

Migration Reporting Regime

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1 Introduction and Context

This document should be read in conjunction with the Transition and Migration Approach Document (TMAD) which forms Appendix AL of the Smart Energy Code (SEC).

1.1 DCC Migration Reporting Obligations under TMAD

- 1.1.1 The current TMAD (which covers requirements for the initial operating capability (known as 'IOC') for SMETS1 Services) was designated by the Secretary of State on 28 July 2019 and included in the Smart Energy Code (SEC) from version 6.14 onwards of the SEC. There are updates for the TMAD envisaged to support MOC and FOC and this TMAD also supports these cohorts
- 1.1.2 This document is the Migration Reporting Regime (MRR), required by Clause 4.45 of TMAD. It contains an explanation of how the DCC provides Migration Reporting and has been established in line with processes specified in the TMAD.
- 1.1.3 The reports that are delivered are included at Appendix A.

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2 Objectives of the Migration Reporting Regime

2.1 Reporting Context

- 2.1.1 The MRR provides Responsible Suppliers and Distribution Network Operators with regular reports that provide relevant information concerning the progress and outcomes of the migration processes.
- 2.1.2 TMAD defines the data flows between various parties that will take place as part of the Migration process. The following table represents the file exchanges that take place during the process:

File Type	Description	Originating party	Target party
Migration Authorisation	Provides Supplier's authorisation to migrate SMETS1 Devices to DCC. This file contains a list of MPAN, MPRN, date or date ranges for which migration is authorised and Organisation Certificate Serial Number. Where the Responsible Suppliers for the Smart Metering Systems that comprise part of the same SMETS1 Installation are Affiliates, and one migration authorisation has been provided containing Electricity Smart Metering System and Gas Smart Metering System as per TMAD, MRR Reports will be delivered only to the supplier who submitted this authorisation.	Authorising Party – being either the Responsible Supplier for Active Meters; or the DCC for Dormant Meters.	SMETS1 SMSO (Smart Meter System Operator).
Migration Authorisation Validation Response	This file provides the DCC with the result of the SMSO's validation of the Migration Authorisation – the SMSO will either accept or reject the Migration Authorisation. This file is not exposed externally and is therefore not defined in TMAD.	SMSO	DCC Reporting Application

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File Type	Description	Originating party	Target party
Migration Authorisation Completion Response	This file provides the DCC with information about the success or failure of the Migration authorised by the Migration Authorisation; it also provides information about Migration Authorisations which were not used in the Migration process (e.g. because they expired, or because it was not possible to commence the authorised Migration). This file is not exposed externally and is therefore not defined in TMAD.	Requesting Party	DCC Reporting Application
Migration Common File	Provides a set of basic data required prior to migrating each SMETS1 Installation, including details of Devices and Device Models	Requesting Party	S1SP (SMETS1 Service Provider) Supplier (Commissioned by DCC = False)
Migration Common Validation File	Provides the result of validation checks of SMETS1 Installation and its constituent Devices.	S1SP	Requesting Party
Migration Group File	Provides a set of data that is required for WAN communication including CSP APN details for successfully validated installation in the Migration Common Validation File.	Requesting Party	S1SP
Migration Group Encrypted File	Contains cohort-specific information for the devices in the Migration Group File, including device keys	Requesting Party	S1SP
S1SP Commissioning File	Contains the outcome of the S1SP test activities preparatory to Commissioning	S1SP	Requesting Party Supplier (Commissioned by DCC = False)
Commissioning Outcome File	Contains the outcome of the commissioning activities (grouped by 'Installation') Produced only when Commissioned by DCC = True	Commissioning Party	Requesting Party Supplier * * Please note changes are under consideration now relating to the generation of this file in circumstances where two Responsible Suppliers exist at the same SMETS1 Installation

