



# Conclusion on the SMETS1 Supporting Requirements for MOC Secure Consultation for Secure

DCC's conclusion on proposed changes to the  
SMETS1 Supporting Requirements document for  
MOC Secure

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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 are installing 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.

The latest version of the SMETS1 Supporting Requirements came into effect on 13 December 2019 and the consultation proposed changes to this designated version of 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.

## 2. Consultation

On 9 April 2020, DCC published the consultation proposing further changes to the S1SR on the DCC Website. DCC's Service Desk also emailed stakeholders to notify of the publication.

Stakeholders were invited to respond to the consultation by 17:00 on 1 May 2020.

DCC sought comments on the following questions:

Number	Question
S1SR Question 1	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 Question 2	Do you agree with the additional pre-migration configuration requirements provided in Table 15 of the S1SR?
S1SR Question 3	Do you agree with mappings of clauses in Section 18 of S1SR to the relevant Device Models in DMVES?
S1SR Question 4	Do you agree with the proposed re-designation date of 26 June 2020?

### 2.1. Respondents

DCC received seven responses to the consultation on the changes to the S1SR.

### 3. Analysis of Responses

DCC has undertaken an analysis of the feedback provided by each respondent regarding the S1SR which is presented within this section document.

DCC is consulting on further changes to the S1SR for Secure as a result of a respondent that identified a number of drafting issues as well as address further device specific behaviours have been identified.

#### 3.1. Comments on the Proposed changes

Comment	DCC Response
A respondent considered the drafting of Clause 13.2 to be overly complex and requested that DCC consider redrafting it.	DCC has reviewed the content of the Clause and is of the opinion that it is fit for purpose and has accordingly not amended this content.
Following a review of Clause 18.5(o) by a respondent, they noted that a failure response will be returned where a DCC user attempts to reconfigure the Pre-Payment Configuration using SRV 2.1, while the meter is operating Credit Mode. The respondent opined that the failure response conflicted with the approach adopted in SMETS2 and would result in DCC Users having to develop additional orchestration to accommodate this behaviour.	DCC explained in S1SR that some devices will reject the SRV 2.1 when in Credit mode but some devices will only accept the SRV 2.1 when in Prepayment mode. To avoid unnecessary disconnection on change of payment mode, and to effect the change of prepayment mode in a way that works across all SMETS devices, Suppliers should use the following orchestration: SRV 2.1 (Update Prepayment Configuration) is executed first, followed by SRV 1.6 (Update Payment Mode) and then another SRV 2.1 (Update Prepayment Configuration). DCC proposes to publish this guidance on the SECAS website in the near future.
A respondent noted that Clause 18.5(p)(iii), provided that a maximum of three NonDisablementScripts are permitted in a single day. The respondent sought to understand why this restriction is being proposed as they were of the opinion that it could potentially impact the ability of Suppliers to offer certain tariff options to customers with enrolled SMETS1 Secure Meters.	DCC notes the concern that has been raised. It has been noted during testing and then confirmed with Secure Meters that this is a limitation of the meter and is accordingly being recorded in the S1SR for clarity to users.
A respondent noted that the current red-line drafting of Clause 18.8 does not confirm that a failure notification will be returned where the SMETS1 ESME fails to activate Emergency Credit.	DCC agrees with the comment and the S1SR has been updated as a consequence.

Comment	DCC Response
<p>A respondent noted that the definition of the Sequence of Debt Recovery Types outlined for SMETS1 Secure Meters does not appear to fully consider the entire repayment structure within SMETS2 v4.2 and that this would impact their ability to operate enrolled Secure Meters consistently in prepayment mode. They sought further information on how the sequence of the total debt recovery will operate, specifically in terms of the treatment of customers operating in emergency credit and with a negative meter balance.</p>	<p>“Sequence” when referred to in Table 15 indicates the order of the debt recovery types that must be configured on Secure devices prior to migration to ensure that the correct application of debt-recovery commands. This does not refer to the order in which debt is recovered in different user scenarios.</p>
<p>A respondent raised a concern about the content of Table 15 where it is stated that the Disablement of Supply Not Allowed setting must be configured to &lt;False&gt; ahead of enrolment as they sought to have the ability to utilise different options to prevent customers from losing their energy supply. The respondent was of the opinion that the DCC should deliver solutions that allows meter configuration settings, such as Disablement of Supply Not Allowed to be efficiently changed post-enrolment.</p>	<p>These configurations are prescribed in order to comply with the SMETS1 specification which requires that devices are capable of disabling supply when certain conditions are met. There are a range of prepayment capabilities (e.g. Non-Disablement Calendar) laid out in SMETS1 which Suppliers may wish to consider in order to mitigate any perceived risks.</p>
<p>A respondent raised a concern that the proposed changes had not been shared previously with industry and that there was accordingly insufficient time available for them to design build and test the system changes that would be required as a result of the proposed changes. The respondent was concerned that the Secure devices in their supply portfolio would be migrated into the DCC service significantly in advance of the delivery of their capability to support them as smart meters.</p>	<p>It is worth noting that the majority of these issues have emerged as a consequence of SIT and that testing has only recently completed. Where possible, DCC has endeavoured to make users aware of these behaviours as soon as possible.</p>
<p>A respondent proposed that due to the Standing Charge reference being added to Clause 15.1, the definition of the DSB in Clause 18.4 (j) could be simplified with no reference to time based debt as time based debt is already suspended as per Clause 15.1.</p>	<p>DCC agrees with the comment and the S1SR has been updated as a consequence.</p>
<p>A respondent pointed to the Non Disconnect Calendar definitions and the need to update the guidance to allow Suppliers to configure each unique configuration that is required.</p>	<p>DCC proposes to publish this guidance on the SECAS website in the near future.</p>
<p>A respondent sought a definition of what time enrolled meters operate on (UTC or local time).</p>	<p>The DCC can confirm that DCC has observed through SIT that Secure devices do operate in Local time.</p>
<p>A respondent sought clarification that where the S1SR drafting refers to whole number of pence in Clause 18.7 (j), that as DUIS requires these denominations to be provided in millipence that for the purposes of the Service Request 1p = 1000 in SR 2.3, 20p = 20000 etc.</p>	<p>DCC has observed through testing that this assumption is correct in that sending 1000 in the DUIS service request would result in 1p being applied to the parameter on the meter.</p>

Comment	DCC Response
<p>A respondent pointed out that the S1SR needs a reference in Clause 15.1 to state that standing charge is still collected when SuspendDebtDisabled and SuspendDebtEmergency are set to "true" and from where this would derive due to the fact that this is different behaviour to SMETS2.</p> <p>As a consequence, the DSB for Secure as defined in Clause 18.4 (j) could be change to state that the suspension of the collection of Standing Charge as the suspension of time based debt recovery when "true" is already defined in 15.1 and is the expected behaviour for SMETS1 and therefore not a Secure DSB.</p>	<p>DCC agrees and has updated Clause 17.12</p>
<p>A respondent sought to understand whether DCC would consider whether relevant SRVs such as 1.1.2, 1.2.1, 4.11.2 would be supported for Twin Element Meters such as where Liberty 112 / 114 Twin Element meters are installed as they indicated that DCC has not re-assessed the applicability of the relevant DUIS for this cohort of meters.</p>	<p>As the SMETS 1 specification does not require twin element functionality and the core SMETS1 Services have been laid out for over two years, DCC is not intending to add Service Requests to support Twin Element configurations to the core set of SRs. Whilst the liberty 112 and 114 may, subject to appropriate testing and addition to the EPCL, be enrolled, the provision of the Service requests to support twin element functionality will not form part of the Core Service. If the respondent has further concerns they may wish to engage with BEIS.</p> <p>As the DCC service is required to support all eligible SMETS1 devices regardless of manufacturer, it has taken as its baseline for the core service, those functional capabilities that the SMETS1 Specification requires of all devices. This was laid out in previous consultation and confirmed in the DUIS 3.0 specification.</p>
<p>A respondent sought clarification on the omission of SMETS1 SRV 4.6.2 as being supported under the DUIS specification, which means that it is not possible to read the 'Export Daily Read Log'. The respondent was of the opinion that it was a mistake that 4.6.2 has been omitted but that SRV 4.8.3 Read Export Profile Data is supported by DUIS for SMETS1.</p>	<p>The DCC SMETS1 service is predicated on those services described in the SMETS1 Specification, which is the reason why SRV 4.8.3 is supported. As there is no requirement for an export Daily Read log in SMETS1 SRV 4.6.2, this is not supported by the DCC as part of the core service requests. Should this be required a SEC Modification could be raised or approach the DCC regarding an Elective Service.</p>

## Comment

## DCC Response

A respondent queried the omission of certain information that Secure has been providing such as Prepayment Data (Meter Balance, Emergency Credit Balance, Payment Debt Register, Time Debt Registers [1 ... 2] and Accumulated Debt Register) ('PP Data').

The DCC SMETS1 service is predicated on the services described in the SMETS1 Specification. As the Prepayment Daily read log is not supported by the SMETS1 specification there is consequently no SRV to read it, even though this is supported by SMETS2.

The DCC wishes to correct any misunderstanding regarding the services the Secure S1SP is providing. All scheduled collection of data will need to be scheduled by a DCC user using SRV 5.1 and utilising the core DCC services to retrieve the required information (SRV x.x.x etc). There is no retrieval of data without a corresponding Service request or scheduled Service Request.

As the DCC service is required to support all eligible SMETS1 devices regardless of manufacturer, it has taken as its baseline for the core service, those functional capabilities that the SMETS1 Specification requires of all devices. This was laid out in previous consultation and confirmed in the DUIS 3.0 specification. Where users require functionality over that required by the SMETS1 Specification then they have the option to engage the DCC in providing an Elective Service.

A respondent sought to understand why the consultation did not include information about discussions held with the DCC regarding a change request to provide the SRV4.4.3 as a DSP Scheduled read service, potentially in a later release. This consultation makes no mention of this consideration.

Updating DUIS to allow SRV4.4.3 to be included as one of those service requests that can be scheduled has been discussed with users at the SMETS1 TBDG Sub-Group. It was understood from these discussions that given the long lead-times that would be required to deliver this functionality to DUIS, Suppliers would have already accommodated alternative solutions which rendered this requirement redundant.

