

DCC SSSG 1: Scope & Services Workstream

Minutes of Meeting 4 of the SSSG	From:	DCG SG1	1 October 2010
	Date and time of Meeting:	30 Sept 2010, 10am	
	Location:	Ofgem	

1. Present

Dora Guzeleva (DG, Chair)	OFGEM
Rosie McGlynn	British Gas
Dave Crookes	EDF Energy
Neil Beckwith	ElectraLink Ltd
Dorcas Batstone	Elexon
Dave Shattock	ENA (Morning only)
Jeff Studholme	AMO
Alex Travell	Eon-UK
Nick Halliman	Gemserv/MRA
Richard Street	ICoSS
Richard Moore (pm only)	Ofcom
Alex Hurcombe	RWE Npower
Jamie Dunnett	Scottish Power
Mark Knight	SSE
Alastair Manson	ERA
Prashant Sharma	Utilita
Steve Nunnington	Xoserve
Tim Newton (PM only)	Eon
Steve Burns (PM only)	ENA Representative
Andy Evason (AE)	OFGEM
Ale Campbell (Item 4 only)	OFGEM
Ted Hopcroft (TH)	OFGEM

2. Apologies

2.1. Apologies were received from:

- a. Jill Ashby, Gemserv;
- b. Gareth Evans, OFGEM;
- c. Colin Sawyer, OFGEM.

3. Agenda Item 1: Introductions, Context and Workplan

3.1. All members present introduced themselves and the agenda was explained, including the addition of a new item on Smart Grid WAN requirements.

4. Agenda Item 2: Minutes of SSSG1 and actions arising

4.1. Only one comment was received on the minutes of the previous meeting, namely a request to include in the minutes a comment about the need to reform the Meter Inspection regime if the full benefits were to be achieved. The draft minutes were updated accordingly.

5. Agenda Item 3: DCC Scope

Introduction

- 5.1. A brief introduction was given during which it was explained that the DCC Scope options had been reformulated slightly, so that now:
 - a. Option 1 was the minimum scope identified in the prospectus;
 - b. Option 2 built on option 1 by adding a registration capability. Various sub-options were identified differing primarily in the way that the transition to full DCC registration occurs over time. The previous option 3 was now referred to as option 2C.
 - c. Option 3 built on option 2 by the addition of data processing capabilities.
- 5.2. It was noted that the definition of options 1 and 2 (including 2C) had not changed in this process and that option 3 was presented for the first time and would be the focus of the option discussion under item 3.4.

Feedback from DCG on DCC Scope Options

- 5.3. The DCC Scope options were not discussed in detail at the DCG on 27 September. However it was noted that there should be an option which explicitly included registration and data processing services.

Feedback from Data Modelling Workshop

- 5.4. As agreed at the previous subgroup meeting, a data modelling meeting had been held on 28 September to attempt to identify at a high level the data that would need to be used and/or held by DCC for the various DCC Scope options. The outputs from the meeting included data models for DCC for various scopes together with data models for registration and settlement. In addition the group had identified the master and owner for key registration data.
- 5.5. It was commented that the output of the meeting was not sufficiently detailed to provide the clarity of definition required for the DCC Scope options. The particular area of concern was around the detailed information required for registration. This was seen to be a particular problem for option 2. It was also commented that it was more important to have clarity about the definition of the option (in terms of what data was held at the DCC) than to identify the optimum option. This is because any ambiguity will undermine the quality of any responses to the DCC Scoping information request. The way forward on this issue is discussed in paragraph 5.7.

Review of updated profiles for DCC options

- 5.6. A revised set of option definitions was circulated and discussed. Key points raised were as follows:
 - a. The overview section for each option would describe the functions to be performed by the DCC in terms of the existing market roles for gas and electricity.
 - b. The 'Services supported' entry for each option now states that all services will be supported.
 - c. The data section of each profile will be extended to provide greater clarity, based on the outputs from the recent data model workshop. In particular:

- With Option 2 and 3 it should be assumed that DCC will use a new site identifier based on the UPRN;
 - With Option 3 it can be assumed that the DCC will hold the master copy of all data required for data collection and data aggregation processing for electricity and for the calculation of energy usage for gas.
- d. Where possible any existing industry systems that will effectively be replaced by DCC should be identified for each option.
- e. It should be assumed that existing settlement processes will be unchanged.
- 5.7. With regard to the clarity of the data to be used by the DCC for each option the way forward is as follows:
- a. The option descriptions will be updated, including with a more detailed definition of which information would be held by the DCC. The updated versions will be issued by Close of Play (COP) 1 October.
- b. All subgroup members will review the updated option definitions and provide the following information by COP 4 October:
- if they do not feel that the data is sufficiently specified, they will propose changes to provide the level of clarity required – ie an approve or improve approach;
 - details of any systems that they think will no longer be needed for each option;
 - any organisation that operates or uses a registration system will identify each of the data items held in the registration system, where it comes from, what it is used for and who uses it.
- 5.8. In addition, Xoserve will provide details of the current gas settlement processes and information flows so that the optimum scope of DCC gas data processing can be identified for Option 3.

6. Agenda Item 4: Security

- 6.1. Two options for the provision of encrypted tokens for PAYG payments in the context of DCC were presented, namely:
- a. For the token encryption process to continue to be provided outside the DCC by a number of providers, with the DCC only being responsible for delivery of the token to the correct smart meter without change and within agreed service levels.
- b. For a single centralised PAYG token encryption service to be provided as a DCC service.
- In both cases it was noted that it would be likely that the DCC and WAN provider would make use of encryption techniques for other purposes.
- 6.2. In the ensuing discussion different subgroup members expressed strong preferences for both options and a number of points were made:
- a. Common standards for PAYG token processing within Smart Meters would be required to support interoperability and enable efficient Change of Supplier processes.
- b. Any solution should allow fall back modes of operation, eg provision of a 'number' that could be typed into a meter locally when a payment had been made if the WAN was not available.