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File Type	Description	Originating party	Target party
S1SP Migration Audit File	Contains audit information	S1SP	DCC reporting application
	This is S1SP log /audit file and therefore not defined in TMAD		
Commissioning Party Migration	Contains audit information	Commissioning Party	DCC reporting application
Audit File	This is CP log /audit file and therefore not defined in TMAD		

- 2.1.3 As well as being provided to the respective target parties, each of the listed files is provided as an input to the DCC's Migration Reporting Application.
- 2.1.4 The Migration Reporting Application also has access to the following master data and reference data:
 - Migration Demand Commitments the schedule of quantities of Installations that the DCC has committed to migrate on each Migration Day;
 - (ii) Organisations the Identifiers, names and other supporting information concerning the SEC Parties and DCC Service Providers involved in the migration, including, where applicable, User IDs [and DCC IDs].
- 2.1.5 The DCC operates a Migration Control Centre (MCC). The purpose of the MCC is to monitor the migration processes, as they happen. Its role includes troubleshooting, liaising with all relevant parties to the migration, and planning and scheduling. Its objective is to allow the migration of SMETS1 Installations to take place efficiently.
- 2.1.6 The MRR defines reports that help stakeholders understand the overall progress of the Migration processes. By contrast, the MCC will use real-time data to manage errors and exceptions as they occur, and to make all stakeholders aware of issues that require their immediate action.

2.2 Reporting Objectives and Scope

- 2.2.1 DCC has developed the Migration Reporting Regime to:
 - (i) allow Responsible Suppliers and Distribution Network Operators to track progress and the outcome of SMETS1 Installations and ultimately individual Smart Metering Systems through the Migration processes;

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- (ii) report on failures by Device, Device Model, and Device Model Combinations and by the nature of the failure;
- (iii) provide summary information of the DCC's overall Migration volumes against its Demand Commitments;
- (iv) report on the outcome of Migration Authorisations which have failed validation, or which have not been used to authorise a Migration; and
- (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 The MRR reports are delivered in addition to the operational data flows defined in TMAD. MRR reports will provide a more holistic view of progress by combining the data in the operation files into single records
- 2.2.3 The scope of the Migration Reporting Regime is defined as:
 - (i) the process that commences with a Migration Authorisation, and ends with a Migration Authorisation Completion Response; and
 - (ii) in the case of SMETS1 Installations, the process that commences with the generation of a Migration Common File and ends with a Commissioning Outcome File or S1SP Commissioning File (when Installation is not to be Commissioned by the DCC);
 - (iii) the reporting of activity against the DCC's Demand Migration Commitment to each Energy Supplier
- 2.2.4 The Migration Reporting Regime provides regular reports to allow parties to understand the outcomes of the Migration processes. The most critical reports are generated four times a day. It is not intended to be "real-time" or to enable real-time intervention in the Migration processes. As noted above in paragraph 2.1.6, the coordination of such intervention is the responsibility of the MCC.
- 2.2.5 The following activities are excluded from the scope of the Migration Reporting Regime:
 - forecasting;
 - capacity and demand management processes, including scheduling and scaling of Supplier Demand (however, the DCC's final Migration Commitments that result from these processes will be held in the reporting application, as a basis against which to report actual Migration activity);
 - activities preparatory to Migration, including Device Configuration and Firmware Upgrades;

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- information about SMETS1 Installations and Devices that have not started the Migration process (i.e., for which a relevant Common Record has not been generated);
- online analytics tools;
- real-time reporting; and
- reports that the DCC will deliver to the Authority, the Secretary of State, or the SEC Panel.

