

ECOS Migration Reporting Regime

DCC ECOS Migration Reporting Regime pursuant to the ECoS
Transition and Migration Approach Document (ETMAD) –
SEC Appendix AS

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1 Introduction and Context

The ECoS Transition and Migration Approach Document (ETMAD) is a Smart Energy Code (SEC) Subsidiary Document (SEC Appendix AS) that defines DCC and Supplier Party rights and obligations that are to be in place during the ECoS Migration Period. This document should be read in conjunction with the ETMAD.

Section 4 of the ETMAD requires the DCC to produce and maintain an ECoS Migration Reporting Regime (EMRR) to define reports provided to Supplier Parties showing Failed Migrations and also those Device Models deemed to be Non-Migratable. These are intended to inform Supplier Parties on the progress of migration and will convey successful and failed migrations.

As per clause 1.9 of the ETMAD, Responsible Suppliers shall monitor reports provided in accordance with this document and shall endeavour to resolve issues which led to the Failed Migration of Devices for which they are the Responsible Supplier, in accordance with the ECoS Migration Error Handling and Retry Approach (EMEHRA).

The EMEHRA, which is a separate document to the EMRR, is outlined in section 7 of the ETMAD and details the activities the DCC shall carry out where an ECoS Migration attempt is unsuccessful and the resolution activities the Supplier Party shall carry out in relation to Failed Migrations.

Capitalised terms in this document have the meaning given to them in this document or ETMAD or, if not defined in this document or the ETMAD, in Section A of the SEC.

1.1 DCC Migration Reporting Obligations under the ETMAD

- 1.1.1 This document outlines the reports that shall be issued to Supplier Parties pursuant to clause 1.8 of the ETMAD. It contains an explanation of how the DCC provides ECoS Migration Reporting to Responsible Suppliers and has been established in line with processes specified in the ETMAD.
- 1.1.2 Clause 4.1 of the ETMAD also outlines that the DCC shall make available to the Panel, all Parties and (on request) the Secretary of State the EMRR a list of the reports that the DCC shall provide in respect of ECoS Migration and an overview of the frequency, content of and recipients of those reports. This EMRR does not specify the frequency, content and recipients of those reports in order to allow for flexibility in updating other interested parties in a manner that is acceptable to all stakeholders, to be agreed as necessary, as migration progresses. The DCC will work all stakeholders to provide updates on ECoS Migration progress as, and when, requested. This will include regular migration updates to BEIS and relevant governance groups e.g. the SEC Operations Group and Technical & Business Delivery Group (TBDG). The reason for specifying reporting to Supplier Parties within this EMRR is to allow systems to be built to consume the data where appropriate.
- 1.1.3 DCC has also considered the provision of reports to Meter Asset Providers (MAPs). Reporting to MAPs is not included within this EMRR however is defined under clause H17.5 of the SEC. DCC considers that the most robust mechanism for providing data related to the ECoS Migration status of individual Devices for MAPs, would be to use the mechanisms that were developed for MP181. This enhanced reporting will be reflected with additional fields within the ETMAD as a change to Clause H17.5 of the SEC whilst the ETMAD remains in force.
- 1.1.4 The reports that are delivered are included at Appendix A.

2 Objectives of the ECoS Migration Reporting Regime

2.1 Reporting Context

- 2.1.1 The EMRR provides Responsible Suppliers with regular reports that provide relevant information concerning the progress and outcomes of the migration processes.
- 2.1.2 The migration reporting system has access to data relating to organisations i.e. identifiers, names and other supporting information concerning the SEC Parties.
- 2.1.3 The EMRR defines reports that help Supplier Parties understand the overall progress of the Migration processes.

