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MP281 'Install Codes in the SMI'

Modification Report

Version 0.4

18 March 2026

Corporate member of
Plain English Campaign
Committed to clearer
communication

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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. This document will be updated as this modification progresses.

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This document also has two annexes:

- **Annex A** contains the Data Communications Company (DCC) Preliminary Impact Assessment.
- **Annex B** contains the Business Requirements required to deliver the Proposed Solution.
- **Annex C** contains the DCC Preliminary Impact Assessment assessed against the existing DCC Data Service Provider (DSP).
- **Annex D** contains the DCC Preliminary Impact Assessment assessed against the Future Service Management (FSM) Proposed Solution.

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1. Summary

This proposal has been raised by Emslie Law of OVO.

Suppliers are often encountering the scenario where they are unable to commission gained Devices due to not having the install codes. Install codes are unique codes required to commission a Device during installation. This problem of missing codes can be exacerbated by the fact that the losing Supplier often was not the installing Supplier. This situation often results in Devices being removed and replaced, adding cost and inefficiency to the process.

The current solution is an email-based option obligating a losing Supplier to provide the required install codes to the gaining Supplier as part of a 10-day Service Level Agreement (SLA), or to provide confirmation that they were not the installing Supplier. This approach is labour intensive and is viewed as unsuitable to be dealing with the rising volumes of non-commissioned Devices that Suppliers are encountering.

This modification is looking to provide functionality for existing install codes to be uploaded to a secure database in the FSM solution. Additional changes in the Future DSP would utilise the Service Reference Variant (SRV) 12.2 'Device Pre-notification' during pre-notification to upload the install code and Device Certificates to the Smart Metering Inventory (SMI) where they will be held securely and be available for any Supplier that subsequently gains a non-commissioned Device.

2. Issue

What are the current arrangements?

Situations can arise where a Smart Metering Equipment Technical Specification (SMETS)2 Device is installed but not commissioned. This can happen where the DCC Wide Area Network (WAN) coverage database indicates that there will be WAN coverage to the premises but on arrival there is no coverage. In these cases, Suppliers may install the Devices, including a Communications Hub (CH) in a non-commissioned state, and then commission the CH once a WAN connection has been established.

The DCC has a 90-day target to resolve WAN connectivity to installations. As a result of these timescales there is a risk that the Consumer will change their energy Supplier before WAN connectivity has been established. In these circumstances the gaining Supplier is not currently able to commission the installed Devices. This is because it requires the install code, Smart Metering Key Infrastructure (SMKI) Device, and SMKI Organisation certificates to enable the installed Devices to be joined to the Home Area Network (HAN), using SRV 8.11 'Update HAN Device Log', which needs to occur before the Devices can be commissioned.

In summary, there is no process for a Smart Energy Code (SEC) Party to commission an installed meter where they did not complete the installation.

[MP121 'Commissioning non-commissioned Devices after CoS'](#), which was implemented as part of the February 2022 SEC Release, considered options to provide install codes to gaining Suppliers. Three options were considered. An automated solution which involved making install codes available via the Self-Service Interface (SSI) was considered and costed in the PIA at £150,000 – £350,000 but was ruled out due to being deemed not fit for purpose and unworkable for SEC Parties to automate a

process to accommodate this solution. There was also the option of a DCC maintained spreadsheet at a proposed cost of £25,000. The chosen solution was an email-based option obligating a losing Supplier to provide the required install codes to the gaining Supplier within a 10-day SLA, or to provide confirmation that they were not the installing Supplier.

What is the issue?

Where non-commissioned Devices are changing Supplier, it is often the case that the gaining Supplier cannot complete the commissioning activity as they do not have the install codes to do so. This requires the gaining Supplier to establish the identity of the installing Supplier, and then to request the install codes.

It was anticipated that WAN issues would be resolved over time, and scenarios where installations are affected by 'no WAN' issues would reduce, however that has not been the case. The email solution implemented as part of MP121 is not suitable to deal with the volume of non-commissioned installs that are being encountered which has been stated by Suppliers as up to 3,000 per month.

What is the impact this is having?