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3 Distribution and Content of Migration Reports

3.1 Distribution Mechanism and Frequency

- 3.1.1 Migration Reports are distributed using the DCC's SharePoint site. Each SEC Party is provided with a secure area of the site, from which they can retrieve published reports on demand.
- 3.1.2 Reports will be generated at a frequency specified in Appendix A.
- 3.1.3 Daily summary progress and status reports will relate to the previous Migration Day, or to 23:59:59 on the previous Migration Day.
- 3.1.4 Weekly summary reports will relate to the previous Migration Week.
- 3.1.5 Each individual Migration outcome will be included on a detail report distributed to the relevant Responsible Supplier(s) and Distribution Network Operator. Such reports will be generated four times a day. Each report will include all previously unreported transactions that have been concluded within the period that ended six hours before the report generation time. DCC will use best endeavours to also include previously unreported transactions that have been concluded within the period that ended one hour before the report generation time.
- 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 Migration Reports is defined at Appendix A.
- 3.2.2 All reports are delivered as comma-separated values. Formats and 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/or Distribution Network Operator, and which is delivered to those Parties.
- 3.2.4 Any or all reports produced under the Migration Reporting Regime may be made available to the SEC Panel, the Authority or the Secretary of State upon request.

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Appendix A : Summary of Migration Reports

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

Ref	Name	Distribution	Frequency
S1MIG-001	Detail Report: Migrations Completed Successfully	Responsible supplier; DNO	6 hours
S1MIG-002	Detail Report: Migrations Completed Unsuccessfully	Responsible supplier; DNO	6 hours
S1MIG-003	Detail Report: In- Process Migration Status at Period End	Responsible supplier; DNO	Daily
S1MIG-004	Summary Report: Migrations by Commencement Date	Responsible supplier	Weekly
S1MIG-005	Summary Report: Migration Activity for the Previous Day	Responsible supplier; DNO	Daily
S1MIG-006	Detail Report: Migration Authorisation Outcomes for the Previous Migration Day	Responsible supplier	Daily



Ref	Name	Distribution	Frequency
S1MIG-007	Summary Report: Commenced Active Meter Migrations against Installation Commitment	Responsible supplier	Weekly
S1MIG-008	Summary Report: Migration Authorisations against DCC Migration Commitment	Responsible supplier	Weekly
S1MIG-009	Summary Report: Migration Authorisations by Priority Indicator	Supplier parties	Weekly (at DCC discretion)
S1MIG-010	Detail Report: Migration Authorisation Validation Responses	Responsible supplier	Weekly

Notes:

A version of each report is distributed to Responsible Suppliers and subset of reports to Distribution Network Operators (DNOs), 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 or DNO for periods where no relevant Migration activity has taken place.

Reports S1MIG-007 to S1MIG-010 apply only to Active Meter Migrations. Therefore, provision of these reports will commence once the DCC starts to process a Migration Authorisation File related to SMETS1 Installations containing one or more Active Meters.

Report S1MIG-009 is made available to all Supplier Parties.

Each of the reports is described below.

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S1MIG-001 - Detail Report: Migrations Completed Successfully

The Migration of a SMETS1 Installation commences at the time it is included within a valid Migration Group File or Migration Group Encrypted File.

The Migration of a SMETS1 Installation is successfully completed where:

- If the relevant Migration Common File indicates that the Installation is to be Commissioned by the DCC, upon generation of a record in the Commissioning Outcome File showing that commissioning of the Smart Meter System or Systems has been successful;
- If the relevant Migration Common File indicates that the Installation is not to be Commissioned by the DCC, upon generation of a record in the S1SP Commissioning File showing that the commissioning of the Communications Hub Function (CHF) has been successful.

Frequency	Delivered to	Reporting Period	Trigger
Every 6 hours – e.g. 00:00; 06:00; 12:00; 18:00	Responsible Supplier; Distribution Network Operator	See below.	As noted above.

A version of the report will be produced four times a day and will include all previously unreported Migrations that completed in the period ending six hours before the report run time. The report will also, where possible, include previously unreported Migrations that completed up to 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

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Data element	Mandatory/ Optional	Field Type and format	Max Length
Report Identifier ('S1MIG-001')	М	Text	9
Report Recipient (Responsible Supplier or DNO) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	M	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15

Detail record

One detail record is created for each successful Commissioning Outcome File Record where ToBeCommissionedByDCC = true, and for each successful S1SP Commissioning File Record where ToBeCommissionedByDCC = false).

