

Electricity Settlement Expert Group: Meeting 6

Minutes of the sixth electricity settlement expert group meeting.	By Date and time of meeting Location	Ofgem 10:00-15:00 23 October 2014 Mary Sumner House
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1. Welcome and introductions

1.1. Jonathan Amos (JA) welcomed the members of the group to the sixth meeting. Attendees are listed in Annex 1.

1.2. JA said that all materials for the meeting would be published on the website, [here](#).

2. Review of minutes from meeting five

2.1. JA invited the group to comment on the minutes of the previous meeting before they were published. He said that Ofgem had already received comments on the minutes which were shown as tracked changes. The group was happy with the minutes.

2.2. JA went through the actions in the minutes. On action 2a, he asked Jonathan Bennett (JB) to provide an update to the group. JB said that the DCC was waiting for Smart Energy Code (SEC) 4.0 and the GB Companion Specification (GBCS) to be released. He said that there were a number of open DCC consultations but he believed that the group was already aware of these.

2.3. JA said that the action relating to error allocation would be covered by agenda item 6. He closed the action.

2.4. JA said that action 2b on DPDA would be addressed in the open letter that Ofgem would publish in December, in which Ofgem would explain its intentions for the next stage of the project. The discussion on priorities would help shape its thinking. Therefore, JA closed the action.

2.5. JA said that action 5a would be covered by the agenda item on reform packages and therefore closed.

3. Detailed discussion on reform packages

3.1. FJ introduced the topic (slides 4–13, [here](#)). He summarised the introductory discussion on the approach to reform packages from the previous expert group and stated that the aim of this discussion was to seek the group's views on the cost categories and assumptions of any future cost assessment.

Approach to cost categories

3.2. FJ outlined the proposed approach to cost categories (slide 8) and invited comment from the group.

3.3. An attendee asked if, for the detailed assessment of costs, the assumption would be that suppliers have access to half-hourly (HH) consumption data for settlement purposes. FJ informed that this had been an assumption for the current stage of the project and that it would continue to be our assumption. JA said that it was necessary to make this

assumption for any assessment of costs but highlighted that the issue of how suppliers access HH data would be an area requiring further work.

3.4. The attendee said it would be important to define exactly what was meant by "having HH data for settlement purposes". In particular, it was not clear if this was restricted to the allocation of energy volumes or also include other settlement-related activities such as demand forecasting and tariff development. An attendee said it would be important for Ofgem to work with the Information Commissioners Office (ICO) on this issue; JA informed that Ofgem were working with ICO and would continue to do so.

3.5. An attendee queried the underlying assumption that using HH data in settlement would result in greater volumes of data considering that, currently, for NHH settlement a value for each half-hour still needs to be generated. A different attendee replied that this was only generated at the end of the process but if consumers were settled against HH data a lot more data would be used throughout the process. Another attendee said that for ELEXON, as the data they handle is aggregated, settling against HH data would not make a material difference to the volumes of data they handle.

3.6. Also on slide 8, an attendee said that suppliers would not only have to develop new processes but also overhaul existing processes to support new settlement arrangements. As such, this attendee said any further assessment should ask suppliers about the costs of "different" rather than "new" services as this would cover both situations. A different attendee noted that this was a wider point around needing to ensure that the wording used to ask for information from industry was clear so that appropriate information was returned.

Suppliers' costs

3.7. The discussion moved on to consider specific cost categories relevant to suppliers (slide 9). An attendee called for the inclusion of a cost category for tariff development, arguing that if demand-side response (DSR) was going to be considered in any benefits case then the costs of this also needed to be included to give a complete picture. FJ replied that different firms may have different approaches to tariff development and so getting consistent data would be challenging in this area.

3.8. Agreeing with FJ's point, an attendee commented that it was very difficult to get information from suppliers on tariff development for BSC Modification P272 and far more straightforward to show what benefits a reduction in peak delivers.

