

This document is classified as **Clear** in accordance with the Panel Information Policy. Recipients can distribute this information to the world, there is no limit on disclosure. Information may be shared without restriction subject to copyright.



MP272 'SMKI Document Set Changes 2024'

Modification Report

Version 1.0

18 September 2024

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.

Contents

1.	Summary	3
2.	Issue	3
3.	Solution	6
4.	Impacts	6
5.	Costs	7
6.	Implementation approach.....	8
7.	Assessment of the proposal	8
8.	Case for change	9
	Appendix 1: Progression timetable	10
	Appendix 2: Glossary	10

This document also has one annex:

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

Contact

If you have any questions on this modification, please contact:

Elizabeth Woods

020 4566 8335

elizabeth.woods@gemserv.com

1. Summary

This proposal has been raised by Gordon Hextall on behalf of the Smart Metering Key Infrastructure (SMKI) Policy Management Authority (PMA).

The SMKI PMA is required to periodically review the SMKI and Data Communications Company (DCC) Key Infrastructure (DCCKI) Document Sets as stated in SEC Section L 'Smart Metering Key Infrastructure and DCC Key Infrastructure' paragraph 1.17.

Historical reviews were undertaken in early 2021 and 2023, which resulted in [MP173 'SMKI & DCCKI Document Set reviews'](#), [MP198 'Further Changes from the Review of the SMKI and DCCKI Document Set'](#) and [MP245 'SMKI Document Set Changes 2023'](#) being raised to implement the recommendations made by these reviews.

The SMKI PMA has conducted a further review in 2024 on the document sets and identified minor inconsistencies or improvements to be made. They also noted one aspect (the removal of SMKI Portal via the Internet (SPOTI)) has some urgency to it, due to the DCC re-procurement of the Trusted Service Provider (TSP).

The Proposed Solution of this modification will address the concluding observations and recommendations of the SMKI Document Set review 2024.

The costs of this proposal are limited to Smart Energy Code Administrator and Secretariat (SECAS) time and effort to implement the changes. This modification will indirectly impact all SEC Parties by giving greater clarity and transparency to the SMKI and DCCKI Document Sets, and minor process changes.

This modification is targeted for the November 2024 SEC Release. This is a Self-Governance Modification.

2. Issue

What are the current arrangements?

Review of the SMKI and DCCKI Document Sets

The SMKI PMA has an obligation in SEC Section L1.17 to periodically review the effectiveness of the SMKI Document Set (which is defined in SEC Section L9.3) and the DCCKI Document Set (which is defined in SEC Section L13.31). Historical reviews were undertaken in early 2021 and 2023, and [MP173 'SMKI & DCCKI Document Set reviews'](#), [MP198 'Further Changes from the Review of the SMKI and DCCKI Document Set'](#) and [MP245 'SMKI Document Set Changes 2023'](#) were raised to implement the recommendations made by these reviews.

What is the issue?

The review of the SMKI document sets in 2024 has identified minor inconsistencies or improvements to be made. One aspect (the removal of SPOTI) has some urgency to it, due to the DCC re-procurement of the TSP.

The findings from the 2024 review are identified in the table below.

Summary of issue	SEC Sections and Appendices affected	Proposed change
The DCC re-procurement of the TSP and removing the requirement for SPOTI	Appendices D, K, M and N	Remove requirement for SPOTI.
Identified process improvements following a recent SMKI Recovery exercise	Appendices V and AI	Replace existing clauses referring to 'Internet Explorer' with new paragraph to detail reference to DCC Browser Policy.
SMKI and S1SPKI assurance requirements	Appendices C and AO	Broaden the SMKI Independent Assurance Scheme criteria to minimise the single provider dependency risk.
DCCKI Tokens for Admin Users	Section G; Appendices S, T, V and W	Broaden the options for DCCKI Tokens to include hard and soft tokens as well as smart card tokens.

The DCC re-procurement of the TSP and removing the requirement for SPOTI

The origin of the requirement for the SPOTI was to enable Gas Networks, that were not DCC Users (and therefore without a DCC Gateway connection) to be a SMKI Subscriber and obtain SMKI Organisation Certificates. [MP128A 'Gas Network Operators SMKI Requirements'](#) removed the need for Gas Network Operators (GNOs) to be SMKI Subscribers and SPOTI has not been used for over two years. In April 2024, SECAS wrote to SEC Parties, and specifically the GNOs that have used SPOTI in the past, asking if there was a continuing need for the service. SECAS received no response. Developing and maintaining SPOTI has been a considerable expense for provision by the TSP. As the TSP is being re-procured, there is an opportunity to reduce the unnecessary costs of providing SPOTI, when it is no longer a requirement for GNOs to be SMKI Subscribers. The SMKI PMA proposes that the SPOTI requirement is removed from the SEC, as the SPOTI has not been used for two years this is unlikely to impact any Party.