2.2 Reporting Objectives and Scope

- 2.2.1 DCC has developed the EMRR to:
 - (i) allow Responsible Suppliers to track progress and the outcome of ECoS Migration for Devices for which they are responsible.
 - (ii) report on failures by Device and Device Type, Device Model, Manufacturer, Firmware and by the nature of the failure.
 - (iii) for the benefit of Suppliers that gain Devices through change of supplier, provide a historical view on success, failures and Devices that were installed with ECoS manufacturing certificates.
 - (iv) report on Devices recently installed having ECoS manufacturing certificates and provide summary information of the DCC's overall ECoS Migration volumes and Non-Migratable Device Models.
 - (v) provide information in convenient and accessible formats and at a cost that is reasonable and proportionate for both the DCC and its customers.
- 2.2.2 EMRR reports will provide a view of progress by combining the data into standardised format.
- 2.2.3 The scope of the EMRR is defined as:
 - (i) Informing the progress of ECoS Migration;
 - (ii) provision of a list of Non-Migratable Device Models and device counts where ECoS Migration will not be attempted as they are of a Device Model categorised as Non-Migratable; and
 - (iii) informing of the Devices that were installed with ECoS manufacturing certificates, so that the Responsible Supplier is fully informed which Devices contain ECoS credentials.
- 2.2.4 The EMRR provides regular reports to allow parties to understand the outcomes of the ECoS Migration processes. The reports relating to migration failures are generated four times a day. It is not intended to be "real-time" or to enable real-time intervention in the Migration processes.

2.2.5 The following activities are excluded from the scope of the EMRR:

- Forecasting migration targets e.g. throughput, capacity and Device Model selection;
- Activities preparatory to ECoS Migration, including preparatory activities required from other SEC Parties through the ETMAD e.g. firmware upgrades.
- Information about Devices that have not started the ECoS Migration process.
- Information about pre-notified / uninstalled ECoS devices
- Online analytics tools;
- Real-time reporting;
- Reports to Meter Asset Providers which are defined under Clause H17.5¹ of the SEC; and
- Reports that the DCC will deliver to the SEC Panel, the Authority or the Secretary of State.

¹ This is a new clause added as a result of Modification Proposal 181.

3 Distribution and Content of ECoS Migration Reports

3.1 Distribution Mechanism and Frequency

- 3.1.1 ECoS migration reports are distributed using the DCC's SharePoint site. Each Responsible Supplier is provided with a secure area of the site, from which they can retrieve published reports intended for them.
- 3.1.2 Reports will be generated at a frequency specified in Appendix A.
- 3.1.3 Daily summary and detail reports will relate to the previous day of ECoS Migration. Each day is counted up to 23:59:59.
- 3.1.4 Weekly reports will relate to the previous week. Each week will end at 23:59:59 on Sundays.
- 3.1.5 ECoS Migration progress will be included on detail reports distributed to the relevant Responsible Supplier(s). Each report will include all previously unreported transactions that have been concluded within the period.
- 3.1.6 Details of the distribution mechanism are included at Appendix B.

3.2 Report Content and Format

- 3.2.1 A set of ECoS Migration reports is defined at Appendix A.
- 3.2.2 All reports are delivered as comma-separated values. File naming conventions are described at Appendix B.
- 3.2.3 Each report consists of detailed or summary information relating to a specific Responsible Supplier, and which is delivered to those Parties.
- 3.2.4 Each Report consists of standardised header and trailer.
- 3.2.5 All date and time fields will be based on UTC, Coordinated Universal Time. (Please note that UTC does not observe daylight saving time.)
- 3.2.6 The reports will be classified as "DCC Controlled" having the classification at the top and bottom of each report.

Appendix A Summary of Migration Reports

The ECoS Migration Reporting Regime produces the following reports, which are documented within this Appendix A.

Ref	Name	Distribution	Frequency
ECOSMIG-001	Detail Report: ECoS Migrations Completed Successfully	Responsible Supplier	Daily
ECOSMIG-002	Detail Report: ECoS Migrations Completed Unsuccessfully	Responsible Supplier	6 hours
ECOSMIG-003	Detail Report: Gaining Supplier Devices History	Responsible Supplier	Monthly
ECOSMIG-004	Summary Report: Device Count by Non-Migratable Device Model	Responsible Supplier	Weekly
ECOSMIG-005	Summary Report: ECoS Migration Activity for the Previous Week	Responsible Supplier	Weekly
ECOSMIG-006	Detailed Report: Newly Installed ECoS Devices	Responsible Supplier	Monthly

Notes:

A version of each report is distributed to Responsible Suppliers as noted above. Each version of each report includes only the information that is directly pertinent to its recipient.

