Data Communications Company

Smart Metering Implementation Programme

A Consultation on New Smart Energy Code Content and Related Licence Amendments – February 2016

DCC Response

24 March 2016

DCC Public

1 Executive Summary

1. Smart DCC Ltd, known as the Data and Communications Company or DCC, welcomes the opportunity to respond to 'a Consultation on New Smart Energy Code Content and Related Licence Amendments' released on 25 February 2016.

2. DCC holds the licence, granted by the Department of Energy and Climate Change (DECC), to establish and manage the data and communications network to connect smart meters to the business systems of energy suppliers, network operators and other authorised users of the network.

3. DCC broadly welcomes the proposals in the consultation and broadly supports the proposed changes to the Smart Energy Code (SEC), subject to specific areas for further consideration, which are set out in the sections which follow.

4. DCC focuses its response on the consultation questions which invite a response on new legal drafting in the SEC. We have not provided a response to the questions in Chapter 3 (Rollout Strategy) and in Chapter 5 (User to non-User Churn) as they focus on changes to the Supply Licence Conditions.

5. If you have any questions regarding any part of this response please contact

2 DCC responses

1.1 Communications Hubs

Question 4: Do you agree with the proposal and associated legal drafting to reflect matters related to the installation and maintenance of Special Installation Mesh Communications Hubs (SIM CHs) in the SEC? Please provide a rationale for your views.

In reference to the proposed changes in F5, F6 and F7, we agree with the legal drafting.

Question 5: Do you agree with the proposal and associated legal drafting to reflect matters related to Network Enhancement Plans in the SEC? Please provide a rationale for your views.

In reference to the proposed changes in F7.18, F7.19 and F7.20, DCC agree with the legal drafting.

1.2 Enduring change of supplier

Question 7: Do you agree with the 'minded to' position to align the start of the feasibility and design of the ECoS process with the Blueprint phase of CRS with the aim of linking the design and build of the ECoS system with CRS development? Please provide a rationale for your views.

DCC support the proposal to align the design and build of the ECoS system with CRS development. As the CRS and ECoS system development both have a bearing on switching, DCC considers that it would be advantageous to link them.

However, our support is subject to the considerations below:

- DCC understand that the detailed design work required for ECoS is not expected in 2016. DCC asks that the timescales are confirmed and that this work is planned for 2017 at the earliest. DCC must ensure that the delivery of its core functionality through its first two live releases, R1.2 and R1.3, are completed first, and that DCC is required to support the development of ECoS only after the delivery of R1.2 and R1.3.
- CRS development is being driven by the need for a new switching process that is reliable, fast and cost effective. The switching process is significantly different when using the ECoS process in place of the TCoS process. Therefore some of the benefits of a new CRS may be different when using the ECoS process in place of the TCoS process.
- The requirement to move seamlessly from TCoS SMKI certificates to ECoS SMKI certificates will require further design, which should form part of the same development.
- Key exchange processes have the potential to cause major smart service failures if they are poorly designed

Question 8: Do you agree with the 'minded to' proposal for suppliers to take reasonable steps' to start to use ECoS from the point at which it becomes available? Please provide a rationale for your views.

DCC support the proposal for suppliers to take reasonable steps to start to use ECoS from the point at which it becomes available. DCC notes that it is essential that all suppliers have the capability to use ECoS arrangements when they are made available or it may restrict Supplier choice to the customer.

DCC considers that the move to using ECoS will deliver a number of benefits:

- It has the advantage of reducing the number of TCoS SMKI certificates that are deployed onto Devices as part of the roll-out.
- Will start suppliers development to use ECoS SMKI arrangements earlier and thereby reduce risks involved in leaving until near the deadline.
- Will reduce the tendency to choose between ECoS and TCoS arrangements.

DCC would highlight that there will need to be a planned migration from TCoS to ECoS, and that the migration will take some time given that the TCoS certificate on each device will need to be replaced with that of the current registered Supplier by the TCoS function. Therefore this will need to be a planned and phased transition, to manage the associated risks and avoid any traffic surges on the DCC networks.

