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MP109

‘ADT and Exit Quarantine file delivery mechanism’

Modification Report

Version 0.5

23 November 2021



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 five annexes:

- **Annex A** contains the business requirements for the solution.
- **Annex B** contains the Data Communications Company (DCC) Preliminary Assessment response.
- **Annex C** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex D** contains the Anomaly Detection Threshold (ADT) User Guidance document.
- **Annex E** contains the Refinement Consultation responses.

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1. Summary

This Modification Proposal was raised by Chris de Asha of the DCC.

SEC Appendix AA 'Threshold Anomaly Detection Procedures' currently requires the ADT File and Exit Quarantine files to be provided to the DCC by email. The ADT and Exit Quarantine files are data records that must be securely delivered, as they contain information private to both a User and the DCC. Failure to deliver this information securely would be classed as a data breach. The Proposer believes the current method is insecure and poses potential security risk as email is not considered a secure delivery method. This is due to it lacking end to end encryption and being potentially susceptible to Security breaches through either deliberate malicious activity or erroneous activity.

To mitigate the potential security risk posed by email, the DCC has proposed to change the wording of SEC Appendix AA from "Email" to "DCC's preferred secure delivery method of choice". The DCC's current secure delivery method of choice would be via the DCC SharePoint. The legal text also removes references to sending emails to the 'DCC Service Desk'.

This modification will affect the DCC and DCC Users. There are no DCC, or SEC Party costs associated with this change. If approved this modification will be implemented in the February 2022 SEC Release. This is a Self-Governance Modification.

2. Issue

What are the current arrangements?

The SEC explicitly states that email is the delivery method required for ADT files. Several sections in SEC Appendix AA either state email as the only delivery method or refer to an action required prior to an email being sent.

What is the issue?

The SEC specifically details that ADT and Exit Quarantine files can only be sent via email, which prevents alternative methods of delivery being used. Users are obligated to do this, for example in SEC Appendix AA section 4.7 it states "*Each User shall investigate and resolve the ADT exceeded event. Each User shall provide an email to the Service Desk indicating the action to be taken on each of the quarantined communications*". With the current arrangements, this results in emails being the single means of sending ADT and Exit Quarantine files.

The DCC believes there are more secure methods available to send these files. The ADT and Exit Quarantine files must be securely delivered due to these being data records that contain information private to both a User and the DCC. Failure to do so would be classed as a data breach. Additionally, ADTs provide protection to the electricity network by specifying the maximum number of Critical commands expected. This ensures there are no unexpected or malicious surges or reductions in power on the National Grid.

What is the impact this is having?

The DCC believes that using email to provide ADT Files and subsequent updates is not secure as there are potential scenarios where this process could result in a breach of Security, either by malicious activity or human error. If the ADT and Exit Quarantine files aren't securely delivered, then it allows the potential for unauthorised persons being able to access private data. If these data breaches occur, it could undermine the security and commercial image of DCC's business processes. The additional benefits suggested by the Proposer are a single system for the delivery of files, resulting in less effort for end Users and DCC.

Impact on consumers

This change will benefit consumers as moving away from email to SharePoint is a more safe method providing privacy and security.

3. Solution

Proposed Solution

The DCC proposes that a secure delivery method could be via DCC SharePoint which all Service Users have access to as part of the onboarding process. To mitigate the potential security risk posed by email, the DCC proposes a change of SEC Appendix AA wording from "Email" to "DCC's preferred secure delivery method of choice". The wording change to the SEC would also allow future improvements to the ADT process without another SEC Modification. Changes would be communicated via DCC normal operational communications:

- the Customer Operations Forum
- business wide mass communications
- detailed explanations on the delivery method will also be added to the ADT User Guidance document available to all Service Users via DCC SharePoint and the SSI.

The business requirements can be found in Annex A and the ADT User Guidance document reflecting this solution can be found in Annex D.

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

SEC Party Categories impacted			
✓	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

This Modification Proposal affects all SEC Parties who use email to submit their ADT and Exit Quarantine file to the DCC, meaning it will impact all DCC Users that submit Critical Service Requests.

DCC System

There are no impacts on the DCC Systems. There is a small change proposed to the SSI, but the modification is not dependant on that change, and it is being consulted on separately¹.

