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Paper Reference:	**SECP_90_1203_20**
Action:	**For Decision**

SEC Modification Progression

1. Purpose

This paper sets out the Draft Proposals and Modification Proposals that are ready to proceed to the next stage of the framework and our recommendations to the Panel on how each should be taken forward.

2. Recommendations

This table lists our recommendations for each Draft Proposal and Modification Proposal.

Full details of each proposal can be found in the attached draft Modification Reports.

Proposal	Recommendations
DP096 'DNO Power Outage Alerts'	• **AGREE** that DP096 should be converted to a Modification Proposal; • **AGREE** that MP096 should be progressed to the Refinement Process; and • **AGREE** the first package of work and the timetable for this modification.
MP147 'SMKI Full Extract'	• **AGREE** that MP147 should be progressed to the Report Phase; • **APPROVE** the Modification Report; • **APPROVE** the implementation approach; and • **AGREE** that MP147 should be progressed as a Self-Governance Modification.
DP149 'Effecting Changes to the Smart Energy Code efficiently'	• **AGREE** that DP149 should be converted to a Modification Proposal; • **AGREE** that MP149 should be progressed to the Refinement Process; and • **AGREE** the first package of work and the timetable for this modification.

3. Points to note

DP096

A significant amount of work has already been completed in the Development Stage, especially by the Data Communications Company (DCC) to establish the physical limitations of the DCC Systems. Two potential solutions have been proposed but both are very costly and, although these changes will improve Alerts response times, neither will enable the DCC to comply with the obligations currently set out in the Smart Energy Code (SEC).

This is a complex issue with many considerations and the DCC and SECAS believe these solutions now need to be discussed with all SEC Parties to come to an agreeable solution.

Ali Beard

SECAS Team,

5 March 2021

Attachments:

- **Appendix A:** DP096 draft Modification Report
- **Appendix B:** MP147 draft Modification Report
- **Appendix C:** DP149 draft Modification Report

SEC
Smart Energy Code

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Smart Energy Code

DP096
'DNO Power Outage Alerts'

Modification Report

Version 0.7

5 March 2021

Corporate member of Plain English Campaign
Committed to clearer communication
592

About this document

This document is a draft Modification Report. It currently sets out the background, issue, proposed solution and progression timetable for this modification, along with any relevant discussions, views and conclusions. This document will be updated as this modification progresses.

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This document also has two annexes:

- **Annex A** contains the Distribution Network Operator (DNO) requirements for the solution.
- **Annex B** contains the Data Communications Company (DCC) Technical Study Report.

Contact

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1. Summary

This Draft Proposal was raised by Del Kang of the DCC.

DNOs have systems in place to ensure that in the event of a power outage, where possible, power is automatically restored within three minutes. In the case of a power outage lasting more than three minutes, the DCC is obliged under the Smart Energy Code (SEC) to provide Power Outage Alerts (POAs) to Industry, including DNOs, within 60 seconds after the initial three minutes of the outage. Once power has been restored, a Power Restoration Alert (PRA) is sent to the DNO via the DCC Data Service Provider (DSP). This must also be sent within 60 seconds.

POAs and PRAs are key enablers for DNOs to deliver the benefits of the Smart Metering Implementation Programme.

The DCC is currently unable to meet this SEC obligation. A SEC transitional variation was approved by the Department of Business, Energy and Industrial Strategy (BEIS) to compensate for the difference for what is stated in the SEC and the DCC's current capability. This exception expired on 31 October 2018 and BEIS has not offered an extension.

While the DCC fundamental Service Providers (including Communication Service Providers (CSPs) and the DSP) are compliant with the POA and PRA performance requirements specified in their contracts, the DCC does not currently meet the performance specified in the SEC. It is therefore proposing a modification to the SEC to rectify this position.

2. Issue

What are the current arrangements?

Power Outages

Distribution Network power outages are a common occurrence. There are various causes ranging from third party damage and weather-related events to equipment failure. For events affecting high voltage networks, it is normal practice for automation schemes to attempt power restoration to some or all customers affected within three minutes. On the low voltage networks however, there is little, or no, automation and power can only be restored by personnel attending site and carrying out a repair or by manual switching.

Prior to the implementation of the single power cut telephone number (105), DNOs were receiving between 20% and 40% of calls from consumers within five minutes of the start of the power outage event, and between 60% to 67% of calls within ten minutes.

In 2016, BEIS commissioned an external consultancy to conduct an in-depth investigation of the potential impacts and benefits of smart meters for DNOs. This included the increased data that Network Parties would have available from smart meters which would allow them to identify faults in the network earlier, restore electricity supply more quickly when outages occur, and take better informed investment decisions. This work included evidence published by BEIS, the Energy Networks Association (ENA), individual DNOs and Ofgem, as well as international studies. The identified

Network benefits are included in the Smart Meter Implementation Programme Cost Benefits Analysis (CBA)[1], and are summarised below:

- Earlier Fault Notification
- Faster Restoration of Supply
- Reduction in Operational Costs to Fix Faults
- Reduction in Calls to Fault and Emergency Lines

The full potential of Network benefits is underpinned by delivery of automated smart meter POAs and PRAs to DNOs, at the performance requirement specified in the SEC.

What is the issue?

The SEC requirements for POAs and PRAs are specified in SEC Section H3.14(g). The requirement currently states that in the case of a power outage, an Alert must be sent to the DNO within 60 seconds (after an initial period of three minutes has passed to allow for the power to potentially be restored automatically). When the power is restored, a further Alert must also be sent within 60 seconds. The DCC is currently unable to meet the performance requirement for POA and PRA as set out in the SEC.

CSP contracts were developed in parallel with the SEC during the early stages of the Smart Meter Implementation Programme, and the CSP contracts do not include the same POA and PRA definitions and requirements that are specified in SEC. As a result, while the DCC is non-compliant with the SEC, Service Providers are compliant with the POA and PRA performance requirements specified in their contracts.

A SEC transitional variation was previously approved by BEIS to compensate for the difference between the SEC obligation and the DCC's current capability. This exception expired on 31 October 2018.

What is the impact this is having?

This issue has two primary impacts:

- DNOs are not able to deliver the expected benefits and cost efficiencies from smart meter Power Outage Alerts
- Energy Consumers do not receive the expected Network outage benefits from smart meters, including earlier fault notification and restoration.

What is the impact of doing nothing?

Doing nothing will result in:

- DNOs continue to operate current power outage processes and practice but do not receive the anticipated benefits of the Smart Metering Programme. This is particularly important as the Revenue, Incentives, Innovation and Output (RIO II) price control assumes the DNOs can make use of the benefits of having accurate and timely POAs and PRAs.

[1] https://www.gov.uk/government/publications/smart-meter-roll-out-cost-benefit-analysis-2019

- Energy Consumers do not receive the expected Network outage benefits from smart meters.

3. Solution

Proposed Solution

The solution is initially focused on achieving the greatest level of improvement that can be achieved against the current SEC specification without any compromises to the technology or costs.

The DCC has identified a number of technical changes within its systems that would improve the current performance. Two implementation options have been developed:

- Option A represents the minimum change required to achieve a material performance improvement and the rough order of magnitude (ROM) cost of this is £15.2m (up to implementation).
- Option B represents the maximum achievable performance improvement and the ROM cost is £21m (up to implementation).

There would also be an incremental annual operating cost of £0.7m for either option.