Question 9: Do you agree with the principle of suppliers completing the move to ECoS within 6 months of the end of roll out i.e. 2020 or earlier? Please provide a rationale for your views.

DCC agree with the principle that the period of switching between operation of TCoS and ECoS is minimised. However, our support is subject to the details of the migration from TCoS to ECoS being agreed/ confirmed. In particular, whether the migration will be mandated from a particular date or credentials can start to be changed early on an optional co-ordinated basis thus reducing the total certificates to be changed by the end of rollout. This clear approach will enable DCC to start analysing the impacts and determine how long it will take to change TCoS Device Security Credentials on existing rolled out Devices. DCC notes the number of Devices impacted can be as high as circa 100 million and therefore the impact could be significant.

We would ask that details of the migration from TCoS to ECoS are agreed/ confirmed prior to this consultation being concluded, as it should inform the timescales for moving to ECoS.

Question 10: Do you agree with the proposal for DECC to establish an industry working group under the transitional arrangements that will subsequently transfer to industry at a point to be agreed as part of the wider transitional arrangements? Please provide a rationale for your views.

DCC supports the establishment of an industry working group under the transitional arrangements with subsequent transfer to industry. The proposals form a pragmatic and timely solution to establish an ECoS working group.

1.3 DCC Additional Support

Question 11: Do you agree with the proposal to extend the scope of H14.33 to allow the DCC to also provide Testing Participants with assistance with Issues related to User Systems and Devices and allowing this assistance to be provided during or after testing?

DCC supports with the proposal to extend the scope of H14.33 to allow DCC to provide Testing Participants with assistance with Issues related to User Systems and Devices, during and after testing. DCC's support is subject to the considerations below:

1. DCC will only be able to provide additional support where it is available.

   The current drafting states that *'DCC shall, on request by a Testing Participant, offer reasonable additional support'*. We are concerned that the existing drafting requires DCC to provide support, irrespective of whether the necessary resources are available. The level of demand for the additional support Service will depend on the volume of Issues experienced by Testing Participants. This makes it extremely difficult to forecast demand and presents DCC with a challenge with respect to resourcing. In the event of a large number of Testing Participants requesting additional support at the same time, requiring the same resources, DCC may not be able to 'offer reasonable additional support' to all Testing Participants.

   DCC requests that the Secretary of State considers amending the proposed text in H14.33 to read *'DCC shall, subject to the availability of the relevant resources, on request by a Testing Participant, offer reasonable additional support'*.

2. DCC's working assumption is that it will have a requirement to stand up the additional support Service from the commencement of End to End Testing.

   In its February 2016 consultation document, the Secretary of State did not specify a date from which the additional support provisions would be brought in to legal effect. DCC requests that the target designation date for the proposed additional support provisions is made clear as soon as possible, and that in any event, such target designation date is no earlier than the start of End to End testing.

Question 12: Do you have any views on how Additional Support services should be charged for?

DCC considers that additional support should only be charged for on an Explicit Charge basis.

Broadly, DCC has two options for recovering the costs associated with the provision of the additional support Service. The associated costs can be:

1. Socialised across all SEC Parties through Fixed Costs; or
2. Charged directly to the party requesting the additional support, through an Explicit Charge.

DCC believes that smearing the costs associated with the additional support Services across all Parties (through Fixed Costs) may conflict with the Charging Objectives (specifically, the Third Relevant Policy Objective). Socialising the cost of this Service may unduly discriminate against those Parties that have invested heavily in ensuring they have internal resources and controls in place to address any issues that may arise in relation to their User Systems or Devices.

Smearing the cost among Parties also gives rise to competition concerns. Commercial service providers (e.g. IT consultancies) seeking to provide support services to the energy industry may consider that DCC is restricting competition in this particular market by obliging parties to pay for a support service that they may otherwise procure through a third party.

