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# MP172

## ‘Reduced CPA & CPL requirements for innovation and Device field trials’

### Modification Report

Version 1.0

15 November 2022



## About this document

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

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This document also has four annexes:

- **Annex A** contains the business requirements for the solution.
- **Annex B** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex C** contains the full Data Communications Company (DCC) Preliminary Assessment response.
- **Annex D** contains the full collated responses received to the MP172 Refinement Consultation.

## Contact

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## 1. Summary

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This proposal has been raised by Eric Taylor from SMETS Design Ltd.

Innovation in Smart Metering relies on field trials or live usage trials. These are used to see whether the product that has been developed is providing value to the consumer and is working or being used as expected. It also helps with refinement of a product based on real world feedback. Typically, these trials happen before Device Manufacturers commit to the full costs of final volume product, the final detailed design, and certifications.

Currently, the requirements of the SEC are designed around the mass deployment of Devices and offer no leeway to support Minimum Viable Product (MVP) trials on the live DCC network. The biggest cost and risk blocker for the introduction of a new or modified Device type or an innovative Device usage are the Commercial Product Assurance (CPA) arrangements.

The Proposer believes that this is preventing Manufacturers from being able to invest confidently to bring innovative products to market. It is also impacting consumers where Devices have been rolled out on a mass scale with potential defects that could have been uncovered in a limited volume product trial on the live DCC network.

The Proposed Solution will be to request the Security Sub-Committee (SSC) to approve Devices for a trial in limited numbers and duration. The SSC will decide whether the security risk is acceptable to allow the trial. There is not expected to be any DCC costs associated with this modification.

This modification will impact all SEC Parties and the DCC. The implementation costs will be limited to Smart Energy Code Administrator and Secretariat (SECAS) time and effort. This modification is targeted for the February 2023 SEC Release, and this will be a Self-Governance Modification.

## 2. Issue

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### What are the current arrangements?

#### Central Products List

The DCC uses the Central Products List (CPL) to manage the Devices it can communicate with. If a Device is not listed on the CPL, the DCC cannot add it to the Smart Metering Inventory (SMI) and therefore cannot communicate with it. Only once a Device has met the requirements set out in SEC Appendix Z 'CPL Requirements Document' can it be added to the CPL. The CPL is a list of Device Models that are either:

- Smart Metering Equipment Technical Specifications (SMETS) 2 Devices which have received all relevant Assurance Certificates; or
- SMETS1 Devices which have been notified by the DCC and have been included as entries on the SMETS1 Eligible Products Combination list.

## Smart Metering Assurance Certificates

There are three types of Assurance Certificates, each issued by a different Assurance Certification Body. The technical specifications of each product relevant to that Physical Device Type determines which Assurance Certificates are required to add the Device to the CPL. These are Zigbee Alliance Certificates, Device Language Message Specification (DLMS) Certificates and CPA Certificates.

The Assurance Certification Body for the CPA scheme is the National Cyber Security Centre (NCSC).

## What is the issue?

Innovation in Smart Metering (or in any technical or engineering domain) relies on the use of MVP in a field trial or live usage trial. These are used to show the value of the proposal or solution and refine the product and solution designs. Typically, this happens before Manufacturers commit to the full costs of final volume product, the final detailed design, and full product certifications.

The biggest cost and risk factor for the introduction of a new Device Type or innovative Device usage are the CPA requirements. It can take approximately 12 months to complete the CPA Certification process. These requirements are designed around the mass deployment of Devices and offer no leeway to support limited MVP trials on the live DCC network.

This live trial facility has always been needed in SMETS2 Smart Metering but has never been provided in a way that is required for commercially driven innovation to occur. This is the normal way that progress is made in any technology, but the SEC arrangements (listed above) require the full investment of a complete final volume product before any field trial can be undertaken.

The Proposer believes that, as well as stifling innovation, this restriction has already caused cost and problems for the Smart Metering Implementation Programme (SMIP). Devices have been deployed at high volume in the live network with issues that normally would have been easily spotted during a limited volume live field trial. These are cases where Over The Air (OTA) updates have not been able to resolve these issues, where a combination of OTA and Device restarts have been required, or on-site visits. The Proposer believes that had there been the opportunity to trial, then final designs would not have been committed to prior to receiving this important design feedback from real world use.

