Feedback Form
Electricity retail market-wide half-hourly settlement: consultation

The deadline for responses is 14 September 2020. Please send this form to ***HalfHourlySettlement@ofgem.gov.uk*** *once completed.*

Organisation:

Contact:

Is your feedback confidential? NO ☒ YES ☐

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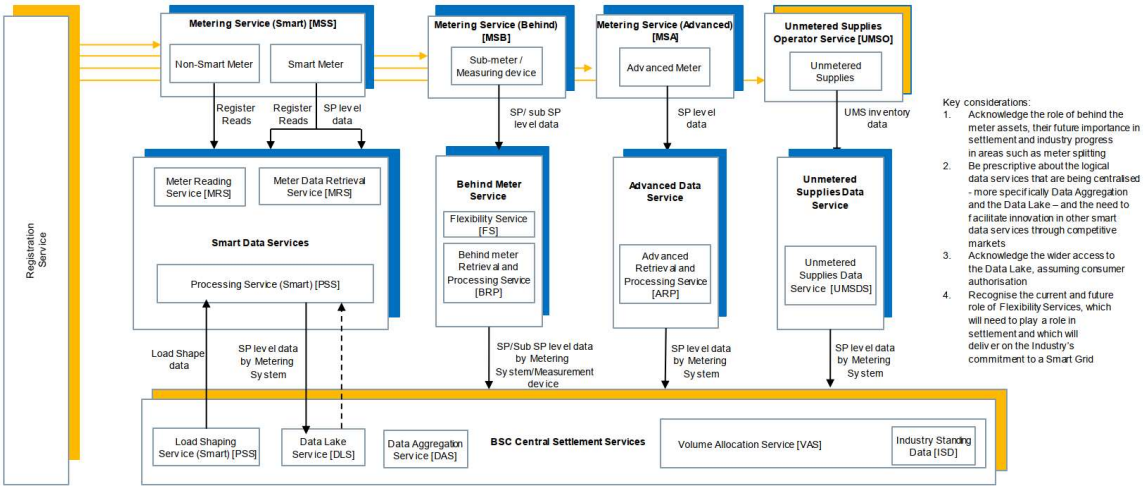
Target Operating Model (TOM)

1. We propose to introduce MHHS on the basis of the Target Operating Model recommended by the Design Working Group last year. Do you agree? We welcome your views.

Siemens are broadly accepting of the Target Operating Model recommended by the Design Working Group last year. However, as argued in our last consultation response, we believe that some important changes need to be made to ensure a timely and cost effective transition to future smart grids. These changes are outlined in the diagram below.



Siemens believe this remains consistent with the design principles that the DWG were adhering to and particularly supports the requirement for innovation in which the DWG were asked consider "how settlement arrangements could interact with, and facilitate new technologies and business models, e.g. demand side response, peer to peer networks, micro generation, storage and electric vehicles".

An important distinction is made in the TOM in the management of domestic, non-domestic and unmetered customers through the metering and data services processes. This segmentation of the market by meter type is a key feature of the TOM and is to be welcomed. However, Siemens remain unclear how the "behind the meter" meter type will be processed in the TOM. Is this included as part of MSS and SDS responsibilities where netting will take place or is there scope for a further segmentation underpinned by the Registration Service? This is further discussed below.

Whilst agreeing in principle to the wide availability of non-aggregated data and the need for non-aggregated data to develop accurate load shapes for non-period level data we would like to see a scoping statement alongside this role that clearly defines its responsibilities in terms of managing data access.

Behind the meter assets

Siemens have previously articulated the importance of ensuring that mechanisms are in place for competitive procurement of behind the meter services.

Whilst recognising that parallel works are currently ongoing, we would like clarity within the TOM and within the wider programme of how these assets are to be accommodated. This is a key area of development within the industry and must not be restricted by the model. A use case demonstrating how behind the meter assets are processed through the TOM would be welcome and if scenarios cannot be worked through the future model then changes at this stage would be preferred rather than after implementation.

