating governance from delivery was the best way to ensure best-in-class governance and best-in-class infrastructure delivery/operation. ElectraLink further argued that, if they were appointed as the EDA delivery body, co-delivery of the DTN and the DIP can provide synergy and total cost benefits as services are ramped up and down. Thus ElectraLink would provide delivery at the lowest total cost for market participants. Operational costs could be met via the existing Data Transfer Services Agreement (DTSA).

Ofgem views

4.22. We acknowledge that governance and operation are distinct activities that need not be performed by the same organisation. MHHS Programme has recently issued a Request for Parties to submit bids for the EDA developer contract. Parties are entitled to bid for the contract on the basis that cost savings from potential synergies will be taken into account. ElectraLink would need to make the case for the DTSA through this procurement exercise.

Ofgem Decision

4.23. After careful consideration of stakeholder feedback, and a thorough evaluation against the assessment criteria, we have decided that BSCCo should govern the EDA via the BSC.

- 4.24. We agree with the views of respondents that both BSCCo and RECCo are able to meet the criteria, with no specific barriers being identified to either taking on the governance of the EDA. There was stronger support from stakeholders for BSCCo's track record in relation to provision of services, but this was relatively marginal. Whilst this would not be enough on its own to determine the outcome, it does support a decision for the EDA to be governed under the BSC at least while the new settlement arrangements are bedding in.
- 4.25. We also agree with a number of respondents who said that fundamentally the decision depended on the strategic fit, and whether it is more important for the EDA to be aligned with the provision of settlement services or with the arrangements for to support innovation in the market including through access to data. Respondents were divided on this, with some leaning one way and others the other way.
- 4.26. One respondent noted that the balance of strategic fit was likely to be in favour of supporting settlement in the short term, but supporting innovation in the longer term. We agree. Our view is that in the first instance it is essential that the EDA meets the needs of the new settlement arrangements and therefore we have decided that the EDA should be governed under the BSC. However, we note that there is a BEIS/Ofgem Energy Code Reform process underway which will consider, among other things, options for consolidation of the current codes.¹⁵
- 4.27. We recognise that we have previously said that we would not expect the code reform process to impact on the enduring governance of the EDA. However, after further consideration we have concluded that the code reform process allows an opportunity to consider whether the balance of importance of strategic fit for the EDA has shifted, and whether the governance of the EDA should be transferred to align with the governance of other retail data services.

¹⁵ BEIS/Ofgem, [Government response to the consultation on Energy Code Reform](#), April 2022. This document notes that, given the anticipated role of the EDA, there may be merit in considering whether it should be within the scope of these reforms in due course. However, Ofgem would engage further with stakeholders ahead of any changes in this area.

5. Next Steps

Implementing Ofgem’s decision

- 5.1. Ofgem has decided that, initially, BSCCo should govern, fund and operate the EDA. It will be for BSCCo to develop and consult on the detailed changes to the BSC that will be required to give full effect to Ofgem’s decision. We expect BSCCo to bring forward proposals in a timely manner to ensure that all parties have certainty about the governance arrangements. Ofgem expects to raise such a modification using the Authority’s SCR powers.
- 5.2. Earlier this month Ofgem raised an Authority-led proposal to modify the BSC to ensure effective and timely development of the EDA. The proposal would enable BSCCo, in its capacity as MHHS Implementation Manager, to develop the systems and processes that may be necessary to implement the EDA (or Data Integration Platform, as it will be called). The modification provides that BSCCo may appoint an external service provider to design, build, test and implement the DIP.
- 5.3. In accordance with a Direction from the Authority,¹⁶ the BSC Panel is consulting on the proposal on a timescale that will enable the Panel to make a recommendation to Ofgem by 16 May 2022. We will consider the Panel’s recommendation and the Final Modification Report with a view to publishing our decision by 7 June 2022. The decision is to be implemented 5 working days after it is made.

¹⁶ Ofgem, [Direction to BSCCo in relation to an SCR BSC modification proposal](#), April 2022.