The Proposer considers that there is no test environment which can simulate the real live usage of a Device on the live network with real Users and which meets the needs of commercially led innovation. The DCC Production Proving environment only shows that the system can work. It is not a real usage environment as it is in a controlled lab and the arrangements are too restrictive for commercially led innovation.

## What is the impact this is having?

The Proposer believes the high threshold required to trial innovation on the live DCC network and prove the value of a new use cases based on the existing smart metering arrangements and the existing technical specifications is prohibiting industry-led innovation. They believe this absence of commercially driven innovation will affect the DCC's ability to meet its second enduring General Objective<sup>1</sup>, as set out in the DCC's Licence, and find ways to re-use the smart metering systems for

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<sup>1</sup> The Second Enduring General Objective of the Licensee is to carry on the Mandatory Business in the manner that is most likely to facilitate: (a) effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy under the Principal Energy Legislation; (b) such innovation in the design and operation of Energy Networks as will best contribute to the delivery of a secure and sustainable Supply of Energy under the Principal Energy Legislation; and (c) the

anything other than dual fuel metering. This denies the DCC the ability to offer other revenue generating services based on such commercially driven innovation which might reduce the overall costs to DCC Users.

Manufacturers are incurring higher costs as they must develop their product to a higher threshold to evaluate their Devices in the field. There is then potential to spend again prior to mass deployment to resolve something which could have easily been spotted if normal Good Industry Practice was used as described above. This also risks reputational damage to the Device Manufacturer, the Device operator and the SMIP, which could have been avoided if a limited volume MVP live field trial were undertaken.

### **Impact on consumers**

The continued mass deployment of Devices without live field trials can lead to Devices containing issues that could have easily been spotted with this type of test. This negatively impacts the consumer by giving them a poor experience of the Devices at the start of volume deployment, as well as the inconvenience of possibly having multiple site visits.

## **3. Solution**

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The Proposed Solution will allow Device Manufacturers to request the SSC to allow trial Devices in limited numbers onto the live DCC network without passing through CPA Certification, where that would otherwise be a requirement.

The SSC would assess whether it had the necessary assurance that the security risk from the small number of Devices was sufficiently low to allow the trial to proceed.

If the SSC is satisfied with the application, a “Trial” CPA certificate reference would be provided. The Device Manufacturer would then use this CPA certificate reference in the CPL submission sent to SECAS. If approved then Devices could be added to the CPL, with detail on existing fields to highlight it as a trial Device, but without affecting the format of the CPL to ensure no impact on DCC systems.

If the SSC requires further assurance, the Device Manufacturer would need to make a trial Device available to a CPA Test Laboratory to carry out an independent risk assessment. That would then be passed to the SSC to accompany the Device Manufacturer’s application and enable the SSC to decide. If necessary, the SSC will seek guidance from the NCSC to assist it.

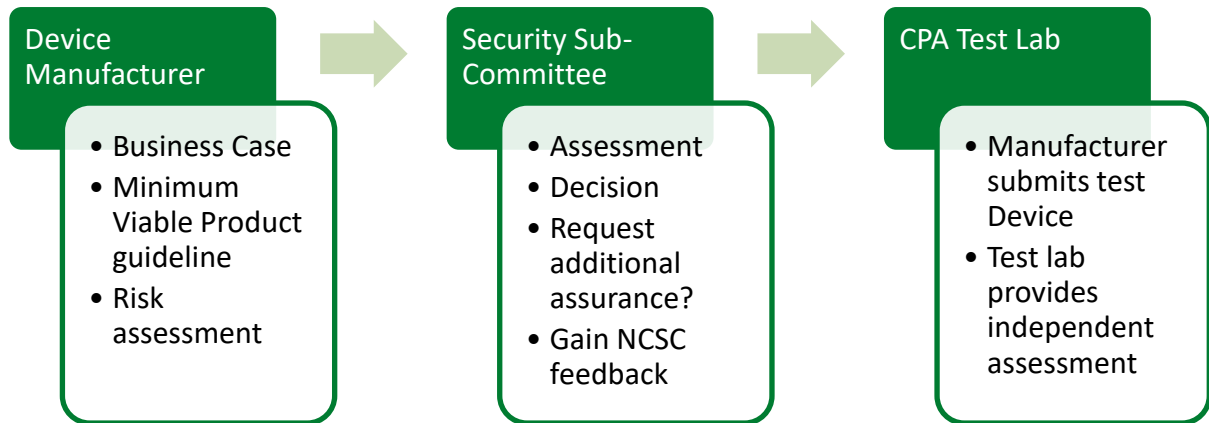
The DCC will provide extracts of the SMI to the SSC to enable it to monitor trial Devices that are in the field. This SSC will use the CPL alongside the SMI extract to identify the Trial Devices. The Trial Device Models will be made identifiable on the CPL by having the Certificate reference prefixed with a “[T]”.