The model should be able to measure and retain these meter values separately and adjust the consumption recorded at the MSID accordingly. Although related to Smart Data Services there are anticipated to be interfaces from non-traditional industry participants to assets behind the boundary point that could be better serviced outside the rules governing boundary point meters. By making a clear distinction at this stage would make future adjustment to rules, access to the market and the delivery of services ancillary to the Settlement process easier in the longer term.

2. Ofgem's preferred position is that HH electricity consumption data should be sent to central settlement systems in non-aggregated form. Do you agree? We welcome your views.

Siemens broadly support the OFGEM preferred position that HH electricity should be sent to central systems in non-aggregated form. However we believe that any Data Lake should be made accessible to the wider market participants, under the right conditions and that there should be no centralisation of value adding analytical services where competition is key to facilitating innovation, rapid time to market and cost effectiveness.

Whilst Siemens is generally against the further centralisation of Supplier Agent functions, we have direct experience of the consolidation of aggregation functions. Siemens has worked with a number of regulatory smart metering programmes across the world, including some which have deployed time of use tariffs en masse, leveraging centralised functions such as aggregation.

Market-wide Data Service (MDS)

Siemens recommend that the AWG are directed to identify case studies from other jurisdictions where significant lessons could be learnt and, possibly, replicated before inviting tenders for the procurement of the MDS, or a similar point for the collection of market non-aggregated data.

A significant challenge any organisation will have is the processing and retention of vast amounts of data in a relatively short timeframe. Fortunately, there are systems currently operating within centralised programmes that have been designed to overcome this challenge and we feel it is important that consideration is given to the environments in which they operate. This should help set the specification requirements and provide potential vendors with early clarity in the expectations of a system and assist in tender responses.

We would expect that a competitive procurement exercise is undertaken to select the most appropriate (MDS) service and supporting system allowing existing systems to compete alongside potential bespoke options.

Amongst the energy systems that have worked with Siemens, perhaps the most relevant is found in Canada. Here Siemens worked closely with the Independent Electricity System Operator (IESO) who oversaw a mass roll out of smart metering and hourly settlement to 4.7 million homes, resulting in the wide scale adoption of Time of Use Tariffs and helping to facilitate the incorporation of 3,400MW of small scale generation within homes, small business and farms.

Settlement timetable

3. We propose that the Initial Settlement (SF) Run should take place 5-7 working days after the settlement date. Do you agree? We welcome your views.

Siemens broadly accept the reduced timescales for Initial Settlement but will be interested to study the detail of expected operational performance that will be set by the Performance Assurance Framework. It is expected that any reduction in timeframes for initial settlement will have a detrimental impact on actual reads as it naturally reduces the timescale for arranging and carrying out manual readings in the event of communication failure. To help alleviate this it may be an opportune moment to re-establish Issue 73 workgroup which was tasked with improving the fault rectification process. Any improvement in communication between organisations to resolve metering issues more quickly should be considered in light of the proposed reduction in settlement timescales. We note that the timescales need to adequately account for the receipt of profiles from the Load Shaping Service to enable their application to Data Services data and that this might compromise the desired timing of the SF run.

4. We propose that the Final Reconciliation Run (RF) should take place 4 months after the settlement date. Do you agree? We welcome your views.

Siemens broadly support the reduction in the number of Reconciliation runs but suggest further analysis is undertaken on the optimum time of the RF run, particularly on the impact this may have on advanced meters being settled on actual data. Also, we currently experience regular instances of late appointments notified after the current R2 run.

Although we agree that the settlement process should not be "built around exceptions" we have not seen any data analysis that suggests that four months is the optimum point for final settlement.

Factors such as late appointments and the volume of estimated data after the current R2 run should be quantified across the market after which the optimum time for the RF can be determined. Alternatively, the number of DF runs may increase and there is a risk that the DF run becomes the *de facto* final reconciliation.

