



SMETS1 Consultation on changes to the SMETS1 Supporting Requirements

A consultation on changes to the SMETS1 Supporting
Requirements relating to the Secure Cohort.

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1. Introduction and Context

1.1. Programme 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.

The DCC solution relies on a common DCC User interface, defined in the DCC User Interface Specification (DUIS) for users of both SMETS1 and SMETS2 devices. SMETS1 specific processing or operating requirements are defined in the SMETS1 Supporting Requirements (S1SR) document – Appendix AM of the SEC.

1.2. S1SR Development background

The latest designated version of the S1SR (version 3.0) came into effect on 6 May 2020 and provided updated information in light of the changes introduced by the DCC SMETS1 Uplift 1.1 which were primarily related to the functionality required to support external load control switches when setting tariffs.

On 9 April 2020 DCC consulted on further changes to the S1SR. The amendments that were proposed to the designated version of S1SR were to accommodate further device specific behaviours that had been identified in respect of the Middle Operating Capability – Secure, and to define the pre-migration configuration requirements specific to the devices that will be capable of being enrolled into DCC as a consequence of that capability release. This was marked as draft version 4.0.

During the initial consultation period a number of additional device specific behaviours were identified which DCC proceeded to consult on by publishing a further consultation on 5 June 2020. This was marked as draft version 4.1. Coincidentally DCC consulted on draft version 4.2 of the S1SR, which dealt with issues arising in respect of Aclara DMCs (part of the IOC release) and which built on the provisions that were laid out in draft version 4.1. Consultation conclusions for both of these consultations on the S1SR were provided on 17 July 2020.

During period that DCC has been consulting on these versions of S1SR, some Users have been engaged in testing against the DCC Secure SMETS1 solution. User testing, which involves a greater exercise of processes and devices to understand impacts on user systems, typically goes further than SIT, which is concerned with testing that the interface operates as intended. As a consequence of the User testing, a number of issues have been brought to the attention of DCC. Following triage and investigation, DCC has found it necessary to draft additional clarificatory provisions in the S1SR. These additional provisions are laid out draft version 4.3 of S1SR, which is the subject of this consultation. DCC anticipates that BEIS will be designating version 4.2 prior to MOC Secure go-live.

1.3. Summary of changes

The updates and clarifications to S1SR can be summarised as:

- Updates on how the S1SP will operate firmware update Service Requests when prior firmware updates are in progress on the same HAN;
- Clarifications on static configuration values that the S1SP will apply when processing Service Requests. Given the differences between DUIS parameters and the command structures that Secure meters operate, in some cases, S1SP will need to append certain information to the Service Request structure it receives from a User (via DSP). The purpose of this drafting is to make Users aware of the data that may be appended;
- Clarifications around the operation of prepayment functions on meters, and in particular around meter balance accounting and emergency credit;
- Device operation where only units of pence are accepted by meters and how the S1SP will process Service Requests to manage this; and
- Clarifications around the granularity of join time periods for adding devices to the HAN and load limit maximum values accepted by the meter.

1.4. Early Life Operation

DCC, subject to the appropriate governance, intends to promote the MOC Secure operating capacity to live over the weekend of the 25/26 July. This aligns with the expected BEIS approval of the initial EPCL entries for Secure Device Model Combinations (DMCs). DCC intends, following these events, to operate according to its pacing strategy. The initial DMCs that are added to the EPCL will only consist of a small number of devices. Due to the pacing strategy and governance process involved in added DMCs to the EPCL, DCC anticipates that only low numbers of Dormant DMCs will be migrated. DCC understands that Active Suppliers will follow similar low level migration approaches to gain increasing confidence in the operation of the migration mechanisms and operational processes through-out all the systems involved.

DCC intends to implement an uplift to the Secure S1SP solution, planned for September, which will resolve some outstanding operational processing. These updates are discussed further in the Use of DUIS guidance document.

DCC does not expect that the updates identified in this version of the S1SR will impact on either the migration or the early life operation of the initial numbers of DMCs being migrated into the DCC solution. The one area that is potentially a cause for concern relates to the operation of firmware updates. The clauses relating to firmware updates in this version of S1SR sets out that where a Supplier sends Service Requests to update the firmware on a specific device, the S1SP will reject the Service Request for only the devices specified in the Service Request where an update is already in progress on that HAN. It is the DCC view that there is a low likelihood of Suppliers needing to update the device firmware for these Secure DMCs in the immediate future.

There are a number of updates around prepayment functions on meters. These are clarificatory and describe how the meters operate their accounting functions. DCC expects that active Suppliers intending to migrate meters in prepayment mode in this initial period will have a good understanding of these meter features due to their operation of these devices via the SMSO.

Accordingly, it is the DCC position that, whilst it is not desirable, it is to a degree unavoidable that issues will emerge through User testing, and the nature of these issues do not present material risks to the initial operation of Secure meters. DCC also notes that it is possible that further device behaviours may be discovered through further User testing (as has been experienced with other DMCs) and that future updates to S1SR may be required, but that this version presents the best view of known behaviours at this time.

