MP162 'SEC changes required to deliver MHHS'

October 2021 Working Group session 3 meeting summary

Wednesday 20 October 2021, 10:00-12:00

Attendees

Attendee	Organisation
Ali Beard	SECAS (Chair)
David Kemp	SECAS (Lead Analyst)
Robin Healey	SECAS
Rosie Knight	SECAS
Richard Vernon	DCC (Proposer)
Stuart Scott	DCC
David Walsh	DCC
Abhijit Pal	DCC
Helen Metcalfe	DCC
Kevin Spencer	Elexon MHHS Programme
Sarah-Jane Russell	British Gas
Seth Chapman	Castillo
Paul Saker	EDF Energy
Julie Geary	E.ON
Daniel Davies	ESG Global
Paul Akrill	IMServ
Ralph Baxter	Octopus Energy
Emslie Law	OVO Energy
Elias Hanna	Smart ADSL
Nik Wills	Stark
Simon Wilcox	Stark
Robert Johnstone	Utilita
Kelly Kinsman	WPD

Overview

The Smart Energy Code Administrator and Secretariat (SECAS) (DK) noted the issue identified, the proposed solution and the plan for the Working Group sessions planned across October.

Issue

As the smart metering rollout continues, there will be more and more premises with Electricity Smart Metering Equipment (ESME) installed capable of recording consumption in each half-hour period. Ofgem's [Electricity Settlement Reform Significant Code Review](#) (SCR) has concluded that settling all consumers on a half-hourly basis would bring net benefits of up to £4.5bn by 2045[1]. It has therefore concluded that Suppliers should be mandated to settle their customers on a half-hourly basis.

Delivering the full solution for market-wide half-hourly settlement (MHHS) will require changes to the Smart Energy Code (SEC) and to the Data Communications Company (DCC) Systems. Ofgem has [requested the DCC raise this SEC modification](#) to progress and deliver these changes.

Solution

During the SCR, Ofgem has developed its target operating model (TOM) for how the full MHHS solution should be delivered. The SEC and the DCC Systems changes will need to deliver the requirements set out in the TOM.

This modification will cover all the SEC changes required to deliver the MHHS solution, which will include:

- The introduction of a new User Role for Parties carrying out the Meter Data Retrieval (MDR) service.

- Defining the relevant Service Requests the new User Role will have access to and the associated Target Response Times (TRTs) and testing scenarios.

- The associated security and data privacy arrangements that will apply to the new User Role.

- The User Entry Process requirements for the new User Role.

'SMETS1 Solution Specifics' workshop

The DCC (AP) took the Working Group through the areas the DCC had identified with the Smart Metering Equipment Technical Specifications (SMETS) 1 part of the solution. In order to enable the SMETS1 Service Providers (S1SPs) to better manage traffic, the DCC is looking for as much of this as possible to be scheduled, otherwise all components will need to be assessed for peak load. The DCC highlighted its proposed caching solution, which could reduce traffic to Devices. This approach will only provide benefit if more than one User is requesting the half-hourly data though. Understanding User behaviour will be key to determining if this option will have benefit.

A Working Group member (EH) queried the setup between the Dual Control Organisation (DCO) and the various Communications Service Providers (CSPs) and how the cache will be managed. They sought clarification on whether the DCO could manage traffic to multiple cohorts in parallel or whether requests are managed sequentially. The DCC (AP) confirmed the DCO doesn't interact with the CSPs, only with the S1SPs. Requests re managed sequentially but the three different cohorts can be supported in parallel.

A member (EL) requested the DCC mitigate any impact on the DCO. The DCC (AP) confirmed this solution would not affect the DCO. The member was fully supportive of this option.

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[1] Please see Ofgem's [final business case and decision to implement market-wide half-hourly settlement](#) for more details.

A member (SC) noted the cache option only works if there is no reuse of data outside of the DCC, such as through the Meter Data Retrieval Agent (MDRA) passing data on to the Supplier. The DCC (SS) noted it is important to futureproof the solution in case further use cases arise generating requests for half-hourly data. The DCC (AP) also confirmed the cryptographic design for SMETS1 allows for the cache to be added without affecting Users' processes or experience, but the DCC will work with the Security Sub-Committee (SSC) to ensure security is maintained.

