



SCOTTISHPOWER

Smart Metering Implementation Programme – Regulation
Department of Energy & Climate Change
Orchard 3, Lower Ground Floor
1 Victoria Street
London
SW1H 0ET

14 February 2014

Dear Sir or Madam,

Smart Metering Implementation Programme - a Consultation on new Smart Energy Code content (Stage 3)

Thank you for the opportunity to respond to the above consultation.

Our views on the specific issues raised are set out in the annex to this letter; however, key aspects that we would highlight are:

- In so far as the details are known, we welcome the recognition of 'industry best practice' in the development of the Government's Smart Metering Key Infrastructure (SMKI) proposals.
- It is important that the established security/SMKI principles are applied effectively, such that, where necessary, the programme schedule is revised to accommodate impacts resulting from the further development of assurance requirements. In particular, it should be recognised that any relevant redesign of Users' solutions might well impact upon their ability to meet the current testing schedule.
- We will need a more detailed explanation of the operational practices and procedures that will support the SMKI Service before we can fully assess the proposals in the consultation. Furthermore, we think this detail needs to be made available as early as possible to allow the efficient assimilation of any assurance requirements into the industry's business processes.
- We note DECC is 'minded to' extend the existing SEC regime regards liabilities, warranties and indemnities to the SMKI arrangements. While we agree that this approach would be consistent with the SEC's arrangements for DCC's other Service Providers, we would reiterate the concerns we previously expressed about these arrangements. In particular, DCC Users' risk exposure is unduly increased if they are unable to recover liabilities owed by DCC Service Providers, via the DCC. In essence, we think that DCC Users should at least be able to recover from the DCC to the extent that the DCC can recover from its Service Provider.

- We believe the most efficient arrangement is for suppliers to discharge relevant SEC obligations through their contractual relationship with meter installers (MOPs & MAMs). Allowing meter installers to become SEC Parties would undermine this. That said we recognise there may need to be defined exceptions to this approach for example where IGTs are required to install meters on their network.

Should you wish to discuss any aspect of this response please do not hesitate to contact

Yours faithfully,

**SMART METERING IMPLEMENTATION PROGRAMME - A CONSULTATION ON NEW
SMART ENERGY CODE CONTENT (STAGE 3)
SCOTTISHPOWER RESPONSE**

Q1 Do you agree with our proposed approach and text for the SEC with respect to the Policy Management Authority? Please provide a rationale for your views.

Yes; we generally agree with the approach proposed in the consultation.

Q2 Do you agree with our proposed approach to securing the timely appointment of PMA members? Please provide a rationale for your views.

We agree that early development of SMKI principles into a suite of fully fledged arrangements is important if it is to afford DCC Users a clear baseline to build from. To that end, it would seem sensible to establish the PMA sooner than later. Unfortunately, we are not convinced that even immediate appointment of the PMA will be enough to deliver the level of detail required in the timeframe currently available. Moreover, we are anxious to ensure that any development work that is undertaken by, or under the auspices of, the PMA, does not conflict with earlier policy decisions. It would be unfortunate if the PMA were to oversee radical changes that impacted on DCC Users' solutions or on their ability to meet their testing schedule obligations.

Q3 Do you agree with our proposed approach and text for the SEC with respect to provision of the SMKI Service? Please provide a rationale for your views.

We broadly agree with the approach outlined in the consultation document, which appears to be based on standard PKI methodology; however, until we have seen the detailed explanation of the operational practices and procedures that will support the SMKI Service, which is yet to be defined and published, we are unable to fully assess the suitability of these proposals. Nonetheless, we fully expect the supporting documentation outlining the operational detail and assurance measures to adhere to the principles that have guided the definition of the SMKI requirements to date.

It is important to note that any significant deviations from these principles are likely to have adverse impacts on our system development timelines. We would therefore urge that these practices and procedures be developed, and made available to DCC Users, at the earliest opportunity to ensure that our supporting systems and processes can be developed in time for the commencement of the SMKI testing and assurance regimes.

