

Regulation Team
Smart Metering Implementation Programme
Department of Energy & Climate Change
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By email only to: smartmetering@decc.qsi.gov.uk

28 November 2013

Dear Sirs

Smart Metering Implementation Programme: Consultation on New Smart Energy Code (SEC) Content (Stage 2)

Thank you for the opportunity to respond to the above consultation. This letter should be treated as a consolidated response on behalf of UK Power Networks' three distribution licence holding companies: Eastern Power Networks plc, London Power Networks plc, and South Eastern Power Networks plc.

We have set out our answers to the consultation questions in the appendix to this letter. Our comments are not confidential and can be published via the DECC website.

I hope that you will find our response helpful. If you have any questions, please do not hesitate to contact me.

Yours faithfully

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Appendix

Smart Metering Implementation Programme: Consultation on New Smart Energy Code (SEC) Content (Stage 2)

Technical Governance and Change Control

Question 1: Do you agree with our proposed text for the SEC with respect to Technical Governance and Change Control? Please provide a rationale for your views.

We agree with the proposal for Technical Governance and Change Control. However, we believe that it is more appropriate for the first version of the End to End Technical Architecture to be produced as a Technical Specification to the SEC as part of the design phase, rather than later on, at the refinement phase. The major opportunity for this document to add value (by fostering understanding of the solution) will have passed before the refinement phase.

Registration Data

Question 2: Do you agree with our proposed text for the SEC with respect to Registration Data? Please provide a rationale for your views.

We agree with the proposed text in respect of registration data, except where outlined in our answers to the other questions.

We note that the Data and Communications Company (DCC) and the Registration Data Providers (RDPs) have already started to meet to agree the details of the Registration Interface Specification and Code of Connection. We support this approach as a way of finding the optimal solution.

The proposed text at E2.4 (provision of data to DCC) lists the specific data items to be provided by the Registration Data Provider, and this seems suitable. However, the proposed text at E2.5 (provision of data by DCC) does not list the specific data items to be provided by the DCC. Therefore, at this stage we are unable to confirm that the overall solution will work properly. This is dependent on the design completion process noted above.

Question 3: The DCC currently uses profile class data as a proxy to estimate the number of non-domestic meter points registered to users. Should this be replaced with a new data item which accurately reflects non-domestic meter registration, or should the DCC continue to use profile calls as a proxy? If you think it should be replaced, should the DCC rely on Suppliers providing this information separately, or should a change be sought to electricity registration systems to collect this data? Please provide a rationale for your views.

All electricity suppliers have an obligation under the Balancing and Settlement Code to provide the correct Profile Code to registration system providers. Electricity suppliers are also required by the Master Registration Agreement to update the Profile Class for a metering point once they become aware of a change. Therefore, requiring suppliers or registration system providers to generate a separate data item adds no value but would incur additional cost by industry parties.

In the longer term, we support enhancements to registration processes that provide parties with greater insight into the likely energy usage at each property. The addition of a domestic/non-domestic data item would be useful to the industry as well as the DCC.

However, given the other pressures on suppliers in particular, we question the priority of implementing such a change solely to support the DCC charging model pre-go-live. There is no need to have an overly complex charging model while no meters are live on DCC. In any case, it seems unlikely that there will be material variations in the proportions of domestic and non-domestic meters from one period to the next. So while this kind of data has usefulness in the registration processes in the longer term, it may suffice in the period before DCC go-live to use a one-off data extract from suppliers.

Question 4: The SEC will include a requirement for RDPs to provide the DCC with a 'data refresh' on request, within a set number of days. Do you agree that it is sensible to measure in calendar days? If so, what is the impact of providing data refreshes to the DCC within two calendar days? If this has too significant an impact, what should the correct value be? Alternatively, do you believe it should be a set number of working days? If so, how long should this period be?

In our view, this should be three working days. Non-working days are currently reserved for hardware/software registration maintenance, planned refreshes and external reporting. Registration staff with the training and authority to run refresh requests are currently employed on working day contracts to support existing industry requirements. A move to calendar days would increase the operational cost of registration service provision.

DCC User Gateway

Question 5: Do you agree with our proposed text for the SEC with respect to the DCC User Gateway? Please provide a rationale for your views.

We agree with the proposed changes in respect of the DCC User Gateway. The proposed conditions are similar to existing industry user gateways.

DCC User Gateway Services and Service Request Processing

Question 6: Do you agree with our proposed text for the SEC with respect to the DCC User Gateway Services and Service Request Processing? Please provide a rationale for your views.

Yes – the proposed text is in line with our expectations arising from the User Gateway Catalogue, draft Technical Specifications etc.

Parsing and Correlation

Question 7: Do you agree with our proposed text for the SEC with respect to Parsing and Correlation? Please provide a rationale for your views.

Yes – the proposed text is in line with our expectations from previous discussions of Parsing and Correlation.

Enrolment in the Smart Metering Inventory

Question 8: Do you agree with our proposed text for the SEC with respect to Enrolment in the Smart Metering Inventory and other associated processes? Please provide a rationale for your views.