By charging the Testing Participant that requests the additional support Service through an explicit charge, DCC provides the industry with a choice of service provider. This will prevent discrimination against Testing Participants that have not planned to utilise DCC's additional support Service and will ensure competition in Commercial Activities is not restricted.

DCC intends to consult on the necessary changes to its Charging Statement, subsequent to the Secretary of State's conclusions on the additional support provisions. Such a consultation may also solicit Parties' views in relation to the provision of the additional support Service itself.

1.4 Further requirements on testing

Question 13: Do you agree with the proposal and associated legal drafting to set a mandatory requirement on the DCC to provide a Pre-UEPT service and a GFI service? Please provide a rationale for your views.

DCC agrees with the stated intention to provide a Pre-UEPT and GFI Testing service. We make the following observations regarding each:

<u>Pre-UEPT:</u>
Following further analysis, engagement with Service Providers, planning and having raised this with industry, DCC proposes that Pre-UEPT is delivered in two stages.

Stage 1: from 18 April 2016: Early UIT Connectivity.
Early UIT Connectivity will enable a Testing Participant to establish and validate their connection to the UIT environment (which is used by Testing Participants for UEPT and End-to-End testing).

We consider that this activity will bring significant benefits, will be non-trivial and will effectively validate network connections and security (DCCKI) between a Testing Participant and the DCC.

The primary reason for delivering this part of the Pre-UEPT service earlier is to deliver the benefits of resolving connectivity problems whilst gaining increased confidence that the DSP and CSP

simulator solutions are delivered and appropriately tested for this initial period of testing with Testing Participants.

Stage 2: from 6 May 2016: SR Processing.
SR Processing will follow on from Early UIT Connectivity and will add validation of a Testing Participant's ability to correctly construct Service Requests and process Service Responses. This includes DSP validation of messages received in accordance with DUIS and enables a Testing Participant to validate that they can verify MAC / Signatures applied by the DCC.

The Service Requests initially supported will be in line with the Service Requests delivered at Release R1.2 and will increase in line with the release strategy (i.e. when R1.3 is deployed the solution will support those). A limited number of Service Responses will have valid GBCS payload, with all others returning 'dummy' GBCS payload.

The table below sets out which Testing Participant capabilities are validated at each stage.

Capability Verified	Early UIT Connectivity	Pre-UEPT (SR Processing)
1. DCC Gateway Connection	Y	Y
2. DCCKI	Y	Y
3. Interface to each Web Service	Y	Y
4. Interpretation of DUIS for each Service Request supported	N	Y
5. Receipt of Service Responses	N	Y
6. User Verification of MAC / Signatures	N	Y
7. Verification of Correlate	N	Y
8. Verification of GBCS Payload	N	Y

DCC notes that SR8.5 has been incorrectly advised by DCC as being included in scope of R1.1 (it is delivered at R1.3) and requests that this reference is removed from Section X9.3 (a) (iv).

<u>Interim Device (GFI) Testing:</u>
The consultation correctly states that DCC is considering a configuration of GFI working in tandem with Test Communications Hubs. DCC has been conducting further analysis with our Service Providers and we have been investigating two options: 1) enhancing GFI alone to mimic the GPF functionality within a Communications Hub; 2) enhancing GFI and Test Communications Hubs such that GFI provides GBCS content using the Test Communications Hub as the HAN manager.

DCC considers that enhancing GFI alone (option 1, above) is more likely to be achievable in the required timeframes considers that this is an appropriate route. We consider that option 2 may still be achievable but unlikely before the start of End-to-End testing. We consider that it would be appropriate to return to TBDG with further analysis of option 2 to determine whether there will be value in delivering each solution in different timescales.

We consider that we can comply with the draft legal text.

Question 14: Please provide your views on the draft direction for the insertion of a new X9 and the proposal to:

- **bring the new X9 into effect on18 April 2016 (or as soon as possible thereafter),**
- **require the provision of the Pre-UEPT service from the date that X9 is effective,**
- **require the provision of the GFI service as soon as reasonably practicable, but in any event no later than the start of End-to-End testing,**
- **provide that the Pre-UEPT and GFI service will end when Section X ends, noting that the Secretary of State has the ability to direct an earlier end date?**

Please provide a rationale for your views.