SMKI PMA noted that this change needs to be in place before the DCC sets new TSP contracts, and the tenders can be made 'subject to' this modification being in place before contracts are awarded.

Identified process improvements following a recent SMKI Recovery exercise

In a recent SMKI Recovery exercise, it was noted instances where the term 'Internet Explorer' is noted as an acceptable web browser however this has now replaced by Microsoft Edge and so this term is no longer valid. To ensure futureproofing, the instances of this term should be changed to refer to the DCC's Browser Policy published on the DCC website DCCKI for acceptable web browsers. There is no direct impact to SEC Parties.

SMKI and S1SPKI assurance requirements

The original requirements for the SMKI Independent Assurance Scheme specified in SEC Appendix C 'SMKI Compliance Policy' and SEC Appendix AO 'S1SPKM Compliance Policy', were based on very tight quality criteria. These criteria can only be met by one assurance scheme and one accredited provider, and is only applied to two other Public Key Infrastructures (PKIs) in the UK. There is a risk that this scheme and the single provider could withdraw from the provision of this scheme (as recently occurred when National Cyber Security Centre (NCSC) withdrew the Commercial Product Assurance (CPA) Scheme) and the SMKI PMA wishes to broaden the criteria to minimise the risk. There is no direct impact to SEC Parties.

DCCKI Token Changes

The Universal Serial Bus (USB) tokens defined in the SEC are reliant on Java applets being executed within web browsers in order to encode and maintain the DCCKI Admin User Certificates. Once a Personnel Authentication Certificate is encoded onto the USB token via the Self-Service module, the Java applet is no longer required to access Self-Service Interface (SSI)/ Self-Service Management Interface (SSMI). It is only then required when managing or in the renewal process for the Personnel Authentication Certificate.

Leading browser providers have redacted support for Java applets from the latest versions of their products. Java is not supported by Microsoft Edge (the replacement for Internet Explorer), nor in the latest versions of Chrome or Firefox. The impact of this is that Administrators cannot enrol new or replacement certificates, as well as their Entrust¹ USB Token unless they install the Entrust client software or run a legacy unsupported version of the browsers. This is prevented in many instances by standard build processes and security policies. The SEC currently only caters for hard tokens, the SMKI PMA supports the DCC proposal to broaden the use of DCCKI Admin Tokens to also include soft tokens. This will have a positive impact on SEC Parties, as it would allow Administrators to enrol their new or replacement certificates on leading browsers.

What is the impact this is having?

If these issues are not resolved, the SMKI and DCCKI Document Sets will contain some unnecessary or inappropriate requirements. These vary in nature but include reduced expenditure and future proofing assurance, web browser and DCCKI Token details.

If these continue to remain, it could make it harder for Parties to comply with these documents and make the obligations in these documents unnecessary, inappropriate or impossible.

Cost reductions are achievable by removing the requirement for SPOTI and process improvements are achievable and independent assurance risks can be mitigated.

Impact on consumers

The issues outlined in this proposal do not impact consumers.

¹ Entrust is an authentication and identity assurance platform. It is used within the DCC Data Systems to authenticate users and provide two factor authorisation.

3. Solution

The Proposed Solution is to implement the changes identified from the SMKI and DCCKI Document Set review. These changes have been identified by the DCC and SMKI PMA Members and are supported by the SMKI Specialist and reviewed and recommended by the SMKI PMA Working Group. The legal text to implement these changes can be found in Annex A.

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

All Parties will indirectly benefit from this modification as the SMKI and DCCKI Document Sets will have greater clarity, transparency and align with current processes. There are no expected negative impacts to SEC Parties as these changes are to processes that are no longer used in the case of SPOTI, or no direct changes to processes. There is an expected positive impact to SEC Parties for DCCKI Admin Tokens to allow new or replacement certificates on leading browsers and including soft tokens.

DCC Systems

There will be no impacts on the DCC System from this modification.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Section A 'Definitions and Interpretation'
- Section G 'Security'
- Appendix C 'SMKI Compliance Policy'
- Appendix D 'SMKI Registration Authority Policies and Procedures'
- Appendix K 'SMKI and Repository Test Scenarios Document'
- Appendix M 'SMKI Interface Design Specification'

- Appendix N 'SMKI Code of Connection'
- Appendix S 'DCCKI Certificate Policy'
- Appendix T 'DCCKI Interface Design Specification'
- Appendix V 'DCCKI Code of Connection and DCCKI Repository Code of Connection'
- Appendix W 'DCCKI Registration Authority Policies and Procedures'
- Appendix AI 'Self-Service Interface Code of Connection'
- Appendix AO 'S1SPKM Compliance Policy'

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

Devices

The issues outlined in this proposal do not impact Devices.