We are concerned about proposals to allow to MOPs/MAMs to request Device Certificates, which the consultation document suggests is to support an installation model where meters are deployed without any supplier-specific personalisation or security credentials. Careful consideration needs to be given to this model to ensure it does not require the DCC to play a more active role in the installation process for those meters than has previously been anticipated. It would also be important, should these proposals be adopted, to ensure that the same level of rigour is attached to the assurance regime for these Parties.

Q4 Do you agree with our proposed approach and text for the SEC with respect to SMKI Assurance? Please provide a rationale for your views.

Yes. The proposed approach appears robust and the establishment of an independent assurance scheme would appear to follow best practice, providing the necessary assurances consistent with those protections that are sought across the end-to-end GB smart architecture. We also agree that Users of the SMKI must operate in accordance with the Compliance Policy and consider it important that all SMKI users are subject to the same requirements, such that dispensations are not introduced based on an organisation's size, or its relative customer base.

We are concerned, however, that there is still significant work to be undertaken in short timescales (which includes the appointment of the PMA and the development of all supporting assurance documentation) against a set of SMKI principles that are by now well established.

Q5 Do you agree with our proposed approach and text for the SEC with respect to the Device Certificate Policy? Please provide a rationale for your views.

While we broadly concur with the policy, which appears consistent with PKI best practice, we must reserve final judgement until the 'Registration Authority Policies and Procedures' (RAPP) is published, as it is only then that the real operational detail will become available.

The information that will be contained in the RAPP will, to a large extent, drive many of our internal SMKI process and system requirements. We would therefore urge that the RAPP be drafted and published as soon as possible, to enable the DCC User community to fully assess the merits of the SMKI processes and procedures, and provide it with as much time as possible to allow its members to embed these critical processes into their system delivery programmes.

Q6 Do you agree with our proposed approach and text for the SEC with respect to the Organisation Certificate Policy? Please provide a rationale for your views.

Please refer to our response to question 5

Q7 Do you agree with our proposed approach to parties using the SMKI service, including by Opted Out Non-Domestic Suppliers? Please give a rationale for your views.

We broadly agree with the Government's approach to parties' use of the SMKI service, as set out in the consultation document. We also agree that introducing the SMKI Device Certificate requirements into SMETS2 offers a pragmatic solution.

We do not agree, however, with proposals to allow installers to become SEC Parties, as we feel this could distort the underlying contractual relationships between such installers and the suppliers that appoint them. Noting the position that the Government takes with respect to the DCC's service providers, set out in paragraph 129 ("In the case of the DSP and CSPs, it is currently envisaged that they will be the subject of Certificates for which the DCC is the Subscriber as a SEC Party."), we cannot understand why different arrangements are proposed for suppliers' service providers.

Q8 Do you agree with our proposed approach for the SEC with respect to Liabilities, Warranties and Indemnities? Please provide a rationale for your views.

While we can see that the existing SEC regime for liabilities, warranties and indemnities appears equally applicable to the SMKI arrangements, we would make the following observations:

- We note Paragraph 138 of the consultation says that the Government “do not foresee the need for any special arrangements to be pursued to try to limit tortious claims by third parties (including consumers)”. However, it goes on to say that the DCC is covered as it will claim against the relevant Service Provider. If the DCC was to be sued as a result of a breach in the SMKI service (or any other) and can recover its losses from the Service Provider then why, if a DCC User is sued as a result of the same breach, should it not be able to recover from the DCC to the extent that the DCC can recover from a Service Provider?

As a general observation, this touches once more on the wider issue of how liabilities and redress from the appropriate parties will work given the lack of contractual links, which we do not believe DECC has ever suitably addressed. The general principle appears to be that DCC losses get socialised, while Suppliers must shoulder their own losses arising from breaches by DCC and its service providers – even if the DCC could pursue those Service Providers under their agreements.