Data element	Mandatory /	Field Type	Max Length
	Optional		
Record type ('10')	M	Text	2
SMSO ID	M	Text	3
Commissioning File DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Party ID	М	Text	23
MCF Counter	М	Integer	6

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Data element	Mandatory / Optional	Field Type	Max Length
Group ID	М	Text	2
Reporting Party ID (S1SP or Commissioning Party)	М	Text	23
Reporting Party Counter	М	Integer	6
Installation ID (CHF ID)	М	Text	23
Split Supplier Installation Indicator	М	Boolean (1 for true; 0 for false)	1
Import MPAN	0	Text	13
Responsible Supplier ID for Import MPAN (or null)	0	Text	23
MPAN Distributor ID (1st two characters of MPAN)	0	Text	2
MPAN Active Indicator (or null)	0	Boolean (1 for true; 0 for false)	1
MPRN	0	Text	13
Responsible Supplier ID for MPRN (or null)	0	Text	23
MPRN Active Indicator (or null)	0	Boolean (1 for true; 0 for false)	1
ToBeCommissionedByDC C Indicator	М	Boolean (1 for true; 0 for false)	1

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Data element	Mandatory /	Field Type	Max Length
	Optional		
For each of seven Devices (CHF, GPF, ESME, GSME, PPMID, IHD, CAD):			
GUID	О	Text	23
Device Manufacturer;	o	Text	30
Device Model;	o	Text	30
Device Type;	О	Text	6
Firmware Version	О	Text	8
[NB not all Installations will include all types of Device, in which case corresponding fields will be empty]			
Migration Completion DateTime [equal to Outcome File Creation DateTime]	М	DateTime (YYYYMMDDThhmmss)	15

Optionality:

- Note that where an Installation is split between two Responsible Suppliers, the report sent to each Supplier will show only that Supplier's own User ID, and Active/Dormant Indicator. Information concerning Smart Meters authorised against a different Supplier ID will be omitted. The DNO will receive information relating to both Suppliers.
- Import MPAN and MPRN must both be present unless the Installation only includes a single electricity or gas meter.
- Information concerning Devices will be present for all Devices within the Installation, with the exception of any Smart Meter for which the report recipient is not the Responsible Supplier or DNO.

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S1MIG-002 - Detail Report: Migrations Completed Unsuccessfully

The Migration of a SMETS1 Installation is unsuccessfully completed where:

- If the relevant Migration Common File indicates that the Installation is to be Commissioned by the DCC, upon generation of a record in the Commissioning Outcome File or the S1SP Commissioning File showing that commissioning of the Smart Meter System or Systems has failed;
- If the relevant Migration Common File indicates that the Installation is not to be Commissioned by the DCC, upon generation of a record in the S1SP Commissioning File showing that the commissioning of the Communications Hub Function (CHF) has failed.

Note:

 If a Migration failure is recorded in the S1SP Commissioning File stage, a Migration Rollback will have occurred wherever possible.

Frequency	Delivered to	Reporting Period	Trigger
Every 6 hours – e.g. 00:00; 06:00; 12:00; 18:00	Responsible Supplier; Distribution Network Operator	See below,	As noted above.

For each failed Commissioning Outcome File Record (where ToBeCommissionedByDCC = true), and for each failed S1SP Commissioning File Record.

A version of the report will be produced four times a day and will include all previously unreported Migrations that completed unsuccessfully in the period ending six hours before the report run time. The report will also, where possible, include previously unreported Migrations that completed unsuccessfully up to one hour before the report run time.