Reports are not produced for an Energy Supplier for periods where no relevant ECoS migration activity has taken place or otherwise the report will be empty.

Fields referenced in each of the reports outlined in this document should be interpreted with the following explanation:

- MPxN - Where there is no Gas Smart Meter Equipment connected to the Communications Hub, the MPxN provided in relation to a Gas Proxy Function shall be the MPAN associated with the Electricity Import Supplier
- Device Manufacturer is a unique identifier for the manufacturer. For example: 1057
- Device Model is a unique identifier comprised of the Device Model Identifier, the Device Model Hardware Version and Device Model Revision as supplied by the CPL. For example: 54342152 where 5434 is a Device Model Identifier, 21 is Device Model Hardware Version and 52 is Device Model Revision.
- Firmware Version is an identifier of the firmware version. For example: 00123402

ECOSMIG-001 - Detail Report: ECoS Migrations Completed Successfully

The ECoS Migration of a device is successfully completed where it has been confirmed that the device credentials have been successfully updated on a device.

A Detail record is provided for each Device that has completed ECoS Migration successfully within a reporting period.

Frequency	Delivered to	Reporting End Period	Trigger
Daily 06:00 UTC	Responsible Supplier	23:59:59 UTC on Previous Migration Day	Time based

A version of the report will be produced once per day and will include all previously unreported ECoS Migrations that completed successfully.

Information will be present for all Devices successfully migrated for which the report recipient is the Responsible Supplier.

Header record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('00')	M	Text	2
Report Identifier ('ECOSMIG-001')	M	Text	11
Report Recipient (Responsible Supplier SEC Party ID)	M	Text	6
Report Sequence Number	M	Integer	6
Report Title	M	Text	100
Report Creation DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Start DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	M	DateTime (YYYYMMDDThhmmss)	15
DCC Classification ('DCC Controlled')	M	Text	14

Detail record

One detail record is created for each successfully completed ECoS Migration device.

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('10')	M	Text	2
Device ID	M	Text	23
MPxN	M	Text (MPAN or MPRN)	13
Device Type	M	Text	6
Device Manufacturer	M	Text	30
Device Model	M	Text	30
Firmware Version	M	Text	8
Migration Completion DateTime	M	DateTime (YYYYMMDDThhmmss)	15

Trailer record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('99')	M	Text	2
Rows Count	M	Integer	6
DCC Classification (‘DCC Controlled’)	M	Text	14

ECOSMIG-002 - Detail Report: ECoS Migrations Completed Unsuccessfully

The ECoS Migration of a Device is unsuccessfully completed where ECoS Migration of the Device has been tried and failed.

A detail record is provided for:

- Each attempt to send a certificate replacement command to a Device; and
- Such attempt has completed unsuccessfully within a Reporting Period for which the report recipient is the Responsible Supplier.

A Device may appear in subsequent issues of this report when a further attempt to send a certificate replacement command to a device that also completes unsuccessfully.

Frequency	Delivered to	Reporting End Period	Trigger
Every 6 hours – e.g. 00:00; 06:00; 12:00; 18:00	Responsible Supplier	One hour before the report run time	Time based

A version of the report will be produced four times a day and will include all previously unreported ECoS Migrations that completed unsuccessfully in the period ending one hour before the report run time.

Header record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('00')	M	Text	2
Report Identifier ('ECOSMIG-002')	M	Text	11
Report Recipient (Responsible Supplier SEC Party ID)	M	Text	6
Report Sequence Number	M	Integer	6
Report Title	M	Text	100
Report Creation DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Start DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	M	DateTime (YYYYMMDDThhmmss)	15
DCC Classification ('DCC Controlled')	M	Text	14

Detail record

One detail record is created for each Device that failed ECoS Migration.