DCC agrees with the proposals but requests clarity regarding the duration of these services to facilitate efficient contracting for the provision of these services.

DCC notes that SR8.5 has been incorrectly advised by DCC as being included in scope of R1.1 (it is delivered at R1.3) and requests that this reference is removed from Section X9.3 (a) (iv). DCC has previously communicated this to DECC and industry.

Question 15: What are the benefits of providing Pre-UEPT services beyond the go live date for Release 1.3 functionality? Please provide a rationale for your views.

DCC believes that it is appropriate for potential users of the service to comment on the benefit of providing Pre-UEPT services beyond go live for R1.3.

Question 16: Do you agree with our proposed amendments for additional SIT, Interface Testing and SRT Testing? Please provide a rationale for your views.

DCC agrees with the proposals for Additional phases of testing for SIT, Interface Testing and SRT.

We would like to work further with DECC to ensure that revisions to relevant testing approach documents align with the developing policy.

With regards to the SIT Approach Document and IT Approach Document we plan to de-scope functionality not delivered at R1.2 by referencing Annex B of V1.3 (or such later version) of the Testing Baseline Requirement Document and agree that the objective of Additional phases of testing will relate to those variations.

Question 17: Do you agree with our proposed amendments for the length of the End to End Testing Period? Please provide a rationale for your views.

DCC agrees with the policy intent of the duration of End-to-End Testing.

We make two observations:

1. It is not entirely clear that the draft legal text reflects the policy intent that End-to-End Testing will continue for 12 months after the start of End-to-End testing with the 'full environment' as it appears to be silent on 'full environment' / Release R1.3.
2. It may be beneficial to set out what 'full environment' means – if a Modification or other change were to be raised the scope of 'full environment' may inadvertently include that scope, meaning that 'full environment' for End-to-End Testing purposes may never be achieved.

Question 18: Do you agree with our proposed amendments for additional phases of Service Request testing? Please provide a rationale for your views.

DCC agrees with the policy intent of Testing in respect of Additional Release Services.

DCC considers that further clarity around SEC Section X1.17b may be beneficial.

We consider that this clause alone could lead to a Testing Participant becoming a valid User of Service Requests that do not fall into Additional Release Services – and by implication not a valid User of the Service Requests that do fall into Additional Release Services.

Question 19: Do you agree with our proposed amendments to the relevant versions of the SEC for testing purposes? Please provide a rationale for your views.

DCC agrees with the proposed amendments.

1.5 SEC Panel and DCC Live Criteria Assessment

Question 20: Do you agree with the proposal and associated legal drafting? Please provide a rationale for your views.

We agree with the proposal and legal drafting. We support the need for a formal process to establish DCC live for the purposes of the Implementation Milestones. We are currently in the process of developing the DCC Live Criteria and we are keen that the DCC Live Criteria are: simple, unambiguous, flexible, proportionate, material, and do not duplicate other IM criteria.

We plan to issue a further consultation on the remaining Implementation Milestones in Spring 2016.

1.6 Security

Question 21: Do you agree with the proposed approach and legal drafting that seeks to ensure that only disputes associated directly with the issue of compliance with Section G are determined by Ofgem, with other disputes following the "normal" path for resolution?

In reference to proposed changes in G1.8 & G1.9, DCC agree with the legal drafting.

Question 22: In relation to the need for DCC to test and monitor the security of Cryptographic Credential Tokens, do you agree with the proposed approach and legal drafting?

In reference to proposed addition of the new definition of Cryptographic Credential Token in Section A, DCC agree with the drafting and also note it is proportionate and consistent with the current version of the SMKI RAPP.

In reference to the addition of clauses G2.36, G2.37 and G2.38, DCC are satisfied that the drafting requires proportionate controls for the protection of the hardware and software that are issued in accordance with the SMKI RAPP.