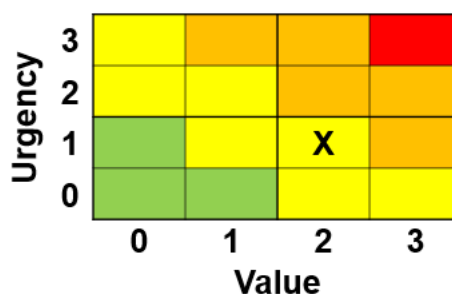
Suppliers are struggling to keep up with the volume of requests that they are receiving through the current email process. The current process is time consuming, labour intensive and the 10-day SLA only applies to Suppliers and not to others involved in the process like Meter Asset Providers (MAPs), which can result in processing bottlenecks.

Impact on consumers

As a result of this issue, it is often the case that Suppliers are having to install new Devices at properties as they are unable to commission the existing ones. This process is not only wasteful, but can yield additional costs to SEC Parties, which may be subsequently passed on to consumers.

What is the priority of this Issue?

This Issue has a priority score of Medium. This rating is based on the following factors:



These scores have been allocated based on the below factors:

- Security benefits due to replacing unsecure email process with secure controlled install code storage.

- Operational benefits due to reduction in Devices needing replacement and removal of current labour-intensive process.

3. Solution

Proposed Solution

This Modification seeks to introduce a method of ensuring the availability of install codes and relevant Device Certificates in a secure repository which can be accessed by the responsible Supplier. This will be achieved by providing functionality for existing install codes to be uploaded to a secure database in the FSM solution. This would allow Suppliers, MAPs and Meter Manufacturers to access the database and upload existing and new install codes in high volumes. Further changes would then be required in the future DSP for install codes and Device Certificates to be uploaded at point of install.

There will be no new SEC obligations associated with the modification, as the FSM Database will provide that functionality to be able to upload install codes securely. Suppliers, MAPs, and Manufacturers will have the ability to access and upload install codes to the FSM Database.

Additional changes would involve adding additional fields to SRV 12.2 to include install codes, Device Certificates & Access Control Broker (ACB) Certificates used by the Device.

The installing Supplier will provide the install codes and Certificates via SRV 12.2 during pre-notification. The install codes and Certificates will be stored in the SMI which will provide a secure repository so that the responsible Supplier can access the install codes and Certificates when required. It will ensure the availability of install codes for gaining Suppliers when a Change of Supplier (CoS) event takes place.

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

Breakdown of Other SEC Party types impacted		
DCC Other Users	✓	MAPs/ MAMs

This modification will have a positive impact on Suppliers as when they gain a Device, they will be able to retrieve the install code from the FSM Database and in the future the SMI. Instead of having to use the current labour intensive and time-consuming email process to identify the installing Supplier.

There will be an impact on the DCC as there will be changes required to FSM to includes the new Database and in the future to add additional fields to SRV 12.2 and changes to create a user interface to access Device information.

There will be a positive impact on MAPs and Manufacturers as they will be able to spend less time responding to requests to provide install codes and less Devices will be removed unnecessarily reducing costs and waste.

DCC Systems

DCC System changes

The following DCC system changes will be required to support this modification.

Changes to FSM and to the SMI will be required to store the required Install Codes, Device Certificates, Access Control Broker, and Change of Supplier certificates.

Validation will be implemented to ensure that supplied Data is in the correct format and that only the responsible Supplier can access install codes and Certificates. Rules based Access Control (RBAC) will be required to enable MAPs and Meter Manufacturers to upload, view, and download from FSM.

There will be an update to the DCC User Interface Specification (DUIS) schema for SRV12.2 to include information for Install Codes, Device Certificates, Access Control Broker and Change of Supplier certificates.

There will be changes made to FSM to provide a new screen in the FSM Portal to allow an authorised User (Gaining Supplier) to view install and certificate information.

The full impacts on DCC Systems and DCC's proposed testing approach can be found in the DCC Preliminary Assessment responses in Annexes A, C, and D.

DCC System traffic

Although there will be additional fields in SRV 12.2 the number of SRVs being sent at install should not change.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Appendix AC 'Inventory Enrolment and Decommissioning Procedures'

Consumers

This modification will benefit the consumer experience. Making the relevant Device install code available will prevent non-commissioned Devices from being removed from consumers' premises and being replaced with new Devices in order to gain smart functionality.

Other industry Codes

This modification will have no impact on other industry Codes.

Greenhouse gas emissions

This modification will have no impact on Greenhouse gas emissions.

5. Costs

DCC costs

The estimated DCC implementation costs to implement this modification is £295,000 to 450,000. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs (Future DSP)	
Activity	Cost
Design, Build and Pre-Integration Testing (PIT)	£295,000 to 450,000
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC
Application Support	TBC

More information can be found in the DCC Preliminary Assessment response in Annex A.