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('10')	M	Text	2
Device ID	M	Text	23
MPxN	M	Text (MPAN or MPRN)	13
Device Type	M	Text	6
Device Manufacturer	M	Text	30
Device Model	M	Text	30
Firmware Version	M	Text	8
Error Code	M	Text	5
Error Sub Code	M	Integer	6
Migration Failed DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Number of Attempts	M	Integer	6

Trailer record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('99')	M	Text	2
Rows Count	M	Integer	6
DCC Classification ('DCC Controlled')	M	Text	14

Error Information

The error codes and sub-codes and their meanings are maintained within the *ECoS Migration Error Handling and Retry Approach* document.

ECOSMIG-003 - Detail Report: Gaining Supplier Devices History

The *gaining supplier device* is a Device which had a CoS event in the Reporting Period.

A Detail record with successfully migrated, the latest failure or installed with ECoS credentials is provided for each *gaining supplier device* from the beginning of the migration to the applicable Reporting End Period (the last day of the previous month 23:59:59 UTC).

This report shall provide a gaining supplier with a historical view of the successfully migrated Devices, the latest failures on their Devices or installed Devices with ECoS credentials which were subject to a CoS Event within the Reporting Period.

Frequency	Delivered to	Reporting End Period	Trigger
Monthly on the 2 nd of every month 08:00 UTC	Gaining Supplier	23:59:59 Last day of the previous month	Time based

A version of the report will be produced once per month.

Header record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('00')	M	Text	2
Report Identifier ('ECOSMIG-003')	M	Text	11
Report Recipient (Responsible Supplier SEC Party ID)	M	Text	6
Report Sequence Number	M	Integer	6
Report Title	M	Text	100
Report Creation DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Start DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	M	DateTime (YYYYMMDDThhmmss)	15
DCC Classification ('DCC Controlled')	M	Text	14

Detail record

A Detail record with successfully migrated, the latest failure or installed with ECoS credentials is provided for each *Gaining Supplier Device*.

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('10')	M	Text	2
Device ID	M	Text	23
MPxN	M	Text (MPAN or MPRN)	13
Device Type	M	Text	6
Device Manufacturer	M	Text	30
Device Model	M	Text	30
Firmware Version	M	Text	8
ECoS Status	M	Text ("Success" or "Failure" or "Installed")	7
Error Code	O	Text (Mandatory for ECoS Status = "Failure")	5
Error Sub Code	O	Integer (Mandatory for ECoS Status = "Failure")	6
Migration DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Number of Attempts	M	Integer	6

Trailer record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('99')	M	Text	2
Rows Count	M	Integer	6
DCC Classification ('DCC Controlled')	M	Text	14

Error Information

The error codes and sub-codes and their meanings are maintained within the *ECoS Migration Error Handling and Retry Approach* document.

ECOSMIG-004 - Summary Report: Devices Count by Non Migratable Device Model

The report summarises how many devices will not be attempted for ECoS Migration as they are of a Device Model categorised as Non Migratable.

A summary record with Devices count is provided for each device type, manufacturer, device model, firmware version that are non-migratable for which the report recipient is the Responsible Supplier.

Frequency	Delivered to	Reporting End Period	Trigger
Weekly (Monday 6:00)	Responsible Supplier	23:59:59 Previous Migration Day	Time based

A version of the report will be produced once per week and will include a snapshot of Non-Migratable Device Models - Device Type, Manufacturer, Device Model and Firmware Version.

Header record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('00')	M	Text	2
Report Identifier ('ECOSMIG-004')	M	Text	11
Report Recipient (Responsible Supplier SEC Party ID)	M	Text	6
Report Sequence Number	M	Integer	6
Report Title	M	Text	100
Report Creation DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Start DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	M	DateTime (YYYYMMDDThhmmss)	15
DCC Classification ('DCC Controlled')	M	Text	14

Detail record

One detail record is created for each Non-Migratable Device Model.