Question 23: In relation to the removal of Manufacturer Release Notes from the CPL and the associated requirements for secure storage, do you agree with the proposed approach and legal drafting?

DCC has no comment to make with regards to the removal of Manufacturer's Release notes from the CPL as we do not currently store this information centrally.

DCC would like to note that it would be advantageous to develop a formal specification and governance arrangements for the CPL. DCC places reliance on the CPL and DCC has automation in place to process the CPL extract that is provided to DCC. The lack of a formal specification and governance arrangement means that changes to agreed format and data structures may be made without fully assessing the impact of those changes. Any such changes will have an impact on DCC Systems.

Question 24: In relation to the inclusion of systems used to generate a UTRN within the scope of the User System, do you agree with the proposed approach and legal drafting?

DCC agree with proposed definition.

1.7 Privacy and Explicit Consent

Question 25: Do you agree with the proposal to include a definition of Explicit Consent and do you have any comments on the proposed drafting? Please provide a rationale for your views.

DCC agrees with the definition and the proposed legal drafting.

1.8 Changes to Section H (DCC Services)

Question 26: Do you agree with the proposal and associated legal drafting to consult with Parties and Registration Data Providers prior to changes to DCC Internal Systems or the Release Management Strategy? Please provide a rationale for your views.

DCC agrees with the definition and legal drafting.

DCC would like to note that the question refers to the "Release Management Strategy", our understanding is that the intent is to refer to the DCC Release Management Policy.

Question 27: Do you agree with the proposed change to remove the requirement on RDPs to raise an incident where the issue can be resolved by the transmission of an unsolicited registration data refresh file? Please provide a rationale for your views.

DCC agrees with the proposed amendment.

Question 28: Do you agree with the proposals and associated legal drafting to the recovery and data loss obligations in regard to a Disaster? Please provide a rationale for your views.

DCC agrees with the proposals and legal drafting.

1.9 Rectifying Errors in Relation to Device Credentials

Question 29: Do you agree with the proposal to clarify that Users are permitted to send the relevant Service Requests? Please provide a rationale for your views.

DCC is concerned with the proposal to amend H3.6 and add the following text:

"(save that a User may send a Service Request in circumstances where it is not an Eligible User in order to rectify errors, as further described in the Service Request Processing Document)"

If a User is not an Eligible User for a Service Request then the DCC Systems are designed to Reject these Service Requests in alignment with the relevant provisions in the SEC and the Eligible Services Schedule. DCC understands that the intent of Clause 17.1 of the Service Request Processing Document was to facilitate Parties working together to resolve issues (relating to rectifying errors) bi-laterally and the Party whose Credentials have erroneously been placed on the Device would send a Service Request to update the Device Security Credentials. The proposed text for H3.6 is inconsistent with the requirement in Clause 17.1 of the Service Request Processing Document for Parties to cooperate to rectify the position. As we have noted, a Service Request sent by a User who is not an Eligible User will fail in the DCC system as they are not the Party whose Certificates are on the Device. DCC notes that if a change to the DCC system is required, a change request will need to be raised. We would ask that this is considered after successful completion of R1.2 and R1.3.

1.10 Panel/IKI Subscribers

Question 30: Do you agree with the proposal and associated legal drafting to permit SECCo to become a Subscriber for IKI File Signing Certificates for the purposes of Digitally Signing the CPL as set out above? Please provide a rationale for your views.

DCC agree with the proposal and legal drafting.

1.11 Status of Associated Devices

Question 31: Do you agree with the proposals to remove the requirement for DCC to modify the SMI Status of a Device in circumstances where the status of a Device with which is associated changes, and to clarify by when suppliers must ensure that the appropriate Device Security Credentials are placed on a Device? Please provide a rationale for your views.

DCC broadly supports the proposals. The proposed change to Clause 3.1 of the Inventory Enrolment and Withdrawal Procedures needs further clarification. The use of the term Service Request needs to be clarified. The SEC defines two types of Service Requests, Device and Non-Device. DCC would ask for clarity on whether the proposed change to Clause 3.1 is to cover both types of Service Requests or one of the two.