The Proposed Solution introduces a new self-contained section specifically for Trial Devices within SEC Section G ‘Security’. This section does not impact any other clauses within the SEC that will apply to those Device Types. For example, SEC Appendix AC section 5.3(a) will apply to all SMETS2 Devices, regardless of whether they have a CPA Certificate or a Trial Certificate. This was a simpler

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reduction (by virtue of benefits arising from the provision of Value Added Services) of the charges payable for Mandatory Business Services.

solution than changing every obligation to specify the inclusion of Trial Devices and was proposed by the SEC Lawyer.



## 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

Breakdown of Other SEC Party types impacted			
	Shared Resource Providers		Meter Installers
✓	Device Manufacturers		Flexibility Providers

Suppliers and Network Operators will be impacted by the potential for Devices that have not been through full CPA Certification to be installed on their networks at consumer properties.

Device Manufacturers will be able to apply for Devices to be installed on a trial basis without the need for passing CPA Certification.

The DCC will need to continue to issue the SSC with a monthly extract of the SMI to allow the SSC to monitor the Trial Devices.

## DCC System

The DCC System will not be impacted by this modification as the DCC already provides a suitable extract of the SMI to the SSC that will meet the requirements of this modification.

The full impacts on DCC Systems and DCC's proposed testing approach can be found in the DCC Preliminary Assessment response in Annex C.

## SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Section F 'Smart Metering System Requirements'
- Appendix Z 'CPL Requirements Document'

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

## Devices

Devices impacted			
✓	Electricity Smart Metering Equipment	✓	Gas Smart Metering Equipment
✓	Communications Hubs	✓	Gas Proxy Functions
	In-Home Displays		Prepayment Meter Interface Devices
✓	Standalone Auxiliary Proportional Controllers	✓	Home Area Network Connected Auxiliary Load Control Switches
	Consumer Access Devices		Alternative Home Area Network Devices

Device behaviour is not impacted by the modification, however any Device that would usually require CPA Certification would be eligible for this process.

## Consumers

Consumers will only be impacted if they choose to be involved in a trial to have a Device placed at their premises.

## Other industry Codes

There will be no impact on other Codes from this modification.

## Greenhouse gas emissions

There will be no impact to greenhouse gas emissions due to this modification.

## 5. Costs

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### DCC costs

There are no DCC costs to implement this modification.

The DCC carried out an initial Preliminary Assessment which can be found in the DCC Preliminary Assessment response in Annex C. However, based on feedback from the Working Group the DCC has investigated an alternate solution whereby the DCC solely submits extracts of the SMI to the SSC. The DCC will not apply an additional cost for this, therefore no Impact Assessment was necessary.

### SECAS costs

The estimated SECAS implementation cost to implement this as a stand-alone modification is two days of effort, amounting to approximately £1,200. This cost will be reassessed when combining this modification in a scheduled SEC Release. The activities needed to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.
- Updating the CPL Guidance Notes to reflect the new process.

### SEC Party costs

It is not expected that there will be any SEC Party costs from this modification. However, applicants would have to cover the costs of the CPA Test Lab assessment should it be required as part of the application. There are potential cost savings for Device Manufacturers who can identify fixes to Devices in-field without the need to go through full CPA Certification initially.

Respondents to the Refinement Consultation agreed costs would only be incurred if their Parties choose to support a Trial and that would be limited to resource in managing the application.