Breakdown of DCC implementation costs (Existing DSP)	
Activity	Cost
Design, Build and Pre-Integration Testing (PIT)	£350,000 to 550,000
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC
Application Support	TBC

More information can be found in the DCC Preliminary Assessment response in Annex C.

Breakdown of DCC implementation costs (FSM Solution)	
Activity	Cost
Design, Build and Pre-Integration Testing (PIT)	£27,000 to 35,000
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC
Application Support	TBC

SEC Change costs

The estimated SEC Change implementation cost to implement this as a stand-alone modification is one day of effort, amounting to approximately £600. 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.

SEC Party costs

SEC Parties have indicated that they would be likely to incur costs as a result of this Modification. Costs for the initial upload of install codes are seen as minimal as they would involve only process and policy changes. Integration costs with the FSM Database are unknown and have been provided as loose estimates. Costs associated with the additional changes to store install codes in the SMI are expected to be higher as there may be adapter changes required to support new fields.

6. Implementation approach

Recommended implementation approach

SEC Change is recommending an implementation date of:

- 6 November 2026 (November 2026 SEC Release) if a decision to approve is received on or before 6 October 2026; or
- An Ad-hoc SEC Release if a decision to approve is received after 6 October 2026.

7. Assessment of the proposal

Solution development

Due to the associated costs and availability of an SMI solution, which on the Future DSP would be unlikely to be available until early 2029, an alternative solution was explored. The Proposer worked with Vantage on a web-based platform provided by an organisation named 'Paragon'. This platform

offered a more complete solution than the SMI as it would provide a searchable web-based portal allowing bulk upload of install codes and search functionality, which would be free for an initial 10-year period. The platform could also be available within 3 months.

The Paragon solution received positive feedback from the industry however concerns were raised over the security of Data and the security of the platform. MAPs were concerned about the security of Data that was stored and the validation that would be in place to ensure only responsible parties could access it. The Security Sub-Committee were concerned about the security credentials of Envigo, the third-party company that provided the Security for the platform. Envigo are an overseas company with a retail presence in the UK. Although ISO 9001 and ISO 27001 certifications were held, it was overseas rather than in the UK which created a significant security issue, meaning that the Paragon solution could not be progressed.

Following additional requirements workshops in November 2025, the DCC proposed a solution providing functionality for existing install codes to be uploaded to a secure database in the FSM solution. This solution would offer a resolution for the bulk upload of legacy install codes as well as the ability to upload new install codes moving forwards. This option delivers at a significantly lower cost and with reduced timescales compared to the SMI option.

Refinement Consultation

A Refinement Consultation was issued in February 2026 to understand the potential impacts of the proposed change. All eight respondents believed that MP281 should be approved. Respondents cited the strength of the business case given the size of the issue and noted that the benefits outweighed any costs likely to be incurred. Respondents also acknowledged the need, and benefits of a full solution in the Future DSP which would store install codes and Device Certificates in the SMI at point of install.

8. Case for change

Business case

Approval of the modification

There has been overwhelming acknowledgement of the issue from the industry. The current email solution has been deemed as time consuming, labour intensive and struggles to cope with the volumes that are required by various different Parties. This modification aims to reduce waste and cost in the industry avoiding non-commissioned Devices from being removed from a consumers premises and being replaced with new Devices in order to gain smart functionality.

Views against the General SEC Objectives

Respondents believed that this modification would better facilitate SEC Objectives (a)¹, (c)², (d)³, (e)⁴, (f)⁵, (g)⁶. Respondents believed that this modification would allow Supplier parties to provide consumers with the full smart experience of being able to access their data for the management of their electricity and gas usage, while avoiding the unnecessary removal of working meters.

Views against the consumer areas

Improved safety and reliability

This modification will be neutral against safety and security for consumers.

Lower bills than would otherwise be the case

Positive, there will be a cost saving for the industry as a result of reduced waste which could be passed on to Consumers.

Reduced environmental damage

Positive, the reduction in non-commissioned Devices being removed replaced will result in less Devices being disposed of.

Improved quality of service

Positive, service will be improved as Suppliers will be able to commission more meters that they have gained and deliver a more efficient CoS experience.

Benefits for society as a whole

This modification will be neutral against this benefit area.