The DCC's Preliminary Assessment response can be found in Annex B. As there are no DCC costs to implement this solution, the DCC has confirmed that no subsequent Impact Assessment was needed.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Appendix AA 'Threshold Anomaly Detection Procedures'.

The redlined changes to deliver this modification can be found in Annex C.

Consumers

No impacts of Consumers have been identified.

Other industry Codes

No other industry Codes are impacted by this proposal.

Greenhouse gas emissions

This proposal will have no effects on greenhouse gas emissions.

¹ The DCC SSI consultation can be found here [Consultation on proposed changes to the Self-Service Interface \(1\) | Smart DCC](#)

5. Costs

DCC costs

There are no DCC costs to implement this proposal.

SECAS costs

The estimated 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 will be no cost to SEC Parties to implement this proposal.

6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **24 February 2022** (February 2022 SEC Release) if a decision to approve is received on or before 10 February 2022; or
- **30 June 2022** (June 2022 SEC Release) if a decision to approve is received after 10 February 2022 but on or before 16 June 2022.

As the change will be a document-only change, the February 2022 SEC Release is the earliest release this can be targeted for.

7. Assessment of the proposal

Observations on the issue

The views of the Panel Sub-Committees were sought during the Development Stage. Only the Security Sub-Committee (SSC) confirmed it had an interest in the progress of this Modification Proposal. It agreed that this was an issue and requested further involvement as the solution developed so that it could remain updated on its progress and ensure that it would be fit for purpose.

The Change Sub-Committee (CSC), on its initial viewing of the modification, was supportive of the issue and agreed that it was clear in what was looking to be addressed. SECAS and the CSC agreed that if converted to a Modification Proposal, it should proceed to a decision under Self-Governance.

Solution development

The DCC initially proposed that DCC Users to send ADT and Exit Quarantine files via the Self-Service Interface (SSI). A DCC Preliminary Assessment was conducted based on this original Proposed Solution which was presented to Working Group².

The Working Group members discussed this option and highlighted they would consider to a move to the SSI, on the condition it wouldn't create any duplication of efforts for the User. This was due to ADT files needing to be signed off by an Authorised Responsible Officer (ARO), which is fine under the current email system. Another Working Group member believed this Modification Proposal would be an improvement on the existing system but queried whether keeping the current system would be more cost effective than switching over to a primarily SSI driven delivery method.

A Working Group member stated that the SSI Improvements Process (SIP) would need to be consulted upon at some point to deliver the changes given the impacts to the SSI that would result from the Proposed Solution. It was suggested that a SIP be run in parallel with a Refinement Consultation for the Modification Proposal; however, since the SSI solution is no longer the Proposed Solution this is no longer needed to deliver the modification.

Overall though, the Working Group considered the SSI solution to be too expensive compared to the benefits it would bring and the availability of another, less expensive option. The Smart Energy Code Administrator and Secretariat (SECAS) and the DCC explored alternative methods. The DCC then looked at alternative secure methods and proposed ADT and Exit Quarantine files are sent to the DCC via SharePoint. The proposed SharePoint solution has no DCC cost associated with the change and the Working Group members were more supportive of this method.

Working Group members noted the DCC had not stated a secondary method in the solution for use if SharePoint is suffering an outage. The DCC advised the secondary method of email was not recommended as it was unsecure. The DCC proposed the term 'preferred secure delivery method of choice' be used in SEC Appendix AA as this would allow changes to be made in the future without the need for a SEC modification.

In addition, the DCC believed a secondary method was not required as the DCC uses the Microsoft Office 365 cloud subscription to host the service. The DCC believed that in Q2 2021 there was a worldwide 99.98% uptime. There had only been one major incident related to DCC Customer SharePoint in the last year, on 11 December 2020, due to a full Microsoft outage across the UK for all of Office 365, disrupting the Service for under an hour. A Working Group member stated while they heard the DCC's comments about SharePoint being reliable they did not agree, and it would be good to have an alternative method in the event of an emergency.

SECAS asked the Working Group if members wanted something specific written into the SEC and a Working Group member confirmed it would be better to have this updated into the ADT User Guidance document. The DCC agreed it would be able to put some wording in the guidance document with the agreement to use email if SharePoint is unavailable. Following the Working Group, the DCC have updated the ADT User Guidance to reflect the User request. This will be released when the modification goes live.