## 6. Implementation approach

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### Recommended implementation approach

The Change Sub-Committee (CSC) has agreed an implementation date of:

- **23 February 2023** (February 2023 SEC Release) if a decision to approve is received on or before 23 January 2023; or
- **29 June 2023** (June 2023 SEC Release) if a decision to approve is received after 23 January 2023 but on or before 29 May 2023.

This is a document only modification so can be implemented in the February 2023 SEC Release. The SSC will need to develop their internal documentation to manage the Device Trial applications and SECAS will need to update the CPL Guidance Notes to reflect a new process. It is estimated those



items would require a one-month lead time to ensure they are ready in advance of implementation. SECAS are working with the SSC to ensure this new guidance will be prepared following approval of this modification.

## 7. Assessment of the proposal

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### Observations on the issue

#### Change Sub-Committee

CSC members noted that any increase in security risk would likely not be supported by industry. It advised that the SSC and the NCSC must be fully engaged with the development of the modification.

One CSC member highlighted that the DCC has a test network, and they believe this could be utilised with Devices that are installed in the field already. Upon further investigation this was found not to be the case and the Devices are not installed at consumer premises.

#### Security Sub-Committee

The SSC was presented with the issue. Members agreed that this was an area that should be explored further and noted that a lack of innovation within Devices was a growing concern.

One member highlighted that any solution should ensure that situations of Change of Supplier should be accounted for. They also noted there must be a mechanism for removal or upgrade of the Device once any limited numbers trial was finished.

The SSC noted that there are currently limited Device field trials ongoing in conjunction with the Department for Business, Energy & Industrial Strategy (BEIS).

#### Views of an Other SEC Party

One Other SEC Party provided feedback on the initial Draft Proposal. It acknowledged that whilst CPA Certification causes some innovation to go at a slightly slower pace it disagreed that this had prevented bringing new products to market. In the current climate of cyber security issues, it believes the current CPA arrangements provide a vital layer of protection to the SMIP.

The Proposer agrees that the Security Characteristics are vital but believes there should be an option to have the Device verified independently, likely through the SSC, in this specific circumstance. This would help to reduce costs and timescales for Device development and promote innovation within the industry.

#### Working Group

Working Group members noted that they were supportive of the principle of the change, but that it must be counterbalanced against the security implications of not having CPA Certification.

## Refinement Consultation

One respondent to the Refinement Consultation challenged the issue stated. They questioned why the DCC Boxed testing tool or laboratory settings were not suitable to test products. They also noted that a trial of 100 Devices would not likely pick up issues with Devices that had been seen in some mass deployments. They noted some problems only appear in 0.3% of installs, which would mean that at most one Device would fail during the production test period, which could be seen as negligible or a one-off problem. SECAS noted that any trial is not likely to identify all Device issues via a small-scale trial but could identify some. However, being able to place Devices in real world settings will also demonstrate how consumers will use Devices and can aid Device Manufacturers in identifying issues themselves with the product, or identifying additional functionality, prior to mass rollout.

A respondent also noted that the overall issue seemed to be with the NCSC's CPA process taking too long and being too costly and this was side stepping it, rather than making changes to that process. The Proposer noted that improvements are being made to the NCSC CPA scheme as well. They also commented that there are fundamentally different risks to cater for a small-scale trial as opposed to mass deployment and there needs to be a process to deliver small-scale trials to aid innovation.

## Solution development

The CSC highlighted that any solution must be developed in consultation with Other SEC Parties to ensure that any solution is developed that works for a wide audience. To achieve this the Proposer chose to develop the initial business requirements for the modification with the Working Group. The modification has also been discussed with the TABASC and the SSC.

## Who is eligible to submit a Device for a trial?

To add in a security control as to who is eligible to submit a Device for a trial, the Proposer suggested that only Device Manufacturers that already have a CPA certified product would be eligible. They noted that part of the CPA certification involves the company demonstrating that it has the quality, security and engineering processes and systems in place to ensure that secure development can take place. A Working Group member disagreed, saying that a company is not approved by CPA as it can produce one Device that is compliant but another that it produces may not be.

The DCC suggested it may be more appropriate to make the requirement specific to the Device type that the Manufacturer wishes to put through a trial, not just any SMETS2 Device. It stated that the development of a new Device type for that Manufacturer would have an increased likelihood of defect than if they had produced that Device type before.