Consumers

The issues outlined in this proposal do not impact consumers.

Other industry Codes

The issues outlined in this proposal do not impact other industry Codes.

Greenhouse gas emissions

The issues outlined in this proposal do not impact greenhouse gas emissions.

5. Costs

DCC costs

There are no additional DCC costs associated with this modification. The removal of SPOTI will reduce DCC costs.

SECAS costs

The estimated SECAS 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

There will be no other costs for SEC Parties from this modification.

6. Implementation approach

Approved implementation approach

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

- **7 November 2024** (November 2024 SEC Release) if a decision to approve is received on or before 23 October 2024; or
- **Ad hoc SEC Release** if a decision to approve is received after 23 October 2024.

As this is a text-only change which needs to be in place as soon as possible, for alignment before the DCC TSP re-procurement begins, the earliest possible SEC Release that can be targeted for is the November 2024 SEC Release.

7. Assessment of the proposal

SECAS has engaged with the Chairs from the Operations Group (OPSG), Privacy Sub-Committee (PSC), Smart Meter Device Assurance Sub-Committee (SMDASC), the SMKI PMA, the Security Sub-Committee (SSC), the Technical Architecture and Business Architecture Sub-Committee (TABASC), and Testing Advisory Group (TAG) to confirm what input is required from these forums. SECAS believes the following Sub-Committees will need to provide the following input to this modification:

Sub-Committee input	
Sub-Committee	Input sought
OPSG	No input required
PSC	No input required
SDMASC	No input required
SMKI PMA	The SMKI PMA have requested this modification be implemented.
SSC	No input required
TABASC	No input required
TAG	No input required

Observations on the issue

The changes in this modification report have been identified by the DCC and the SMKI Specialist. Both the SMKI PMA and some members of the SSC provided input into the SMKI and DCCKI Document Set reviews and agreed the observations and recommendations should be addressed.

The SMKI PMA has noted that cost reductions are achievable by removing the requirement for SPOTI and process improvements are achievable and independent assurance risks can be mitigated.

8. Case for change

Business case

The purpose of the proposed revisions to the SMKI and DCCKI Document Set is to bring the documents in line with current procedures and incorporate minor updates that have been identified. There is minimal cost to implement these changes and minimal impact to SEC Parties.

Views against the General SEC Objectives

Proposer's views

The Proposer believes that this modification will better facilitate SEC Objective (g)² by aligning inconsistencies and incorrect references to improve security of Data and Systems.

Industry views

The SMKI PMA has agreed with the DCC that the minor changes identified require to be addressed.

Views against the consumer areas

Improved safety and reliability

This change is neutral in this area.

Lower bills than would otherwise be the case

This change is neutral in this area.

Reduced environmental damage

This change is neutral in this area.

Improved quality of service

This change is neutral in this area.

Benefits for society as a whole

This change is neutral in this area.

² To facilitate the efficient and transparent administration and implementation of this Code.

Appendix 1: Progression timetable

Timetable	
Event/Action	Date
Draft Proposal raised	10 Sep 2024
CSC converts Draft Proposal to Modification Proposal	17 Sep 2024
Modification Report approved by CSC	17 Sep 2024
Modification Report Consultation	18 Sep – 9 Oct 2024
<i>Change Board Vote</i>	23 Oct 2024

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
CSC	Change Sub-Committee
CPA	Commercial Product Assurance
DCC	Data Communications Company
DCCKI	Data Communication Company Key Infrastructure
GNO	Gas Network Operator
NCSC	National Cyber Security Centre
OPSG	Operations Group
PKI	Public Key Infrastructure
PSC	Privacy Sub-Committee
S1SPKI	SMETS1 Service Provider Public Key Infrastructure
S1SPKM	SMETS1 Service Provider Key Management
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SMDASC	Smart Meter Device Assurance Sub-Committee
SMETS	Smart Metering Equipment Technical Specifications
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SPOTI	SMKI Portal via the Internet
SSC	Security Sub-Committee

Glossary	
Acronym	Full term
SSI	Self-Service Interface
SSMI	Self-Service Management Interface
TABASC	Technical Architecture and Business Architecture Sub-Committee
TAG	Testing Advisory Group
TSP	Trusted Service Provider
USB	Universal Serial Bus