2. Changes to the S1SR

Whilst the updates in this version of S1SR are summarised above, the more detailed list of updates and clarifications are set out in the table below:

Drafting Reference	Description
Clause 18.3	Clarifying the behaviour when adjustments to the Meter Balance are requested
Clause 18.4	Clarifying the default behaviour when changing to prepayment mode
Clause 18.5	Clarification on the behaviour when EmergencyCreditLimit is zero and how the various prepayment thresholds are treated when in prepayment mode
Clause 18.8	Clarifications on the amount made available to consumers when Emergency Credit is activated
Clause 18.16	Clarification on the values returned when meter balances are adjusted
Clause 18.27	Clarification of the values returned when the various prepayment thresholds have been truncated to the nearest whole penny
Clause 18.37	Clarification on the maximum acceptable value for the Load Limit Power Threshold
Clause 18.62	Clarification of behaviour for the JoinTimePeriod when the value converted to minutes by the S1SP before sending to the device and that the minimum time is therefore 60 seconds
Clause 18.63	Clarification on behaviour when attempting a firmware upgrade
Clause 18.64	Moved to 18.65
Clause 23	Describes that the S1SP will use the values set out in Annex C when processing Service Requests.

Table 1 - Overview of Drafting Changes

S1SR Q1	Do you agree with the proposed amendments to the SMETS1 Supporting Requirements Document (S1SR) in Section 18 of that document, that have been added to describe the device behaviours specific to the MOC Secure devices?
S1SR Q2	Do you agree with the proposed amendments to the SMETS1 Supporting Requirements Document (S1SR) in Section 23 and the Default Values for Service Requests that have been added as Annex C?
S1SR Q3	Do you agree with mappings of clauses in Section 18 of S1SR to the relevant Device Models in DMVES?

3. Next Steps

Following the closure of this consultation, DCC will take into account respondents' views, and, subject to the consultation responses received, submit to the Department of Business, Energy and Industrial Strategy (BEIS) an amended version of the S1SR that it considers suitable for re-designation into the SEC by the Secretary of State.

DCC is aiming to provide the updated version of the S1SR to BEIS no later than 15 September 2020. DCC has discussed the re-designation of the S1SR with BEIS and it is proposed that, subject to timely receipt of DCC's report and copies of relevant stakeholder responses to this consultation, BEIS will re-designate the S1SR on 22 September 2020 or as soon as reasonably practicable within one month thereafter.

In order to expedite the re-designation of the S1SR, DCC is also seeking views on behalf of BEIS on the proposed date for re-designation of the S1SR as well as the draft direction which is presented in Attachment 1 of this consultation document for stakeholder consideration.

S1SR Q4

Do you agree with the proposed re-designation date of 22 September 2020 (or, if necessary, as soon as reasonably practicable within one month thereafter) for the updates to the S1SR using draft notification at Attachment 1?

4. How to Respond

Please provide responses in the attached template by 1600 on 21 August 2020 to DCC at consultations@smartdcc.co.uk.

Consultation responses may be published on our website www.smartdcc.co.uk. Please state clearly in writing whether you want all or any part, of your consultation to be treated as confidential. It would be helpful if you could explain to us why you regard the information you have provided as confidential. Please note that responses in their entirety (including any text

marked confidential) may be made available to the Department of Business, Energy and Industrial Strategy (BEIS) and the Gas and Electricity Markets Authority (the Authority). Information provided to BEIS or the Authority, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004). If BEIS or the Authority receive a request for disclosure of the information we/they will take full account of your explanation (to the extent provided to them), but we/they cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

If you have any questions about the consultation documents, please contact DCC via consultations@smartdcc.co.uk.

5. Attachments

- Attachment 1: S1SR direction text
- Attachment 2: SEC Appendix AM SMETS1 Supporting Requirement - clean
- Attachment 3: SEC Appendix AM SMETS1 Supporting Requirement - redline
- Attachment 4: SEC Appendix AM Annex A Device Model Variations to Equivalent Steps Matrix

Attachment 1

This attachment contains the text that BEIS plans to use for direction of changes to the S1SR.

S1SR Draft Direction Text

This direction is made for the purposes of the smart meter communication licences granted under the Electricity Act 1989 and the Gas Act 1986 (such licences being the "DCC Licence") and the Smart Energy Code designated by the Secretary of State pursuant to the DCC Licence (such code being the "SEC").

Words and expressions used in this direction shall be interpreted in accordance with Section A (Definitions and Interpretation) of the SEC.

Pursuant to Condition 22 of the DCC Licence and Section X5 (Incorporation of Certain Documents into this Code) of the SEC, the Secretary of State directs that, with effect from [DD MMM YYYY], the SMETS1 Supporting Requirements previously designated and incorporated into the SEC as Appendix AM is hereby re-designated and incorporated in the form set out in Annex [XX] to this direction.

For the avoidance of doubt such re-designation of the SMETS1 Transition and Migration Approach Document shall be without prejudice to anything done under the DCC Licence or the SEC on or after this document first being designated, or to the continuing effectiveness of anything done this document prior to its re-designation (which shall have effect as if done under the re-designated document).

This direction is also being notified to the SEC Administrator.