- While we recognise the need to place financial robustness at the centre of the smart metering arrangements, with its cost recovery initiative now well underway, we see no reason why the DCC, should not be required to use all reasonable efforts to pursue Service Providers for any breach that adversely affects users and pass on to the user(s) in question any sums recovered in so doing. Absent this, we remain concerned that DCC Users are being asked to carry all of the financial risks of this venture while others are apparently only exposed to the rewards.
- We note the Government's suggestion (para 141) that warranties will be needed in respect of the accuracy of the information to be provided in Certificates. We do not think this is really necessary and that a “reasonable endeavours” obligation would be sufficient.
- It would be useful to understand what liabilities DECC expects the DCC will waive as regards its Service Providers and the level of any caps it will agree with the SMKI Service Provider (para 145 and 146). Surely it is in all parties' interests that where the Service Provider has caused a loss to the DCC it is liable for it - we are also unclear as to why there should be a waiver for SMKI but not for other liabilities.
- At paragraph 148, we note the Government's suggestion that an indemnity be given in respect of the information provided in the Certificates to the effect that the information is permitted to be provided to the other persons in the Certificate. In our view, this seems disproportionate given that it would already constitute a breach giving rise to liabilities.
- Given the unlimited liability for breaches of confidentiality elsewhere, would DECC see such an indemnity as being unlimited?
- Notwithstanding our objection to the introduction of such an indemnity in the first place, we would also object to it being to the DCC only. In our view, if there is to be such an indemnity, it should be reciprocal.

Q9 Do you agree with our proposed approach and text for the SEC with respect to the SMKI Repository? Please provide a rationale for your views.

As with the SMKI service, absent any of the real detail required to allow us to fully understand the operational practices and procedures that will support the SMKI Repository, we are unable to fully assess the suitability of the Government's proposals. Therefore, although the approach outlined in the consultation appears to be aligned with best practice, we can only offer our qualified support until that detail is made available. We would also urge that these procedures and practices are developed and made available to DCC Users at the earliest opportunity to ensure that our supporting systems and processes can be developed in time for the commencement of SMKI testing.

Q10 Do you agree with our proposed approach and text for the SEC with respect to SMKI Recovery Processes? Please provide a rationale for your views.

Again, at a high level, we would offer our qualified support, as the approach and text appear to be based on best practice. However, until the operational detail is defined, we will not be in a position to accurately assess the suitability of the Government's proposals. We would stress once more how important it is that these operational details be made available at the earliest opportunity, such that any supporting processes we might be required to develop for SMKI assurance can be fully assimilated.

We would also anticipate that the Recovery Process will be one of the core scenarios tested during SMKI and Repository Testing. Any delay in defining and publishing the operational detail and processes is, therefore, likely to have a knock-on effect on our ability to define meaningful test scripts and scenarios.

Q11 Do you agree with our proposed approach and text for the SEC with respect to SMKI and Repository Testing? Please provide a rationale for your views.

While we agree that all SMKI Users must complete SMKI Service and SMKI Repository testing, we are unclear as to the benefits of having all Large Supplier parties be test ready at the same time. Given that all SMKI Users will need to demonstrate SMKI operational compliance at some point prior to undergoing Interface Testing, and all Large Suppliers must be ready for the designated start of Interface Testing, this approach would merely introduce an additional obligation for its own sake.

We would welcome further detail on all assurance measures from a User perspective, so that we can ascertain the activities we need to undertake and fully understand the interdependencies between SMKI assurance and DCC User Integration testing. At this time we have concerns over the level of assurance documentation which, though yet to be developed, might well have a bearing on the approach and compliance of SMKI Users, and we would welcome further granularity of the assurance measures, timeframes and interdependencies: e.g. a DCC User cannot commence User Integration Testing without first successfully exiting SMKI Service and Repository testing.

Q12 Where appropriate, when do you consider your organisation will first need to obtain live Device and Organisation certificates to be placed on Devices ordered from manufacturers? This will help to determine when the SMKI Service and SMKI Repository should Go Live. Please provide a rationale for your views.

Our current working assumption is that we will be able to complete all SMKI testing and the initial assurance activity using test certificates. However, this has not been clearly stated anywhere and we would welcome confirmation of this. If this assumption is correct, to support our supply chain requirements, the live Organisation certificates will need to be made available to us a minimum of three months before DCC 'go live', to allow those certificates to be added to the meters at the point of manufacture.

A slightly shorter lead time would be required for the live Device certificates as our current assumption is that these can be obtained after the manufacturing process has been completed. If this assumption is correct, we would anticipate such live Device certificates will need to be made available to us a minimum of one month before DCC 'go live'. This will ensure that we have adequate time to distribute 'compliant' devices to our field installation agents to allow them to start installing such devices from the point the DCC commences live operations.