The Proposer commented that placing that limitation would stifle the innovation of a Device Manufacturer who wished to develop a new Device type to their business.

A Working Group member questioned whether the requirement for the Device Manufacturer to have another CPA Certified Device Model was necessary. They noted that this modification seeks to improve innovation and limiting those who can apply to current Manufacturers could prohibit this. They continued to ask whether it would be better to not include that within the legal text, even if the SSC currently saw it as a requirement, as that thinking could change in the future. The SSC Chair confirmed that the SSC has discussed this modification at length, and it is an absolute requirement, however agreed that this could change in the future. The legal text will not include this clause to futureproof the modification.

### **Limitations of the trial**

Previous BEIS trials have been limited in terms of duration and quantity of Devices. These have previously been limited to a 12-month period and 100 Devices. The Proposer noted that experience from these trials showed that 12 months was too short to obtain the data required to validate the Device and suggested 18 months would be more appropriate.

A Working Group member suggested that the requirement could be left ambiguous, allowing different Device types to have different trial numbers. This would allow the SSC or BEIS to make final decisions that could consider a wider range of variables that may be subject to change over time.

The SSC agreed that the trial should be limited in terms of duration and quantity and have left the specifics undefined in its suggested process. The SSC also noted that any trial must be about proving technology and not used as a shortcut testing route to live.

### **What does the Device Manufacturer need to do?**

The primary goal of the modification is to remove the requirement of CPA Certification for trial Devices, so all other certifications would still be required. The Great Britain Companion Specification (GBCS) and the SMETS both follow a self-certifying methodology and evidence of this would be expected to be provided to the SSC.

The SSC's formal position includes a requirement for the Device Manufacturer to provide supporting MVP guidelines, a Use Case with business rationale (i.e. what the trial is trying to achieve) and a risk assessment. All trials are expected to have been previously tested (with evidence provided) with DCC systems prior to submission of the MVP, Use Case and business rationale.

A Working Group member suggested that the Distribution Network Operator (DNO) would need to be informed of any trial Devices on the live network as the Devices would need DNO and Supplier Smart Metering Key Infrastructure (SMKI) Certificates added. They added that the Post Commissioning obligations would also need to be met. The Proposer agreed that all existing SEC obligations would need to be met, except for the CPA Certification.

### **End of the trial**

DCC Users operating these trial Devices must have processes in place to enable trial Devices to be removed, or to have the firmware updated to a CPA certified version. These processes should account for situations where the consumer chooses to change Supplier during the trial. The SEC states the requirements for upgrading Devices where CPA Certification has expired and as part of this modification the SEC must be updated to state that these trial Devices will follow the same processes.

The SSC Chair stated that the Proposed Solution must be explicit that the Device should be "fully" upgraded, meaning it must be fully CPA Certified or removed from the premise. This can be achieved either by physical Device exchange, or OTA firmware upgrade if the hardware variant has passed CPA Certification.

A Working Group member requested clarification on what would happen to Devices at the end of the trial. The SSC Chair confirmed the exact outcome would be determined by the SSC as is the case for other CPL entries. However, the Devices could either be 'suspended' by the DCC if the CPL entry was marked as removed or could be allowed to remain pending the CPA Certification, subject to any perceived security risk.

### **Managing Consumers within a trial**

SECAS asked for feedback from the Working Group on how the process would manage Supplier churn and consumer contracts for premises to be included within any trial. The Working Group heard that with a previous BEIS trial for Home Area Network (HAN) Connected Auxiliary Load Control Switches (HCALCS) and Electric Vehicle (EV) Chargers, the Devices were not planned to be removed following the trial and had no specific project considerations of Supplier churn, other than the normal industry processes that protect consumers. The Proposer also highlighted that there have been over two million consumers affected by the Supplier of Last Resort (SoLR) process in the last few months and that possible churn in a trial of 100 Devices was highly unlikely to be considered an issue.

The Proposer noted that any trial would require a Supplier to sponsor the trial and it would provide a consumer base that was not likely to churn during the trial. Therefore, there is a very low element of risk and impact from this happening.