As with the reduction in timescales for initial settlement, detail on operational performance needs to reflect the shortened timelines for resolving metering faults in time for final reconciliation. Therefore, any changes made to the settlement timetable need to be made in parallel with changes to performance obligations. Performance obligations will need to be set separately for the different market segments reflecting the respective impact each segment has upon settlement. It is often performance metrics that are used to differentiate agents, promote competition and improve overall performance.

There is also concern around the transition to MHHS and the run-off of HHDA and NHHDA services. It is unclear if the current Data Aggregators will need to operate for the Settlement Dates prior to MPAN migration to MHHS and the "centralised aggregation service" and continue to do so up to the current DF timescale of 28 months. These services will need to be funded and it is not clear how this will work.

We also question the role HHDAs will have in the run-off arrangements and whether there will be an obligation on HHDAs to process unmetered consumption at a Wh level. We raised this as an observation in our initial TOM response and await proposals on how this will be arranged.

5. We propose that the post-final (DF) settlement run should take place 20 months after the settlement date, with the ratcheted materiality proposals described in chapter 4. Do you agree? We welcome your views on this proposal, and in particular about its potential impact on financial certainty for Balancing and Settlement Code parties.

Should the analysis determine that the optimum time for the RF run is reduced then the earlier running of the Dispute Final run should also be considered. Siemens are not party to the current disputes process and have not been exposed to the typical time beyond RF that issues leading to disputes are currently identified. Siemens have also not been exposed to the materiality of current disputes though understand there is a current £3000 threshold. It would seem appropriate to understand the current impact of reducing the DF run to 20 months and the number and materiality of disputes that would have been exempt from being raised. Only then would smaller Suppliers be able to understand the potential financial impact the reduction would expose them to and provide information to determine the optimum timescale for the DF run.

Export-related meter points

6. We propose to introduce MHHS for both import and export related MPANs. Do you agree? We welcome your views.

Respond
Siemens agree that MHHS should be implemented for both import and export related MPANs provided that this does not delay the implementation of MHHS for import MPANs. The measuring of all export is a further tool in delivering more dynamic grids enabling Suppliers to better forecast energy requirements and, where appropriate, load shift. Where it is possible, Siemens support the accountability of all measured assets allowing the consumer flexibility in selecting the organisation to supply or consume to/from those assets. This includes the increasing number of export measurement devices that sit "behind the meter". How these are to be netted-off against the primary MPAN based on the current design is unclear at this stage and we highlight this apparent omission in our response to Q1.

7. We propose that the transition period to the new settlement arrangements should be the same for import and export related MPANs. Do you agree? We welcome your views.

Although in agreement with this proposal it is important that the transition period is not extended in order that export measurements are included in the settlement arrangements thus delaying the import mandate. If the plan does highlight a significant delay then a staged approach to incorporate export into the new arrangements would be preferred.

Transition period

8. We propose a transition period of approximately 4 years, which at the time of analysis would have been up to the end of 2024. This would comprise an initial 3-year period to develop and test new systems and processes, and then 1 year to migrate meter points to the new arrangements. Do you agree? We welcome your views.

There are a number of challenges to overcome with the two most prominent being the unknown ongoing impact that Covid-19 presents and the resourcing difficulties many organisations are experiencing particularly with the pace of change in the energy sector. And while Siemens support the early implementation of a HH mandate we are concerned that the 3-year implementation period is ambitious. Our response to Q9 highlights areas of the Programme Plan affecting Supplier Agents that we are particularly concerned about.

This concern is borne out of experiences of previous industry changes significantly overrunning and the assumption within the plan that development drops will occur simultaneously. Setting up new central services in addition to internal programmes that a large number of Suppliers and Supplier Agents will undergo and then for these services to be qualified and integrated is a significant undertaking. We suggest a more integrated plan could be considered that breaks down into development areas to confirm ongoing progress. This may be the intention and form part of the more detailed planning assumptions but this is not clear in the published version of the plan. The apparent "big bang" approach before a testing period appears ambitious and unlikely to be successful for all participants.