DCC notes that treatment of Device and Non-Device Service Requests is not the same in the DCC system. While it is technically possible for some Non-Device Service Requests to be sent to the DCC (in relation to a Smart Meter or Type 1 Device) prior to each Trust Anchor Cell on that Device being populated, there are currently no direct validation checks in the DCC system to prevent this. For example SR12.2 Device Pre-notification or SR8.2 Read Inventory. If the proposed change is intended to cover Non-Device Service Requests, DCC will need to add validation checks in the DCC system. DCC would ask that any changes to the DCC systems are considered after successful completion of R1.2 and R1.3.

1.12 Post Commissioning Reporting

Question 32: Do you agree with the proposal to change the reporting obligations on DCC in relation to Devices Commissioned between DCC Live and Release 1.3? Please provide a rationale for your views.

DCC agrees with the proposal to start producing the Post Commissioning Reports from Release 1.3 (with the first report including data previously captured between Release 1.2 and 1.3) and that the reports covering the 1.2 to 1.3 service audit entries will only report on attempts to execute the required service request rather than whether they were successful or not.

The DCC did consider implementing the success/failure status for audit entries captured at Release 1.2 and also the option to bring forward the Post Commissioning Reporting to Release 1.2, but in both cases this would not be possible without causing a significant delay to the Release 1.2 delivery plan.

1.13 Subscriber Obligations for certain IKI File Signing Certificates

Question 33: Do you agree with the proposals to modify the subscriber obligations in relation to Certificate Signing Requests generated by DCC-provided software and to place an additional obligation on DCC in relation to these in Section G?

We agree that the intent of the obligation is correct but the obligation as drafted is not possible for the Eligible Subscriber to meet.

The drafting needs to recognise the following scenarios:

1. Any Key Pair generated on the token and the associated CSR will be transparent to the Eligible Subscriber. In the case of IKI tokens, the Eligible Subscriber will be provided with an initialised token that has the Key Pair and associated Key Pair. They will have no control of the CSR generation process and cannot ensure that the Key Pair was generated on the software that is part of the token.
2. There is a type of IKI Certificate that the associated Key Pair is not generated on a token. That type of IKI Certificate requires the Eligible Subscriber to generate their own Key Pair and submit an associated CSR. In this scenario, the normal Subscriber Obligation in relation to CSRs still applies.

1.14 RDP IDs and DCC Reporting under Section E

Question 34: Do you agree with the proposal not to make transitional changes to the SEC to deal with these matters and instead to rely upon RDPs and the Panel to work with DCC within the confines of its Systems Capability on a transitional basis?

DCC agrees with this proposal.

1.15 Miscellaneous Issues and Minor Amendments to Drafting

Question 35: Do you agree with the proposal legal drafting amendment to C3.13? Please provide a rationale for your view.

DCC supports the amendments to C3.13.

Question 36: Do you agree with the proposed legal drafting amendments to Section E2? Please provide a rationale for your view.

DCC supports the amendments to Section E2.

Question 37: Do you agree with the proposal to remove these documents from the SEC and to re-introduce them (including any enduring changes made using Section X) by designation under Condition 22/Section X5 of the SEC?

DCC agrees with this proposal.

Question 38: Do you agree with our proposal and legal drafting in relation to Test Communications Hubs? Please provide a rationale for your response.

DCC agrees with the proposed amendments to the definition of Test Communications Hubs.

Question 39: Do you agree with the proposal and associated legal drafting to align the wording of obligations throughout the SEC?

DCC agrees with the proposed legal drafting for the purpose of aligning the wording of obligations throughout the SEC.

Question 40: Do you agree with the proposed changes to the Incident Management Policy? Please give reasons to support your answer.

DCC broadly agrees with the proposed change. In reference to Clause 2.5.8 of the Incident Management Policy, DCC suggest that the following text is removed to align with the consultation proposal that an incident does not have to be recorded in the Incident Management Log:

"The Service Desk shall set the status in the Incident Management Log to close".