A Refinement Consultation respondent also thought that any consumers selected for a trial would need to be fully aware that the Device in their home has not passed through the 'industry standard' assurance process before being installed. They noted that this could also affect future homeowners/occupiers of the property. SECAS agreed that any agreements between the Supplier and the consumer would need to include agreement for the disconnection of Devices should a consumer wish to cease taking part in a trial.

SECAS also noted that this should be covered in commercial agreements between Device Manufacturers, Meter Asset Providers (MAPs), Suppliers and consumers, and these commercial arrangements were outside the scope of the modification.

### **Will Guidance be provided?**

A Device Manufacturer questioned whether there would be guidance provided to clearly set out the specific requirements and formats to cover the initial application to the SSC, and for the SSC to have a framework for what would be deemed acceptable to be trialled. The Proposer's view is that the legal text should be sufficient to deliver the agreed process between the SSC and Device Manufacturers. The SSC Chair advised this would be discussed at SSC meetings prior to the implementation of MP172 with the aim of developing and publishing process guidance on the SEC website.

### **DCC System impacts**

The Proposer's view is that if the CPL is left unaffected then there should be no change to functionality to the DCC System. During the Working Group and the Requirements Workshop with the DCC Service Providers this view was challenged.

The DCC questioned the impact the Devices have on the Data Science and Analytics (DS&A) reporting and noted that issues with Devices would affect the DCC Operational Performance Regime (OPR) or internal processes. It suggested that consideration to how that would be managed, possibly with a system flag, would be required. The DCC highlighted that 100 Devices could be the difference between them passing/failing a Service Level Agreement (SLA) and highlighted that the "noisy meters" on the network are currently removed from these metrics.

The TABASC Chair noted that there is no change to business as usual and the smart metering architecture can accommodate the modification. The DCC stated that it would need to carry out further analysis to agree there was no impact.

As part of the SSC's formal position, it requested that reporting be provided on the trial Devices. The DCC was therefore requested to provide a Preliminary Assessment to confirm impacts on Systems.

The DCC returned an initial Preliminary Assessment which indicated a cost of £85,000 – £115,000 for Design, Build and Pre-Integration Testing (PIT). The initial DCC solution would involve the DCC team receiving a list of Trial Device Models once confirmed as part of a CPL update. The DCC would then pass the information to the Data Service Provider (DSP) who would update a back-end table with the information. This will then be referenced by Service Reference Variants (SRVs) 12.2 'Device Pre-notification' & 8.4 'Update Inventory' to apply a 'Trial flag' in the SMI.

A Working Group member questioned why the DSP needed to be aware of the Device, noting that the bulk of the costs for this solution appear to be from adding a Trial flag to the Devices. The SSC Chair also noted that the SSC currently receives reports from the DCC that are used to identify Devices on the SMI that have a Device Model due for expiry.

The DCC highlighted that the requirement is for it to provide these reports, and the CPL identifier is not currently held within the DSP System which is why the DSP changes are required.

SECAS advised that it currently receive an extract of the SMI on behalf of the SSC that can then be filtered down to monitor Devices that have a CPA Certificate expired. SECAS noted this same process could be mirrored. The DCC confirmed this would be a suitable approach, and the business requirement were redrafted to reflect this. Considering this, the DCC returned confirmation that its solution to provide extracts of the SMI can be carried out at no additional cost. The SSC will then combine these extracts with the CPL to identify Trial Devices.

### **CPL change**

The change required to the CPL is to allow an additional valid prefix for CPL submissions indicating that the entry is a Trial Device. The change is only to the content of one of the existing CPL fields and does not affect the format of the CPL or the way it is used by DCC Systems. The TABASC reviewed the change and confirmed that it is suitable and should not have any consequences past its intended use. SECAS is working internally to ensure that if this modification is approved any changes to the current processing will be accommodated.

## **8. Case for change**

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### **Business case**

There are no DCC implementation costs from this modification and therefore the implementation cost to industry is minimal. Parties have raised the concern of increased security risk from the ability to place Devices on the live network that have not gone through CPA Certification. However, the SSC has agreed a process whereby Devices will only be approved subject to the security risk being tolerable and this will be assessed on a trial-by-trial basis.

It is envisaged that this modification will aid the development of innovative Devices that will ultimately benefit consumers and the wider industry by improving efficiency.

