Stakeholder event: Governance, funding and operation of an Event Driven Architecture (EDA) for Market-wide Half-hourly Settlement (MHHS) - 3rd February 2022

On Thursday 3 February 2022, Ofgem held a stakeholder event on the issues raised by our consultation on MHHS EDA governance. This note is a summary of the key discussion points. Ofgem began by reiterating the scope and purpose of the consultation. Ofgem said its initial view was that Elexon/BSC or RECCo/REC could be well placed to take on governance responsibilities given their respective roles in relation to managing settlement processes and access to retail energy data. However, we made clear that Ofgem did not yet have a firm view about where the governance should lie and added that we had requested views on whether any other organisation or delivery mechanism would be better placed to govern the MHHS EDA.

Ofgem referred to the assessment criteria set out in the consultation document that we propose to use to make our decision. Ofgem reminded stakeholders that BSCCo and RECCo had provided Ofgem with assessments of how they meet the criteria, which we had published alongside the consultation. BSCCo and RECCo presented slides providing further details in relation to their assessments. Q&A followed. We set out below a summary of the key discussion points and the answers given.

Q & A

Q1. How would the funding, charging and representation arrangements work for organisations that are not parties to the BSC or the REC?

RECCo: organisations that are not Parties to the REC may nonetheless be users of REC services. In that event, we could charge for the services on a user-pays basis. Price comparison websites are an example of this, as they have access to enquiry services and contribute to the cost of providing them. Whether or not an organisation is a party to the REC, the code is open to them if they use our services. Any interested party including members of the public may sign up to access the REC Portal to access our code and see all of our arrangements. That individual could also raise a change proposal if they wish, as we have fully open governance.

BSCCo: our arrangements are flexible. In recent years, we have delivered several new services to energy market participants and can charge flexibly in response to who those services are actually serving. For example, MHHS which only a subset of BSC parties is funding. We could put in place other flexible arrangements if that were Ofgem's decision. Fundamentally the question is, who these arrangements are going to serve? That should dictate who funds them. Just to the point around openness, it is also possible for non-parties to the BSC to apply to make modifications to the BSC and that can happen as long as the panel agrees it should happen.

Q2. How will the EDA operator keep this service separate from their other services so that EDA maintenance would not affect the operator's other services and vice versa? How are they going to maintain the integrity of this service if they're operating it?

BSCCo: Look at particular developments at the moment in relation to Kinnect and Helix. Kinnect has been designed with a Cloud-based modular architecture with built in scalability and flexibility. In the case of the EDA that could be designed separately from or integrated with, as was seen to be the best decision. It is certainly true that it would not be done in a way such that if one bit was down for maintenance or whatever, that would affect the other.

From the beginning in the Architecture Working Group back last year where the original requirements and design work was carried out, it's very clear that the EDA is separate and we're building a loosely coupled architecture in the middle of the industry that we will use for settlement processes, but other people can use as well. It's separately ring fenced outside but accessible at the same time, that's the key distinction.

RECCo: We don't have a single enterprise architecture. Each of our service providers provide the architecture to us (in layman's terms, the systems that are used) and most of those systems have been or are migrating to the Cloud. As we know, a benefit of Cloud services is strengthened disaster recovery - you have different server locations, so it's highly unlikely that any down time in the EDA would affect systems anywhere else, or vice versa. Similarly, in six months' time when the Central Switching Service is in operation, it would be ring fenced from the development of the EDA. On the funding, it's very clear that you keep very clear segregated pots with targeted cost recovery for different services, and that is the approach we take.

Q3. What mechanisms do you have to ensure value for money and continual control of EDA costs?

BSCCo: ensuring we deliver value for money for all of our customers is of great importance. As stakeholders will have seen from the last budget, we have reduced operating costs over the last business plan by some £6.6m.[1] When you are not for profit, benchmarking is the best way to test yourselves. We have been doing that, and are doing that, not only to see how you compare to others who are offering similar services in the market but also to set a baseline against which you can then seek to drive further efficiencies in the future. It's about remembering that although you may be not for profit that doesn't take away the obligation to be commercial in the way you operate vis-à-vis those who fund you.

RECCo: we are not for profit, but we are highly commercial and wherever practicable use the market instead of benchmarking. We have a new operating model where we're committed to periodic procurement exercises where, notwithstanding the fact that we may have a contract

[1] During the event, BSCCo stated that it had reduced its operating costs by 6.6%. BSCCo subsequently clarified that operating costs were reduced not by 6.6% but by £6.6m, which is nearly 10%.

with an option to extend, we may actually choose to go out and market test to inform whether we should re-procure for service. This is the case whether the contract value is relatively small or large. We have a number of framework agreements which expedite the process and allow for efficient procurement exercises, but have experienced staff who fulfil the role of informed customers, making sure it is absolutely clear what the deliverables are and subsequently hold the service providers to account for their delivery. If service providers don't deliver against the service requirements, there are financial and contractual consequences which mitigate the impact on RECCo and REC Parties of those failings. We also keep our contractors keen by having a broad pool of potential contractors and, through our commitment and ability to go out to procurement as and when appropriate, ensure that we deliver value for money. That value for money starts with the commercial framework, the contract management and the approach to managing the contractor, but it's also around the long term value that can be achieved - in this case the long term vision around the fact that MHHS can be a catalyst for opportunities that go far beyond timely settlement. Value for money also looks at how you can develop wider use cases to benefit consumers in other parts of the value chain outside of the settlement process and in other industries, to really benefit from the economies of scale that arise from that investment.