These timescales are based on our current understanding of the SMKI processes and procedures. Once the lower level operational detail of the SMKI processes is known we may need to re-visit these estimates.

We also believe that is essential that there is a 'controlled start up' of live SMKI operations to provide us with an opportunity to identify any issues with the service before volume call-off of Device Certificates.

We would like to highlight that the availability of live SMKI services may be driven by the needs of the DCC rather than the requirements of Users. In the current draft of the DCC User Gateway Interface Specification Code of Connection (DUGIS CoCo) document it indicates that the process for obtaining certificates through the separate DCCKI Certificate Authority is dependent upon DCC Users being in possession of a live SMKI certificate for their Digital Signing key. If Users require a live DCCKI certificate to establish a communications link with the DCC before they can access their testing services, it follows that the SMKI services for providing Organisation Certificates will need to be made available to DCC Users before the start of User Integration Testing.

Q13 Do you agree that Large Supplier Parties should be obliged under the SEC to be ready to participate in SMKI and Repository Testing? Please provide a rationale for your views.

While we agree that all SMKI Users must complete SMKI Service and SMKI Repository testing at some point, we are unclear as to the benefits of having all Large Supplier parties be test ready at the same time. Given that all SMKI Users will need to demonstrate SMKI operational compliance, this approach would merely introduce an additional obligation for its own sake.

Q14 Do you agree that it is sufficient for only one large Supplier to complete SMKI and repository testing for the SMKI Service and repository to have been proved? Please provide a rationale for your views.

No. Provided it does not introduce onerous additional obligations, we think a consistent approach is usually best and, in this case, we take the view that this should mean at least two Large Suppliers will have undertaken SMKI testing before it is considered proven. This would align these arrangements with other test exit criteria.

We would also add that we would very much like to see further details of the assurance milestones, and the measures required to enter and exit key testing activities, be brought forward as soon as possible for consultation.

Q15 Do you agree that the SMKI entry processes should be aligned with the User Entry Process Testing in relation to the DCC User Gateway and Self Service Interface? Please provide a rationale for your views.

We agree that these generally need to align; based on the understanding that there is interdependency between these two testing disciplines as SMKI functionality will be required for UIT. However, further detail on just how closely the two disciplines will be coupled, and whether completion of SMKI testing and/or the demonstration of SMKI results is a gate entry criteria for commencing UIT, is required.

We would also like further clarity regarding the approach to managing parallel testing / interdependencies: e.g. where a Large Supplier may have successfully completed one discipline but not the other.

Q16 Do you agree with our proposed approach and text for the SEC with respect to the Location of System Controls? Please provide a rationale for your views.

This requirement has by now been consulted on exhaustively and we think the associated SEC text clearly sets out the requirements DCC User systems will need to comply with. Nonetheless, we are anxious to seek assurance that these measures are to be applied consistently across all DCC Users and that special dispensations are not introduced based on organisation size and/or customer volumes.

We would also like to highlight that, should DECC's / CESC's view on the scope of these requirements change, perhaps based on further risk assessments, then this really needs to be communicated to Users at the earliest opportunity, as any such changes in scope would be likely to significantly impact on DCC User system architecture and associated controls, both in terms of their cost and the time to implement them.

Q17 Do you agree with our proposed approach and text for the SEC with respect to the Obligations for Cryptographic Material? Please provide a rationale for your views.

In general, we agree with the approach adopted here, although we would welcome further clarification on the extent of the Supply Sensitive checks to be carried out before signing a pre-command. For example, where a meter is operating in prepayment mode would we be expected to check every price change pre-command to confirm that no substantial errors have occurred when populating the new pricing details?

Again, given the importance of the requirements, there should be no distinction between large and small suppliers in this area. Given the potential impact on consumer confidence from even a relatively small-scale compromise of customer sensitive functionality, it is vital that all consumers are afforded the same protection, irrespective of the size of their chosen supplier.

Q18 Do you think that it is important that MOPs / MAMs are able to access DCC services directly? Please provide a rationale for your views.

In our view, it is rather more important that they are not.