The plan has, of course, been made more challenging with the "new ways of working" that companies are adapting to following Covid-19 together with the programmes that are also in-flight.

Although Siemens remain sceptical, it is not inconceivable that these services can be operational in the timescales defined but we believe contingencies need also to be put in place to manage potential overruns. As the objective of MHHS is to develop a solution that leads to the settlement of as many meters as possible at non-profiled half-hourly granularity, Siemens suggest the following:

- Early adoption of the "opt-out" principle potentially leading to a significant increase in the numbers of meters that Suppliers would have an incentive to transition to elective half hourly;

- Obligating Suppliers to offer customers, with assets "behind the meter", sub-metering contracts as part of the P379 implementation;

- Impose a one-way transition from NHH to HH.

Siemens believe the use of EHH should continue to be encouraged in advance of MHHS implementation and that in-flight modifications such as P375 and P379 should be aggressively progressed, and, where necessary changed, to deliver the benefits enabled by smart metering as early as possible.

By encouraging the use of the established elective processes through an obligation placed upon Suppliers, the pressure of realising the business case presented by delivering the half-hourly mandate over the 4-year period could be released and taken up by this alternative approach

9. We have set out high-level timings for the main parties required to complete a successful 4-year transition to MHHS. Do you agree? We welcome your views, particularly if your organisation has been identified specifically within the timings.

It must be recognised that, generally, Supplier Agents act in multiple roles. The challenge for Supplier Agents is to design, develop, test and implement systems and processes across all roles to the same timetable together with an expectation to maintain existing processes and systems to the compliance standard in the existing but changing market. Then once systems and processes have been established a series of qualification events will occur simultaneously.

Without a full understanding of the obligations that will be placed upon Supplier Agents it is difficult to be absolute in our assessment but we do have some concerns that we think should be considered further.

As mentioned in our response to Q8, we believe a more integrated plan may be necessary to confirm participants are "on course" during the development phase which would then help to ensure a smoother full integration testing period.

We also suggest that the programme should look at ways that the qualification of agents could be an ongoing process running in parallel with "development drops". Whilst the detail of the qualification requirements has not been presented (for example, to what extent do agents operating in the advanced segment need to confirm functionality) there is likely to be considerable pressure on the qualification body in advance of the migration period and even without MHHS we understand that the current workload on the qualification body is a challenge.

Furthermore, as raised in our response to Q4 it is not clear how existing DA services are to be run down and the contractual implications this may expose.

A further point we would like clarification on is that the TOM does not impose a restriction on the roles that an agent performs and that an agent can operate in any or all of the market segments in any role for which the organisation is qualified. Whilst we fully expect this to be the case this does not seem to be confirmed in the documentation.

10. What impact do you think the ongoing COVID-19 pandemic will have on these timescales?

The full implications of the pandemic are not known but speculation of continuing disruption is not without foundation. Most companies have begun to adapt to new ways of working and, generally, business as usual activities have been re-established to pre-pandemic status.

However, operating a major programme of change affecting and requiring the participation of many organisations within an environment that is new and relatively unknown does increase the risk on the Programme plan. Mitigating this risk will not be easy but developing and full integration testing of certain elements early to generate confidence as the programme moves forward may be one option available to the industry.

From a direct practical position Siemens and others have experienced the impact C-19 has had on meter installations and maintenance visits and future lockdowns may exacerbate the issue. This will naturally impact the time to reach the critical mass that supports the MHHS business case though does not directly impact the timescales for delivering the systems and processes presented in the programme plan.

Due to the current issues facing the country it is likely that major restructuring programmes will be affected. In these scenarios it is important to mitigate delay as much as possible by utilising existing levers in meeting similar objectives. By expanding the EHH opportunity through mechanisms such as those outlined in our response to Q8 we believe many of the objectives of MHHS could be realised earlier.