BSCCo: of course, we apply exactly the same sorts of controls over contract management. We have recently renegotiated the contracts with our core BSC system service providers and have driven some of those costs down, which was a very good example of contract management.

Q4. The services we are talking about are very much similar to what is offered in the DTSA. Can Ofgem explain how you've 'landed' on BSCCo/BBSC and RECCo/REC as potential operators?

Ofgem: the consultation explicitly seeks views on whether there's any alternative model that should be looked at. We would be very interested to hear from people if they think the DTSA or equivalent is a better way forward. At the start of this event we reiterated the rationale for our initial view that BSC/BSCCo and REC/RECCo could be suitable governance options given their roles in relation to managing settlement processes and access to retail energy data. In addition, we believe that in terms of simplifying future industry governance, industry needs a stronger sense of single coherent architectural planning. This would be helped the more that services are brought together in a limited number of homes rather than continually

fragmenting and setting up new homes. The EDA governance decision gives industry an opportunity to build strategically instead of tactically. This is why our initial view is that it would be sensible to site the governance within one of the key codes - with the REC and BSC being the most appropriate - and then looking at how the services and the data are likely to interact with different codes.

Q5. How will the service providers maintain the governance and the sovereignty of data passing across those Cloud infrastructures?

RECCo: the National Cyber Security Centre has just issued guidance that if you want to reach the highest standards in terms of your systems, particularly for cyber security (and this will be the same for Elexon as it is for ourselves), then your Cloud service providers fall into the same framework for assessment. So how do we ensure we have the appropriate level of governance? Basically we have requirements that the data stays in the UK so one of our requirements of the Cloud centres that backup services are in the UK. As the data controller we determine precisely how the data is used, how it is processed and for what purposes. We can specify contractually where backups take place.

BSCCo: not going to repeat everything RECCo said about protocols and cybersecurity. But clearly data is at the heart of everything that we do and therefore it has always been incredibly important to put in place the right control. We are ISO 27001 certified. Going back to when the AWG was working on the EDA last year - part of the activity there was to understand all of the interfaces and to write specifications about each individual interface and to understand our requirements around encryption etc. MHHS Programme in developing this solution has all of the principles, standards and guidelines necessary to put the appropriate levels of security in place regarding sovereignty and this will need to be driven out of the design process.

REC Manager: there is a very clear demarcation between what the requirements are going to be for the programme in terms of service design and data management, whether and when they become functional or non-functional, including things like location of data backup, as well the general governance and then the enduring governance. It is important at this juncture that we get through the enduring governance so that the relevant body can then go and do the relevant assurance on those requirements.

Q6. Will the policy decision about EDA governance be absolutely final or could future governance reforms affect this?

Ofgem: definitely the intention is that we will make a final governance decision off the back of this consultation. Obviously, we cannot pre-empt what might come out of the code review that is coming down the line, but it wouldn't be our intention that there be any further chopping and changing.

Q7. Could we see more detailed information about the costs of the design architecture options that were considered, including a breakdown of costs for different types of stakeholders?

Ofgem: we are not making public information about the expected costs of the EDA because of the implications that might have on the procurement process. We do not want to put information into market that might skew that process or lead to an uneconomic outcome. Clearly parties will need to understand what the costs are and we expect that once that reason for confidentiality is past there could be greater transparency. We have of course seen comparative estimated costs for each option. While the option of aiming for a single DTN solution was relatively cheap, it wouldn't meet the requirements of the programme. On the other hand, the costs of moving to a single EDA solution would be very significant because of the need to change the ways in which systems and processes work. Under the hybrid option, a lot of traffic is still going to be carried over the DTN and while running two parallel systems would give you two sets of costs, we are confident that those costs fit within the overall business case. We reflected that in the text if not in the numbers that went into the December decision.

Q8. How do you intend to split the funding between the parties that would be using the EDA?

Ofgem: we haven't got a firm view yet and we have explicitly invited views on how the funding should be apportioned between parties. The one thing we have said is that additional

services to third parties who aren't part of the codes should be charged out on self-funding basis. Other than that, we want to understand views on where the funding should sit and how it should be split.

The questioner noted that there would be a need to make sure that new third parties are not adding a security risk to the service by accessing it in an inappropriate way.