'A Day in the Life of MHHS' workshop continued

DCC Scheduling time periods – smoothing demand peaks

The DCC (SS) queried whether Users had any constraints over changes to the existing scheduling windows, or whether doing so would be an issue to Users, to help inform design options.

A member (EL) queried whether the DCC would be distinguishing the use for the data, noting this does not happen now. When a Supplier is acting as its own MDRA, the DCC won't be able to tell if the Supplier is collecting data for MHHS or for other existing uses. The DCC (SS) noted it has been considering this and exploring the concept of asking Users for the purpose of the data being collected. This can be added for MHHS fairly easily but distinguishing between the other existing uses will be harder. The high-level assumption is that the definition of Service Requests could be changed to include a new optional attribute to state if the data is being collected for MHHS or not, which could allow the DCC to create different usage patterns for this.

A member (RB) considered that Suppliers collecting this data places less strain on the system. They would want to encourage Suppliers to collect MHHS data themselves, to reduce the load on the system, but at same time wanted to ensure there is a balanced playing field for independent MDRAs too. If collecting MHHS data is equally onerous for all Users, this could make it more likely Suppliers outsource this to an agent. The DCC (DW) confirmed that existing usage of the system not something the DCC wants to affect through MP162, with MHHS being considered an additional use, and this is specified in the business requirements.

The member noted the dilemma, as the solution is less expensive if Suppliers were to collect their own data, but by making it possible for independent MDRAs to do so too adds complexity and cost. They queried what could be done to balance this without negatively impacting existing Users. The DCC (SS) noted this implied a trust model, with ways of operation written into the SEC. The member noted that the current load is varied, and Users have had to work together to manage this in a form of trust model, which works well when seeking to resolve problems.

The DCC (DW) noted there will be an impact on Parties from MHHS. They will need to set up their systems in response to this or arrange for an MDRA to manage this. The DCC also noted that Users have other scheduled reads during the overnight period.

A member (SC) felt this approach could be unfavourable to independent MDRAs, and that Ofgem's requirements was for equality between the roles. Another member (EL) noted this was not intentional, but there had been some incorrect assumptions around smart metering used in the TOM.

A member (JG) highlighted that they currently schedule the relevant Service Requests and would be surprised if others didn't too. They would not move away from scheduling for MHHS. They also want to avoid the return traffic affecting other processes during working hours, such as Install & Commission (I&C). Managing this throughput is key. An independent MDRA may be able to schedule requests across the whole day, but Suppliers likely couldn't.

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The DCC (SS) noted that having more freedom to make full use of the TRT would allow the load to be better spread across the day.

A member (SC) queried if the DCC was looking to smooth the load across all Service Requests, not just those sent for MHHS. There could be different scheduling windows but with overlap. The DCC (SS) confirmed this was the case.

A member (PS) noted that this would depend on what the data currently collected is used for. If data is spread too far, Users may not gather data as promptly as they currently do, which may affect some services to customers. Ideally, they would not want to change anything in their systems, though could agree to a small cost in one area to avoid a larger cost elsewhere. The DCC (SS) noted this comes back to understanding the use for the data requested, to put it into an appropriate window. The TRT is currently 24 hours, even though the service often delivers more quickly. The member noted that current scheduling is set up based on the information being returned as quickly as it is now. If that was to change, even if it was still within the TRT, that could drive changes in User behaviour to meet customer expectations.

A member (EH) queried if the whole system needs to be reviewed and redesigned to meet future needs, before it reaches a point where it cannot cope with the demand, though conceded this would likely be outside the scope of MP162. They asked whether the DCC had a view on when a full review of the current model would be needed, due to the pipeline of expected changes that will impact on demand. The DCC (SS) confirmed wider work is taking place on this.

A member (RB) felt it would be worth gaining further understanding of the options and the costs, to help the Working Group gauge the best way to go.