We note the suggestion in the consultation to the effect that MOPs / MAMs will need such access to allow them to purchase smart meters directly from the manufacturer, independently of any supplier. While there is clearly nothing to prevent MOPs / MAMs from doing this, the same could be said of anyone. The relationship that exists between the supplier and such agents is an entirely commercial one; decisions regarding which meter to have installed in which premise is entirely at the discretion of the relevant supplier. In our view, it would seem foolhardy for MOPs / MAMs to enter into such meter purchases without both a contract and clear instructions for their installation. If they have these, however, there should be no need for them to access the DCC.

Q19 Do you have any views on the possible options identified for MOPs / MAMs to access DCC services? Please provide a rationale for your views.

We fully recognise the importance of the role these agents have played in the legacy market: their contribution being fundamental to the (usually) successful operation of the competitive supply arrangements. However, despite the codified dependences established elsewhere (particularly in the BSC), we believe the relationships between suppliers and agents in the rollout of smart meters are better left on an entirely commercial footing. This will afford suppliers the greatest degree of flexibility in their installation processes, deliver cost efficiencies from more competitive behaviours, and streamline the future structure of the industry.

In our view, codifying the agent's role, as proposed, would imply rights and obligations into these relationships that simply do not belong in the smarter market. For that reason, we have very much opposed the entrenchment of MOPs and MAMs in formal arrangements regarding smart meters and, in particular, with regard to the SEC; indeed, we consider future obviation of such requirements to be a positive benefit of smart metering.

Of the options proposed, therefore, we very much support Option 1, which we regard as a natural step towards achieving these objectives.

Q20 Are there other options which should be considered for MOPs/MAMs to access DCC services?

No.

Q21 Do you agree with our proposed text for the SEC with respect to Test Phasing, consistent with our decisions on testing arrangements detailed in our recent consultation response? Please provide a rationale for your views.

While the SEC sets out different testing disciplines, these have yet to be explained with to a sufficient granularity that will allow us to understand all of the assurance measures, interdependencies and associated risks that might exist within the testing cycle. We would suggest that the Government and the DCC work to ensure that all interdependencies between phases are fully understood and that entry and exit criteria are fully defined, as we do not believe this level of detail is currently available.

We would like a better understanding of just how phasing of testing per region is to work in practice: e.g. we would assume that Telefonica would be able to demonstrate appropriate assurances for both regions assuming comparable technologies vs phasing between Telefonica and Arqiva, but would like this clarified.

We also wish to understand how the phasing of testing would achieve a single exit gate based on the assumption that all regions are subject to the same testing activities, unless a subset of test activities were applied to Telefonica regions on the basis that one region has been fully tested. It is important that Large Suppliers, having been obligated to be ready to commence testing, are not then subject to inactive down-time, as they wait for phasing to complete, before they can progress through a single test exit control gate.

Q22 Do you agree that the term 'Enduring Testing' should be used to encompass both the End-to-End and Enduring Test stages in order to assist comprehension and simplicity? Would the consequential removal of the terms 'End-to-End Testing' and 'User Integration Testing' cause confusion or be undesirable, such that we should reinstate this terminology? Please provide a rationale for your views.

Yes; we are comfortable with the proposed change of terminology.

Q23 Do you agree with the proposed approach to include the Projected Operational Service Levels within the SEC? Please provide a rationale for your views.

In principle, we are very supportive of this approach; both for reasons of transparency and control, as much as for the certainty it will offer DCC Users, we consider it fairly essential that these details are codified in the SEC at the earliest opportunity. Nevertheless, we also recognise the potential loss of flexibility that might result; so wondered whether the service levels might be better added to Section X, in the first instance, as this offers visibility and flexibility, but subsequently moving to Section H for live operation.

Q24 Do you agree with the need for an issue resolution process in testing? Does the proposed process meet that need? Please provide a rationale for your views.

We agree that an issue resolution process is needed for all phases of testing. However, we think such a process would be better developed by the DCC in the first instance, then subject to SEC Panel approval, to determine fitness for purpose, before being added to the SEC. We also think it is important such a process should benefit from the ad hoc input of relevant expertise from its Service Providers. Naturally, we would also expect DCC to be accountable for ensuring these Service Providers act fairly, impartially and consistently in providing such input.