Header record:

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Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2
Report Identifier ('S1MIG-002')	М	Text	9
Report Recipient (Responsible Supplier OR DNO) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	M	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15

Detail record

One record is created for each failed Commissioning Outcome File Record and for each failed S1SP Commissioning File Record.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	M	Text	2
SMSO ID	М	Text	3
Commissioning File DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Requesting Party ID	М	Text	23
MCF Counter	М	Integer	6
Group ID	М	Text	2

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Data element	Mandatory/ Optional	Field Type	Max Length
Reporting Party ID (Requesting Party or Commissioning Party)	М	Text	23
Reporting Party Counter	М	Integer	6
Installation ID (CHF ID)	М	Text	23
Split Supplier Installation Indicator	М	Boolean (1 for true; 0 for false)	1
Import MPAN	0	Text	13
Responsible Supplier ID for Import MPAN (or null)	0	Text	23
MPAN Distributor ID (1 st two characters of MPAN)	0	Text	2
MPAN Active Indicator (or null)	0	Boolean (1 for true; 0 for false)	1
MPRN	0	Text	13
Responsible Supplier ID for MPRN (or null)	0	Text	23
MPRN Active/Dormant Indicator (or null)	0	Boolean (1 for true; 0 for false)	1
ToBeCommissionedByDCC Indicator	М	Boolean (1 for true; 0 for false)	1

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Data element	Mandatory/ Optional	Field Type	Max Length
For each Device (CHF, GPF, ESME, GSME, PPMID, IHD, CAD):			
GUID	О	Text	23
Device Manufacturer;	О	Text	30
Device Model;	o	Text	30
Device Type;	o	Text	6
Firmware Version	o	Text	8
[NB not all Installations will include all types of Device, in which case corresponding fields will be empty]			
Migration Failure DateTime [equal to Outcome File Creation DateTime]	М	DateTime (YYYYMMDDThhmmss)	15

Optionality:

- Note that where an Installation is split between two Responsible Suppliers, the report sent to each Supplier will show only that Supplier's own User ID, and Active/Dormant Indicator. Information concerning Smart Meters authorised against a different Supplier ID will be omitted. The DNO will receive information relating to both Suppliers.
- Import MPAN and MPRN must both be present unless the Installation only includes a single electricity or gas meter.
- Information concerning Devices will be present for all Devices within the Installation, with the exception of any Smart Meter for which the report recipient is not the Responsible Supplier or DNO.

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Error Information

One record is created for each Failed Step in the S1SP Outcome File or Commissioning Party Outcome File. There will be at least one occurrence of Error Information corresponding to each Detail Record.

The Failed Step Number is the reference to the Step Number referenced in TMAD.

The Error Codes and their meanings are maintained within the *Migration Error Handling and Retry Strategy* document.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('20')	М	Text	2
Installation CHF GUID	М	Text	23
Failed Step Number	М	Text	20
Error Code	0	Text	25
Failed Device ID	0	Text	23

To facilitate file processing, the error information rows will include additional empty fields such that the number of fields in detail rows will be the same as the number of fields in error information rows. An example of the report record type 20 content is provided below:

S1MIG-003 - Detail Report: In-Process Migration Status at Period End

An Installation and its constituent Devices are In-Process if the Migration Group File or Migration Group Encrypted File has been produced for the Installation, but the Migration has neither successfully completed, nor failed,

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as defined above. A Detail record is provided for each Installation that is In-Process at the applicable time (23:59:59 UTC on the Previous Day).

Frequency	Delivered to	Reporting Time	Trigger
Daily by 06:00 UTC	Relevant Responsible Supplier and Distribution Network Operator	23:59:59 UTC on Previous Migration Day	As noted above.

