Minutes

ofgem
Making a positive difference for energy consumers

Design Advisory Board Meeting 5		
From: George Huang	Date: 25/09/2018 Time: 10:00-16:30	Location: Ofgem, 10 South Colonnade, Canary Wharf

1. Welcome and Meeting Overview (Slides 1-3 & 6) — Anna Stacey

1.1. The Chair, Anna Stacey (AS - Chair), opened the Design Advisory Board (DAB) meeting and set out the day's objectives:

- to get the DAB's views on Ofgem's future market models and how they interact with the agent functions consultation
- to update the DAB on the Settlement Reform project progress to date
- to update the DAB on the Design Working Groups (DWG) workgroups progress to date with a particular emphasis on load-shaping and settlement timetables

1.2. George Huang (GH) went over the open actions from the last DAB. Kevin Spencer (KS) will send the updated export spill data for 2017 **(Action 1).** A previous action to update the board on blockchain was decided not to be needed as the TOM design is technologically neutral. An action was raised **(Action 2)** for Ofgem and ELEXON to talk about when it would be suitable for the DAB to have a talk on technology.

2. Update on Settlement Reform SCR - Access to data and the OBC (Slides 7-9) — Anna Stacey

2.1. AS updated the board on the project progress so far, including the publication of the access to half-hourly data consultation, the outline business case (OBC) and the agent functions consultation.

2.2. A board member asked whether the savings outlined in the OBC were too optimistic. JGS noted that the lower end of the benefits were calculated with a low load-shifting assumption (1% shift by 2025 and 6% by 2045).

2.3. A board member highlighted specific trials that implemented time of use (ToU) tariffs in people's homes, which demonstrated that people were able to load shift, and noted that there has been an emergence of new tariffs, such as an electric vehicle tariff from Octopus.

2.4. AS updated the board on the recently closed access to data consultation. There was a large number of responses with a mix of views – the majority felt mandatory would be the best approach, but there was widespread recognition of data privacy issues and support for opt-out as a balanced response to the benefits and risks.

2.5. There was a discussion with the board members on the best option for access to data. Members were worried that consumers would opt-out if there is a media campaign and it was noted that explaining settlement to consumers would be difficult. Board members

raised the fact that this was a regulated function and as such they did not think it should be as high-risk as it is currently being perceived.

2.6. A board member asked if the full business case takes into account the policy decisions. AS confirmed that it would.

3. Update on forward work plan and DWG/DWG workgroup progression (Slides 10-15) George Huang

3.1. GH provided the board with an update on the project forward work plan (FWP). Since the last DAB ELEXON and Ofgem have met to update the FWP. Ofgem will be providing a least regrets policy steer to the DWG so they can continue their design work. They have been using the minded-to position as outlined in the agent functions consultation.

3.2. A further consultation has been added on the choice of a final TOM, this is because the policy decisions will not narrow the TOM down to a final TOM.

3.3. The question of architecture has not been added into the FWP but may need to be added as we transition to HHS.

3.4. It was noted that the DWG is on track to deliver a final DWG preferred TOM in January 2019. They are currently outlining the service requirements – note that these do not show by whom or how the service is done. It will have to be costed for the full business case.

3.5. Kevin Spencer (KS) from ELEXON provided an update on the DWG workgroups. Each workgroup has met at least twice and a gap analysis has been undertaken to ensure that no requirements or interfaces are missing. Not all services have been finished due to architecture and policy questions not being finalised yet. These have been noted and kept in mind.

3.6. The settlement reform team has met with the targeted charging review team to discuss interactions with their project. In our access to data consultation we noted that use of data for calculating network charging is within the scope of our work on settlement. However, if the proposals currently being developed by Ofgem require access to additional data or handling by different parties than we looked at in our Data Protection Impact Assessment, this will have to be consulted on separately.

3.7. There was a discussion with board members on what data is needed for charging. One member noted that charging doesn't currently need reactive data.

3.8. A board member asked how we would access maximum load data in the future. KS clarified that this would be derived from settlement data. If TCR needed this data they would be able to access it.

3.9. AS noted that the TOM has to be future proof and as such we need to keep in as many scenarios as possible in mind.

4. Interaction between HHS & future market models (Slides 16-24) Colin Sausman

4.1. AS introduced the future retail market design team to the Board and provided an overview of the agent functions consultation. AS outlined the minded-to position to not have a central agent and the suggestion that a separate data aggregation service

outside of central settlement may not be needed in the future. We wanted to get the DAB's views on if this is needed in the future.