A comparison of Option A and Option B enhancements against current POA and PRA performance for each region is shown below:

North Region						
Volume	Power Outage Alert			Power Restoration Performance		
	Current	Option A	Option B	Current	Option A	Option B
50% message delivery	6m 30s	3m 50s	3m 55s	24m 00s	3m 47s	3m 47s
80% message delivery	8m 45s	5m 30s	4m 45s	36m 00s	5m 12s	5m 12s
95% message delivery[2]	15m 00s	10m 00s	10m 00s	45m 00s	8m 00s	8m 00s

Central and South Regions						
Volume	Power Outage Alert			Power Restoration Performance		
	Current	Option A	Option B	Current	Option A	Option B
50% message delivery	9m 15s	6m 30s	5m 30s	2m 40s	2m 40s	1m 50s
80% message delivery	11m 00s	7m 12s	6m 12s	3m 10s	3m 10s	2m 20s
99% message delivery	13m 00s	8m 00s	7m 00s	3m 30s	3m 30s	3m 00s

Notes:

- All timings show estimated performance from time of power interruption, based on CSP modelling.
- POA and PRA performance is shown for an outage impacting 30,000 homes.

[2] The North Region has a maximum 95% Alert message delivery due to message collision and data loss (this is when the system can't handle the volume of data and starts to lose data)

- The Central and South Regions has a scenario where due to power failure there may be a Communications Hub attachment issue, but the likelihood of this happening is estimated at 1%.
- The actual performance enhancement will need to be validated after the changes have been delivered.

The above data is also shown graphically in Appendix 1, including comparison against the current SEC performance specification.

Option A consists of five individual technical changes and Option B augments this with an additional three technical changes:

Technical changes for Options A and B	
Change	**Results of enhancements**
1. Introduction of a microservices in the Central South Region Systems.	This will improve the speed of the Alerts and increase the volume of Alerts. This would also benefit firmware updates for Home Area Network (HAN) Devices
2. Send the restoration Alert from the North Region Communications Hub.	This will improve the timing of the restoration Alert.
3. Introduction of new North Region Alert channels.	This will improve the speed of the Alerts and reduces the number of Alerts lost.
4. Relax the throttle between North Region Systems and the DSP.	This will improve the speed of the Alerts.
5. Implement an additional motorway in the DSP systems.	This will enable the above changes to be delivered by providing additional capacity.

Additional technical changes for Option B	
Change	**Results of enhancements**
6. Reduce the Central South Region Communications Hub reboot time.	This will improve the speed of the Alerts.
7. Reduce the Central South Region Communications Hub dither timing.	This will improve the speed of the Alerts.
8. Modify the North Region Alert processing timings.	This will improve the speed of the Alerts.

DCC recommendation

The DCC recommends Option B to deliver the maximum POA and PRA performance improvement:

- Option B delivers a clear POA performance advantage compared to Option A for the Central & South region
- In the North region, Option B enables POA performance to be optimised for outages impacting up to 30,000 homes, creating a performance advantage over Option A for medium-scale outages as prioritised by DNOs.

While Option B does not fully meet the current SEC requirements, this will enable the maximum potential benefits delivery for DNOs, and therefore the maximum benefit for energy consumers.

It is recognised that different combinations of technical changes could be delivered, which may be reviewed during the Refinement Process. Given the extensive work that has been completed to date to understand current DCC Systems behaviour and performance, the DCC expects that additional technical review during the Refinement Process may be reduced.

4. Assessment of the proposal

Observations on the issue

DCC communication with DNOs

There has been extensive engagement between the DCC and DNOs to understand the DNO impacts and what the DCC Systems are currently capable of regarding POAs and PRAs. This has included investigating undelivered Alerts being experienced by DNOs from outages and the lack of anticipated performance around the resulting POAs and PRAs.

The DNOs understand that the DCC System characteristics mean that their requirements may be difficult to achieve in full and that they may need to compromise in order to reach agreement on the final arrangements for POAs and PRAs. To support this, the DNOs re-assessed their requirements and submitted a revised requirements document via the ENA on 8 October 2019. The document outlined the requirements that the DNOs deem necessary to improve the current situation and can be found in Annex A.

A DNO representative has shared their view on the proposal. They have stated that the reason behind the need for DP096 is a DCC non-compliance with the SEC. Any costs involved will be incurred by Parties, however the DNO commented that this is wrong given it is a non-compliance issue. Whilst they understand that the Service Provider contracts do not align with the SEC, the DCC contract should comply as it should be compliant with the SEC.

They also commented that due to the extensive time the DCC and DNOs have been working together, any potential thoughts from SEC Parties regarding alternative solutions are most likely to have been discussed and investigated. These can be addressed as part of the Refinement Process.

The DNOs' requirements stem from the basing of their price control and smart metering benefits assessments on the expectations of the performance that was set out in the SEC. Whilst DNOs have since agreed to relax the 60-second delivery to 120-seconds through this SEC Modification, the requirements under DP096 stem from the link to the DNOs' price control.

The DNO representative also highlighted that the improvement in the CSP North's PRA performance noted in the DCC Technical Study Report, which was produced as part of the DCC's Technical Study, is due to the DCC utilising the Communications Hub PRA as opposed to the Electricity Smart Metering Equipment (ESME) PRA. This will have implications as Users' systems will need to be changed to accommodate this.

Furthermore, the DNO representative commented that the DCC Technical Study Report contains more than 20 system enhancement options across the three Service Providers. DNOs requested the DCC to recommend the optimum selection that represents the best value for money. Once the DCC provided its recommendation, the DNOs agreed that DP096 could progress. DNOs have not yet stated whether they agree or support either proposed solution option, as this will be decided upon by the Working Group.

DCC investigations into the issue

The DCC has carried out three key areas of investigation to better understand current POA and PRA performance, underlying issues and improvement potential:

- Comprehensive Technical Study to identify options to improve POA and PRA performance
- Development of technical capability to measure POA and PRA performance
- Testing of POA and PRA performance with different meter and Communications Hub combinations to replicate and diagnose issues identified by DNOs

The Technical Study Report has confirmed that, while significant improvements can be delivered, it is not possible to fully achieve current SEC performance for POA or PRA due to fundamental limitations of the SMETS2 hardware and network design in both the North and South & Central CSP regions.

The testing work, undertaken as part of the Technical Study, has identified defects with existing smart meter Devices which must also be resolved to achieve maximum potential POA and PRA performance.

The DCC has developed two options (Option A and Option B) to improve POA and PRA performance, up to the maximum achievable performance within the design constraints of the current system. The improvement options and the related design constraints have been shared and discussed with the DNOs as part of the Development Stage.

It should also be noted that, while performance improvement for the current SMETS2 network is constrained, the DCC Network Evolution Programme (NEP) includes design requirements to meet the full existing SEC specification for POA and PRA for new NEP Devices. The NEP looks to introduce 4G Communications Hubs within the next three years.

The DCC's full Technical Study Report can be found in Annex B.

Views of the TABASC

The DCC and the Smart Energy Code Administrator and Secretariat (SECAS) presented DP096 during the Development Stage to the Technical Architecture and Business Architecture Sub-Committee (TABASC) to seek views on the proposed solution Options put forward by the DCC.

The TABASC Chair stated that it would be beneficial to understand the scale of the issue the modification proposes to address. DNOs commented that until recently, this has been hard to clarify due to capabilities to measure performance at a large scale being limited. A key goal of the DCC's project has been to implement sufficient measurement capability, which has been met. This will be discussed further during the Refinement Process when carrying out a CBA.

An ENA representative stated that a clear benefit in the modification must be DNOs getting earlier visibility of outage events than is currently experienced. This is particularly important for outages that occur on low voltage networks. This is to prevent smaller outages not being identified if a large-scale outage occurs in the surrounding area at the same time.

The DCC offered further information on the root causes of the issue. For CSP Central & South, the Communications Hub design does not have sufficient battery and super capacitor performance to keep the Communications Hub in an operational state for three minutes in the event of an outage. Another cause identified is the time taken to reconnect to the network. For the CSP North, the Communications Hub battery and super capacitor perform in a way that enables them to remain

operational in the case of an outage. The Communications Hub can remain operational for approximately ten minutes. The constraint in the North is that the network has a narrow bandwidth. In an outage event, the common radio channel used by Communications Hubs can become saturated. To compensate, the CSP North allocates time windows for Alert delivery which ultimately draws out time of delivery (for both POAs and PRAs).