To address concerns relating to SMETS2 roll out, Siemens is supportive of extending the use of advanced meters to micro business customers and small sites that form part of a wider corporate portfolio. In the latter case, the market is in need of an extended DCC user role to support SMETS2 installations.

Data access and privacy

11. We propose that there should be a legal obligation on the party responsible for settlement to collect data at daily granularity from domestic consumers who have opted out of HH data collection for settlement and forecasting purposes. Do you agree that this is a proportionate approach? We welcome your views.

We suggest re-consideration of the opt-out decision in advance of MHHS to support our view that EHH should be expanded upon in advance of the MHHS transition. This forms part of our response to Q8.

On the wider question on the granularity of data should a customer decide to opt out of half-hourly exposure, Siemens believe that daily granularity strikes the correct balance between customer data privacy and the requirements of the market.

12. Existing customers currently have the right to opt out to monthly granularity of data collection. We are seeking evidence about whether it is proportionate to require data to be collected at daily granularity for settlement and forecasting purposes for some or all of these consumers. We welcome your views.

Although Siemens consider daily opt-out to be the sensible approach we do understand that existing customers would have their wishes reversed if this was mandated across all customers. We therefore believe that existing customers should remain on their existing terms until moving to a new tariff arrangement.

It is also important to develop robust processes between the Registration Agent, Suppliers and Supplier Agents to ensure customer wishes are respected particularly on Change of Ownership and following a change of decision by the customer. Indeed, it may be that until the onboarding process is complete the opt-out option may be the default to provide the customer with sufficient time to express a preference. It is this level of detail that extends development time of participants' systems and processes and an insight into why it is not easy at this stage to agree the length of the development.

13. Should there be a central element to the communication of settlement / forecasting and associated data sharing choices to consumers? For example, this may be a central body hosting a dedicated website or webpage to which suppliers may refer their customers if they want more information. If yes, what should that role be and who should fulfil it? We welcome your views.

Siemens are broadly in agreement with this approach. We would expect the OFGEM approved Energy Ombudsman to manage such a service or another OFGEM accredited body.

Consumer impacts

14. Do you have additional evidence which would help us refine the load shifting assumptions we have made in the Impact Assessment?

No response

15. Do you have any views on the issues regarding the consumer impacts following implementation of MHHS? Please refer to the standalone paper we have published for more detailed information.

Siemens believe a positive consumer impact will result with the transition to MHHS where a more competitive market will develop allowing consumers greater choice and greater control in their energy usage. However, it is essential that the democratisation of energy is equally shared across all demographics. This can only be realised through access to metered information at a low level of granularity and the development of tools that allow innovative tariffs and consumer choice.

Programme management

16. Do you agree we have identified the right delivery functions to implement MHHS? We welcome your views.

Siemens are broadly in agreement that the correct delivery functions have been identified to implement MHHS. We strongly believe that competitive tendering processes for each of the key services is necessary to obtain the most appropriate parties to deliver such functions.

17. We have set out some possible options for the management of the delivery functions, and a proposal on how these would be funded. We welcome your views on this.

Siemens are concerned that the industry must retain focused on existing change and business as usual activities during the transition in addition to ensuring the successful implementation of MHHS so while there is a strong case for managing the programme from within the industry it must not be to the detriment of continuing change.

Additionally, one of the assessment findings from Project Nexus was the risk posed by an "industry party integral to the change also having responsibility for wider programme management and party coordination". We therefore believe that an industry party that does take responsibility for the management of the delivery functions is precluded from tendering for wider service delivery. This would not only ensure focus is directed to delivering the full programme but also allay any "conflict of interest" fears.

The other options considered in Ofgem's impact assessment also have advantages, particularly in guaranteeing neutrality. Although the costs of utilising an outside organisation may be prohibitive, the experience and skills provided within a tightly framed contractual relationship may deliver the better outcome.

Other

18. Do you have any comments on the Impact Assessment published alongside this document, or any additional evidence that you think we should take into account?

Siemens has no additional comments, other than stressing the importance of reviewing how these programmes have been managed in other jurisdictions.