The proposed text appears to provide a workable framework in this respect.

Intimate Communications Hub Interface

Question 9: Do you agree with our proposed text for the SEC with respect to the Communications Hub: Intimate Physical Interface? Please provide a rationale for your views.

We agree with the proposed text as it provides a process which allows SEC parties to be involved with the development of the ICHIS.

DCC Service Management

Question 10: Do you agree with our proposed text for the SEC with respect to DCC Service Management? Please provide a rationale for your views.

In general we agree with the proposed text. However, the rules governing the scheduling of planned changes should take into account that electricity distribution operations are heavily influenced by severe weather events. It is standard practice in the industry for planned changes to be avoided when severe weather is forecast, and work may be cancelled at short notice when weather forecasts change. The network operators will seek to make maximum use of DCC services to assist the restoration of customer supplies during and after severe weather. The same is true to an extent for the Communications Service Providers' networks.

Incident Management

Question 11: Do you agree with our proposed text for the SEC with respect to Incident Management? Please provide a rationale for your views.

We agree that the text provides for adequate management of incidents.

Self-Service Interface

Question 12: Do you agree with our proposed text for the SEC with respect to the Self-Service Interface? Please provide a rationale for your views.

We agree that this is a sensible framework to manage the Self-Service Interface. However, we recommend that an additional requirement is placed on parties not to employ automated systems to submit multiple record requests. This is to ensure that the performance of the system is not affected by such actions.

DCC Service Desk

Question 13: Do you agree with our proposed text for the SEC with respect to the DCC Service Desk? Please provide a rationale for your views.

We agree with the proposed text for the SEC with respect to the DCC Service Desk, as this provides a clear structure for provision of this service.

However, it is worth noting that the main intention of H8.19 is to ensure that an alternative email address and telephone number for the Service Desk are published by the DCC, so that parties may still contact the DCC Service Desk in the event that the normal contact methods are not available. The proposed drafting in this section lacks clarity and appears to require 20 days' notice of the use of an alternative contact method.

Service Level Agreements for Testing

Question 14: Do you agree with our proposed text for the SEC with respect to the Service Level Agreements for Testing? Please provide a rationale for your views.

While we agree with the proposed text in principle, we are not sure that the information is complete. We understand that the Communications Service Provider agreements allow for significant deviation from the stated 60 second performance standard for alerts linked to outage management. The deviations could include the slow delivery of some alerts or the failure to deliver some alerts altogether. These arrangements do not appear to be documented in any of the Technical Specifications and we do not believe that it is possible for the network operators to comment fully without this information.

Given the key role that Service Providers play in the delivery of smart metering and smart grids, we propose that an additional requirement is added to H13.3. This would require the approval of the SEC Panel prior to any contract change that would modify the performance measures set out in the SEC.

Question 15: Does the inclusion of DCC aggregate performance measures in the SEC, and the consequential reduction in future service charges, appropriately balance the need for the DCC to manage its Service Providers flexibly with the need for DCC Service Users to have a say regarding performance targets? Please give reasons for your answer.

We agree with the proposed text to publish Service Provider Measures on the DCC website. However, we believe that it would add clarity if Testing was added to the list of performance measures in section H13.2.

Managing Demand

Question 16: Do you agree with our proposed text for the SEC with respect to Managing Demand? Please provide a rationale for your views.

We agree that the proposed text is a reasonable approach.

We recognise the need to manage the capacity of the DCC and in general the proposed forecasting and reporting mechanisms appear reasonable, although forecasts may not be that meaningful or significant in the early roll-out.

In order to confirm that the service thresholds are reasonable, the table at paragraph 407 (Annex 5) of the consultation document requires clarification. Two rows are shown for the network operators' use of DCC User Gateway Service Requests 4.8 and 4.10. It is likely that each pair of rows refers to the usage of each Service Request in On Demand and Future Dated modes respectively. Such distinctions need to be clearly marked for the table to be intelligible.

The threshold calculation for 4.10 differs from that of 4.8 by a factor of 48. Since both Service Requests may be used to retrieve time series data we believe that the value 48 should appear in both definitions. Furthermore, the forecast volumes for 4.10 depend on the resolution of ambiguity in the User Gateway Catalogue. The catalogue is clear that an invocation of Service Request 4.8 may be used to gather any combination of profile data series, but the text of Service Request 4.10 suggests an invocation will gather any one of the voltage data series. We believe that, for efficiency, Service Request 4.10 should operate in the same manner as 4.8, whereby a single invocation can gather all relevant data from the meter. In that situation we would support identical service thresholds for both Service Requests.

We believe that Clause 3.43 is drafted too leniently as there are no consequences for the DCC in the event of a relatively minor excursion (10 per cent) over the forecast demand. We believe that there should also be a low water mark for aggregate Service Requests in any given month below which the DCC should gain no relief against its service targets, irrespective of the forecasts submitted by DCC Users (thinking in particular of the early roll-out period, during which the DCC systems should not be very heavily loaded).

We note that the proposed capacity mechanisms do not place any constraints on the volumes of alerts. We agree with this approach as the number of alerts is not within the direct control of SEC parties.