A TABASC Member sympathised with the DCC as the requirement in the SEC is extremely difficult to deliver. They suggested that the SEC requirement is altered depending on the size of the outage. This is due to varying levels of performance depending on how many premises are impacted by the outage (due to the networks having a limit of how many Alerts they can facilitate at one time). This was supported by members.

The NEP was discussed as a potential solution. Members agreed that the NEP must consider the DNO requirements. This is to ensure that enhancements have been consulted upon and agreed as there may be an impact on DP096 as a result. This will be raised at network design discussions.

The TABASC discussed the proposed solution options that the DCC had put forward. The DCC agreed that it would investigate implementing option A in the CSP North region and option B in the CSP Central & South region during the Refinement Process. It noted that the performance enhancements between the two options is relatively small in comparison to the associated cost.

An alternative solution was put forward by a TABASC member whereby the relevant CSP would send a summarised Alert to the DNO. The DNOs commented that this would be extremely complicated to obtain the necessary information, such as scale of the outage. This approach was deemed likely to be unfeasible due to the possibility of not being alerted to outages affecting vulnerable customers.

The TABASC Chair highlighted that there may be occasions where DNOs receive PRAs before the relevant POAs. The DCC confirmed that under certain circumstances, this is the case.

The TABASC agreed that DP096 is ready to proceed to the Refinement Process. Once in the Refinement Process, the Proposer, the TABASC and SECAS will work together to help further refine the solution options following consideration by the Working Group, to provide a cost-effective solution that will enhance current POA/PRA performance as per the DNO requirements.

CSC discussions

Due to the high costs associated with the DCC's proposed solution options, the Change Sub-Committee (CSC) asked who would be liable to pay for the changes if the modification is approved. The DCC has stated that the SEC's POA requirements were not included in the baseline versions of the Service Provider contracts. SEC non-compliance therefore reflects a gap in the original scope and cost for the Smart Metering Implementation Programme (SMIP) delivery and is not a performance failure. The incremental change cost to improve performance is therefore a part of the fundamental build cost for the SMIP and, DCC believe, should be borne by DCC customers. The DCC believes that these costs should be shared by all industry participants as per the rest of the SMIP costs.

The CSC also asked why the SEC requirements weren't included in the Service Provider contracts. The DCC responded stating that the original Service Provider contracts were developed in parallel with the SEC and that the POA requirements codified in the SEC were not reflected in the final Service Provider contracts when they were awarded. With operational experience from the smart meter roll-out, the industry now has a better understanding of operational needs and limitations and the wider operation of the shared smart metering infrastructure. This has enabled a better-informed discussion of DNO performance and quality requirements for Alerts, which are considered under this proposal.

The CSC also queried why this is a SEC modification. The DCC responded that the SEC Modification Process provides the best route for engagement and transparency with the industry on the scope, nature and costs of the proposed changes. Furthermore, the SEC Modification Process enables the DCC to deliver, test and implement the change in the most efficient way. The DCC has also stated that, if approved and the proposed changes are implemented, SEC Parties will need to agree a change to the SEC to align with the newly achieved DCC performance; it is extremely difficult to achieve the requirements currently set out in the SEC without major changes throughout the smart metering infrastructure.

CSC recommendations

SECAS presented the Draft Proposal to the CSC in order to gain members' recommendations for progression. A DNO representative reiterated that POA and PRA performance is a key factor in their cost benefit realisation. This is currently based on the SEC requirement of the Alert being sent to the User within 60 seconds of the Alert being communicated to or generated by the Communications Hub. They confirmed that they understand and accept that the SEC obligations in their current form are extremely difficult to meet; however DNOs seek the best performance possible as the longer Alert delivery times erode the benefits sought.

The CSC advised that the benefits of any proposed solution must be clearly articulated. This is due to the likely high costs involved that the Consumer will ultimately pay.

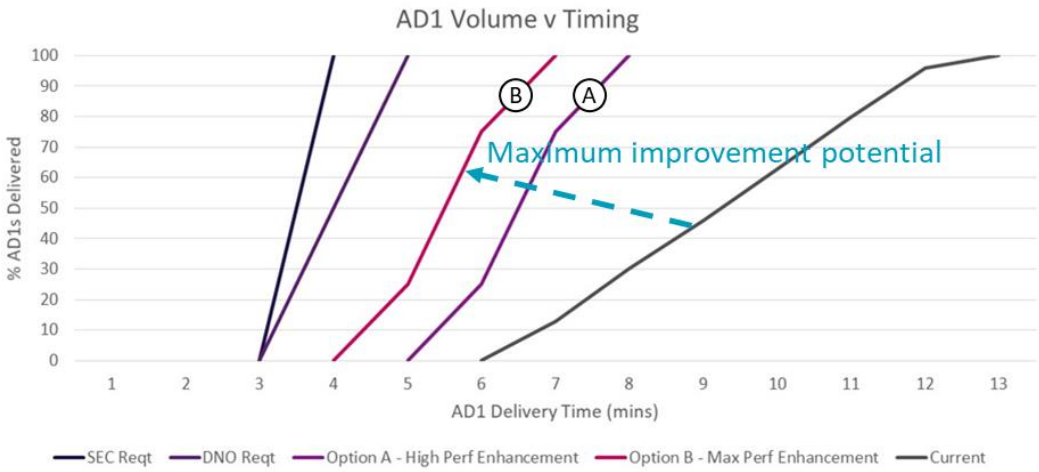
The CSC recommended that DP096 will likely require standalone Working Group meetings to discuss in detail the solution options. A member also advised that business requirements will need to undergo close scrutiny to ensure they address the issue and current technical architecture is considered such as technical limitations of how many Communications Hubs can re-join a network at once.

The CSC agreed that DP096 is ready to be converted into a Modification Proposal and should progress to the Refinement Process.

Appendix 1: Performance graphs

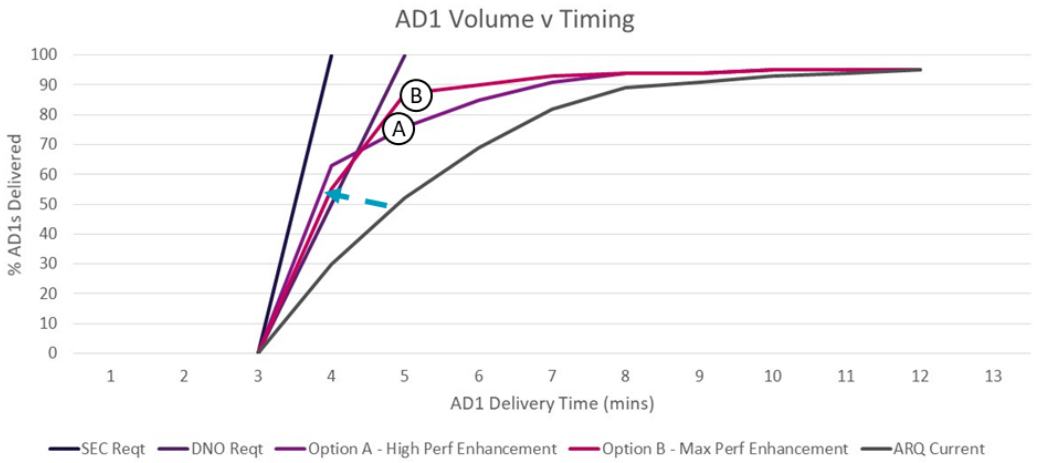
The below graphs show the comparison between SEC specification and enhancements.