We would also like to see more clarity regarding DCC's publication of such issues on its website: e.g. how timely; whether progress is tracked etc. In our view, publication should take place immediately following assignment of the severity level and priority status; ideally, this would be within 2 working days of the issue being raised by the Testing Participant.

In our opinion, the DCC should be time bound to respond to Category 1 or 2 appeals within 5 working days of them being raised. We also think the DCC should provide the rationale for its decisions in such cases.

Where issue resolution requires adjustment of test systems and components, we do not think such resolution should be subject to delay to allow modification and subsequent approval of baseline documentation. We would, therefore, look to a more pragmatic approach i.e. the documentation should be allowed to catch up through transitional governance, where necessary.

Q25 Do you agree with our proposed text for the SEC with respect to Issue Resolution? Please provide a rationale for your views.

We agree with the proposed text changes to sections H and T, subject to our comments in response to Question 24.

Q26 Do you agree with our proposed text for the SEC with respect to Equipment Testing, and configuration of enrolled Smart Metering Systems? Please provide a rationale for your views.

We have identified a number of apparent inconsistencies between the legal text and the text of the consultation document. In each case, we believe the legal draft addresses the concerns we would otherwise have had regards clarifications or omissions. Nonetheless, we feel it is important that consistency is maintained between the consultation and legal text, so we have identified the following for consideration:

Paragraph 274 onward

References to interoperate, interoperability and similar terms need to be used with care. When reference is made to interoperability it needs to be clear whether the requirement being defined lies between the DCC and Supplier systems, the DCC and in-home devices or between the different devices within the home.

Paragraph 283

Clarification is required regarding what is meant by the requirement for Suppliers to provide the DCC access to the SMS System.

Paragraph 284

As per Paragraph 245, the use of the test environment covers more than just interoperability testing with the DCC systems.

Paragraph 291

Suppliers shall ensure equipment is recertified...rather than 'Suppliers will be required to recertify all equipment'

Clarification required regarding what is meant by 'all equipment' in particular what equipment will be CPA certified but not enrolled in the DCC?

Paragraph 287

The same requirement to notify the SEC panel of certification changes should be placed on the DCC or the party that added the device to the CPL as is placed on the Supplier.

How will the management of devices be maintained if the party that added a device to the CPL secedes from the SEC?

Paragraph 293

Does not indicate that the DCC will be responsible for verifying that CH is CPA compliant.

Paragraph 294

The indicated requirements for the Supplier should also be applied to the DCC for the CH.

Paragraph 295

Does not indicate that there is a similar requirement on the DCC to ensure that the manufacturer provides a hash of the firmware image for the CH.

Paragraph 297

Does not indicate that a similar requirement to specify the method of validating the firmware image is placed on the DCC for the CH.

Section 6

There is a running theme through section 6 of the consultation with requirements being placed on devices installed within the home by the Supplier but no equivalent requirement placed on the DCC for the Comms Hub. In these areas the consultation does not necessarily reflect the SEC legal draft.

Additional general point on CPA Scheme:

While obligations on Suppliers under the auspices of CESG's CPA Scheme are set out in the SEC3 draft, we remain concerned that this remains too generic to be introduced successfully into the context of smart metering; in essence, the processes by which appropriate assurances are achieved are not sufficiently explained.

We believe that the Government, in conjunction with CESG, needs to go much farther to ensure all parties have sufficient understanding of how CPA processes will operate, both in terms of the initial certification of smart metering equipment and any subsequent time-based and event-based assessments. Appropriate CPA documentation needs to be developed to meet the specific needs of the on-going operation and assurance of smart metering equipment, and the Government must decide who will provide such documents.

We also think further consideration should be given to how product certificates and associated software/firmware versions are tracked over time, and especially following CoS. In our view, relevant issues can only be exacerbated by extending time-based recertification

out to 6 years, and we would highlight that our consistent support for a 2-year recertification window was based firmly on our practical experience of a similar regime in the US. This experience also suggests that the number of necessary firmware upgrades, in early rollout years, could be significant. All in all, we are persuaded that a 6-year recertification regime is likely to increase the complexity of the assurance process over the period.

ScottishPower
14th February 2014