A respondent was of the view that the S1SR created a requirement that Suppliers would be required to build their systems on the basis that they would have to run SRV4.3 every day at midnight. The respondent sought clarification as to whether their interpretation was correct.

The DCC SMETS1 service is predicated on the services described in the SMETS1 Specification. As the Prepayment Daily read log is not supported by the SMETS1 specification there is consequently no SRV to read it, even though this is supported by SMETS2.

Using an on-demand SRV4.3 will return the required prepayment data. However, the meter instructions from an on-demand SRV's will always be executed by the meter at a variable interval after the SRV is submitted.

Alternatively, the user could set the Billing Calendar to collect the required prepayment information in the Billing Data Log at whatever frequency is required and then send an on-demand service request 4.4.3 to retrieve the data whenever required.

Comment	DCC Response
<p>A respondent noted that the changes to SRV 2.1 update prepayment results in a specific Secure Non Disablement Calendar (NDC) to be defined, alongside additional NDCs for the same non-disablement calendar dates, times and periods. The respondent was of the opinion that this would add further complexity and development overhead.</p>	<p>The comment is noted.</p>
<p>A respondent sought confirmation from DCC that Clause 18.7 (i) stated that update debt SRV 2.3 can only be done to meters in Credit Mode, but in fact the update debt is only supported when the meter is operating in Prepayment mode.</p>	<p>DCC agrees with the comment and the S1SR has been updated as a consequence.</p>
<p>A respondent identified that for Clause 18.2 (a), SRV 1.2.1 should not apply to 18.1(l) and that the current wording is incorrect as follows:</p> <p>Present drafting:</p> <p>The provision of Clauses 18.1 to 18.1(l) apply to this Service Request.</p> <p>Proposed drafting:</p> <p>The provision of Clauses 18.1 to 18.1(k) apply to this Service Request.</p>	<p>DCC agrees with the comment and the S1SR has been updated as a consequence.</p>
<p>A respondent suggested alternate wording to Clause 18.5(l)</p>	<p>DCC agrees with the comment and the S1SR has been updated as a consequence.</p>
<p>A respondent sought assurance from DCC that the proposals in the S1SR consultation will not interact with their tariff structure and that the respondent would be able to continue to be able to use their tariff structure post-implementation of the proposals.</p>	<p>The drafting of Section 18 clauses of S1SR reflects the behaviour of devices as notified to DCC and its Service Providers. Other than any particular constraints posed by devices the DCC solution has been built to provide that functionality provided by the core set of Service Requests (that have been designed to map to the functionality required by the SMETS1 specification).</p>
<p>A respondent sought clarification on the following words contained in the S1SR: "Where the target SMETS1 ESME does not support the setting of a tariff..." as the respondent did not understand why an ESME would not support the setting of a tariff.</p>	<p>Theses clauses are specific behaviours of specific devices in response to specific service requests that reflect the constraints of SMETS1 devices procured by Suppliers. Please refer to DMVES as to which behaviours apply to which device.</p>

**Table 1**

## 4. Summary of Changes to the S1SR

In light of the consultation responses received, DCC is proposing changes to the S1SR as set out in the table below.



Drafting Reference	Description	Rationale for Change
Definitions	Clarification of the GroupID for Secure Devices	DCC accepts the rationale provided by respondents
Clause 17.12	Clarification on Application of Standing Charge	DCC accepts the rationale provided by respondents
Clause 18.1	Clarifying the application of tariff behaviours to price updates	DCC accepts the rationale provided by respondents
Clause 18.5	Clarifications when setting a Non-disconnection Calendar	DCC accepts the rationale provided by respondents
Clause 18.8	Clarifying that responses will be generated for ESME or GSME	DCC accepts the rationale provided by respondents

**Table 2**

## 5. Conclusions

In addition to the responses laid out above, a respondent returned a number of detailed technical comments on the clauses in Section 18 of the S1SR that related to the device specific behaviours and S1SP validation steps that would be undertaken in respect of the Secure meters.

During the consultation period a number of additional device specific behaviours were identified by DCC during its review of SIT outputs. DCC has accordingly reviewed the S1SR and made consequential changes in the form of additional provisions and amendments to the existing S1SR provisions and will accordingly be consulting on the proposed changes. DCC is now confident that all the relevant device specific behaviours that apply to Secure meters that have been identified at this stage have been addressed in the S1SR (although please note that previous experience indicates additional device specific behaviours may be identified that were not detected in SIT).

In light of these changes DCC plans to provide stakeholders with a further opportunity to comment further on the amended and updated drafting. The S1SR and DMVES annexes contain both the changes set out above and the changes that are being proposed to the S1SR.

## 6. Next Steps

DCC will provide an updated version of S1SR for consultation by the 5 June 2020 that contains both the changes identified above (in Section 4 of this document) along with the additional changes that further analysis has revealed. This consultation will be available on the DCC website here: <https://www.smartdcc.co.uk/customer-hub/consultations/open-consultations/>.

## 7. Attachments

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