A member (EL) noted the expectation for Users to be able to carry on with what they currently do, and for this to continue to happen within current time windows. There does not appear to be anywhere under the MHHS work that is looking at how businesses are currently operating more generally and how these will be affected by MHHS. In their view, MHHS would be in addition to existing processes but should not affect them.

A member (SC) queried if the data collection for MHHS increases, could this affect existing uses.

Elexon (KS) noted the decision to collect data daily from all 30 million meters was a DCC recommendation and not one from the TOM. Under the TOM, it was originally considered to collect data from one million meters a day, collecting data for the whole month.

A member (DD) noted the TRT for scheduled requests has always been 24 hours, and so Users' expectations should be based on this. Users may have got used to getting data overnight, but they should have an expectation this could be longer. The DCC would be within its right to make full use of the TRT. Another member (JG) reiterated that they are already seeing data sought overnight creeping into working hours and did not want to make this worse. The DCC (DW) considered changes in User behaviour to fall under its key design principle around not impacting on existing processes.

A member (PS) acknowledged the DCC would be within its right to make full use of the current TRTs, but this could then change Suppliers' behaviour. They chose to schedule their requests on the basis they would get that data in time to meet customers' expectations. They would need to consider further the impacts if this data was returned later, even if it was still within 24 hours of the request being made.

The Working Group concluded that further information to assist the DCC would be best sought via a consultation. This would give members an opportunity to discuss this further within their organisations to provide more informed information.

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Issues noted with the business requirements

The Working Group returned to the points raised by the DCC in the first October session.

The DCC (SS) noted the question around whether SRV 4.1.1 was needed for SMETS2 Devices, or if this could be removed.

A member (JG) felt it would not bother them if this was not available. Another member (DD) noted the principle of not impacting the Great Britain Companion Specification (GBCS), as otherwise it could take years for the version to be implemented, and some meters could never be updated to this version. A further member (SC) considered consistency between SMETS1 and SMETS2 Devices would be beneficial. Elexon (KS) did not see having an instantaneous read as a disadvantage, as a midnight read would work for settlement.

The Working Group felt that SRV 4.1.1 was not needed for SMETS2 Devices but agreed to ask a question on this in the consultation.

The DCC (SS) also sought confirmation on whether SR 4.2 needed to be schedulable.

Elexon (KS) could not see any use cases for this, as export customers cannot opt out of half hourly settlement. The DCC (SS) noted this would be used as part of any validation checks, noting that SMETS1 meters do not hold midnight reads.

A member (PS) felt it seemed sensible to make this schedulable but asked what this would mean for TRTs. The DCC (SS) noted the User would receive the read at some point in the following 24 hours, but the alternative would be a spike of on-demand requests at midnight.

The Working Group felt it would be sensible to make SR 4.2 schedulable but agreed to ask a question on this in the consultation.

Final comments

The Working Group queried whether the MHHS programme is looking at the full end-to-end impact beyond settlement, such as on businesses' processes and how they interact with smart meters. Elexon (KS) noted MP162 is about extracting the data from smart meters, and wider impacts are being considered by the programme over coming months. They also noted further consequential SEC modification could arise from these discussions. SECAS (RH) agreed wider processes such as change of Supplier (CoS) still need to be worked through. In the case of CoS, this would likely sit under the Retail Energy Code (REC), but there could be a consequential impact within the SEC.

The Working Group considered that the full MHHS solution is still being developed, and that it is too early to be considering the DCC solution. Members noted a risk that the technical solution could change later because of further clarification on the wider MHHS solution and business processes. However, members acknowledged the anticipated lead time needed for the DCC Systems changes meant the DCC changes needed to be developed now.

Next steps

The Working Group agreed the final October session on Friday 22 October was no longer needed. A Refinement Consultation will be issued to consult the industry on the technical solution and seek further information to help inform the non-functional requirements.

In parallel with this, work on the remaining aspects of MP162, such as the security and privacy impacts, will take place. A further Refinement Consultation will be issued later in the Refinement Process to cover these and the legal text.

The following actions were recorded from the meeting:

- SECAS to prepare and issue a Refinement Consultation to consult on the technical solution.

- SECAS to review the MP162 timetable to build in the work remaining on the other aspects of the full MP162 solution.

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