Security Requirements

Question 17: Do you have any comments on the security obligations set out in Section G of the SEC drafting or the way they are expressed?

We agree with the main tenets of the security drafting. However, we believe that further work is required to understand the definition and practical extent of DCC User Systems to which the obligations will apply.

The current definition of the DCC User System does not give enough clarity over what, if any, ancillary systems and users with access to the actual system (e.g. a party's smart metering head end system) are to have the SEC security obligations applied. In recent review meetings with the industry, DECC personnel have stated that it is not the intention that Section G will apply to a DCC User's backend systems which interface into a DCC User's primary system holding the trusted connection to the DCC.

We welcome this intention but the current version of the SEC does not provide the required clarity to enshrine the intention into actual SEC obligations. Such clarity could be made through enhancing the definition of 'Separation' to address what are adequate boundary controls between a DCC User's primary system and its backend systems.

We firmly believe that security obligations should be realigned according to the user roles in order to be proportionate (see our answer to question 18).

We also have the following observations:

- Compliance should be a defined term in relation to the required adherence to the various ISO and British standards listed, in particular ISO 27001. The definition should state what level of audit and documentation constitutes 'Compliance'.
- DCC Users should be given a notification period for complying with any new versions of the referenced ISO or British standards. DCC Users cannot be expected to be 100 per cent compliant from the date of a standard's first public issue. Changes to such standards may not be known or accessible to a DCC User until after a standards issue. Compliance with any new or changed requirements within such standards would then need to be assessed and implemented.
- In relation to the 'security screening' obligations (G4), we need further definition of the extent of users encompassed by the phrase 'capable of Compromising the User System'. For example, we would be interested to know if such a definition includes authorised 'view only' users.

Question 18: Do you have any comments on the appropriateness and/or the proportionality of the security obligations in relation to particular types of DCC Service Users and their role?

Our view of the appropriateness and proportionality of security obligations depends on both:

1. the definition and practical extent of the DCC User Systems to which the obligations will apply, which, as noted in our response to Question 17, are currently not clear; and
2. the impact and cost of meeting the obligations in relation to the criticality of the DCC user roles.

The criticality of DCC user roles can be considered in terms of the impact that each role could have on the system if their security was breached, i.e.:

1. the disruption of electricity supply to customers;
2. the financial impact on customers or suppliers arising from incorrect tariffs, inability to change supplier etc.; and
3. lesser disruption, where the DCC user suffering from the security incident impacts their own ability to use DCC services but does not affect other DCC users.

The criticality of a network operator is of type (3). This is similar to export suppliers that have a lower standard of security obligations in the proposed drafting.

The criticality of an RDP is similar, although the provision of incorrect supplier details in registration data could have a disruptive effect on DCC services. Note that this would not result in erroneous parties actually achieving supplier privileges over the affected smart meters; the DCC requires a change of supplier critical command from the gaining supplier in addition to the registration update in order for this to happen. Most vulnerability in this area could be mitigated by strong validation and anomaly detection by the DCC. We believe that strong security controls, embedded centrally at the DCC, provide more effective protection than security obligations devolved to all DCC Users and that the centralised approach should be followed wherever applicable.

We believe that in order to achieve proportionality, there should be a graduation of security obligations by DCC user role. For example, some of the anomaly detection, vulnerability and security screening obligations could be seen as disproportionate for the network operator and RDP roles.

To the extent that the scope of DCC User Systems can be limited, for example to those components directly connected to the DCC (encapsulating all cryptographic keys and mechanisms etc.), the impact of the security obligations on DCC Users will be lessened. We believe that the most appropriate approach is to have tightly defined DCC User Systems and to focus on the strength of access controls to those systems.

Communications Hub Financing

Question 19: Do you agree that the four additional provisions are proportionate responses to providing reliable and economic third party financing options for Communications Hubs?

We agree that the four additional provisions are proportionate responses to providing reliable and economic third party financing options for Communications Hubs. Separate charging provides visibility, while the contingency fund and the ability of the Authority to act in the event of the DCC defaulting should allow for competitive financing of Communications Hubs.

Communications Hub Services

Question 20: Views are invited on the proposals in relation to Communications Hub asset charges and maintenance charges. This includes:

- *Monthly Communications Hub Charge*
- *HAN Variant Pricing*
- *Monthly Maintenance Charge*

This is an area that would benefit from economic modelling, once all the principal costs are understood. We believe that this is key to ensuring a cost effective and timely roll-out programme.

Question 21: Views are invited on the proposals in relation to charges following removal of a Communications Hub. In particular, views are invited on the proposals for no fault removals in split fuel households. Do you agree that any outstanding asset costs should be smeared across all users rather than being charged to the installing or removing Supplier when Communications Hubs that do not serve the second installer's equipment are removed from split fuel households? Please provide a rationale for your views.

Where a second supplier changes the original Communications Hub, we believe that the most cost effective solution is to smear the costs across all commissioned Communications Hubs.

This is an area that would benefit from a review after the first 18 months of operation.