- c. The security threats to a new pre-payment regime based on the use of smart meters would need to be understood before the best solution could be identified.

6.3. The proposed way forward was as follows:

- a. A meeting will be arranged to identify new pre-payment processes, probably in October after the existing subgroup meetings have finished.
- b. Once the processes have been identified, a further meeting will be arranged to assess the threats and vulnerabilities in the context of the new processes and smart meters, so that an informed choice can be made between the various options.

7. Agenda Item 5: WAN Services

Agenda Item 5.1: WAN Services information request

- 7.1. An updated version of the Information Request had been circulated to sub-group members following the DCG meeting on Monday, and a slightly updated version was handed out at the meeting.
- 7.2. It was generally felt that the Information Request was reasonably mature and that no major changes would be required after the meeting. Specific changes (excluding proof reading comments) that were identified were as follows:
 - a. An additional question should be added requesting those responding to identify what additional content or detail they would need in any eventual ITT to enable them to bid for the services.
 - b. The assumption at 9.a.ii should be changed to state that the WAN services provider was responsible for the connection to the WAN module.
 - c. Basement meters and large premises should be added to paragraph 13.a.i.
 - d. An additional question should be added to paragraph 13.r to ask what services they could provide in November 2013 if the contract was let in April 2018.
 - e. In Appendix C, all costs should be expressed in 2010 pounds.

Agenda Item 5.2: Requirements for smarter grids

- 7.3. A letter from the Ofgem Smarter Grids team had been circulated prior to the meeting which made the following key points:
 - a. *Firstly, there does not appear to be any direct linkage between the current LCNF proposals and the smart metering WAN. This is as expected but it is still helpful to have it confirmed.*
 - b. *The control of voltage and power flow on a distribution network probably does not need sub-second response times – this applies particularly for plant with thermal inertia that can withstand short term overload. However, the response times necessary for effective voltage control could be much shorter, though still not sub-second. New voltage control techniques are likely to be deployed in the near future.*
 - c. *The issue of simultaneous communication from a smart meter has been raised – i.e. could a smart meter simultaneously communicate with the DCC and the HAN and a DNO control system? This would appear to be an important question.*
 - d. *On a related point, it is suggested that thought should be given to the difference between data that will be generated and 'used' locally (e.g. current and voltage*

control) and data that needs to be collected centrally. Is this being factored into the DCC/WAN thinking?

- e. *The potential to manage the demand profile using smart grid/DSM solutions is referred to (reference the work of Goran Strbac). If in future we rely on DSM to balance the system then the control strategy used has to be very resilient to avoid major imbalances and potential system collapse.*
 - f. *Regarding latency, the view is expressed that real-time data will be required to deliver the full potential of a smart grid. Mobile phone network solutions will not be able to deliver this. While the Prospectus documents highlight the linkages between smart meters and smart grids this is not expanded on and needs to have flesh put on the bones.*
 - g. *It is unclear who is considering the end-to-end process (i.e. DNO to smart meter).*
 - h. *A generic question for the WAN information request is proposed – what comms requirements do you foresee for smarter grids, in what timescales do you see the need arising and what would the benefits be? This can be expanded out into a series of questions about required functionality, response times, delivery timescales and so on.*
- 7.4. The subgroup was asked for its views and specifically whether there was a need for real-time voltage information to be passed to a DNO control system rather than the current model which envisages that all data flows will be via the DCC.
- 7.5. The ENA representative stated that the work undertaken with Engage over the last 12 to 18 months had concluded that there were no real time / sub-second latency requirement for Smart Grid purposes. He undertook to contact ENA members to confirm that there are no sub-second latency requirements and will report back on the outcome of this engagement by close of play on Monday 4 October.
- 7.6. The common view of the subgroup was that, subject to confirmation on Monday from the ENA following engagement with members, the Information Request was fit for purpose and should not be extended to include the real-time/subsecond latency from the meter to the substation for local control purposes.

8. Agenda Item 6: Date of next meeting

- 8.1. The next DCC scope meeting (i.e. the morning session) will be 7 October at 10am.
- 8.2. The next DCC WAN services meeting will be held on 4 November to discuss the responses to the DCC WAN Services information request, which are due in on 22nd October.

9. Actions

- 9.1. **Action 4.1:** OFGEM to update the DCC Scope Option Definitions and circulate them to subgroup members.
- 9.2. **Action 4.2:** Subgroup members to review the updated option definitions and provide the following information by COP 4 October:
 - a. if they do not feel that the data is sufficiently specified, they will propose changes to provide the level of clarity required – ie an approve or improve approach;
 - b. details of any systems that they think will no longer be needed for each option;

- c. any organisation that operates or uses a registration system will identify each of the data items held in the registration system, where it comes from, what it is used for and who uses it.
- 9.3. **Action 4.3:** Xoserve is to provide details of the current gas settlement processes and information flows.
- 9.4. **Action 4.4:** Ofgem will arrange a meeting for mid-October to discuss future pre-payment processes and a subsequent meeting to assess associated security issues and identify the optimum approach.
- 9.5. **Action 4.5:** ENA to engage with its members on whether there are any additional WAN requirements to support Smart Grid capabilities beyond those already taken into account in the WAN Services Information Requirement. A response is required by COP 4 October.
- 9.6. Please send responses to these actions to DCG@ofgem.gov.uk.

DRAFT