Data Communications Company

SMETS1 Consultation on the S1SPKI Certificate Policy for FOC

DCC Conclusions and Report to Secretary of State

Date: 17 February 2021
Classification: DCC Public

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1. Introduction and Context

In the initial stages of the smart meter roll-out across Great Britain, a number of energy suppliers installed first generation smart devices (known as SMETS1 devices), in consumers' premises. SMETS1 devices installed by one energy supplier, however, are not always interoperable with and supported by the systems used by another supplier. The Data Communications Company (DCC) has developed a plan and designed a solution for the incorporation of such devices into its national network. It provides important shared benefits for industry and consumers and intends to offer the ability for SMETS1 consumers to maintain their smart services following a decision to switch suppliers.

Section L of the Smart Energy Code (SEC) sets out the arrangements that govern the Smart Metering Key Infrastructure (SMKI) which underpins the security of smart-meter related communications. In order to provide governance of the SMKI documentation and gain assurance of the DCC operation of the SMKI Services, the SMKI Policy Management Authority (SMKI PMA) was established under the SEC and serves as a Sub-Committee of the SEC Panel.

Depending on the SMETS1 Service Provider (S1SP), communications to SMETS1 devices from S1SPs are secured using either a dedicated, non SMKI PKI or by using symmetric keys. The Department for Business, Energy and Industrial Strategy (BEIS) introduced changes that aligned the management of these S1SP PKIs and the symmetric keys under the aegis of the SMKI Policy Management Authority (SMKI PMA) and required the incorporation of relevant documentation into the SEC. This was to ensure a consistent set of oversight arrangements on the management of keys that are used as part of the secure end-to-end communication for SMETS1.

For the FOC S1SP, DCC is proposing to use a separate PKI to the existing versions in the SEC. As the PKI is an essential element of the end-to-end security of communications with their associated SMETS1 devices, BEIS placed this under the oversight of the SMKI PMA to provide a consistent set of oversight arrangements with SMKI. The result is that the certificate policies for the FOC PKI would, on incorporation into the SEC, need to be reviewed by the SMKI PMA in the same way that applies to the SMKI documentation. In practice the content of the S1SPKI Certificate Policy for FOC has been considered by the SMKI PMA and following on from changes that were made based on their recommendations, which the SMKI PMA approved on 13 December 2021 for consultation. On 16 February 2021, the SMKI PMA further considered the content of the Certificate Policy for FOC and approved that the content was appropriate for designation into the SEC.

Pursuant to Section L of the SEC, DCC consulted[1] on a new version of the S1SPKI Certificate Policy that would be applicable to the FOC cohort in which it sought views on that S1SPKI Certificate Policy. The S1SPKI Certificate Policy includes, within Annex E, the associated Registration Authority Policies and Procedures (RAPP) which DCC is also required to develop pursuant to Section L. DCC previously consulted on an S1SPKM Compliance Policy[2] which has been incorporated into the SEC. Prior to consultation, DCC reviewed the S1SPKM Compliance Policy

[1] https://www.smartdcc.co.uk/customer-hub/consultations/smets1-s1spki-certificate-policy-for-the-foc-cohort/
[2] https://www.smartdcc.co.uk/customer-hub/consultations/smets1-consultation-on-the-smets1-public-key-infrastructure-pki/

against the draft FOC S1SPKI Certificate Policy and was satisfied that it does not require any amendments.

2. Consultation

On 8 January 2021 DCC consulted on the content of the S1SPKI Certificate Policy for FOC. The consultation closed on 5 February 2021. In the consultation DCC sought views on a proposed SMETS1 Service S1SPKI Certificate Policy for the FOC cohort.

This document considers responses to this consultation consistent with the regulatory requirements in Section L14.8 of the SEC which provides for the Document Development Process.

DCC also sought views on behalf of BEIS on the proposed date for designation of the S1SPKI Certificate Policy for FOC as well as the draft direction which was presented in Attachment 1 of the consultation document.

DCC sought comments on the following questions:

Number	Question
PKI Question 1	Do you have any comments on the S1SPKI Certificate Policy for the FOC cohort?
PKI Question 2	Do you agree with the proposed designation date of 28 February 2021, or as soon as reasonably practicable within 1 month thereafter for the Certificate Policy for FOC?

Table 1

2.1. Respondents

DCC received three responses to the consultation.

2.2. Analysis of Responses

DCC has undertaken an analysis of the feedback provided by each respondent regarding the S1SPKI Certificate Policy for FOC which is presented within this section document.

None of the respondents offered any objection to the content of the consultations or the proposed redesignation dates.

3. Summary of Changes to the S1SPKI Certificate Policy for FOC

DCC is not proposing any material changes to the S1SPKI Certificate Policy for FOC as a result of the responses received. DCC is of the view that due to the engagement with the SMKI PMA on the content of the S1SPKI Certificate Policy that the S1SPKI Certificate Policy is fit for purpose.

DCC has identified the following typographical errors in the version of the S1SPKI Certificate Policy which it has amended on the version that will be submitted to the Secretary of State:

- Section 4.9.13 – Typographical error in the Header

- Section 7.2.1 – The Section indicates that that Version 2 of the X.509 certificate is being used, which should be Version 3 as per Annex B of the S1SPKI Certificate Policy.

A further change has been identified which provides improved clarification for the document by adding a definition for Operator Root CA Certificate. DCC is of the opinion that this is not a material change and further consultation is accordingly not required. DCC has therefore added the following definition:

> **Operator Root CA Certificate** "means one of the self-signed Certificates issued by the FOC S1SP Operator Root CA that meets the requirements of the Operator Root CA Certificate profile set out in Annex B and that has been issued in accordance with Policy".

4. Conclusions

DCC is of the opinion that the version of the S1SPKI Certificate Policy, which will be submitted to the Secretary of State reflects the requirements set out in Section L14 of the SEC.

DCC is of the opinion that the S1SPKI Certificate Policy for FOC is fit for purpose in that it meets the requirements set out in Section L14 of the SEC by clearly and unambiguously setting out parties' rights and obligations.

DCC is of the opinion that it has had appropriate consultation with industry regarding the content of the S1SPKI Certificate Policy for FOC. It is accordingly DCC's view that it has met its SEC obligation set out in Section L14 of the SEC.

5. Next Steps

DCC will submit the updated version of S1SPKI Certificate Policy for the FOC cohort to the Secretary of State on 17 February 2021.

DCC anticipates that the Secretary of State will designate the S1SPKI Certificate Policy for the FOC cohort into the SEC using the powers set out in Section X of the SEC on or shortly after 28 February 2021.

6. Attachments

- Attachment 1 – SMKI PMA - FOC S1SP HES Certificate Policy