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('10')	M	Text	2
Device Type	M	Text	6
Device Manufacturer	M	Text	30
Device Model	M	Text	30
Firmware Version	M	Text	8
Non Migratable DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Devices Count (Distinct Devices Count)	M	Integer	9

Trailer record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('99')	M	Text	2
Rows Count	M	Integer	6
DCC Classification (‘DCC Controlled’)	M	Text	14

ECOSMIG-005 - Summary Report: ECoS Migration Activity for the Previous Week

The report summarises the status and events pertaining to all ECoS Migrations on the week prior to the date of the reporting time, irrespective of the original date on which the ECoS Migration was commenced. The report is thus a summary of daily activities for the last seven days.

Note that an ECoS Migration can start several times for the same Device, and thus the total numbers reported here may be greater than the total number of Devices eligible to be migrated.

Frequency	Delivered to	Reporting End Period	Trigger
Weekly (Monday 6:00)	Relevant Responsible Supplier	23:59:59 Previous Migration Day	Time based.

Header record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('00')	M	Text	2
Report Identifier ('ECOSMIG-005')	M	Text	11
Report Recipient (Responsible Supplier SEC Party ID)	M	Text	6
Report Sequence Number	M	Integer	6
Report Title	M	Text	100
Report Creation DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Start DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	M	DateTime (YYYYMMDDThhmmss)	15
DCC Classification ('DCC Controlled')	M	Text	14

Detail record

A detail record is supplied for each migration activity date.

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('10')	M	Text	2
Migration Activity Date	M	Date (YYYYMMDD)	8
Quantity of Migrations Successfully Completed	M	Integer	9
Quantity of Failed Migrations	M	Integer	9

Trailer record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('99')	M	Text	2
Rows Count	M	Integer	6
DCC Classification ('DCC Controlled')	M	Text	14

ECOSMIG-006 - Detail Report: Newly Installed ECoS Devices

A detail record is provided for each newly installed ECoS Device within a reporting period for which the report recipient is the Responsible Supplier.

In the case of the GPF, the device will appear in the report once the Comms Hub has sent a notification to the CSP to indicate that it is on the network in the reporting period.

For other device types, the device will appear in the report when the device status changes from "pending" to "commissioned" in the reporting period

Frequency	Delivered to	Reporting End Period	Trigger
Monthly on the 1 st of every month 06:00 UTC	Responsible Supplier	23:59:59 Previous Migration Day	Time based

A version of the report will be produced once per month and will include all previously unreported newly installed Devices with ECoS credentials.

Header record:

Data element	Mandatory/Optional	Field Type and format	Max Length
Record type ('00')	M	Text	2
Report Identifier ('ECOSMIG-006')	M	Text	11
Report Recipient (Responsible Supplier SEC Party ID)	M	Text	6
Report Sequence Number	M	Integer	6
Report Title	M	Text	100
Report Creation DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Start DateTime	M	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	M	DateTime (YYYYMMDDThhmmss)	15
DCC Classification ('DCC Controlled')	M	Text	14

Detail record

A Detail record is provided for each newly installed Device with ECoS credentials.

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('10')	M	Text	2
Device ID	M	Text	23
MPxN	M	Text (MPAN or MPRN)	13
Device Status DateTime	M	DateTime (YYYYMMDDThhmmss)	15

Trailer record:

Data element	Mandatory/ Optional	Field Type and format	Max Length
Record type ('99')	M	Text	2
Rows Count	M	Integer	6
DCC Classification (‘DCC Controlled’)	M	Text	14

Appendix B Report Distribution Mechanism

ECoS Migration Reports will be distributed as CSV Files via DCC's SharePoint site, providing named user reports into each participating Energy Supplier folder, as identified by SEC Party Signifier and SEC party name.

Reports will be contained within files named using the following scheme as it is displayed in the example of the report filename below:

<ReportID>_<6 character SEC Party Signifier>_<Report Sequence Number>_<Report DateTime>

SEC Party Signifier is the identifier of the SEC Party associated with the User ID.

The Report Sequence number is an ordinal number for the report generated in respect of the Report ID and SEC PARTY ID combination and is then incremented by 1 for each successive issue of such report.

The Report DateTime is the UTC date and time corresponding to the time when the report was generated.

An example of a report filename is:

ECOSMIG-001_PXX999_10_20211206060000.csv