4.2. Colin Sausman (CS) provided an overview of the future market models that are being developed. The team are now increasing their stakeholder engagement to get stakeholder views on the models.

4.3. CS went over the number of functions that a supplier currently undertakes which can be segmented and separated out. The team have separated these out into three themes. A board member asked if these functions can come under more than one of these themes. It was confirmed that this can happen, but any value added services have not been added to this diagram.

4.4. CS went over the interaction between the future market models and settlement reform and what exactly the supplier hub reform should address.

4.5. A member noted that the future models outlined did not look at vulnerable customers and how to protect them. CS said this would fall under the customer service element of the model. Another member was worried that this new model did not show how savings from half-hourly settlement would be passed on to consumers. AS clarified that it would up to suppliers to pass these savings on to consumers.

4.6. A member asked about wholesale costs and how these would be reflected to consumers in the future.

4.7. AS asked for a view from the DAB on what the role of a data aggregator should be in the future. In particular, will data aggregation in its current form be needed in the future?

4.8. The board considered that separate data aggregation is currently only there for a historical purpose and they did not think it was needed now that the central settlement systems could receive disaggregated data and aggregate it themselves.

4.9. AS asked if there was any need for aggregated data. A board member said that aggregated data is needed by DNOs, however, there didn't seem to be a problem with not having a separate data aggregator service outside settlement.

4.10. ELEXON said that the data would be added up in central settlement systems which wouldn't be a problem.

4.11. The board thought that future market models needed disaggregated data.

4.12. AS asked about the board about the security implications of having disaggregated data in central settlement systems. There was an action on Ofgem to look at this further. **(Action 3).**

4.13. The Ofgem consultation on agent functions, including the question of data aggregation, is still open. Ofgem will be considering all responses and evidence carefully before reaching a decision. A steer from the DAB will be provided to the DWG in the context of the proposals put forward in Ofgem's consultation – however, it is important to note that a decision has not yet been taken and that Ofgem's final decision may be different from our original proposal. In this context (to help the DWG move forward with the design on a least-regrets basis) the DAB steer is that aggregation was there for a historical purposes and the need for data to be aggregated prior to submission into settlement is no longer there. They feel that the value chain needs disaggregated data to realise the full benefits of settlement reform and that the DWG should look at:

- The security risks of central settlement holding disaggregated data and how long data should be stored in central settlement in disaggregated form
- consider how central settlement holding disaggregated MPAN level data could support archetypes 1-3 of smart meter data use-cases developed by the Public Interest Advisory Group
- would having disaggregated data create costs for DNOs such as having to upgrade billing systems
- how difficult would it be to change our mind in the future. i.e. changing an aggregated model to a disaggregated one later on

5. DAB consideration of: Criteria to assess TOM and identify a preferred option (Slides 25-31) George Huang

5.1. GH outlined how the DWG would come to a decision on a preferred TOM option. This would be done by using Ofgem's least regrets policy steer and a decision tree approach.

5.2. There was a comment from the board about disaggregated data in a central settlement system and how it would be optimal to combine the load shaping service with this.

5.3. One board member had a question about network charging and how it would be affected by the introduction of time of use tariffs. One member was worried that the data collected didn't include maximum load levels. AS clarified that we should tell the DWG to incorporate whatever data is needed for charging (as long the cost is not prohibitive, and bearing in mind the caveat outlined at para 3.6 above).

5.4. A board member noted that consumers may have to be banded to decide what kind of system user they are (i.e. high peak usage or low peak usage) and make charges reflective of this.

5.5. A board member asked about how much unknown innovation could be taken into account in the design of the TOM. The Board noted that if data was disaggregated it would allow for more innovation in the long term.

5.6. We asked the board if they had any views on the type of architecture we should provide as a steer to the DWG. No one had any views.

5.7. As we will need to do a security assessment we asked the DAB if they had any views on what needs to be included. There was a discussion on what this would focus on (i.e. just settlement). One member noted that access to data is an important consideration for security and system architecture.

6. DAB consideration of: Load shaping service and settlement timetable (Slides 32-45) Kevin Spencer

6.1. KS provided an overview of the load shaping service and settlement timetable. Ofgem was keen to hear the DAB's views on the settlement timetable.

6.2. The load shaping (workgroup 2 have worked on the assumption that meters should be read once a month (1/30 of the population's data would be read each day). Ofgem and ELEXON are exploring the viability of this with the Data Communications Company (DCC).

6.3. A member said that if the load shape is calculated from a month ago, less data would need to be collected. KS said that the point of having a daily load shape is you get the temperature and light levels for that day. The member suggested that looking at the small differences from yesterday/last week/last month was actually very accurate, however, ELEXON did not agree. There is an action for this to be discussed with the member, ELEXON and Ofgem **(Action 4).**

6.4. Rob Salter-Church (RSC) asked about how accurate this data needs to be and what was the lowest amount of data needed that would provide an accurate amount of data accuracy. GH said that as we are currently in the design stage we are unable to know what accuracy level is needed.

6.5. A member asked if access to half hourly data was mandated, would we need a load shaping service. KS said that it would be needed for where data is missing or erroneous or if a person doesn't have a smart meter.

6.6. KS then discussed shortening timescales for settlement.

6.7. A member noted that shorter timescales were better for innovators as currently you are not able to leave the balancing and settlement code (BSC) until it had been through a final settlement run.

6.8. A member noted that in the OBC we suggest that the settlement run could be shortened from 14 months to 6 months, which doesn't feel short enough.

6.9. A member raised concerns that the DCC wouldn't be able to handle all the data with their current capacity. ELEXON said that the DWG members said that the design shouldn't be hampered by the capacity of the DCC and also noted that the issues may not be with the DCC but with the meters.

6.10. A member asked what other markets had done to reduce settlement. Other markets had shorter settlement timescales and longer dispute runs.

6.11. A member noted that the current settlement system was based around meter reading frequency which will become less of an issue in the future.

6.12. KS outlined the question of whether a dispute run was needed in the future. The Board thought that there would need to be a dispute run, because if the settlement timetable was shortened there may be more disputes.

6.13. There was a question over the length of the dispute run – currently 28 months. Should it be shortened to 12 months? If it is too short then there may be errors that cannot be corrected. A member raised that the delay may not lie in correcting the error but in identifying it in the first place. Another member said this is because suppliers don't look for errors until the last moment so a shorter dispute run may force them to be more efficient. KS noted that the Parties raising Disputes are usually the ones who are negatively impacted by the error, not those causing it. The energy market is unique compared with other markets in that one Party's error impacts all other Parties through the reconciliation mechanism.

6.14. The board agreed that the settlement timetable should be brought down. The DAB wish to give a steer to the DWG that there does not need to be a dispute run apart from cases of significant materiality (i.e. the disputes threshold should be raised). Ofgem should get data on how many dispute runs there are **(Action 5)**.

6.15. The final steer to the DWG was decided to be: The RF run should be at 4 months with no disputes except where the threshold is large. If the DWG consider this is not feasible, the DWG should explain why. The DWG should also consider high level transitional arrangements which could facilitate moving to this timetable and what performance assurance arrangements will be needed for the shortened settlement timetable. We would like the DWG to note that we are unlikely to be convinced by arguments based on historic performance for detecting and resolving faults and errors.

6.16. A discussion followed on shortening the SF run which is currently one month (16 working days). The new proposed SF run is 10 working days which we (Ofgem) think can be made shorter. ELEXON said this could probably be made six working days depending on how accurate we want load shapes to be.

6.17. Ofgem and ELEXON should look at technology to see if the SF run can be made shorter. The Board suggested that if we are not able to do this, consideration should be given to transitioning to the end state in a phased approach **(Action 6).**

6.18. The final steer to the DWG would be: The SF run should be lower than the 10 working days suggested. The DWG should look how low it can be at an end state and how this may work in the transition period (i.e. in the transition period it can be longer, but the end state should be less than 10 days). We would like the DWG to clarify the constraints on this timetable.

7. Update on Export Settlement (Slides 51-55) George Huang

7.1. An update on export settlement was provided. A board member noted that you were only able to look at active import and export if a meter has an export MPAN. A problem with this is you are unable to tell if a site does start exporting and needs an MPAN.

7.2. A board member said this should be noted down if the consumer has a FiT supplier which should note that the consumer is exporting. GH asked what would happen if it was an electric vehicle that exports to the grid.

7.3. A member said that this requirement can be written into new contracts.

7.4. A member of the board said that we should use the wording FiT administrator in place of FiT supplier.

8. Other Actions

8.1. Other actions were raised were **action 7:** the next DAB should discuss the interaction between future charging and settlement reform. The agenda item on the starting point for transition (slides 46-50) was not covered in this meeting so will be discussed next meeting **(action 8).**

8.2. Further actions were raised on the dependencies log. Ofgem to meet with Chris Allanson to discuss how to manage interaction between DSO transition and settlement reform (**Action 9**).

8.3. Ofgem to organise meeting with Graham Oakes and ELEXON to discuss potential architecture options for new settlement arrangements (**Action 10**)

DAB Actions

1. For the DAB dependencies log:
    - Ofgem to meet with Chris Allanson to discuss how to manage interaction between DSO transition and settlement reform (Action 9).
    - ELEXON to send the DAB updated feed in tariff (FIT) PV spill model using 2018 FIT data (Action 1)
2. For future DAB meetings:
    - Ofgem to organize a discussion with the DAB to have a talk on future technology (including blockchain) and how they could interact or be used in settlement (Action 2)
    - the DAB to discuss the starting point for the transition to the TOM in the next meeting (Action 8)
    - the next DAB meeting to include an item on the interaction between settlement reform and the Charging Futures Forum (Action 7)
3. On the settlement timetable:
    - Ofgem and ELEXON to consider how technology can reduce the timing for the first settlement run (below ten days) and if this is not possible, how a reduced timing could be transitioned into using a phased approach at the end state (Action 6)
    - consider if statistical approaches can reduce how much data is needed to create load shapes (i.e. is 1/30th of all consumption data enough – will it be useful to treat the load shape as a deviation from the long-run average rather than creating from scratch each day?) and discuss with Graham Oakes (Action 4)
    - ELEXON to look into whether dispute run data can help inform consideration on the appropriate settlement timetable (Action 6)
    - Ofgem should get data on how many dispute runs there are (Action 5).
4. Ofgem to organise meeting with Graham Oakes and ELEXON to discuss potential architecture options for new settlement arrangements (Action 10)
5. Ofgem to look at the security implications of having central settlement hold disaggregated MPAN data and if the data has to be disassociated with an MPAN, once no longer required for settlement, to remain secure. (Action 3)

DAB Steers

<u>Steer on the Settlement Timetable</u>

- The RF run should be at 4 months with no disputes except where the threshold is large. If the DWG consider this is not feasible, the DWG should explain why. The DWG should also consider high level transitional arrangements which could facilitate moving to this timetable and what performance assurance arrangements will be needed for the shortened settlement timetable**.**

- Further thinking should be given to reducing the SF run to less than 10 working days. Ofgem and ELEXON to examine how improvements in technology could reduce the timing for SF at the target end state and how this may work in the transition period (i.e. in the transition period this can be longer, but the end state should be shorter).

Steer on Aggregation

The Ofgem consultation on agent functions, including the question of data aggregation, is still open. Ofgem will be considering all responses and evidence carefully before reaching a decision. A steer from the DAB will be provided to the DWG in the context of the proposals put forward in Ofgem's consultation – however, it is important to note that a decision has not yet been taken and that Ofgem's final decision may be different from our original proposal.

In this context (to help the DWG move forward with the design on a least-regrets basis), the DAB considered that having aggregation outside of central settlement was there for historical purposes and the need for aggregating data separately is no longer needed. Members also felt strongly that the energy market needs disaggregated data to realise the full benefits of settlement reform (i.e. to maximise the value chain). When thinking about this issue, the DAB would like the DWG to consider:

- Would having disaggregated data in settlement create costs for DNOs (such as having to upgrade billing systems)
- How difficult would it be to change our mind in the future? I.e. changing an aggregated model to a dis-aggregated one later on?

When considering the broader value and risks that central settlement having disaggregated data may have, the DWG should give consideration to:

- The security risks of central settlement holding disaggregated data and how long data should be stored in central settlement in disaggregated form. Ofgem to also consider this issue.
- Consider how central settlement holding disaggregated MPAN level data could support archetypes 1-3 of smart meter data use-cases developed by the Public Interest Advisory Group.

Attendees

Alasdair MacMillan (Ofgem) Update on SCR

Anna Stacey (Ofgem)

Chris Allanson (Northern Power Grid)

Chris Gaskell (Ofgem) First Session

Colin Sausman (Ofgem) Future Market Models Session

David Crossman (Cornwall Energy)

George Huang (Ofgem)

Graham Oakes (Upside Energy)

Henry Norman (Ofgem) Future Market Models Session

Josep Garcia-Sole (Ofgem) First Session

Judith Ward (Sustainability First)

Justin Andrews (ELEXON)

Kathryn Coffin (ELEXON)

Kevin Spencer (ELEXON)

Neil Barnes (Ofgem) Future Market Models Session
Rhys Keally (British Gas) Alternate for Mitch Donnelly
Richard Haigh (Ofgem) Future Market Models Session
Rob Salter-Church (Ofgem)
Sabiha Padhani (Ofgem)
Stew Horne (Citizens Advice)
Will Broad (BEIS) First Session