3.9. An attendee highlighted that suppliers' costs would be influenced by when new arrangements go live. They said that if the arrangements go live before suppliers have a year's worth of HH data for a cross-section of consumers, costs would be higher as suppliers would not be able to fine tune their forecasting systems. A different attendee echoed this point and argued that a year's worth of data should be the minimum required. A different attendee suggested that this was a transition consideration around what would be an appropriate threshold (in terms of smart meter penetration) to transfer to new arrangements.

3.10. Highlighting that moving to new HH settlement arrangements would have significant training implications for staff throughout suppliers' businesses, a member called for a cost category to reflect this. In addition there would need to be a significant customer education programme. JA said that it would be important not to attribute to settlement costs that were actually driven by the smart meter roll-out programme.

3.11. Another attendee argued that the cost categories should be broken down further so as to enable suppliers to provide more consistent and higher quality data to Ofgem. For

instance on demand forecasting, there could be cost categories for behavioural analysis as well as systems development.

3.12. A member queried which cost category would capture the costs to suppliers of storing HH data. A different attendee argued that this should be a consideration for each cost category. The first attendee clarified that they were referring not to the costs of conducting different processes but rather storing reads before any processing had occurred. FJ said that such a cost may therefore sit outside the suggested activities and require its own category.

3.13. A different attendee said that there could be costs categories for storing data and processing data. This is because some suppliers may choose to store HH data for a number of days before taking action while others may want to operate systems on a rolling basis.

3.14. Another attendee said that moving to new settlement arrangements would represent a significant business change and so may require a programme management cost category.

3.15. The same attendee also said that there would be an impact on the Performance Assurance Framework (PAF) from winding down the non-half-hourly (NHH) arrangements. This may represent an ongoing cost saving but there will also be some form of upfront cost of revising the PAF.

3.16. Another attendee queried whether DECC's assumption on smart meters roll-out was credible, particularly given experience from the AMR roll-out. This attendee said the ongoing costs of completing the roll-out could be substantial and potentially long-running. Commenting on this further, another attendee argued that, if there is a significant minority of consumers being settled NHH, it means the costs of managing the rump could increase because more complex estimation processes for those consumers may be required. JA argued that, without reform, suppliers would incur ongoing costs to manage the NHH arrangements. Therefore, any assessment of using HH data in settlement should focus on the incremental costs compared to the status quo including costs for managing legacy NHH arrangements if roll-out targets are not met.

3.17. Reflecting on the various issues associated with the transition to using HH data in settlement, one member recommended that any cost assessment should split the costs into upfront, transition and ongoing. That way they would be more meaningful for suppliers and would return more accurate results.

3.18. Members queried if gaining suppliers would be able to access the profile data log that stores HH consumption data for all consumers on change of supplier to enable them to estimate and forecast consumption where necessary. JA said this may be a question for the change of supplier project. He agreed that Ofgem would explore further and report back to the group.

Action: Ofgem

3.19. An attendee queried why Ofgem had not listed all cost categories as both upfront and ongoing. This attendee argued that any cost assessment should ask for ongoing costs for all categories and if there are none, suppliers will leave those blank.

Supplier Agent costs

3.20. FJ moved the group on to consider the costs to Supplier Agents (slide 10).

3.21. An attendee said that contract termination costs for suppliers that have contracted directly with Supplier Agents would need to be included in cost categories. This attendee

noted it was part of the assessment for P272 and for consistency it would therefore need to be part of assessment of any new settlement arrangements.

3.22. Another attendee said that some Supplier Agents serve the NHH market only and so it would be necessary to assess their costs from gaining HH accreditation.

3.23. JA raised the complexity of suppliers that have in-house agent functions. He said it would be important for such suppliers to show that the information provided to Ofgem distinguished between costs for their agent business and costs for their supply business.

Other parties' costs

3.24. FJ spoke to slide 11 which looked at the costs central bodies and DNOs would face in moving to new settlement arrangements. Members queried whether ELEXON would face any process costs, given that their systems should be scalable. These members said ELEXON's costs may go down from retiring the NHH process and that their costs would be driven more from delivering governance changes.

3.25. A member argued that there may be costs to the Meter Point Administration Service (MPAS), considering that the expert group has argued that the Change of Measurement Class Process may have to be reformed.

3.26. FJ explained that Ofgem had not identified significant costs for DNOs. Attendees agreed: one argued there would be benefits for DNOs, particularly in using HH data to manage their networks more efficiently. JA also said that they could use the data to develop more sophisticated Line Loss Factor Classes.

3.27. Another member said there would be costs for the transmission companies from changing the basis of transmission charging.

Assumptions

3.28. FJ spoke to slide 12 on the assumptions for the current and next stage of the project.

3.29. Attendees queried the DCC's communications performance standards. JA clarified that of the 77% of non-domestic consumers who receive a smart meter by 2020, suppliers are expected to receive 97.5% of those consumers' data via the DCC. Of the 99% of domestic consumers with smart meters, suppliers will receive 100% of their data via the DCC.

3.30. A member raised the issue of assumptions relating to the transition. He argued that a long transition will drive costs as it will mean multiple systems will have to be run concurrently for different groups of consumer (NHH, HH smart and current HH). Therefore, the assumption for the length of the transition will be a critical input into cost estimates.

3.31. The expert group argued that if the business case is dependent on a certain assumption (such as length of transition), or combination of assumptions, then it will be open to question. As such the business case will need to go through a sensitivity analysis to ensure it is robust.

3.32. Making a related point, attendees argued that it would be necessary to determine at what point the existing NHH settlement arrangements are replaced by a reduced process for consumers with traditional metering. A key input to deciding this is the level of error industry and Ofgem are willing to accept. One attendee mooted the threshold could be set at smart roll-out being 75% complete, as at this point there would be enough consumers

with smart meters to generate accurate consumption estimates for both smart and traditional consumers. Another attendee said that a better measure would be Grid Supply Point Group Correction Factor as it reflects the accuracy of settlement.

3.33. JA queried if additional assumptions would be required. In response attendees called for assumptions on central registration and a more efficient Change of Measurement Class process.

4. Retrieving data from DCC

4.1. Jeremy Adams-Strump (JAS) introduced and explained the original options and the preferred option (slides 15-17, [here](#)). He asked for the group's views on the assumptions that Ofgem suggested could underpin any cost assessment (slide 18).

4.2. One member asked if there was an assumption about the read frequency, querying if there would be daily reads. JAS said that a supplier may be able to schedule the DSP to retrieve data for its entire portfolio within 24 hours, or to do it in sections, for example one third every three days.

4.3. JAS said that the DCC would need to work out the cost implications (if any) of these different approaches. He added that settlement timing may be a factor. The group had concluded that the information run should be at three working days, with the first run at 10 working days.

4.4. One member suggested that retrieving data frequently would reduce the likelihood of exceptions: it may be more reliable to make daily versus weekly reads. He added that daily reads would be required in time for the information run at 3 working days.

4.5. One member pointed out that consumption data from customers with switched load would be the most critical to get for the first settlement run. If this data were absent, it would introduce volatility between runs, since it would be harder to estimate this type of consumption accurately. Suppliers may affect each others' positions by not submitting actual data on switched load in time for the first run as this would increase smeared error. JAS said that suppliers may have incentive to retrieve data quickly for such customers in any case.

4.6. Another member commented that daily reads would have other benefits to suppliers. For example they would mean that customers' bills could be generated at any point without the need for estimates. Several other members agreed.

4.7. A different member, however, pointed out that suppliers may have different preferences for read frequency and may choose to do things differently. Another member said that there may be costs associated with moving certain processes to operate on a daily basis.

4.8. One member commented that there was possibly a difference between suppliers receiving data and actually processing, for example for billing. They could receive it on a daily basis and then process it at a rate so as to minimise system change costs.

4.9. JAS summarised that the group had agreed with the assumption relating to DSP scheduling. More work may be required with the DCC to explore cost differences between retrieving data daily for all sites compared with other schedules (eg every three days, weekly etc).

4.10. JB clarified that at present these costs would go into the fixed charge since it was not cost efficient to charge suppliers according to individual requests. However, they would keep this under yearly review to ensure that no supplier was disadvantaged.

The group broke for lunch

5. Discussion on priorities for 2015

5.1. JAS introduced the topic (slides 21-24, [here](#)) and asked for the group's views on priorities.

5.2. One member said that further work on Data Processing and Data Aggregation (DPDA) may be needed. The costs of these functions may be very different in a smart world. JAS replied that the intention was to anchor thinking about costs in the future. To do so it may be necessary to do more detailed work about what future DPDA functions look like.

5.3. JAS asked if any areas had been overlooked that could be critical to the case for using HH data for settlement. One member suggested that the default NHH arrangements for the residual population on traditional meters would be important for the cost assessment. Another member said that work may be needed to look at how and when the existing NHH arrangements could be closed down.

5.4. Another member suggested that work may be required on the data access and privacy framework to ensure that suppliers would have access to HH data for settlement in the broader sense (including functions such as forecasting). The same member added that the accuracy of smart meters' HH data should be explored further, as this was critical to using this data in settlement.

5.5. JAS suggested that the above suggestions would inform thinking on the assumptions underpinning the project. One member agreed and said that work may therefore be required to achieve more certainty on the assumptions.

5.6. JA suggested that the ordering could be different, with a view on using HH data for settlement informing the decision of whether to begin work on data access and privacy rules.

5.7. One member suggested that it could be useful to know more about the intended approach to transition. Another member agreed and argued for a transition model with a clear rule regarding the link to smart roll-out penetration. Responding to this, one member said that smart meter penetration was important because suppliers may have different roll-out strategies, and so binding settlement migration targets could penalise suppliers with fewer smart meters installed.

5.8. One member commented that distributional analysis should be a priority. He said that it was fundamental to the business case. If it was found to be regressive, it would necessitate work to develop mitigating actions or policies. Another member agreed and said that it would be important to work out if regulatory caps or controls were required, for example something equivalent to the Warm Homes Discount to protect fuel poor customers.

5.9. Another member talked about Change of Measurement Class (CoMC) process, arguing they would be a big part of the costs that suppliers would face. As such it would be necessary to develop a better, more cost-effective CoMC process prior to the cost assessment, in order not to receive a skewed answer. Another member agreed that CoMC

was a key enabling mechanism for the reforms and a third member agreed that it would be a big potential cost driver if not addressed.

5.10. On a similar theme, another member stressed the importance of any cost assessment being grounded in the future. It should be cognisant of changes to registration; indeed it may need to influence the requirements of the proposed central registration service. To work out such interactions, it may be necessary to carry out a dataflow mapping exercise.

5.11. JAS asked the group if they thought that Data Transfer Network (DTN) costs were likely to be material. One member said that it may depend on the chosen DPDA model. They said that a central agent may not use the DTN. One member suggested that the potential work was more accurately described as 'options for the DTN' rather than 'the impact on the DTN'. However, no members suggested that work was required to fundamentally assess the appropriateness of the current DTN for the future smart world.

5.12. One member suggested that it could be beneficial to ask Supplier Agents what the DP costs were likely to be when the function was scaled up for millions of sites. JA said that this would be covered by the cost assessment itself: we were looking here at additional work that may need to be completed first.

5.13. A different member said that the benefit of settlement reform would largely come from customers shifting demand. They questioned if work was therefore required to ensure that existing research on the likely outcomes was sufficiently comprehensive, ie a gap analysis. JAS pointed out that a lot of work had been and was being done on this subject, for instance through the Low Carbon Network Fund and Workstream 6 of the Smart Grid Forum.

5.14. JA added that Ofgem was thinking about doing more work on what DPDA would look like in a smart world. The group agreed that work on DPDA functions would be beneficial.

5.15. One member suggested that work could be done around data storage issues. This could serve to allay parties' concerns about the costs. JAS said that further work on this may help to avoid the cost assessment being grounded in today's world, and help Ofgem to challenge cost estimates.

5.16. JA closed the session, saying that priorities would also be discussed at the Smarter Markets Coordination Group in November. The outcomes of that discussion and Ofgem's latest thinking would be fed back to the expert group for discussion at the next meeting.

6. Error allocation

6.1. FJ spoke to slides 27-35, [here](#). On the list of causes of error on slide 31, several members said that Central Volume Allocation (CVA) errors should be added to the list since these affect the Group Take to which suppliers' allocations are scaled.

6.2. FJ asked the group about the potential for falling numbers of NHH consumers to pick up increasing amounts of error.

6.3. One member suggested that the biggest issue was knowing the contribution of different causes of error. They suggested that it may be possible to look at how corrected volumes change during the smart roll-out, and therefore infer the contribution of smart metered sites to total error. However, it was noted that certain sources of error are inherently unknowable, for example energy theft. One member commented that HH errors were often uncorrelated so netted out across a supplier's portfolio, unlike NHH profiling errors which moved all sites in the same direction.

6.4. One member pointed out that it would be the commercial choice of suppliers whether to pass on all allocated error to the relevant group of customers. However, it was recognised that suppliers may have different market shares and there was a risk of giving the appearance that big business customers were being subsidised by domestic customers.

6.5. It was noted that error allocations can be both positive and negative. However, it was noted that even if on balance and over time they net out, they potentially impose volatility and risk on the relevant consumers.

6.6. The view was expressed that NHH customers should not bear all the errors in the future. One member said that while profiling was still the key driver of error, it made sense to calculate scaling weights; however as profiling declines, remaining error should be shared equally. The question of whether this should be on a national or GSP Group basis was raised. One member added that the whole process could be far simpler and there were diminishing returns to a sophisticated mechanism as the amount of error reduces.

6.7. One member asked what happened in other countries with smart meters. FJ said that Ofgem had not explored this with other regulators. One member suggested that other jurisdictions had very different models for dealing with error, so there may not be a direct learning from them.

6.8. FJ moved the discussion on to longer-term principles for error allocation. He asked for the group's views on whether different principles were needed, for example linking allocation to settlement performance.

6.9. The group did not favour such a new set of principles or propose alternative principles.

6.10. One member said that no suppliers were currently raising concerns about being systematically disadvantaged by the current system. Discussing the option of allocating error based on suppliers' performance in submitting validated HH data, one member pointed out that not all errors (for example CVA and unmetered supply errors) would be attributable to performance. Additionally, errors could be beneficial to suppliers, in which case suppliers may perversely benefit from having poor performance.

6.11. There was a discussion around the likelihood of errors reducing longer term. One member suggested that a new approach was not a priority if errors would decline due to the elimination of profiling. However, other members argued that there may be new causes of error. Greater uptake of microgeneration spilling onto the grid could increase errors. Smart meters themselves could introduce error, for example if an entire batch had a time clock error. Under the central DPDA model, the risk of a systematic error may be increased.

6.12. One member added that even if performance were not incentivised via error allocation, the incentives around the Performance Assurance Framework would nonetheless need to be made more robust during the transition.

7. Wrap up and close

7.1. JA thanked members for attending and closed the meeting, noting that the next meeting would be held on 12 November at Ofgem.

Annex 1 – Attendees and apologies

Group members

Jonathan Amos (Chair)	Ofgem
Andrew Bard	MRASCO
Andy Colley	SSE
David Crossman	Haven power
Eric Graham	TMA
Harish Mistry	EDF
Hazel Ward	Npower
John Christopher	DECC
Jonathan Bennett	DCC
Kevin Spencer	Elexon
Mark Bellman	Scottish Power
Paul Akrill	IMServ
Rachael Burn	EON
Simon Bevis	Utilita
Steven Bradford	Flow Energy
Tabish Khan	British Gas
Tony Diccico	ETI

Ofgem attendees:

Francis Jackson
Jeremy Adams-Strump

Apologies:

Chris Alexander	Citizens Advice
John Lawton	ENW
Robert McNamara	TechUK
Paul Pettitt	Electralink
Sara Bell	UKDRA

Annex 2 – Summary of actions

Agenda Item/ Action number	Action	Owner	Due by /Status
2	Review of minutes from meeting four		
	a) DCC to keep the group updated on DCC consultations and any changes to the DCC performance measures.	DCC	Ongoing
3	a) Ofgem to explore rules around transfer of HH consumption data at a smart meter change of supplier event.	Ofgem	12 November meeting