Final conclusions -

It was the view of the Working Group held on 5 November 2025 that such was the need for a solution to the issue that they were uncomfortable waiting until 2029 for a solution to be available on the new DSP. It was highlighted that with the forthcoming Guaranteed Standards of Performance (GSOP) updates coming in April 2026, Suppliers will have 90 days to fix non-communicating Devices, or the

¹ (a) facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain

² (c) facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems

³ (d) facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy

⁴ (e) 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

⁵ (f) ensure the protection of Data and the security of Data and Systems in the operation of this Code

⁶ (g) facilitate the efficient and transparent administration and implementation of this Code

Consumer is entitled to a payment of £40 per fuel so it heightens the need to be able to obtain install keys quicker.

Working Group members requested that a DCC Preliminary Assessment be carried out for the existing DSP to obtain costs and look at whether this change could be available in 2026. Following concerns relating to the time and costs associated with a DSP solution the DCC suggested an alternative solution of a secure Database in FSM which would provide functionality for both the initial bulk upload of install codes as well as upload of install codes following future installs. This proposal would offer the opportunity to have a solution in place quicker than the alternatives and at significantly lower cost. This solution was supported by the Working Group 4 February 2026.

Appendix 1: Progression timetable

Timetable	
Event/Action	Date
Draft Proposal raised	11 Feb 2025
<i>Presented to CSC for initial comment</i>	<i>18 Feb 2025</i>
<i>CSC converts Draft Proposal to Modification Proposal</i>	<i>18 Feb 2025</i>
Modification discussed with TABASC	6 Mar 2025
Modification discussed with OPSG	11 Mar 2025
Modification discussed with SSC	12 Mar 2025
Modification discussed at Working Group	2 July 2025
Modification discussed with SSC	9 July 2025
Preliminary Assessment requested (Future DSP)	16 Sep 2025
Modification discussed at Working Group	5 Nov 2025
Preliminary Assessment requested (Existing DSP)	13 Nov 2025
Modification discussed at Working Group	3 Dec 2025
Preliminary Assessment requested (FSM)	9 Jan 2026
Modification discussed at Working Group	4 Feb 2026
Refinement Consultation	18 Feb 2026 – 11 March 2026
<i>Full Impact Assessment requested</i>	<i>25 March 2026</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
ACB	Access Control Broker
CH	Communications Hub
CoS	Change of Supplier
CSC	Change Sub-Committee
DCC	Data Communications Company
DSP	Data Service Provider
DUIS	DCC User Interface Specification
FSM	Future Service Management
GSOP	Guaranteed Standards of Performance
HAN	Home Area Network
MAMs	Meter Asset Managers
MAPs	Meter Asset Providers
OPSG	Operations Group
PIA	Preliminary Impact Assessment
PIT	Pre-Integration Testing
RBAC	Rules based Access Control
SEC	Smart Energy Code
SLA	Service Level Agreement
SIT	Systems Integration Testing
SMETS 2	Smart Metering Equipment Technical Specifications
SMI	Smart Metering Inventory
SMKI	Smart Metering Key Infrastructure
SRV	Service Reference Variant
SSC	Security Sub-Committee
SSI	Self-Service Interface
TABASC	Technical Architecture and Business Architecture Sub-Committee
UIT	User Integration Testing
WAN	Wide Area Network

Appendix 3: Prioritisation Matrix

Prioritisation Matrix ⁷							
Legal & regulatory compliance ⁱ	Operational performance ⁱⁱ	Cost benefit ⁱⁱⁱ	Consumer impact ^{iv}	Security impacts ^v	Value	Urgency	Priority
1	2	1	1	2	2	1	Medium

- This change will enable losing Suppliers to meet their obligation to provide gaining Suppliers with the relevant install codes within a 10-day SLA.
- This change will reduce industry costs incurred from replacing non-commissioned Devices.
- Efficiencies will be introduced for the industry through the ready availability of Device Data reducing time and labour demands.

ⁱ Ensure that Parties (including the DCC) meet the obligations of all relevant laws, regulations and licence obligations

ⁱⁱ Deliver performance improvements enhancing speed, quality, costs, flexibility and dependability

ⁱⁱⁱ Realise financial benefits compared to the cost of the change and the impact of doing nothing

^{iv} Meet or enhance consumer and end user needs and expectations through offering better services

^v Deliver or enhance the smart metering security arrangements or reduce the risk of a security incident arising

⁷ The impact or improvement in each area is measured on a 0-1-2-3 rating system, where 0 is equal to no expected impact or improvement and 3 is equal to a major expected impact or improvement.