## Views against the General SEC Objectives

### Proposer's views

The Proposer believes that this modification better facilitates SEC Objectives (a)<sup>2</sup> and (e)<sup>3</sup> by allowing Device Manufacturers to drive innovation and develop products that would benefit consumers and industry.

### Industry views

Respondents to the Refinement Consultation broadly agreed with the Proposer's views. Three respondents agreed the modification better facilitated SEC Objectives (a) and (e) and two respondents believed the modification better facilitated SEC Objective (a) only. One respondent was opposed to the modification and did not believe that the modification better facilitated any SEC Objectives. The full responses to the Refinement Consultation can be found in Annex D.

## Views against the consumer areas

### Improved safety and reliability

If implemented, this modification will have a positive impact against this consumer area by aiding the development of innovative new Devices and helping identify defects before a mass rollout.

### Lower bills than would otherwise be the case

If implemented, this modification will have a neutral impact against this consumer area.

### Reduced environmental damage

If implemented, this modification will have a positive impact against this consumer area by enabling Device Manufacturers to fine-tune their products before they are required to be mass produced.

### Improved quality of service

If implemented, this modification will have a neutral impact against this consumer area.

### Benefits for society as a whole

If implemented, this modification will have a neutral impact against this consumer area.

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<sup>2</sup> Facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain

<sup>3</sup> Facilitate such innovation in the design and operation of Energy Networks (as defined in the DCC Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy;



## Final conclusions

Respondents to the Refinement Consultation broadly agreed the modification should be implemented. One respondent opposed this, noting that other test environments exist and can be utilised. The Proposer has stated that these test laboratory settings are not suitable and not replicative of real-world conditions.

The Working Group was supportive of the modification subject to the DCC costs being reduced. These costs have now been removed in light of the reporting already provided to the SSC which can be used to monitor Devices.

The SSC is supportive of the principle and provided the process which the Proposed Solution is based on.

## Appendix 1: Progression timetable

This modification will be presented to the Change Board on 21 December 2022 for approval to implement under Self Governance.

Timetable	
Event/Action	Date
Draft Proposal raised	18 Jun 2021
Presented to CSC for initial comment	29 Jun 2021
Modification discussed with SSC	28 Jul 2021
CSC converts Draft Proposal to Modification Proposal	31 Aug 2021
Modification discussed with the Working Group	4 Oct 2021
Modification discussed with the Working Group	3 Nov 2021
Business requirements developed with the Proposer	Nov – Dec 2021
Business requirements discussed with SSC	12 Jan 2022
Business requirements discussed with TABASC	3 Feb 2022
SSC developed its formal position	Jan – Mar 2022
DCC Preliminary Assessment requested	26 Apr 2022
Modification discussed with the Working Group	6 Jul 2022
Refinement Consultation	15 Aug – 5 Sep 2022
Proposed Solution discussed with TABASC	3 Nov 2022
Modification Report approved by CSC	15 Nov 2022
Modification Report Consultation	15 Nov – 7 Dec 2022
<i>Change Board vote</i>	<i>21 Dec 2022</i>

*Italics denote planned events that could be subject to change*

## 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	Department for Business, Energy and Industrial Strategy
CPA	Commercial Product Assurance
CPL	Central Products List
CSC	Change Sub-Committee
DCC	Data Communications Company
DLMS	Device Language Message Specification
DNO	Distribution Network Operator
DS&A	Data Science & Analytics
DSP	Data Service Provider
EV	Electric Vehicle
GBCS	Great Britain Companion Specification
HAN	Home Area Network
HCALCS	HAN Connected Auxiliary Load Control Switch
MAP	Meter Asset Provider
MVP	Minimum Viable Product
NCSC	National Cyber Security Centre
OPR	Operational Performance Regime
OPSG	Operations Group
OTA	Over The Air
PIT	Pre-Integration Testing
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SLA	Service Level Agreements
SMETS	Smart Metering Equipment Technical Specifications
SMI	Smart Metering Inventory
SMIP	Smart Metering Implementation Programme
SMKI	Smart Metering Key Infrastructure
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SoLR	Supplier of Last Resort
SRV	Service Request Variant
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee