SEC
Smart Energy Code

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Paper Reference:	**SECP_65_1502_16**
Action:	**For Decision**

November 2019 SEC Release

1. Purpose

Following discussion at recent meetings, the DCC have confirmed the Modification Proposals impacting DCC Systems that they believe can be included in the November 2019 SEC Release (due to go live on 7 November 2019), subject to approval decisions being received in time. This paper summarises the current status of the November 2019 SEC Release and provides the Release Implementation Document in Appendix A for the Panel to baseline. An update on the June 2020 SEC Release is also included.

The Panel are requested to agree the scope of this release on the DCC Systems and to baseline the Release Implementation Document for this scope.

2. Background to this release

At the September 2018 Panel meeting[1] the Panel considered the scope of the November 2019 SEC Release. They noted that the total implementation costs would be significant and believed that implementing the changes proposed at the time in the November 2019 SEC Release, would not be cost-effective. They believed it would be more cost-effective for the changes to be implemented in the June 2020 SEC Release alongside other modifications and determined the November 2019 SEC Release should be a document-only release.

At the December 2018 Panel meeting[2] the DCC stated that any modifications delivered as part of the November 2019 SEC Release would incur no additional release costs beyond those stated up to the end of Pre-Integration Testing (PIT). The DCC would instead absorb the costs of the subsequent testing and release activities, leveraging other activity planned for the same period, such as the Smart Metering Equipment Technical Specifications 1 (SMETS1) Enrolment and Adoption programme happening at around the same time, and there would be no incremental costs to the Charging Statement for 2019/20. If this position were to change, the risk would be raised to the SEC Panel. The Panel agreed to this approach.

At the January 2019 Panel meeting[3] the Panel reviewed the scope of the November 2019 SEC Release, in light of the DCC's view of additional modifications they believed they could be included within this release. Noting this and the DCC's proposed approach to costs for this release, the Panel

[1] Please see Panel paper SECP_60_1409_19 for full details.
[2] Please see the minutes for Panel paper SECP_63_1412_16 for further details.
[3] Please see Panel paper SECP_64_1101_09 for further details.

believed it would now be cost-effective to include DCC System impacting modifications in the November 2019 SEC Release.

The DCC costs provided in the Modification Reports for all candidate modifications are up to the end of PIT. As the costs for subsequent stages are not being incurred under this release, these are the complete costs of implementing these modifications, as long as they are included in this release.

3. Scope of this release

The November 2019 SEC Release currently has six DCC System impacting modifications for which approval could be obtained in time for them to be implemented in November 2019. These modifications are summarised in the table below:

Modification	Status
SECMP0023 'Correct Units of Measure for Uncontrolled Gas Flow Rate'	Approved for implementation on 7 November 2019.
SECMP0025 'Electricity Network Party Access to Load Switching Information'	SECMP0025 will be included in the November 2019 SEC Release if the Authority approves the change by 31 March 2019. The Panel will discuss the Modification Report at its February 2019 meeting, and we recommend then proceeding with a shortened Modification Report Consultation. The Change Board can then provide a recommendation to the Authority in an ad-hoc meeting in late February 2019, allowing enough time for an Authority decision to follow.
SECMP0039 'Communication Hub returns notification mechanism for Other SEC Parties'	The Change Board will vote on SECMP0039 on 20 February 2019 under Self-Governance.
SECMP0053 'Amend Target Response Times for Service Requests Critical to Installation and Commissioning Processes'	SECMP0053 is currently undergoing Preliminary Assessment. We are anticipating the Modification Report to be presented to the Panel at the May 2019 meeting, but this may be brought forward subject to progress with the modification. The DCC has highlighted that bringing the Modification Report later would likely mean this modification could not be included in the release.
SECMP0060 'Amend Requirements to remove 'Pending' devices from SMI'	The Working Group is currently considering the Impact Assessment and Working Group Consultation responses. The Modification Report is targeted to be presented to the Panel in March 2019. If the Panel approves this report at that meeting, the Change Board will vote on SECMP0060 on 24 April 2019 under Self-Governance.
SECMP0062 'Northbound Application Traffic Management – Alert Storm Protection'	SECMP0062 has undergone Preliminary Assessment and the response is being considered by the Working Group. We are anticipating the Modification Report to be presented to the Panel at the May 2019 meeting, but this may be brought forward subject to progress with the modification. The DCC has highlighted that bringing the Modification Report later would likely mean this modification could not be included in the release.

We have prepared the Release Implementation Document for the November 2019 SEC Release on the basis that these six modifications are included, and this is provided in Appendix A. If any modification not yet approved is either rejected or misses the corresponding decision cut-off date, it will be removed from the scope. Please note that any modification that misses the cut-off date and so slips to a later release may need to be sent back as the implementation costs would then be incomplete due to post-PIT costs not being known.

The DCC have highlighted that they do not anticipate delays to the SMETS1 Enrolment and Adoption programme having a corresponding impact on the SEC Release.

We invite the Panel to agree the scope of the release and to baseline this document based on this scope, on the understanding that modifications not yet approved may fall out of scope later on. This baselined document will then be published on the SEC Website. This will provide the DCC with certainty on the maximum scope of the release on their systems.

Further modifications that do not impact on DCC Systems could be added to the scope of this release at a later date. The Release Implementation Document will be updated to include these, and we plan to present this to the Panel in May 2019 to be re-baselined.

4. The June 2020 SEC Release

At the December 2018 Panel meeting[4] the Panel noted that an enduring approach to implementation costs will be agreed following completion of the DCC's cost benchmarking study. The results of this study are expected to be presented to the Panel in March 2019.

As part of the updated modification timetables approved by the Panel in January 2019[5] we highlighted that any modifications that could not be included in the November 2019 SEC Release would not be submitted for DCC Impact Assessment to obtain the full costs until this approach had been agreed. This prevents the need for continual extension requests to be approved or for a second Impact Assessment to be required to update the costs. We anticipated at the time this would mean these Impact Assessments would not be requested until around June 2019; this may change as discussions on the approach evolve.

We are reviewing with the DCC which modifications could be included in the June 2020 SEC Release. The DCC are looking for the scope of this release on the DCC Systems (the modifications that would be included in the release if approval is given in time, although approval may not be received until later) to be confirmed 12 months prior to go-live, in line with the Release Management Policy. However, with final decisions on modifications not currently anticipated before October 2019, this may not leave enough lead time to then implement changes in the June 2020 SEC Release.

We and the DCC are working to identify suitable approaches to facilitate a June 2020 SEC Systems Release taking place. We stress that while we will seek to facilitate timely decisions on any candidate modifications, we will ensure this is not done at the expense of allowing adequate time for industry participants to feed in or for the industry decision-making steps to be completed. Where needed, we would have to postpone modifications to the November 2020 Release to allow for this to happen. Noting the timescales, we flag that there is the potential for the June 2020 SEC Release to be converted to a SEC Documentation Release due to no modifications able to be included. We will provide a further update on this at the March 2019 Panel meeting.

[4] Please see Panel paper SECP_63_1412_16 for further details.
[5] Please see Panel paper SECP_64_1101_09 for full details.

5. Recommendations

The Panel are requested to:

- **AGREE** the modifications that impact the DCC Systems to be included in the scope of the November 2019 SEC Release;
- **BASELINE** the November 2019 SEC Release Implementation Document for these modifications;
- **NOTE** the November 2019 SEC Release Implementation Document will be returned in May 2019 to be re-baselined to include any modifications that do not impact the DCC System; and
- **NOTE** the update on the June 2020 SEC Release.

David Kemp

SECAS Team

8 February 2019

Attachments:

- **Appendix A:** November 2019 SEC Release Implementation Document

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November 2019 SEC Release (7 November 2019)

SEC Release Implementation Document

Version 0.1

About this document

This document is the Smart Energy Code (SEC) Release Implementation Document (RID) for the November 2019 SEC Release, due to be implemented on 7 November 2019. It summarises the scope of the release, the impacts it will have, the timeline and testing strategy, the central costs that will be incurred, and the acceptance criteria for this release.

This document will be updated periodically as the release develops.

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This document also has one annex:

- **Annex A** will contain the Data Communication Company's (DCC's) SEC Release Testing Approach Document (TAD) for this release – this document will be produced by the DCC at a later date.

1. Scope

Approved Modification Proposals

The following Modification Proposal has been approved for inclusion in this release:

- SECMP0023 'Correct Units of Measure for Uncontrolled Gas Flow Rate' will amend the accuracy of the Uncontrolled Gas Flow Rate value from integer to four decimal places.

Targeted Modification Proposals

The following DCC System impacting Modification Proposals will be included in this release if a decision to approve is received by the respective cut-off dates:

- SECMP0025 'Electricity Network Party Access to Load Switching Information' proposes to give Electricity Network Parties (ENPs) access to Auxiliary Load Control Switch (ALCS) and Home Area Network (HAN) Connected Auxiliary Load Control Switch (HCALCS) information from the Smart Metering System. ENPs will also be informed when changes are made to existing load switching regimes.
- SECMP0039 'Communication Hub returns notification mechanism for Other SEC Parties' proposes to allow Registered Supplier Agents (RSAs) to submit the Service Requests triggering a Communication Hub Return in a fault or no-fault situation.
- SECMP0053 'Amend Target Response Times for Service Requests Critical to Installation and Commissioning Processes' proposes to reduce the Target Response Times for Service Requests that need to be processed as part of the installation and commissioning of a smart meter.
- SECMP0060 'Amend Requirements to remove 'Pending' devices from SMI' proposes to extend the time where a Communication Hub can be listed as 'pending' on the Smart Metering Inventory (SMI) before it needs to be removed from 12 months to 36 months.
- SECMP0062 'Northbound Application Traffic Management – Alert Storm Protection' proposes to put in place a traffic management system for Alerts issued by Devices to protect the DCC System and Service Users against alert storms originating from a single device. It is expected that some parts of this modification's solution will not be implemented until the June 2020 Release.

No further modifications that impact on DCC Systems are anticipated to be added.

Further modifications that do not impact on DCC Systems may be added to the scope of this release at a later date.

Interaction with SMETS1 Enrolment and Adoption

The Smart Metering Equipment Technical Specifications 1 (SMETS1) Enrolment and Adoption programme is due to implement two releases (Middle Operating Capability (MOC) and Final Operating Capability (FOC)) in the second half of 2019. The DCC have informed the Panel that the DCC Total System changes for modifications in the November 2019 SEC Release will be developed and implemented using the test environments set up for these releases.

The DCC have also stated that they will absorb the costs for stages after Pre-Integration Testing (PIT) for any modifications included in the November 2019 Release, and so will not be incurred under this release's implementation costs. The DCC have also confirmed there would be no incremental costs to the Charging Statement for 2019/20. If this position changes, this risk will be raised with the SEC Panel.

2. Impacts

This section lists the impacts that the changes included in this release will have on participants and their systems, SEC documents and other industry codes.

SEC Party and DCC impacts

Participant impact matrix					
Modification	**Suppliers**	**Electricity Networks**	**Gas Networks**	**Other SEC Parties**	**DCC**
SECMP0023	✓				✓
SECMP0025	✓	✓			✓
SECMP0039				✓	✓
SECMP0053	✓			✓	✓
SECMP0060	✓				✓
SECMP0062	✓	✓	✓	✓	✓

The impacts on the different participants are summarised below. The business requirements for each Modification Proposal are annexed to the Modification Reports for each modification, which are available on the corresponding modification's webpages.

SEC Party impacts	
Participant	**Summary of impacts**
Supplier Parties	• Suppliers will be able to submit Uncontrolled Gas Flow Rates to an accuracy of four decimal places (ten-thousandths of a cubic metre). • Suppliers will receive a response to Service Requests 6.14.1 'Auxiliary Load Control', 6.14.2 'Auxiliary Load Control' and 7.9 'Add Auxiliary Load to Boost Button' within 30 seconds. • Suppliers will be able to install Communication Hubs that are in a 'pending' state on the SMI within 36 months of their addition to the inventory. • Suppliers must ensure any devices they procure and any firmware updates are compliant with the applicable Technical Specification versions. • Suppliers may be subject to the throttling of Alerts from Devices that exceed defined thresholds and will be notified when this happens.
Electricity Network Parties	• ENPs will be able to receive data from Service Requests 6.13 'Read Event Or Security Log' and 7.7 'Read ALCS data', and a new Alert notifying changes to ALCS or HCALCS. • ENPs may be subject to the throttling of Alerts from Devices that exceed defined thresholds and will be notified when this happens.
Gas Network Parties	• Gas Network Parties may be subject to the throttling of Alerts from Devices that exceed defined thresholds and will be notified when this happens.

SEC Party impacts	
Participant	**Summary of impacts**
Other SEC Parties	• RSAs will be able to submit Service Requests 8.14.3 'Communications Hub Status Update – Fault Return' and 8.14.4 'Communications Hub Status Update – No Fault Return'. • Parties that submit these will receive a response to Service Requests 6.14.1 'Auxiliary Load Control', 6.14.2 'Auxiliary Load Control' and 7.9 'Add Auxiliary Load to Boost Button' within 30 seconds. • Parties may be subject to the throttling of Alerts from Devices that exceed defined thresholds and will be notified when this happens.

DCC impacts	
Area impacted	**Summary of impacts**
DCC Systems	• The systems will be able to receive and store Uncontrolled Gas Flow Rates to an accuracy of four decimal places (ten-thousandths of a cubic metre). • Response to Service Requests 6.14.1 'Auxiliary Load Control', 6.14.2 'Auxiliary Load Control' and 7.9 'Add Auxiliary Load to Boost Button' will be provided within 30 seconds of submission. • Service Requests 6.13 'Read Event Or Security Log' and 7.7 'Read ALCS data' will be submitted to the relevant ENPs, and a new Alert notifying ENPs of changes to ALCS or HCALCS in their networks will be issued. • The system will need to accept Service Requests 8.14.3 'Communications Hub Status Update – Fault Return' and 8.14.4 'Communications Hub Status Update – No Fault Return' submitted by an RSA and perform validation that the RSA is eligible to submit these requests on behalf of the relevant Supplier. • Communication Hubs that are in a 'pending' state on the SMI will not be removed until 36 months after their addition to the inventory. • The DCC will throttle Alerts issued by Devices when the number of a specific Alert exceeds the set thresholds.

SEC document impacts

SEC document impact matrix						
Document	**SECMP 0023**	**SECMP 0025**	**SECMP 0039**	**SECMP 0053[1]**	**SECMP 0060**	**SECMP 0062[1]**
Schedule 8	✓	✓				
Schedule 11	✓	✓				
Appendix E				✓		✓
Appendix AC					✓	

[1] The changes to the SEC for this modification are still undergoing assessment, and so this information may be updated at a later date.

SEC document impact matrix						
Document	**SECMP 0023**	**SECMP 0025**	**SECMP 0039**	**SECMP 0053[1]**	**SECMP 0060**	**SECMP 0062[1]**
Appendix AD	✓	✓	✓			✓
Appendix AF	✓	✓				

The approved changes to each document are annexed to the Modification Reports for each modification, which are available on the corresponding modification's webpages.

Other code impacts

No other codes are impacted as a result of this SEC Release.

3. Implementation timeline

This section lists the timeline for the implementation of this release.

This timeline includes the dates on which decisions on modifications are anticipated, dates for when the System Integration Testing (SIT) and User Integration Testing (UIT) test phases are planned to commence and complete, and key governance steps for the Panel and the Testing Advisory Group (TAG) to complete.

Please note that dates for the submission and approval of the SIT and UIT Completion Reports and the commencement and closure of the UIT window are tentative and may change nearer the time. We have based these dates on the scheduled TAG and Panel meetings, but ad-hoc meetings may be required in order to sign these documents off. It is not yet confirmed by the DCC whether there will be any mandatory UIT testing involved with this release, which will impact dates for UIT. These dates and approaches will be confirmed as the DCC prepares the TAD.

Release implementation timetable		
Date	**Event**	**Notes**
15 Feb 19	Panel baselines RID for system-impacting modifications	The Panel will review the RID for DCC System-impacting modifications (including modifications targeted but not approved) and baseline the document.
20 Feb 19	Change Board determination on SECMP0039	The Change Board will determine whether this modification is approved or rejected under Self-Governance.
By 31 Mar 19	Authority determination on SECMP0025	Latest date where the Authority could approve SECMP0025 for it to be included in this release.
17 Apr 19	DCC submits draft SEC Release TAD	This document will cover the DCC's approach to SIT and UIT.
24 Apr 19	Change Board determination on SECMP0060	Anticipated meeting where the Change Board would determine whether this modification is approved or rejected under Self-Governance. If this date is missed, this modification may not be able to be included in this release.
24 Apr 19	TAG reviews draft SEC Release TAD	
During May 19	DCC consults on draft SEC Release TAD	The DCC will consult the industry on the draft TAD.
10 May 19	Panel baselines RID for non-system-impacting modifications	The Panel will review the RID for non-DCC System-impacting modifications (including modifications targeted but not approved) and re-baseline the document to include these.
19 Jun 19	Change Board determinations on SECMP0053 and SECMP0062	Anticipated meeting where the Change Board would determine whether these modifications are approved or rejected under Self-Governance. This date may be earlier subject to progression of the modifications. If this date is missed, the modifications are unlikely to be able to be included in this release.

Release implementation timetable		
Date	**Event**	**Notes**
19 Jun 19	DCC submits updated SEC Release TAD	The TAD will be updated to account for comments provided by the TAG.
26 Jun 19	TAG reviews updated SEC Release TAD	The TAG will provide a view to the Panel on whether this document is suitable for use.
12 Jul 19	Panel reviews SEC Release TAD	The Panel will review the TAD and incorporate it into the RID.
Late Jul 19	SIT commences	
21 Aug 19	DCC submits SIT Completion Report	
28 Aug 19	TAG reviews SIT Completion Report	The TAG will provide a recommendation to the Panel on whether SIT has been completed successfully.
02 Sep 19	Test Participants inform DCC of their regression testing plans	By 10 Working Days before UIT begins
13 Sep 19	Panel approves SIT Completion Report	
16 Sep 19	UIT commences	
18 Sep 19	DCC submits UIT Completion Report	
25 Sep 19	TAG reviews UIT Completion Report	The TAG will provide a recommendation to the Panel on whether UIT has been completed successfully.
01 Oct 19	Operations Group reviews status against acceptance criteria	Operations Group reviews the status of the release and provides a recommendation on whether it should be implemented as planned.
11 Oct 19	Panel approves UIT Completion Report	
11 Oct 19	Panel go/no-go decision	The Panel will review the status of the release against the acceptance criteria and will determine if the release should be implemented as planned.
24 Oct 19	Test Participants to provide regression testing results to DCC	By 5 Working Days before UIT completion
31 Oct 19	UIT window closes	
07 Nov 19	Release go-live	The changes are implemented.

4. Test strategy

This section covers the testing approach that will be taken by the DCC as part of the implementation of this release.

DCC's testing approach

The DCC's SEC Release Testing Approach Document will be provided as Annex A to this document in due course. This will cover the DCC's approach to SIT.

User testing approach

The DCC's SEC Release Testing Approach Document will be provided as Annex A to this document in due course. This will cover the DCC's approach to UIT.

5. Costs

This section summarises the costs that will be incurred by the DCC and the Smart Energy Code Administrator and Secretariat (SECAS) in implementing this release.

DCC costs

The total DCC implementation costs of this release is currently £1,073,269, with a further £22,298 being incurred in one-off operational costs. Final costs for two modifications in scope are yet to be provided and are not included in these totals.

The costs for SIT, UIT and Implementation to Live will be absorbed by the DCC, and so will not be incurred as part of this release's costs.

The DCC has provided the following cost breakdown for each modification in this release:

Breakdown of DCC implementation costs						
Activity	**SECMP 0023**	**SECMP 0025**	**SECMP 0039**	**SECMP 0053**	**SECMP 0060**	**SECMP 0062**
Design	£414,393	£386,009	£201,650	*TBC*[2]	£71,217	*£573,000-£769,000*[3]
Build						
Pre-integration Testing						
System Integration Testing	-	-	-	-	-	-
User Integration Testing						
Implement to Live						
Operational costs – one-off	-	-	£22,698	*TBC*	-	-
Operational costs – ongoing	-	-	-	*TBC*	-	-

SECAS costs

SECAS will incur two days effort, equating to around £1,200, to update and implement the changes to the SEC. Project management costs for the release are still being determined due to uncertainty around some dates in Section 3, and an estimate will be provided in due course.

[2] SECMP0053 is still undergoing Preliminary Assessment. A cost estimate will be provided following its completion and confirmed in the subsequent Impact Assessment.

[3] These are the estimated costs for SECMP0062 as provided in the Preliminary Impact Assessment. Firm costs will be provided in the Impact Assessment.

6. Acceptance criteria

We recommend to the Panel that the following criteria will need to be met before the release can go live.

The Panel will review the status of the release against these criteria at its meeting one month before go-live, and will determine then if the release should or shouldn't be implemented as planned.

- The DCC has developed the coding for each approved change and confirmed it will be able to deploy this to the live environment on the agreed implementation date.
- The DCC has completed and closed each Test Phase against the agreed exit criteria.
- The DCC has confirmed that there are no Severity 1 or 2 defects outstanding that would be deployed to the live environment.
- The DCC has produced a clear resolution plan for any outstanding Severity 3, 4 or 5 defects and that the number of extant Testing Issues is within the agreed threshold figures.
- The DCC has demonstrated that the SIT and UIT test environments were aligned to the solution being deployed to production; if there were any differences, these were identified and the risks these posed demonstrably managed.
- SECAS will be ready to implement the approved changes to the SEC on the agreed implementation date.

Appendix 1: Version control

Document history		
Version	**Date**	**Changes**
0.1	08 Feb 19	First draft presented to Panel to be baselined

Appendix 2: Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary	
Acronym	**Full term**
ALCS	Auxiliary Load Control Switch
DCC	Data Communication Company
ENP	Electricity Network Party
FOC	Final Operating Capability
HAN	Home Area Network
HCALCS	Home Area Network Connected Auxiliary Load Control Switch
MOC	Middle Operating Capability
PIT	Pre-Integration Testing
RID	Release Implementation Document
RSA	Registered Supplier Agent
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	System Integration Testing
SMETS1	Smart Metering Equipment Technical Specifications 1
SMI	Smart Metering Inventory
TAD	Testing Approach Document
TAG	Testing Advisory Group
UIT	User Integration Testing

SEC
Smart Energy Code

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