Next steps

Ofgem: the deadline for responding to this consultation is 5:00 PM on the 17th of February, so we look forward to getting all your responses by then and we expect to publish our decision in March. The question is how and when we implement that. If we decide that the governance should be taking place through BSC/Elexon or REC/RECCo we will expect to implement that through a modification to the relevant code. Our thinking is that that would be an Authority-led code modification using our SCR powers. We understand that an enabling modification would need to be fully in place before any development contract could be signed. So we're obviously liaising closely with the code bodies to understand timelines and with the Programme to understand how those timelines fit in with their procurement process. Charles Hyde of the Programme will talk about that.

MHHS Programme: the Programme has established a team to resource the design and the procurement of the Data Integration Platform and manage the delivery through to implementation before handing over to the enduring service owner. (Some of you may know this by the name of the Data Exchange Service, which it previously had, but this has been replaced by the Data Integration Platform[2] title to differentiate the acronym being DIP rather than DES.) This is the next major tranche of work following the procurement of the Lead Delivery Partner last year.

The Programme's Design Workstream, in conjunction with industry and the potential Enduring Service Owners, are in the process of finalising the technical requirements for the DIP. This incorporates the functional, non-functional and service management items you see in this slide.

[2] The Programme now refers to the EDA as a Data Integration Platform, hence DIP.

The four key technical elements outstanding relate to:

1. security and encryption, for encrypted messages (where the MPAN is exposed) and the DIP, can decrypt/re-encrypt;
2. inspecting payloads during transit;
3. addressing - there is a common requirement across many of the business process to send MPAN based messages. These messages need to be addressed depending on which parties have the responsibility (based on roles) of the MPAN in the message. The issue is whether the recipient or the DIP undertakes the addressing, i.e. perform a lookup of participant for role against MPAN; and
4. certificate management for onboarding Participants.

Incidentally on the cyber security requirement raised earlier, the requirements dictate that the solution must be hosted in the UK, with 2 availability zones, and independently assessed to be and maintain both ISO 27001 and HM Government Cyber Essentials Plus standards. MHHS Working Groups, encompassing a diverse range of representatives for constituency groups, have been engaged on the technical requirements over recent months. The requirements have already been socialised with the Working Groups and it is understood that they are generally content already. We plan to share the documents from the Working Groups in a secure data room for procurement bidders to ensure there's as much understanding as possible.

Moving on to the procurement, as many of you will already know, Elexon, like electricity suppliers, is not a Defined Authority under the Government's Public Contract Regulations, and we shall therefore not be conducting a public procurement. Still, we are required to, and we definitely will, run a competitive DIP procurement – to find the optimal quality, cost and timeliness.

As a Programme, we are asking Ofgem's identified potential Enduring Service Owners to discuss approaches, key commercial principles and service requirements for the run and maintain elements so that we're all aligned when we issue the procurement in mid-to-late

February, then looking to award a contract in late June 2022.[3] Clearly, there is a need in the Ofgem timeline to ensure the DIP is in place for Participants to commence testing in June 2023, since a number of Industry Participants want it well before the Ofgem August 2023 deadline. However, it is intended that the Lead Delivery Partner will be providing testing simulators to Participants before this.

Acknowledging that there are a number of potential bidders on this call today, it would be inappropriate to walk through bidder lists now. However, the Programme is happy to have offline conversations with Participants. Ultimately, we want a competitive, fair and timely procurement. We continue to be agnostic as to who the future Enduring Service Owner[4] is. It could be RECCo, could be BSCCo, could be A.N. Other depending on what falls out of this consultation and Ofgem decision. But we do have a broader focus on keeping the broader Programme, for which this is a crucial part, on track, to quality, time and cost.

In summary, provisional dates are:

- Technical Design Working Group comments on DIP technical requirements - 17 February 2022
- DIP requirements approval – Mid-February 2022
- Programme issued procurement RFP to bidders - by end February 2022[5]
- Expected DIP contract award – late June 2022[6]
- DIP expected to be live and operational for Participant testing – June 2023

Of course, any questions you may have please feel free to reach out to the Programme if you wish to discuss this further. And if you haven't already, I'd encourage people to sign up for the

[3] Since the stakeholder event, MHHSP have advised that the issuing of the procurement RFP has moved to early April 2022 after re-circulating DIP technical requirements among Working Group representatives for additional input. In line with issuing the RFP in April 2022, MHHSP have indicated that the DIP contract award will now be in Q3 2022.
[4] In response to a subsequent question, MHHSP clarified that the ESO on its slide was term for the organisation that will own the enduring run and maintain contract with the Service Provider after the Programme has completed the implementation and the system/solution is handed over to business as usual service.
[5] See footnote 3 above – now April 2022.
[6] See footnote 3 above – now Q3 2022.

newsletter known as *The Clock* which goes out weekly. Details are available from the MHHS website www.mhhsprogramme.co.uk. Thank you.

Closing remarks

Ofgem: Thank you very much to all of you for attending. Particular thanks obviously to Sid Cox and Sara Vaughan for presenting and for answering your questions. Thanks to Andy MacFaul and Charles Hyde as well for their contributions and to everyone for their questions. Thank you and we look forward to receiving your consultation responses by the 17th of February.