Department for
Business, Energy
& Industrial Strategy

ANNEX A: SMART METERING ENDURING CHANGE OF SUPPLIER ARRANGEMENTS

Consultation response on the design, development and implementation of smart meter enduring change of supplier arrangements

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Introduction

The current change of supplier arrangements for changing energy suppliers' security credentials on Smart Metering Devices were put in place on a transitional basis. The capability to provide this is called the Transitional Change of Supplier (TCoS) service and is provided by Data Communications Company (DCC).

Our proposed enduring approach, which is termed 'Enduring Change of Supplier Option 2' (ECoS2), is an enhancement to the TCoS service and retains existing business processes to facilitate change of supplier, while also putting in place greater separation from the DCC's Data Services Provider (DSP) and providing independent access to industry registration data. BEIS considers ECoS2 to be the optimum solution to provide enduring change of supplier capability while minimising industry impacts.

Between 30 May and 27 June 2019 BEIS consulted[1] on the following single question:

"*Do you agree that government should direct the DCC to implement the ECoS2 solution as summarised in paragraph 3.2 above*?*

Please provide reasons for your position and, if different from the consultation proposal, details of how you would deliver appropriately robust enduring change of supplier arrangements and why these would be superior to the ECoS2 solution."

[***3.2.** *"… the government proposes to direct the DCC to plan for the design, development and implementation of the systems, processes and procedures intended to comprise the ECoS2 arrangements for SMETS2 and enrolled SMETS1 smart meters in timescales such that TCoS does not need to be re-procured by the DCC under the DSP contract. This consultation seeks views on the government's proposed direction to the DCC."*]

This document provides the government response to the consultation.

Capitalised terms throughout this document have their meaning as per the DCC licence, the Smart Energy Code (SEC) Section A and as defined in the Appendix 12 of the DCC Options Review document (provided as part of the consultation - see link below).

[1] https://smartenergycodecompany.co.uk/latest-news/beis-smip-consultation-on-directing-the-dcc-to-plan-for-the-design-development-and-implementation-of-smart-meter-enduring-change-of-supplier-arrangements/

High Level Summary of Responses

Responses were received from nine stakeholders as follows:

- A Distribution Network Operator (DNO);
- Six large energy suppliers;
- The energy industry trade association: Energy UK (EUK); and
- A technology service provider.

From the nine responses received, two parties, a large energy supplier and the technology provider, were very supportive of the proposal to direct DCC to commence work on an ECoS2 proposal. Two of the large energy suppliers were supportive to an extent, recognising that if TCoS[2] is to be replaced, then ECoS2[3] is best solution. A third large energy supplier and the DNO were supportive to a limited extent, citing the lack of enough information to sway their response decisively one way or the other. Three parties, all large energy suppliers were somewhat unsupportive of the proposal and one of these appearing very unsupportive.

Most of the large suppliers cited the response from industry body EUK as being representative of their detailed views. The EUK response was supportive in principal and clearly expressed a strong opposition to an ECoS1 approach. However, it pointed to insufficient justification for the need to replace TCoS and as a result EUK did not fully embrace ECoS2.

A consistent comment being made in the less supportive responses was, to paraphrase: "*why not stay with TCoS?"*. We believe that this comment may be driven by the perception that ECoS2 is a 'major change' even though it does not directly impact the industry Change of Supplier (CoS) process. Therefore, we would like to take the opportunity to redress this perception, making clear that ECoS2 is an enhancement to / evolution of, the existing TCoS (which itself will be required to be enhanced or replaced as part of DCC's re-procurement of the DSP) rather than a fundamental major change of approach.

As EUK provided some structured and detailed comments and that its response is representative of that of many of the energy suppliers, we have drawn their points out for particular attention in this response.

We have also further addressed any remaining points not sufficiently covered by EUK under separate 'topic' headings and, other than in the case of EUK, anonymised the source of points raised.

[2] TCoS Transitional Change of Supplier is the existing DCC service to be replaced by Enduring CoS (ECoS).
[3] ECoS2 is the approach to ECoS proposed in the Options consultation and is the gaining supplier-led option, the alternative being the loosing supplier-led ECoS1.

Response to Comments Made

Addressing EUK's Points

EUK cited eight areas where it felt that issues lay. The following is a summary of those eight points complete with a response from BEIS to the points made:

EUK Point 1: TCoS works and therefore, does not seem to need to change. Specifically, this is borne out in four associated questions:

i) What is the problem statement that ECoS is addressing?

ii) What are the key Technical / Security risks associated with TCoS?

iii) Why has SSC not been party to evidence to-date?

iv) Will TCoS be an additional cost in the DSP re-procurement? (This is not made clear)

Responding to each these of the sub points in order as above:

For i): In the background section of DCC's Solution Review[4], it was clearly stated that TCoS was intended as a temporary solution recognising at the time of preparing for mass rollout it would not then be realistic to implement the government's preferred solution. That preferred solution is essentially what is now referred to as ECoS1. TCoS was, therefore, constructed on the basis that it would be temporary. TCoS Certificates held on Devices will expire and will need to be replaced with new Certificates, however, there is no current process to achieve this. It is also the case that the source of registration data for DSP is changing as part of the reforms being introduced by Ofgem's Faster Switching Programme, through the introduction of the Central Switching Service[5] (CSS). This will also require changes to DSP and is likely to increase the volumes of CoS events. Given that the CoS processing must be re-procured alongside DSP the decision needs to be made on whether to: re-procure TCoS as is; or to re-procure something slightly different (ECoS2); or something substantially different (ECoS1), which addresses the risks identified with the existing TCoS solution. BEIS believes, based upon engagement with DCC, NCSC and the SEC Panel Security Sub Committee (SSC) that the TCoS solution should be enhanced and that the optimal way of achieving this is to implement ECoS2.

For ii): BEIS have engaged with the NCSC, DCC and the SSC in understanding the security risks relating to the CoS functionality, which are the correct fora to consider security risks. We have concluded that ECoS2 mitigates those risks identified.

For iii): BEIS presented the merits of the ECoS1 and ECoS2 options to SSC in February 2019 and concluded that ECoS2 would be a suitable enduring solution. In addition, and based upon the SSC recommendation, the DCC carried out a risk assessment of the TCoS solution and

[4] The DCC Solution Review document provides a quantitative and qualitative evaluation of the impacts of each of these options on DCC and market participants based on an assessment of the technical solution, along with the associated costs and risks

[5] The Central Switching Service (CSS) is a processing service procured through the Ofgem led Central Registration Service. DCC won the contract to develop CSS for Ofgem.

presented their findings to the SSC at a further meeting on 28 August 2019. This supported the view that the TCoS should not be retained as an enduring solution.

For iv): There are costs associated with the re-procurement of the DSP of which, TCoS is one aspect. Absent of any change, TCoS itself would need to be re-procured as part of the DSP contract re-procurement.

EUK Point 2: What work is required to make TCoS robust? (There is no information on an enhanced TCoS). What did BEIS ask DCC to include in the Options Report?

BEIS requested DCC to carry out the review as stated in the 'Purpose' section of the DCC Options Review. This was to review the two alternative ECoS approaches that would be suitably enduring. The two options were: an ECoS1 approach whereby the business process fundamentally changes; and a development of the TCoS solution not changing the business processes to provide an enhanced alternative which we identify as ECoS2. BEIS considers that these options were exhaustive because (other than resorting to use of the Recovery Key) there are two approaches by which supplier Certificates can be replaced on Devices following churn. These are by either relying on a Command from the outgoing supplier (ECoS1) or by relying on a Command from the CoS Party on behalf of the gaining supplier (ECoS2). The DCC Solution Review states as follows, near the end of section 4.1:

"*If TCoS were to be modified to meet the requirements set out in Section 3, it would effectively be the same as ECoS 2*".

EUK Point 3: Query why the ask at TBDG on why TCoS couldn't persist was not covered in consultation?

The TCoS system as currently in use, cannot persist as an enduring option for security reasons. This position is confirmed by the SSC at the meeting on 28 August 2019, as indicated in our response to Point 1-iii above.

BEIS requested DCC present the costs of the existing TCoS solution but due to it being embedded in the overall DSP contract, it was not possible to identify those costs. DCC considered that it could only ascertain the costs of TCoS through the DSP re-procurement exercise that is now being planned in DCC. As TCoS requires enhancements to become an enduring solution, DCC's Solution Review concluded that the minimum viable solution to meet those enhancements is ECoS2, which builds on TCoS. The full replacement would be an ECoS1 solution, however, we consider that that solution does not provide sufficient benefit to warrant the additional burden to industry of its implementation.

EUK Point 4: In relation to the presentation of DCC cost estimates EUK note:

- **No confidence levels used in figures quoted**
- **Lack of response to the Service Provider RFI leads to lack of confidence in figures provided, so not a CBA**
- **Questioned why there was no coverage of suppliers' costs?**

The points raised are accepted. DCC cost figures provided were based on information that DCC had requested from industry. There was no intention to present these figures as firm cost estimates and hence no confidence levels were used. During the next stage in the process DCC will obtain firm prices for the development of the solutions from potential ECoS2 Service providers. The cost estimates provided in the DCC Solution Review were presented more as a relative comparison of costs, rather than a hard cost given the variance in the data provided. Energy suppliers were asked to provide estimates of their additional operational costs and very few did so. In our view a transfer from TCoS to ECoS2 has very little impact on energy suppliers, unlike ECoS1 and can be undertaken almost entirely by DCC in isolation, as such we expect the operational impact on suppliers to be negligible.

EUK Point 5: Drawing attention to DCC's workload particularly in relation to their work on CSS and Enrolment & Adoption (E&A).

It is recognised that DCC have a number of change programmes running in parallel all of which need to be managed effectively. DCC License Condition 13A[6] requires DCC to develop and consult upon a plan to deliver ECoS2, taking into account testing requirements and any other planned and operating initiatives. It should be noted that the CSS programme in DCC is delivered and managed separately from the Smart Meter Programme delivering ECoS2.

EUK Point 6: Challenge the ECoS2 DB&T timescales as being a 'reasonable assumption' and leading to additional uncertainty.

The proposals for timing for the ECoS2 Design, Build and Test, as in the response to point 5 above, are based on responses received from parties responding to DCC's RFI. Whilst these are estimates rather than based on detailed design plans, they are based on a good level of understanding of the requirement. Greater confidence in timings will be ascertained as part of the DCC response to the LC13A direction.

EUK Point 7: Expressing a view that CSS needs to be in place for ECoS2 and that risk mitigation is not in place.

There is no direct dependency on the new CSS being available for ECoS2 to function, nor on CSS being required for ECoS2 to function. The CSS registration data interface to ECoS is targeted for when ECoS goes live. If CSS is late then ECoS will use a duplicate of the existing file-based solution.

EUK Point 8: Unclear if an assessment of the impact on devices has been considered.

The DCC Solution Review, at section 3.1, lists: "*The drivers of the Trust Model suggest the following set of key mandatory requirements which must be fulfilled by any option, which is to be considered for implementation…".* At requirement point 2, in the subsequent table, there is a statement: "*The enduring solution must not affect the way that Devices operate, either during*

[6] Licence Condition 13A (LC13A) is a provision in the DCC Licence that requires DCC to plan for and implement ECoS following a direction to do so from the Secretary of State.

implementation or operation.". We feel that this is sufficiently clear, that consideration has been given to impacts on devices with the outcome that there is to be no impact on Devices. Devices will continue to have a Trust Anchor Cell with a '*TrustAnchorCellIdentifier*' with the name: *'transitionalCoS'*, there is no requirement nor intention to change this label.

Additional Points Raised by Responding Parties

The impact of ECoS on DSP Re-procurement

It would be most efficient to implement ECoS2 ahead of any new provider being appointed. To ensure that ECoS does not delay the transfer of DSP to another provider, should DCC choose to do so, ECoS2 should be implemented before it becomes critical path.

GDPR Risks

One party queried the purpose of the proposed 'SharePoint link' required, especially in relation to possible GDPR concerns they felt there may be. The requirement for 'SharePoint' is referenced in text within the DCC Options Review document, in the table at appendix 5, which states its purpose is, to list / store 'supplier user ID ranges' and for 'changes of credential information'. Also, further in appendix 5, there is a list of the actual data flows required. None suggest any conflict with GDPR.

Implementation Timescales

A point raised by one party was the lack of detail on the 12-month transition period. Their concern appeared to be based on transitional impacts on suppliers over this period. They cited the footnote #3 at section 3.2 of the DCC Options Review document as evidence (that footnote says: "*This assumption has been made to support this analysis and does not constitute a forecast of delivery timescales, which may change during detailed planning.*"). In response, this footnote is referring to the general initial planning assumptions and is presented before the detail of options are explored further in the document. The plan for the transition in relation to ECoS2 at section 4.4.3 of the DCC Options Review presents a schedule based on the RFI responses. Addressing the possible impact from the transition (migration of TCoS certificates to ECoS2 certs), the exercise could technically be carried out in much shorter timeframes (i.e. weeks) but timescales will be considered further through the LC13A process. As there is no impact to energy suppliers during migration, the timescales for migration should not need to concern them.

Incident Management

There was a query raised in a response on whether DCC would hold incident management responsibly over the independent CoS Party to help expedite their resolution. BEIS can confirm that this is intended.

Conclusion

As laid out above, BEIS has reviewed all the responses that industry provided to the 30 May 2019 consultation. We would like to thank industry for its contributions on this important technical topic and have welcomed the opportunity to respond to and further consider points raised.

BEIS is satisfied and remains of the view that the ECoS2 approach as described in the DCC Options Review document is the most appropriate approach for the enhancement of TCoS.

The DCC has, therefore, been directed under DCC Licence Condition 13A to consult industry on a plan later this year to deliver ECoS2.

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