² The DCC Preliminary Assessment against the initial proposed solution can be found here <https://smartenergycodecompany.co.uk/modifications/adt-and-exit-quarantine-file-delivery-mechanism/>

The full DCC Preliminary Assessment response can be found in Annex B. Furthermore, as there are no DCC costs associated to implement the change the DCC confirmed an Impact Assessment was not required.

Support for Change

The SSC expressed support of the revised solution using SharePoint.

Once SECAS presented the revised solution and the updated Preliminary Assessment findings, the Working Group provided full support. The DCC further highlighted all Users are given access to the SharePoint as part of the on-boarding process and are provided with a guidance document which explains in detail of the process in submitting ADT and Exit Quarantine files. The DCC confirmed that this would be updated when the modification was implemented to reflect the requirement of the use of SharePoint – these updates can be found in Annex D.

Business case

Moving away from email to SharePoint is a safer method providing privacy and security. Since this is a very low-cost option, the benefits outweigh the costs.

Views against the General SEC Objectives

Proposer's views

The Proposer believes that this Modification Proposal would help better facilitate SEC Objective (f)³. This is due to any solution that provides a more secure delivery method than the current email system for providing ADT and Exit Quarantine files being beneficial to the protection of data that is required in the SEC.

Industry views

Four responses were received to the Refinement Consultation. One Large Suppliers confirmed although they preferred email, they had no material issues with moving to the new method of using SharePoint. One Network Party agreed the new method would improve the security of the ADT and Exit Quarantine file delivery mechanism. Another Network Party highlighted while they agreed with the intent of the solution, they queried what would happen in the instance the SharePoint suffers an outage.

The general view of the Refinement Consultation responses was that MP109 would better facilitate SEC Objective (f). If individuals who currently upload the ADT files have access to the DCC SharePoint and respective folders, the change can be implemented immediately. Three respondents agreed MP109 should be approved. However, one Network Party highlighted they believed the modification is neutral against the SEC objectives. Whilst they understand email is not secure, they believed that the files do not contain any personal data. As they are signed the DCC would know if they had been tampered with before actioning them.

The full Refinement Consultation responses can be found in Annex D.

³ Ensure the protection of data and the security of data and systems in the operation of the SEC.

Views against the consumer areas

Improved safety and reliability

This modification will ensure increased safety of the Smart Metering system by maintaining DCC User documents secure and private.

Lower bills than would otherwise be the case

The change is neutral against this area.

Reduced environmental damage

The change is neutral against this area.

Improved quality of service

This implementation will ensure privacy is maintained when sending through data which contain information private to both Users and the Industry.

Benefits for society as a whole

The change is neutral against this area.

Appendix 1: Progression timetable

The modification will be presented to the Change Sub-Committee on 30 November 2021 to agree to progress to the Report Phase. A Modification Report Consultation (MRC) will then be issued. The Change Board vote under Self-Governance will take place in January 2022.

Timetable	
Action	Date
Business requirements agreed with the Proposer	16 Mar 2020
Working Group meeting	1 Apr 2020
Business requirements discussed at SSC	8 Apr 2020
Request Preliminary Assessment	13 May 2020
Preliminary Assessment accepted	29 May 2020
Preliminary Assessment returned	28 Sep 2020
Working Group meeting	4 Nov 2020
Presented to the SSC	24 May 2021
Updated Preliminary Assessment received	16 Jul 2021
Presented to the SSC	28 July 2021
Working Group meeting	4 Aug 2021

Timetable	
Action	Date
Refinement Consultation	16 Aug – 27 Aug 2021
Working Group meeting	6 Oct 2021
Modification Report approved by CSC	30 Nov 2021
Modification Report Consultation	1 Dec – 22 Dec 2021
Change Board vote	26 Jan 2022

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
ADT	Anomaly Detection Threshold
ARO	Authorised Responsible Officer
CSC	Change Sub-Committee
DCC	Data Communication Company
MRC	Modification Report Consultation
SEC	Smart Energy Code
SECAS	Smart Energy Code Administration and Secretariat
SIP	SSI Improvement Process
SSC	Security Sub-Committee
SSI	Self-Service Interface