Minutes

Electricity Settlement Expert Group: Meeting 4

Minutes of the fourth electricity settlement expert group meeting.	By	Ofgem
	Date and time of meeting	10:00-15:00 1 September 2014
	Location	Ofgem

1. Welcome and introductions

1.1. Jonathan Amos (JA) welcomed the members of the group to the fourth 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 three

2.1. JA invited the group to comment on the minutes of the previous meeting before they were published. The group was happy with the minutes.

2.2. One member queried paragraph 4.5 – they said that this implied that reforms would be implemented by 2020 at the earliest. JA said that Ofgem was looking for reforms to be implemented by the end of roll-out or earlier if possible and said that the text in the minutes was not meant to imply otherwise.

2.3. On action 2a, JA asked Jonathan Bennett (JB) from the DCC to update the group on any relevant developments. JB said that DCC were looking at the implications of GCBS v0.8 on message sizing and resulting impact on Smart Energy Code (SEC) Performance Measures. These discussions are ongoing.

2.4. Regarding consultations, the Statement of Service Exemptions consultation had been published. The initial cut of data on service exemption (ie which areas would be out of coverage) was about to be released to SEC parties. This was a precursor to the future coverage database.

2.5. On action 4a, JA said that Ofgem had undertaken further research to answer the group's specific query regarding communication technologies in Texas. Francis Jackson (FJ) explained that there was a mix of technologies in use. The system used depended on the local distribution company. Some used powerline communications while others used radio technology. Distribution company Oncor had been instrumental in the development of powerline technology and therefore still used it. Therefore, the relatively high performance standards in Texas needed to be understood in the context of the use of powerline technology by some distribution companies. JA closed the action.

2.6. On action 4b, JA said that error allocation had been added to the agenda for the seventh meeting. He closed the action. On action 4c, JA said that Ofgem would present further work on mechanisms for adjusting volumes after the final settlement run at the 1 October meeting. The action therefore remained open.

2.7. JA said that actions 7a and 7b would both be covered by the item on data processing and data aggregation (DP and DA). Therefore, they would both be closed.

3. The Irish approach to smarter markets

3.1. Eamonn Murtagh (EM) presented on the Commission for Energy Regulation's (CER) policies. He covered the decision to roll out smart meters, the background to the decision to mandate time-of-use (ToU) tariffs and the implications for settlement.

3.2. One member asked if the cost benefit analysis (CBA) for the smart meter roll-out was predicated on mandating ToU tariffs. EM outlined that the Consumer Behaviour Trials (CBT) that were conducted tested different ToU tariffs. The CBA was not conducted on a predetermined position that there would be mandatory ToU tariffs. However, on the evidence in the CBT and the CBA, the CER determined that mandating ToU tariffs was necessary to ensure the net positive benefit case from the CBA is realised. A group member asked what the threshold of smart meter penetration was for the CBA to turn positive. EM said that the original CBA did not test this; rather it assumed 100 percent smart meter penetration (estimated at 2.2m meters for electricity and 600,000 for gas) with a net present value of €224 million.

3.3. One member asked if the market was vertically integrated in Ireland and if therefore competition was a driver for the ToU tariffs. EM said that the driver behind the mandatory TOU decision was to ensure that the smart meter business case is achieved.

3.4. Another member asked if security of supply was a driver for the policy. EM said that such concerns had been less pressing of late due to the recession reducing demand.

3.5. There was discussion around the details of the policy to mandate ToU tariffs. EM clarified that it would be mandatory for suppliers to move customers with smart meters to such tariffs.

3.6. One group member asked if this may not create a disincentive to accept smart meters by certain customers who know that they cannot shift load. EM said that CER wanted suppliers to develop appropriate tariffs for all customers. EM said that CER had still to work out specific exemptions from the general rule, for example for how ToU would operate for customers with certain medical conditions.

3.7. One member asked exactly what was being mandated. EM explained that this is subject to much future consultation, but it was likely that the time bands for the mandatory ToU tariffs would be specified (for instance similar to the three bands used in the CBTs) and the rules governing price differentials between those band rates would also be specified. There was ongoing discussion on this point. Once the mandatory ToU tariff was decided, it would be unlikely to change in the near-term.

3.8. One member asked if this decision would preclude the possibility of suppliers or third parties managing demand on behalf of customers, potentially a superior approach to expecting customers to respond themselves to price signals. EM said such possibilities had been explored as part of the high-level design.

3.9. EM said that the next stage in the project would be to work out how to make tariffs dynamic – there would be a facility for suppliers to set their own ToU tariffs. He outlined that the step-change from flat rate tariffs to dynamic tariffs may be too great for most consumers initially: the step from flat rate tariffs to a mandatory ToU tariff is a more realistic first step on a longer journey.

3.10. There was a discussion around data privacy, specifically around suppliers' access to half-hourly (HH) data. EM said that there was an ongoing debate on this issue. He said that suppliers were arguing strongly in favour of having access to HH data.

3.11. One member asked about the expected distributional effects of the policy. EM said that analysis had shown that the differential for most customers was a €20-€30 annual change in bills. This was a small proportion of total bills (around €220 per month). This analysis assumed no change in behaviour. He said that the analysis had not revealed any correlation between social class and the effect on customers.

3.12. There were several questions about consumer and press engagement. EM said that there had been very little public awareness of smart gas and electricity meters to date. Significant consumer engagement work, equivalent to Smart Energy GB, had not yet begun but there would be sufficient time to put a successful consumer engagement programme in place. In Ireland, water meters had recently been rolled out which may provide some learnings for smart meter roll-out and consumer engagement. It was important that smart energy meters be associated with a positive message.

3.13. A group member asked about the role of different parties in Ireland. EM said that the smart meter roll-out was network-led. Network companies could procure meters that met a high-level design. The networks would also poll the meters daily for HH data and pass this to suppliers. There was therefore no central DCC-type body.

3.14. EM said that he would be happy to return to the group to update them after the high-level design was published and other decisions had been taken.

4. Introductory discussion on transition

4.1. FJ presented an introduction to the topic of transition and an introduction to the specific topic of timing (slides 5-12, here). The group split into three break-out groups to discuss the questions on slide 12 in more detail.

Considerations relating to the go-live timing

4.2. All groups identified the importance of changes to systems. One group thought that it was suppliers' systems that would require the most far-reaching change: central bodies, DNOs and Supplier Agents would be less affected. It was noted that larger suppliers with existing HH market share would be in a better position to adapt (including managing imbalance risk and forecasting error) than smaller suppliers.

4.3. The systems cited as primarily affected were the settlement validation systems, forecasting systems and billing systems. It was noted by two groups that the smart roll-out did not mean that suppliers were proactively upgrading systems to cope with HH data. Rather, the view was expressed that systems change would be driven by regulatory requirements.

4.4. Concurrent reforms that affect the same systems (eg registration reform) were identified by one group as one of the most important considerations. Systems could only handle a limited number of upgrades per year: to increase the number of changes would increase the risk of failure. Additionally there were significant constraints imposed from a resource perspective: there are a limited number of experts able to work on the various reforms. It was pointed out that Project Nexus should be added to Ofgem's list of relevant concurrent reforms.

4.5. One group raised the issue of interactions with other policies. They said that there would need to be clarity on the RMR tariff cap derogations. There would also need to be a review of the data access rules: suppliers would need HH data in order to develop suitable products for the market.

4.6. The smart meter roll-out was raised as a consideration by one group. They thought that there should at least be a minimum smart meter penetration at the time that settlement reforms go-live for the cost-benefit case to be positive: there would be no point in going faster than this.

4.7. Two groups said that the settlement reform go-live date should be linked to a clear business case. One group said that the merits of different dates should be assessed in the impact assessment (IA).

4.8. Two groups said that code changes would be required and that cross-code changes may be required. There could be changes needed to the Balancing and Settlement Code (BSC), the Master Registration Agreement and the SEC. One group suggested that coordination was essential to ensure the efficiency of cross-code changes.

4.9. An additional point raised was that it would be preferable to think about process changes rather than systems changes. Software systems were transient and would look very different in 2025. Processes were more longer-term and became embedded. It would be sensible to look at what the minimum level of data was for settlement rather than assuming that existing data flows are required. Moreover, faster development should not be chosen at the expense of quality and durability of design. The design needs to be mindful of 2030 requirements.

4.10. One group suggested that two years after the regulatory direction would be the minimum time required to develop systems for the go-live date.

Considerations relating to the completion date for the customer migration

4.11. All three groups cited volume constraints as a significant factor here. As an indication of the magnitude of migration that existing systems can deal with, one group referred to existing registration processes as limiting daily migration to between 25,000 and 50,000 customers per day. Another group referred to the 30,000 limit on change of agent processes. However, it was recognised that these constraints were linked to legacy systems which may well change either because of or regardless of the settlement project.

4.12. Two groups also mentioned the current Change of Measurement Class process, which requires 35 flows and is seen as not fit for purpose: there would need to be a new process for large-scale migration. Therefore the design of the process would have an impact on the speed of the migration after go-live.

4.13. One group again cited the amount of concurrent changes in the market. More specifically, around 2018 there would be three levels of flux in the market: roll-out will be at peak; there may be an increase in change of supplier due to faster switching; and settlement reform would be overlaid on that complexity. This may impose a constraint on the speed of the migration. Similarly, another group highlighted that there would be ongoing uncertainty as the smart roll-out progressed, for example around DCC performance.

4.14. One group talked about different strategies for the migration: one approach would be to switch customers to HH when they received a smart meter; another approach would be more akin to a 'big-bang'. The two other groups cited two years as a potential timeframe for the migration stage.

4.15. It was also noted time would be required for consumer engagement to raise awareness and understanding of the impacts of the migration.

Cost considerations

4.16. One group said that the costs of different transition models should be a full part of the IA. This would help identify if there were sufficient benefits to consumers to merit a faster and potentially more costly transition.

4.17. One group focused on the need for certainty of design in order to control parties' costs. The rules of the new system had to be clear – in particular rules around who is responsible for what. They said much of the problems with existing arrangements are that this is not the case, for instance issues with meter technical details. The same group spoke in favour of a design authority which has strong leadership and the authority to bring about change.

4.18. In the group feedback session, one group member made the point that if there is sufficient certainty around the responsibilities of the different parties and the steps to be taken, faster implementation need not necessarily lead to higher costs. He added that once there was certainty, there would be cost savings for suppliers from removing legacy systems as quickly as possible.

Considerations relating to process and rules

4.19. FJ introduced a second break-out session on transition process. The groups were asked the questions on slide 14.

4.20. Two groups felt that there needed to be clear, enforceable targets for transition. Targets could be percentages of smart metered customers that should be settled HH by a particular date. These would ideally be supported by commercial incentives. For example, suppliers would be allocated a decreasing share of Group Correction Factor as they migrated customers to HH arrangements.

4.21. One group felt that it was important for targets to go beyond start and end dates – it would be better to have interim targets track progress throughout the migration stage. This would prevent perverse incentives to leave the migration as late as possible, for example to avoid process costs and gain a short-term commercial advantage. However it was also noted that such interim targets also limit commercial discretion to complete the migration in the most cost-effective way.

4.22. The groups all discussed the allocation of NHH settlement process costs during (and potentially after) the transition. Two groups felt that there was a clear need for rules.

4.23. Amongst customers who would generate NHH process costs, one group made the distinction between customers who had refused a smart meter and customers out of the coverage area or with a property that could not have a smart meter. A further distinction was made between the generality of these customers and vulnerable customers who may need more specific protections.

4.24. One group said that during the transition, settlement process costs should be socialised across customers. However, after the transition at least some of the NHH costs should be passed on to the relevant customers. All three groups identified the potential utility of passed-on process costs to incentivise customers to accept smart meters.

4.25. However, two groups recognised that the remaining NHH costs had the potential to increase very considerably: as such it may not be either appropriate or commercially viable to pass them all on to customers. One group suggested that suppliers would naturally limit these costs; another group talked about the possibility of a hard cap on such costs.

4.26. One group also questioned if the process costs for legacy customers would necessarily be much higher. Aside from profiling costs, the profiled HH consumption data could be run through the same settlement systems as though it were actual HH data.

4.27. The groups also discussed the allocation of energy costs during the transition. One group did not think there was a need for rules. Although there would be distributional impacts from the change, the best way to address this was to have a clear definition of vulnerable consumers and an obligation for them to be treated differently, for instance through bespoke tariffs. This point also applied to the settlement process costs.

4.28. Another group said that centrally-led consumer engagement would need to be clear about the potential distributional impacts from more cost-reflective pricing.

4.29. A general point around allocation of costs was that it could be a social policy decision and therefore the government or the regulator may have a role: it may not be appropriate for such decisions to be left entirely to market forces. At the same time, the costs and potential difficulties of intervention should be noted. It would be important to understand the costs of administering, say, special regimes for vulnerable customers because there may be less costly alternatives, such as widening WAN coverage.

4.30. The importance of error allocation was also raised. It was noted that Ofgem would revert to the group separately on this subject at the seventh meeting.

4.31. FJ thanks the members for their contributions and said that Ofgem would analyse the discussions and revert to the group with further thoughts at the next meeting.

The group broke for lunch.

5. Detailed discussion on data processing and data aggregation functions

5.1. Ciaran MacCann (CM) presented the follow-up discussion on options for data processing (DP) and data aggregation (DA) functions (slides 19-37, here). He outlined that the main purpose of the session was to refine options so they can be taken forward for further assessment.

Supplier Agent competition

5.2. Taking the Supplier Agent option first, CM spoke through the relative pros and cons between options 1a (agents receiving HH data from suppliers) and 1b (agents receiving data directly from consumers via the DCC). CM invited comment from the group.

5.3. One member noted that SEC 4 allows for shared systems and so the costs of option 1b may not be duplicated. The member also argued that some suppliers may want to access HH data directly or via their Supplier Agent and therefore Ofgem should not discount either option at this stage. Another member agreed, stating that Ofgem should be mindful of future developments such as demand-side response, which may mean suppliers require different information from their agents; as such it would be prudent to keep both options on the table.

5.4. JA reminded the group that at this stage our objective is to develop viable options that can be taken forward for detailed assessment. He said that following this and the previous discussion he felt that Ofgem had enough information to analyse the Supplier Agent competition option further without needing to decide on data flows: the group agreed.

Central Agent – scope of service

5.5. CM turned to refining the central agent option (slides 24-25). He said that a clear message from the last meeting was that Ofgem needed to do further thinking on the scope of the central agent's service.

5.6. Referring to slide 25, one member noted that although the current function of exception identification and notification can be automated, agents will often go beyond the minimum requirements stipulated in the BSC in fulfilling these tasks. He argued that if the central agent is to reflect current offerings it would need to have varying levels of service (from offering a standard exception identification service – effectively the minimum requirements as set out in BSC – to a full exception management service). However, he warned that this would be inefficient as it could result in a comprehensive service being built which may only be used by a few players in the market.

5.7. Reflecting on the same point, another member queried whether this demonstrated that the minimum requirements set out in the BSC were insufficient. A different attendee cautioned against more detailed rules as it may restrict Supplier Agents' ability to innovate. This member noted that Supplier Agents play a crucial role in helping suppliers manage exceptions through advising them on how to resolve them.

5.8. In response the first member queried what exceptions would exist in the future given that the use of HH data and the remote capabilities of smart metering will make many, if not all, causes of exceptions in the current NHH market obsolete. The second member replied that we should not think that all exceptions would disappear in a smart world as new problems would arise which we cannot predict, for instance those related to incorrect meter installations.

5.9. JA summarised Ofgem's initial view on the scope of the central agent's service. He said that that for this option, Ofgem was proposing to centralise only the minimum requirements and the areas where value can be added through competition would continue to be open to the market. He asked the group if dividing the functions in this way was realistic and, if so, whether Ofgem had identified the correct minimum requirements of the central agent.

5.10. A member said that it was difficult to separate out functions as Ofgem was attempting, as the value-added services (such as exception resolution) evolved from the minimum requirements. He also said that to perform exception resolution services, agents needed access to the data used to identify exceptions. He said this would be difficult in the future as it would mean allowing all agents to interrogate the central agent's registry which would have security implications. For these reasons, the member queried Ofgem's suggestion of stripping exception resolution services out of the central agent's offering. He noted that as the central agent would already hold the data necessary to resolve exceptions it may be sensible to have them offer a full exception management service.

5.11. Agreeing with this point, another member queried the logic of separating out the automated agent services from those where real value is added, arguing the central agent needs to perform both to deliver value. He said that the central agent should either perform all services or nothing.

5.12. Arguing against a central agent model, a member cautioned that if services were centralised the central agent would perform these at the lowest acceptable standard rather than at the highest. He noted that many suppliers currently wanted services over and above the minimum set out in the BSC.

5.13. JA reminded the group that at this stage Ofgem was not looking to rewrite the functional requirements but rather trying to determine which services could be centralised, partly based on which are automated and highly standardised. Responding to this comment the attendee said that even standardised services were done differently in today's market. For instance some suppliers wanted their data aggregated in different ways to what is stipulated in the BSC.

5.14. A different attendee stated that the central agent could be capable of performing both standard services and additional exception management services. It could then offer both to industry parties who could choose which package of services they wanted. An attendee noted that this would have competition issues as it could distort prices. Another attendee repeated that the central agent's service standards would be the minimum permissible. A different attendee said that the minimum requirements could be improved and made more ambitious as part of a drive for the industry to do better as a whole.

5.15. JA said that the group had given a clear steer that there would be merit in exploring central agent options further. JA also thanked the group for their input on the scope of the central agent's service and said that Ofgem would decide whether we need to come back to the group to discuss this issue further.

Action: Ofgem

Central agent – functions required in future

5.16. CM asked if the group agreed with Ofgem's initial view of the functions in the HH market which would be required should all consumers be settled against HH data. An attendee queried whether checking alarms would be relevant for smart meters, arguing that they did not know if these alarms would be similar to those on current HH meters.

5.17. Another attendee argued that it may be desirable to retain the current channel mapping function as some sites will have import and export capabilities and so it may be prudent to retain this part of the validation function. This attendee also stated that it may be sensible to retain meter advance reconciliation as not performing this part of validation could preclude future innovation.

Central agent – responsibility

5.18. CM moved on to discuss whether all functions should be centralised with one agent, and if so who that one body should be, or if the functions should be split between different bodies. One member argued that instead of looking at who is responsible for functions, Ofgem should consider the outcomes they want to achieve and then think about who is best place to deliver these.

5.19. Considering who the central agent is, an attendee asked if the responsible party would solely be a procurement vessel. An expert group member asked why only ELEXON and DCC had been considered, noting that there were a number of alternative central bodies including Gemserv, Xoserv and Electralink. This attendee argued that if the central agent were a procurement vessel, Ofgem should look to procure the procurer.

5.20. One member said that if neither DCC nor ELEXON, but a new body, were to provide the service, then some of the potential efficiency gains of the central agent option would be lost.

5.21. Another attendee argued that if the central agent was a procurement vessel, it would need to issue services tenders every few years which could be a way to deliver value. Another attendee queried if having the DCC perform a central agent function would represent a security risk. Responding, a different attendee said that if the DCC were to be the central agent it would alter their current model of solely acting as a conduit for data and not interrogating the data itself. The risks of this, the attendee said, would have to be assessed.

5.22. Commenting on the structure of the central agent option as presented by Ofgem, an attendee argued that instead of receiving billing reads directly from consumers, suppliers should receive this from the central agent. He argued that this would help align what suppliers bill their customers with the costs they are allocated via settlement.

Central agent – data privacy

5.23. Turning to the issue of data privacy, CM questioned the group on what personal data would be required to resolve exceptions. The group said that this was dependent on where the problem occurred, if it was at the individual meter site level than data at this level would be required. The group gave a steer that anonymisation would be unlikely to be appropriate for the purposes of exception management.

5.24. Given that the use of HH data from smart and advanced meters could cut the volume of exceptions, one attendee queried whether there would be a sufficient value in the market for Supplier Agents to continue to exist. Responding to this a member said that if, as a result of competition, the market dried up in the future, this would be an acceptable outcome. CM closed the discussion by informing that assessing this counterfactual would be crucial in coming to a decision on future responsibility of DP and DA functions.

6. Wrap up and close

6.1. JA thanked members for attending and closed the meeting, noting that the next meeting would be held on 1 October at Ofgem's offices.

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 (observer)	DECC
John Lawton	ENW
Jonathan Bennett	DCC
Justin Andrews	ELEXON
Mark Bellman	Scottish Power
Paul Akrill	IMServ
Paul Pettitt	Electralink
Sara Bell	UKDRA
Simon Bevis	Utilita
Steven Bradford	Flow Energy
Tabish Khan	British Gas
Tony Dicicco	ETI

External presenter (attended part only):

Eamonn Murtagh, Council for Energy Regulation (Ireland)

Ofgem attendees:

Francis Jackson

Jeremy Adams-Strump

Angelita Bradney (attended part only)

Ciaran MacCann (attended part only)

David Osmon (attended part only)

Bart Schoonbaert (attended part only)

Apologies:

Chris Alexander	Citizens Advice
Robert McNamara	TechUK
Kevin Spencer	ELEXON
Rachael Burn	EON

Annex 2 – Summary of actions

Agenda Item/ Action number	Action	Owner	Due by /Status
2	**Review of minutes from meeting three**		
	a) DCC to keep the group updated on DCC's consultations and any changes to the DCC's performance measures.	DCC	Ongoing
	b) Ofgem to further develop options around extra runs and other mechanisms for changing volumes after the last run.	Ofgem	1 October meeting
5	**Data processing and data aggregation**		
	a) Ofgem to reflect on discussion and update the group on next steps.	Ofgem	1 October meeting