South/Central Region POA performance:



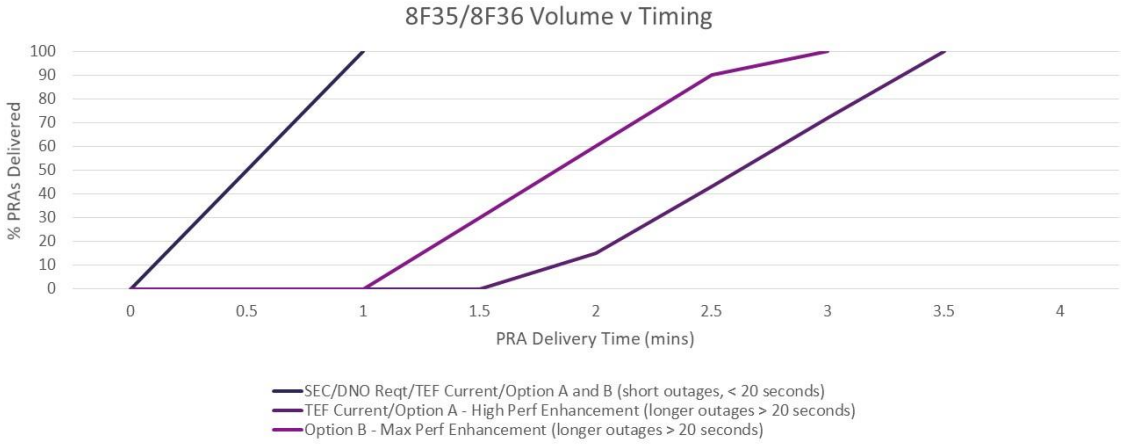
This graph shows the performance of the two solution options in relation to the percentage of AD1s delivered in a reduced amount of time compared with current performance, and the requirements of the DNOs and what is stated in the SEC for CSP S&C.

North Region POA performance:



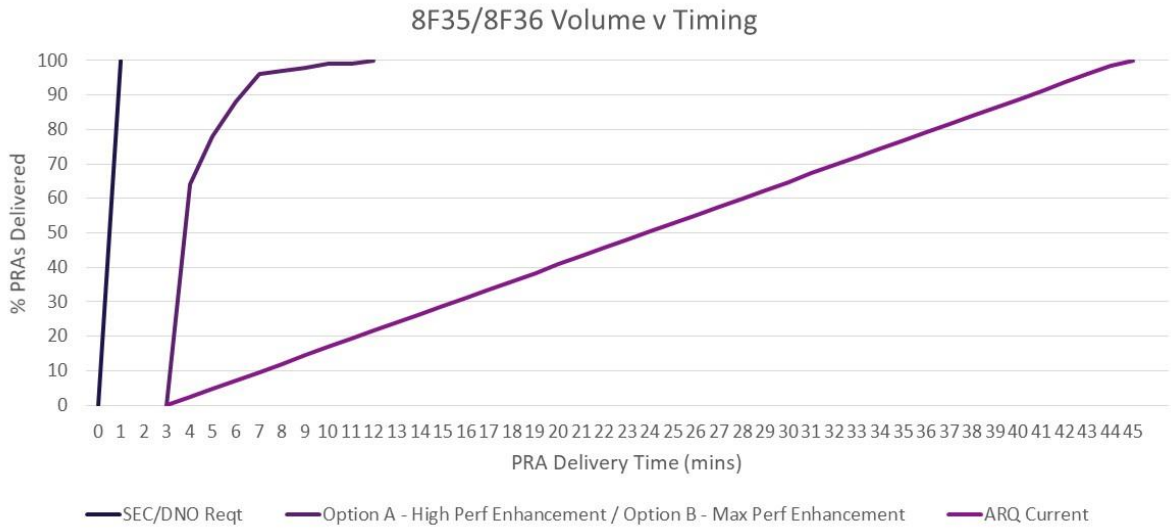
This graph shows the performance of the two solution options in relation to the percentage of AD1s delivered in a reduced amount of time compared with current performance, and the requirements of the DNOs and what is stated in the SEC for CSP N.

Central/South region PRA Performance for outages up to 30,000 premises



This graph shows the performance of the two solution options in relation to the percentage of PRAs delivered in a reduced amount of time compared with current performance, and the requirements of the DNOs and what is stated in the SEC for CSP S&C.

North Region PRA Performance for outages up to 30,000 premises



This graph shows the performance of the two solution options in relation to the percentage of PRAs delivered in a reduced amount of time compared with current performance, and the requirements of the DNOs and what is stated in the SEC for CSP N.

Appendix 2: Progression timetable

Following the DCC's completion of the measurement of CSP Alert performance and briefing DNOs of findings and potential performance enhancements, SECAS will present this modification to the SEC Panel recommending that it progresses to the Refinement Process. SECAS will then work with the Proposer to present the business requirements and proposed solution options to the Working Group.

Timetable	
Action	**Date**
Draft Proposal raised	14 Nov 2019
Presented to CSC for initial comment	26 Nov 2019
Presented to CSC for further comment – placed on hold pending outcomes of DCC performance measurement project	2 Jan 2020
DCC performance measurement project	Feb – Nov 2020
DCC presented performance enhancement options to DNOs	Dec 2020
Presented to CSC for further comment	5 Jan 2021
Proposed solution options discussed with TABASC	4 Feb 2021
Presented to CSC for final comment and recommendations	23 Feb 2021
Panel converts Draft Proposal to Modification Proposal	12 Mar 2021
Modification discussed with Working Group	7 Apr 2021
Modification discussed with TABASC	6 May 2021
Modification discussed with Working Group	2 Jun 2021
Update Panel	18 Jun 2021

Appendix 3: Glossary

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

Glossary	
Acronym	**Full term**
BEIS	Department for Business, Energy and Industrial Strategy
CBA	Cost – Benefit Analysis
CSC	Change Sub-Committee
CSP	Communication Service Provider
DCC	Data Communications Company
DNO	Distribution Network Operator
DSP	Data Service Provider
ENA	Energy Networks Association
ESME	Electricity Smart Metering Equipment
HAN	Home Area Network
NEP	Network Evolution Programme

Glossary	
Acronym	**Full term**
POA	Power Outage Alert
PRA	Power Restoration Alert
RIO II	Revenue, Incentives, Innovation and Output
ROM	rough order of magnitude
SEC	Smart Energy Code
SECAS	Smart Energy Code administrator and Secretariat
SMIP	Smart Metering Implementation Programme
TABASC	Technical Architecture and Business Architecture Sub-Committee

Alerts	
Alert Code	**Description**
8F35	Supply Outage Restored Alert
8F36	Supply Outage Restored (Outage >= three minutes) Alert
AD1	Power Outage Event Alert

Power Outage and Power Restoration Alerts
DNO Requirements

ENA Smart Metering Steering Group
07 October 2019

Introduction

This document has been produced to inform the discussions that will take place at the upcoming the SEC Working Group that will consider DCC's proposals for the delivery of Power Outage Alerts (POA) and Power Restoration Alerts (PRA). The text below summarises the DNO POA and PRA requirements, as they were at the outset of the Smart Metering Programme. The text does not provide a description of the service that the DNOs think they will receive due to the current limitations of the DCC/CSPs system.

DNOs believe that it is for the SEC Working Group, in partnership with DCC, to define the details that will enable an alternative solution to be found. Only DCC and their service providers can put forward the information needed for the Working Group to be able to conclude which solution is technically feasible and cost effective to put forward for a SEC Change. We expect that the Working Group will look for explicit clarity from DCC on the current achievable levels of performance. The group will also need a clear understanding of the costs/impact to raise these performance levels closer to meeting the DNO requirements as far as reasonably practicable.

DNOs understand that the DSP/CSP system characteristics mean that their requirements might be difficult to achieve and that they will have to compromise in order to reach agreement on the final arrangements for POA and PRA. . However, it is important that any CSP/DSP constraints are transparent and well-justified, and that decisions to reject suggested improvements are supported with sound cost/benefit evidence.

Although the DNOs are prepared for a compromise they expect that any proposed alternative solution put forward by DCC is clearly set out with a full description of the POA/PRA alert service levels that DNOs will experience. The compromise solution will still need to deliver meaningful outputs that the DNOs can work with to deliver service improvements to their network customers.

For example, the CSP may be able to add an element of 'location awareness' into their processing (derived from identifying the receiving base station or cellular tower location) and therefore could protect themselves from very large outages affecting one area whilst not impacting traffic from other areas. Such location awareness wouldn't need to rely on the DNO's own network topology, simply on an understanding of which receiving CSP location the alerts are picked up at. If this could be achieved it should guarantee near 100% delivery of small and isolated faults whilst also giving the DNOs sufficient notice of larger network event without needing to send every single alert for large events.

DNO Requirements for Power Outage Alerts

The following bullet points are taken from v1.9 of the DCC Power Alerts Project Briefing Paper.

1. DNOs require a Power Outage Alert for all outages of power to the meter which are longer than 3 minutes to be sent to the DNO. [See note below]

2. The DNOs require the Power Outage Alert to be delivered promptly, arriving at the DNO systems within 5 minutes of the start of the power outage (i.e. 2 minutes after the start of the Power Outage Event, which starts 3 minute after the start of the power outage)

    a. Rationale: Prior to the implementation of the Single Power Cut Number (150) DNOs were receiving between 20% and 40% of calls within 5 minutes, and between 60% and 67% of calls within 10 minutes.

    b. For clarity, any interruptions of less than 3 minutes in duration are not a reportable outage. The three minutes have been agreed with Ofgem and allows for DNO auto-reclose devices to operate and restore supplies on circuits that have automation. Once the outage data is proven reliable it is possible it will one day be used to report network reliability performance to Ofgem. It is therefore important to maintain the clear distinction between interruptions that are less than three minutes duration and those that are greater than three minutes duration.

3. The DNOs require the Power Outage Alert to be reliable and dependable

    a. Rationale: Delivery of 99.5% of Power Outage Alerts from 250,000 power outage events in a year would result in 1,250 instances where customers would be off supply without the DNO being made aware by the Smart Metering system. Although proportionally these are few in number it's likely that on occasions it would include vulnerable customers. This might cause issues for the DNO particularly if consumers start to assume that the DNO will always know when the power has been lost to a premise.

4. The DNOs require the Power Outage Alert to be trustworthy.

    a. Rationale: A 0.1% annual False Positive rate from 10,000,000 meters would result in 10,000 notifications to DNOs where the DNO would need to invest in validating the event. DNOs accept that there are situations where a false POA will be sent which is outside the DCC's control and are working with the relevant industry party to address these types of issues. We note that the impact of False Positives can be much more significant given the large volumes currently being experienced. One DNO is collaborating on a piece of analysis work on OTA AD1s with one supplier who is advising when they are conducting OTAs. We are hopeful that this is offer some possible workarounds to minimise the issues for the DNOs.

5. The DNOs require the format, reliability and behaviour of Power Outage Alert to be consistent between all Meter types and Comms Hub types and CSP regions.

6. The DNOs do not require the throughput of Power Outage Alerts relating to the same Power Outage Event to be very high as in situations where a large number of Power Outage Alerts are being simultaneously sent to any one DNO, it would be more than likely due to a situation where the DNO would already be aware of the outage via other monitoring equipment [see note below]

DNO Requirements for Power Restoration Alerts

1. DNOs require Power Restoration Alerts for all outages of power to the meter (i.e. those lasting less than 3 minutes and those lasting more than 3 minutes) to be sent to the DNO.

    a. Rationale: Reliable delivery of Power Restoration Alerts eliminates the need for DNOs to send a Service Request to check the energisation Status (ping) meters.

2. The DNOs require the Power Restoration Alert to be delivered promptly, arriving at the DNO systems within 1 minute following the restoration of the power supply to the meter.

    a. Rationale: Prompt delivery of Power Restoration Alerts eliminates the need for DNOs to send a Service Request to check the energisation Status (ping) meters.

3. The DNOs require the format, reliability and behaviour of Power Outage Alert to be consistent between all Meter type and Comms Hub types and CSP regions.

Note: Historical Position

The issue of POAs alerts was discussed between ENA and DECC in 2013. DECC's view was POAs required by DNOs for any given fault was:

- 100% alerts delivered for 50 meter outages
- 25% alerts delivered for 50-5000 meter outages
- 1 message delivered for >5000 meter outages
- Delivered within 60s of the end of the three minute period

DNOs generally agreed with this with the exception that the initial cut-off should be 250 meters rather than 50. This view emerged from the Power Outage workshop.

However, in discussion with DCC it became apparent that to deliver this functionality on a *per outage* basis DCC would need to hold a live DNO connectivity model so that they could differentiate between different network faults – and that this was unrealistic (and probably undesirable). From this, the concept that 'all' POAs would be required so that the DNO could assess the POAs against their connectivity models.

ENA Smart Metering Steering Group
07 October 2019

SEC
Smart Energy Code

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Smart Energy Code

MP147
'SMKI Full Extract'

Modification Report

Version 0.5

5 March 2021

Corporate member of Plain English Campaign
Committed to clearer communication
592

About this document

This document is a Modification Report. It sets out the background, issue, solution, impacts, costs, implementation approach and progression timetable for this modification, along with any relevant discussions, views and conclusions.

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This document also has two annexes:

- **Annex A** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex B** contains the responses received to the Refinement Consultation.

Contact

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1. Summary

This proposal was raised by Chun Chen on behalf of the Data Communications Company (DCC).

The full Smart Meter Key Infrastructure (SMKI) extract, which is run daily, is currently 16GB in size, and will only grow as Devices are added to the DCC ecosystem. Each day, the DCC provides a full SMKI extract. The full extract is now taking several hours for Parties to download, and more than 24 hours for the DCC to produce.

The Proposed Solution seeks to amend the obligation of file production from a daily to weekly basis with daily incremental updates.

This modification has an impact on the DCC. There are no costs to SEC Parties as a result of this change. This is a Self-Governance Modification and is targeted for implementation in the June 2021 SEC Release.

2. Issue

What are the current arrangements?

Currently the DCC provides a full SMKI extract as required by SEC Appendix O 'SMKI Repository Interface Design Specification', Section 2.3.3. This can be used by SEC Parties to reconcile their data and acts as a backup in the event that there is a problem with the SMKI Repository.

The full SMKI extract is a large file that is produced daily. In addition to the large SMKI extract file, there are daily incremental reports that inform SEC Parties on where Device certificates from the SMKI Repository Web Service interface belong. Generally, although the full SMKI extract is produced daily, this is only required for when a Party first commences the process, or in scenarios of disaster recovery. The daily incremental reports, which take a few minutes (per hundred thousand Devices) to download, enables the User to maintain a daily synchronised copy of the Certificates in the SMKI Repository.

What is the issue?

The full SMKI extract, which is run daily, is currently 16GB in size, and will only grow as Devices are added to the DCC ecosystem. This full extract is now taking several hours for Parties to download, and more than 24 hours for the DCC to produce.

What is the impact this is having?

The impact of not amending the frequency of the production of the report is the risk of the DCC not being able to meet its obligations in the current timescales to produce full extract for download and the time taken for Parties to download it.

Impact on consumers

There is no impact on consumers from this issue.

3. Solution

Proposed Solution

The Proposed Solution seeks to amend the reference in 'SEC Appendix O 'SMKI Repository Interface Design Specification' Section 2.3.3. so that the DCC is no longer obliged to produce the full SMKI extract daily. Instead, the obligation will be for the DCC to produce the extract on a weekly basis. This will be simpler for the DCC processes, reducing the time taken and effort required to produce the full SMKI extract.

In instances of failure, Parties will still be able to download the full SMKI extract file, for recovery. Once recovery is completed, Parties will be able to download the subsequent daily incremental reports to bring themselves fully up to date.

If not implemented the current arrangements may become untenable and create difficulty in the DCC's obligation to produce the full SMKI extract. It already takes more than 24 hours to produce and the file will become larger and require a longer time to produce as the number of Devices increases.

4. Impacts

This section summarises the impacts that would arise from the implementation of this modification.

SEC Parties

SEC Party Categories impacted			
	Large Suppliers		Small Suppliers
	Electricity Network Operators		Gas Network Operators
	Other SEC Parties	✓	DCC

Other than the DCC, no SEC Parties are expected to be impacted by this change,

The one Refinement Consultation respondent (a Network Party) noted that there may be an impact to their organisation's systems.

DCC System

There is no impact on the DCC Systems.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Appendix O 'SMKI Repository Interface Design Specification'

The changes to the SEC required to deliver the proposed solution can be found in Annex A.

Consumers

There is no impact on consumers from this modification.

Other industry Codes

There is no impact on other industry Codes from this modification.

Greenhouse gas emissions

There is no impact on greenhouse gas emissions from this modification.

5. Costs

DCC costs

There are no DCC costs to implement this change.

SECAS costs

The estimated Smart Energy Code Administrator and Secretariat (SECAS) implementation costs to implement this modification is one day of effort, amounting to approximately £600. The activities needed to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.

SEC Party costs

There are no anticipated costs to SEC Parties. The sole Refinement Consultation respondent noted there may be a cost to their business due to system changes required.

6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **24 June 2021** (June 2021 SEC Release) if a decision to approve is received on or before 10 June 2021; or
- **4 November 2021** (November 2021 SEC Release) if a decision to approve is received after 10 June 2021 but on or before 21 October 2021.

This is a document only change and it has no impact on DCC Systems; it is simply amending the obligation on the DCC to provide the full SMKI extract from a daily to weekly basis. The Refinement Consultation respondent agreed with the implementation approach.

7. Assessment of the proposal

Observations on the issue

SECAS informed the Change Sub-Committee (CSC) that it had reached out to Parties for information on impacts and importance of the full SMKI extract for their business. No Parties specifically came forward to outline the impacts on their business. CSC members advised if there is an impact or consequence on SEC Parties, this can be address further in the Refinement Process.

The Security Sub-Committee (SSC) members also agreed that the issue was clear. An SSC member queried, if no SEC Parties use the full SMKI extract, whether the production and download process remains necessary.

Solution development

The Technical Architecture and Business Architecture Sub-Committee (TABASC) Chair advised during a SMKI Policy Management Authority (PMA) meeting[1] that the full SMKI extract is necessary for recovery of data in instances of catastrophic failure. This justified the need for the full SMKI extract to be produced regularly, however it was agreed that a weekly extract with seven daily incremental updates would be acceptable.

A Working Group member recommended the full SMKI extract should be broken down by Party for the purpose of improving the efficiency of the process. The DCC responded advising this has been previously discussed as each Party is only interested in Devices that relate to them. However, this requires more work and possibly System changes and would require a separate modification.

[1] SECPMA_75_1711

Support for Change

The SMKI PMA advised SECAS that the full SMKI extract cannot be removed altogether as it is needed for recovery purposes, but it can be changed from daily to weekly with seven daily incremental updates.

The Working Group supported the solution.

The Refinement Consultation received one response from a Network Party. The respondent agreed with the Proposed Solution on the basis of the availability of the daily SMKI download, noting their business will be able to remain up to date. They added that their business would only use the full SMKI extract in disaster recovery scenarios, where partial or full data loss occurred.

Views against the General SEC Objectives

Proposer's views

The Proposer believes this modification will better facilitate SEC Objective (b)[2] as it will reduce the amount of time spent producing the full SMKI extract.

Industry views

The Refinement Consultation respondent agreed with the Proposer that this Modification better facilitates SEC Objective (b) as it further enables the DCC to comply with their license.

Views against the consumer areas

Improved safety and reliability

This modification has a positive impact on improved reliability of consumer information. By reducing the time taken for the DCC to produce the full SMKI extract, and for Parties to download the extract, this will improve the reliability of SEC Parties managing their Smart Metering Systems.

Lower bills than would otherwise be the case

This modification will have no effect on consumers' bills.

Reduced environmental damage

This modification will have no effect on environmental damage.

[2] Enable the Data Communications Company to comply at all times with the General Objectives of the Data Communications Company (as defined in the Data Communications Company Licence), and to efficiently discharge the other obligations imposed upon it by the Data Communications Company Licence.

Improved quality of service

This modification will improve quality of service by reducing the file size of the full SMKI extract to reduce time and effort for the DCC to produce it and reduce time for DCC Users to download it.

Benefits for society as a whole

This modification will ensure there is an appropriate back up for the SMKI Repository but is not overly burdensome for the DCC and for DCC Users downloading the information.

Appendix 1: Progression timetable

This Modification Report will now be presented to Panel for approval to progress to the Report Phase. Following the Modification Report Consultation, it will then be presented to Change Board for vote under Self-Governance.

Timetable	
Event/Action	**Date**
Draft Proposal raised	23 Oct 2020
Presented to CSC for comment and recommendation	27 Oct 2020
Modification discussed with SSC	27 Oct 2020
Panel converts Draft Proposal to Modification Proposal	13 Nov 2020
Solution development with the Proposer	w/c 16 Nov 2020
Modification discussed with SMKI PMA	17 Nov 2020
Modification discussed with Working Group	6 Jan 2021
Refinement Consultation	25 Jan – 12 Feb 2021
Modification Report approved by Panel	12 Mar 2021
Modification Report Consultation	15 Mar 2021 – 2 Apr 2021
Change Board Vote	14 Apr 2021

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**
CSC	Change Sub-Committee
DCC	Data Communications Company
SEC	Smart Energy Code

Glossary	
Acronym	**Full term**
SECAS	Smart Energy Code Administrator and Secretariat
SMKI	Smart Meter Key Infrastructure
SMKI PMA	SMKI Policy Management Authority
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee

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MP147 'SMKI Full Extract'

Annex A

Legal text – version 0.1

About this document

This document contains the redlined changes to the SEC that would be required to deliver this Modification Proposal.

Appendix O 'SMKI Repository Interface Design Specification'

These changes have been redlined against Appendix O version 2.0

Amend Section 2.3.3 as follows:

2.3.3 Retrieval of SMKI Repository content

The DCC shall ensure that the SMKI Repository SFTP interface enables DCC Gateway Connection users' systems to download the following files that are lodged in the SMKI Repository, where they have successfully established a connection to the SFTP Interface:

a) a file in .gz format and having a name of form *SMKIKR_FULL_YYYY-MM-DD.xml.gz*, updated ~~daily~~ weekly by the time set out in the SMKI Repository User Guide, containing:

   i. an XML file which complies with the SMKI Repository Web Service interface schema as set out in Annex B of this document, having a name of the form SMKIKR_FULL_YYYY-MM-DD.xml and which contains Certificates, comprising OCA Certificates, DCA Certificates, Organisation Certificates, Device Certificates and with a status of 'In-Use'.

b) seven files in .gz format and having names of the form *SMKIKR_DELT_YYYY-MM-DD.xml.gz*, updated daily, each of which contains:

   i. an XML file which complies with the SMKI Repository Web Service interface schema as set out in Annex B of this document, having a name of the form SMKIKR_DELT_YYYY-MM-DD.xml and which contains Certificates comprising OCA Certificates, DCA Certificates, Organisation Certificates, and Device Certificates Issued and lodged in the SMKI Repository during the preceding twenty four hours or whose Certificate status has change. This will enable the user to maintain a daily synchronised copy of the Certificates in the SMKI Repository. Each of the daily files will be available for 7 days from publication and shall then be removed by the DCC from the SMKI Repository.

c) a file with extension 'gz' that is the latest Organisation ARL;

d) a file with extension 'gz' that is the latest Organisation CRL;

e) a file in .gz format, updated as necessary, containing the base set of Organisation Certificates and OCA Certificates required to populate Device anchor slots prior to installation for the North Region; and

f) a file in .gz format, updated as necessary, containing the base set of Organisation Certificates and OCA Certificates required to populate Device anchor slots prior to installation for the Central Region and South Region.

The DCC shall ensure that SFTP files holding Certificates will be made available in .gz format, with all versions of .gz being supported. Each .gz file will contain a single XML file which complies with the XML schema as set out in Annex B, containing individual Certificates, represented as Base64 encoded strings.

The DCC shall ensure that the Organisation Certificates and OCA Certificates contained within the two Device anchor slot Certificate files shall be the same, other than the Organisation Certificates required to populate the WAN provider Device anchor slot.

The DCC shall lodge a document in the SMKI Repository, which sets out details of which of the base set of Organisation Certificates and OCA Certificates may be placed in specific Device anchor slots.

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MP147 'SMKI Full Extract'

Annex B

Refinement Consultation responses

About this document

This document contains the full collated responses received to the MP147 Refinement Consultation.

Question 1: Does your organisation use the full SMKI extract and how frequently?

Question 1			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	As we would only use the 'SMKI Full' in disaster recovery scenarios whereby we have partial or full data loss, this is not something we use in any regular frequency.

Question 2: Do you agree with the solution put forward?

Question 2			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	Due to the availability of the daily SMKI Delta, we will be able to ensure we can remain up to date by using these alongside a SMKI Full load if this modification is approved.

Question 3: Will there be any impact on your organisation to implement MP147?

Question 3			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	As our systems use the most recent SMKI file date regardless of the Full or Delta file used. We would need to implement system changes for our adapter to retrieve delta files after the Full or there would be gaps within the data after the generation of the Full file.

Question 4: Will your organisation incur any costs in implementing MP147?

Question 4			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Potential	Noting the impacts highlighted in question 3, due to the DCC only changes required within this Modification, this has resulted in a short implementation timeframe. Due to IT changes required, this may not leave enough time for SSEN to implement required changes if the 24th June 2021 date is met.

Question 5: Do you believe that MP147 would better facilitate the General SEC Objectives?

Question 5			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	SSEN agree that this will support SEC Objective (b) - Enable the Data Communications Company to comply at all times with the General Objectives of the Data Communications Company as described in this consultation.

Question 6: Noting the costs and benefits of this modification, do you believe MP147 should be approved?

Question 6			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	As documented in the consultation, there will be no costs to SEC Parties. We further note and assume that the £600 one day of effort cost to update the SEC and releasing the new version to the industry will be absorbed by the DCC or SECAS.

Question 7: How long from the point of approval would your organisation need to implement MP147?

Question 7			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Unknown	At this point, we are unsure at this point how long implementation would take.

Question 8: Do you agree with the proposed implementation approach?

Question 8			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	We agree with the recommended implementation approach as detailed in the consultation. We also note the concerns of the earliest implementation date within question 4.

Question 9: Do you agree that the legal text will deliver MP147?

Question 9			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	Yes	We agree that the legal text change delivers the required change for MP147

Question 10: Do you believe there will be any impacts on or benefits to consumers if MP147 is implemented?

Question 10			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Network Party	No	-

Question 11: Please provide any further comments you may have.

Question 11		
Respondent	**Category**	**Comments**
Scottish and Southern Electricity Networks	Network Party	-

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DP149

‘Effecting Changes to the Smart Energy Code efficiently’

Modification Report

Version 0.3

5 March 2021

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Committed to clearer communication
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About this document

This document is a draft Modification Report. It currently sets out the background, issue, and progression timetable for this modification, along with any relevant discussions, views and conclusions. This document will be updated as this modification progresses.

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Contact

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1. Summary

This proposal has been raised by Simon Trivella from Centrica.

Currently the parties that can raise a Draft Proposal to instigate changes to the Smart Energy Code (SEC) are limited. These constraints negatively impact the efficient progression of changes by:

- limiting the Parties who can raise change to those who have sufficient resources;
- impeding required changes being raised;
- burdening certain Parties devote the time and effort that being a Proposer requires;
- distorting the drivers of the Change process as only Parties with sufficient resources will raise changes;
- requiring Proposers to make decisions where they are acting on behalf of others; and
- adding inefficiencies into the process.

2. Issue

What are the current arrangements?

Who can raise SEC Modifications?

SEC Section D 'Modification Process' sets out the journey of a SEC Modification from raising a Draft Proposal through to implementation.

SEC Section D1.3 states which Parties can raise Draft Proposals, and these are:

- SEC Parties (including the Data Communications Company (DCC));
- Citizens Advice and Citizens Advice Scotland;
- Anyone specifically designated by the Authority;
- The Authority, but only to ensure compliance with European regulations or following a Significant Code Review (SCR); and
- The Panel in specific circumstances (see below).

Two SEC Sub-Committees can also raise Draft Proposals:

- the Security Sub-Committee (SSC) under SEC Section G 'Security' Section G7.20 where a Draft Proposal relates to its remit or documents; and
- the Smart Metering Key Infrastructure (SMKI) Policy Management Authority (PMA) under SEC Section L 'Smart Metering Key Infrastructure and DCC Key Infrastructure' Section L1.19.

SEC Panel raising SEC Modifications

The specific circumstances under which the Panel can raise a Draft Proposal are (this can be found under SEC Section D 'Modification Process' D1.3(e)):

- following a review carried out by the Panel at the request of the Authority (Section C2.3(i)), to progress any consequential changes required;
- following a recommendation from SECAS that the SEC is inconsistent with the Code Administration Code of Practice (CACoP) (Section C7.2(c)), to resolve this inconsistency;
- to progress a Fast-Track Modification to resolve any non-material typographical errors or other minor factual inaccuracies or inconsistencies within the SEC; and
- to progress any consequential changes required to the SEC as a result of changes under other Codes.

Code Governance

Code Governance is currently undergoing review across the industry, and this includes reviewing the approach to change. This can be found in the latest emerging industry Code, the Retail Energy Code (REC). The REC, whilst still in draft form, allows for 'any interested person' to submit a Change Proposal, regardless of whether or not they are a Party to the REC (this can be found under REC v0.4 Section 7 'Submitting Change Proposals').

One of the reasons this approach was taken forward is that the REC is a Code focusing on Consumer outcomes and promoting innovation. It was felt that it wouldn't be appropriate to allow a scenario where REC Parties (or even the Code Manager) can stifle innovation if another organisation (or individual) has a good idea that should be explored. The REC Code Manager has also been appointed with the authority to prevent this process being abused, and can reject any Change Proposals that may be vexatious and have no real chance of success.

The REC also procured the Code Manager with the specific intention of having a more empowered, independent Code Manager that takes on much of the responsibilities currently managed by Panels and/or Executive Committees. Therefore, the commercial framework has greater accountability for the Code Manager through contractual Key Performance Indicators (KPIs), service penalties, contract management and a robust performance assurance framework that ensures the Code Manager is held to account in their operation of the Change Process.

It has been raised previously that there are limited powers for the SEC Panel to raise Draft Proposals and no provisions for SECAS to raise a Draft Proposal. This is consistent with several other Codes and is based on Code Administrators not being able to raise changes to the provisions that govern their functions. However, there is precedence for Code Administrators to be able to raise changes, for example National Grid can raise Connection and Use of System Code (CUSC) modifications as the System Operator, even though it is also the Code Administrator. In addition, the DCC, whose functions are also subject to SEC governance, can also raise SEC Draft Proposals.

What is the issue?

The limitations around which Parties can raise a change are affecting the efficiency, impact and direction of changes in the following ways particularly where Proposers volunteer to progress changes on behalf of the industry:

Distorting change to make it appear that Larger Parties are driving change for their own gain

There are some suggestions that Large Suppliers drive industry change for their own benefit. However, it is likely this is because Large Suppliers are the only companies that have the resources to take responsibility for changes.

Furthermore, due to reduced resources, it is unlikely that smaller organisations will propose or volunteer to be a Proposer for a modification. Since larger organisations are unlikely to benefit from these changes, they are unlikely to be raised.

Taking no account of benefits to Consumers where changes may not be raised due to their costs

It is the intent of SEC modifications to better facilitate the SEC Objectives to ultimately provide a better service to Consumers. It is therefore vital that the Consumer is at the forefront when discussing the impact of change.

However, a Consumer-benefitting SEC Modification may result in SEC Parties incurring costs. This could potentially deter Parties from putting themselves forward as Proposers and result in the Consumer representative, Citizens Advice, to volunteer, who will have to allocate resource.

Creating greater efficiencies in the change process by allowing independent parties to raise modifications will aid the industry in delivering an improved service to Consumers.

Not allowing Parties with responsibility for progressing change to own the change

If SECAS has identified an issue relating to the SEC, it must engage with SEC Parties to identify a suitable Proposer. This can cause inefficiencies in the modification process as the Proposer may not have experienced the issue first-hand and may need to make investigations of their own to understand the issue fully and determine if they wish to sponsor it. The process of finding a Proposer and knowledge sharing on the issue can lengthen the process, specifically in the Development Stage.

Issue Resolution Proposals (IRPs) are Department for Business, Energy & Industrial Strategy (BEIS) led proposals which, once they have been agreed by the Technical Specification Issue Resolution Sub-group (TSIRS), are handed over to SECAS for incorporation into the SEC. Despite IRPs being the responsibility of SECAS, SECAS cannot raise a modification to incorporate these IRPs into the SEC. Proposers must be found to carry the modifications forward, which may involve having to justify the impact and cost of the change, e.g. to correct a fault, to the industry. This can result in having a Proposer who is disengaged with the modification that they are responsible for.

In addition, where changes are identified, if no organisations step forward to volunteer as a Proposer these changes may not be progressed despite potentially benefiting the industry.

How many modifications has this issue affected?

The current restrictions have led to the following 20 SEC Panel, Operations Group (OPSG) or SECAS-initiated modifications being raised by volunteer Proposers.

Past SEC Panel, OPSG or SECAS initiated modifications		
Modifications with volunteer Proposers	**Initiator**	**Status**
SECMP0047 'Default Provisions for Other SEC Parties'	SEC Panel	Implemented

Past SEC Panel, OPSG or SECAS initiated modifications		
Modifications with volunteer Proposers	**Initiator**	**Status**
SECMP0049 'Section D Review: Amendments to the Modification Process'	SECAS	Implemented
SEMP0050 'Section D Review: Moving the Working Group Terms of Reference to a separate document'	SECAS	Implemented
SECMP0051 'Section D Review: Amendments to the Fast Track Modification process'	SECAS	Implemented
SECMP0055 'Incorporation of multiple Issue Resolution Proposals into the SEC'	SECAS	Implemented
SECMP0061 'Enduring SEC Release Provisions'	SEC Panel	Implemented
SECMP0069 'EU Exit Changes'	SECAS	Implemented
MP0076 'Pursuing Non-Payment in Events of Default'	SEC Panel	Implemented
MP078 'Incorporation of multiple Issue Resolution Proposals into the SEC - Part 2'	SECAS	Refinement Process
MP079 'Provisions for withdrawing modifications'	SECAS	Withdrawn
MP084 'Other User Panel Seating Amendment'	SEC Panel	Rejected
MP088 'Power to raise modifications'	SECAS	Rejected
DP095 'Alignment of SEC Credit Cover'	SEC Panel	Refinement Process
DP098 'Incorporation of multiple Issue Resolution Proposals into the SEC - Batch 3'	SECAS	Implemented
MP099 'Incorporation of multiple Issue Resolution Proposals into the SEC - Batch 4'	SECAS	Refinement Process
MP114 'Alt HAN P2P Charging Data'	SECAS	Implemented
MP122A 'Operational Metrics'	OPSG	Pending implementation
MP122B 'Operational Metrics – part 2'	OPSG	Refinement Process
DP132 'DLMS references in GBCS'	SECAS	Withdrawn
MP143 'Incorporating IRPs into GBCS v3 series'	SECAS	Refinement

Allowing other parties the ability to submit Draft Proposals would allow beneficial changes identified by the Panel or by SECAS to be raised and progressed quicker. This would improve efficiency by allowing these changes to be developed and decided upon sooner, without sacrificing quality.

3. Assessment of the proposal

Observations on the issue

Views of the Change-Sub-Committee

SECAS presented the proposal to the Change Sub-Committee (CSC) for initial comment where members were supportive of the proposal's intent. Members felt that the issue was clearly defined

and supported the rationale. A proportion of CSC members have experienced first-hand becoming volunteer Proposers.

Members identified a key benefit which was the potential alignment to the newest industry Code, the REC. During the Development Stage, SECAS engaged with the REC Code Administrator to further understand the rationale behind allowing 'any interested person' to submit a Change Proposal. The outcomes of this can be found in Section 2 above. Ofgem has also commented that while it encourages other Codes to learn from the changes being introduced under the REC, they should not just copy these over like-for-like but should first ensure any changes are suitable for that Code.

The proposal was presented to all other SEC Sub-Committees, who were happy for it to proceed and added no further comments.

The proposal returned to the CSC for final recommendations. The CSC recommended that the Panel converts it into a Modification Proposal and progresses it to the Refinement Process. No further comments were raised.

Appendix 1: Progression timetable

The Draft Proposal will be taken to the Panel with the recommendation for it to be converted to a Modification Proposal and proceed to the Refinement Process. From there, its Proposed Solution will be discussed between the Proposer and SECAS with the target of being taken to the April 2021 Working Group meeting. SECAS will also engage with Ofgem to seek its views on how these changes fit within the wider Code governance reform taking place.

Timetable	
Event/Action	**Date**
Draft Proposal raised	14 Jan 2021
Presented to CSC for initial comment	26 Jan 2021
Sub-Committee input sought	Jan – Feb 2021
Presented to CSC for recommendation	23 Feb 2021
Panel converts Draft Proposal to Modification Proposal	12 Mar 2021
Modification discussed with Working Group	7 Apr 2021
Refinement Consultation	12 Apr – 30 Apr 2021
Refinement Consultation responses discussed with Working Group	2 Jun 2021
Modification Report presented to Panel	18 Jun 2021

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**
BEIS	Business, Energy & Industry Strategy
CACoP	Code Administration Code of Practice
CUSC	Connection and Use of System Code
CSC	Change Sub-Committee
DCC	Data Communications Company
IRP	Issue Resolution Proposal
KPI	Key Performance Indicator
PMA	Policy Management Authority
REC	Retail Energy Code
SCR	Significant Code Review
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SMKI	Smart Metering Key Infrastructure
SSC	Security Sub-Committee
TSIRS	Technical Specification Issue Resolution Sub-Group