Header record:

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	М	Text	2
Report Identifier ('S1MIG-003')	М	Text	9
Report Recipient (Responsible Supplier OR DNO) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable DateTime	М	DateTime (YYYYMMDDThhmmss)	15

Detail record

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This report lists all In-Process Installations for the Responsible Supplier, or Distribution Network Operator

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	M	Text	2
SMSO ID	M	Text	3
Commissioning File DateTime	0	DateTime (YYYYMMDDThhmmss)	15
Requesting Party ID	M	Text	23
MCF Counter	М	Integer	6
Group ID	М	Text	2
Reporting Party ID (Requesting Party or Commissioning Party)	0	Text	23
Reporting Party Counter	0	Integer	6
Installation ID (CHF ID)	М	Text	23
Split Supplier Installation Indicator	М	Boolean (1 for true; 0 for false)	1
Import MPAN	0	Text	13
Responsible Supplier ID for Import MPAN (or null)	0	Text	23
MPAN Distributor ID (1 st two characters of MPAN)	0	Text	2
MPAN Active/Dormant Indicator (or null)	0	Boolean (1 for true; 0 for false)	1
MPRN	0	Text	13

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Data element	Mandatory/ Optional	Field Type	Max Length
Responsible Supplier ID for MPRN (or null)	0	Text	23
MPRN Active/Dormant Indicator (or null)	0	Boolean (1 for true; 0 for false)	1
ToBeCommissionedByDCC Indicator	М	Boolean (1 for true; 0 for false)	1
For each Device (CHF, GPF, ESME, GSME, PPMID, IHD, CAD):			
GUID	О	Text	23
Device Manufacturer;	О	Text	30
Device Model;	О	Text	30
Device Type;	О	Text	6
Firmware Version	o	Text	8
[NB not all Installations will include all types of Device, in which case corresponding fields will be empty]			
Installation Migration Status	М	Text – Either "Group File Received"; or "Commissioning Pending"	30
DateTime of Notification of Last Status Change	М	DateTime (YYYYMMDDThhmmss)	15

Optionality:

Note that where an Installation is split between two Responsible Suppliers, the report sent to each Supplier will show only that Supplier's own User ID, and Active/Dormant Indicator. Information concerning Smart Meters authorised against a different Supplier ID will be omitted. The DNO will receive information relating to both Suppliers.

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- Import MPAN and MPRN must both be present unless the Installation only includes a single electricity or gas meter.
- Information concerning Devices will be present for all Devices within the Installation, with the exception of any Smart Meter for which the report recipient is not the Responsible Supplier or DNO.
- DateTime of Notification of Last Status Change reflects the time at which either the Migration Group File (or Migration Group Encrypted File), or the S1SP Commissioning File was produced.

S1MIG-004 - Summary Report: Migrations by Commencement Date

The report summarises the outcomes of all Migrations commenced within the twenty-eight calendar days prior to the date of the Reporting Time. A Migration is considered to have commenced when the Migration Group File or Migration Group Encrypted File for the Installation is received.

Note that a Migration may be attempted several times for the same Installation, and thus the total numbers reported here may be greater than the total number of Installations eligible to be migrated.

Frequency	Delivered to	Reporting Time	Trigger
Weekly (Monday 06:00)	Relevant Responsible Supplier	23:59:59 Previous Migration Day	Time based.

Header record:

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2

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Data element	Mandatory/ Optional	Field Type	Max Length
Report Identifier (e.g. 'S1MIG-004')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable End DateTime	М	DateTime (YYYYMMDDThhmmss)	15

Detail record

A Detail record is supplied for each combination of Supplier, DNO and Group ID for each Migration Day within the previous 28 calendar days on which one or more Migrations were commenced for the Supplier for whom the report is produced.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	M	Text	2
Responsible Supplier User ID	М	Text	23
MPAN Distributor ID	О	Text	2
Group ID	М	Text	2

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Data element	Mandatory/ Optional	Field Type	Max Length
Migration Commencement Date	М	Date (YYYYMMDD)	8
Quantity of Migrations Commenced	М	Integer	9
Quantity of Migrations Successfully Completed	М	Integer	9
Quantity of Failed Migrations	М	Integer	9
Quantity of Migrations in Progress	М	Integer	9
Average Duration of Successfully Completed Migrations in Minutes (if Quantity of Successful Migrations > 0)	0	Integer	9
Average Duration of Failed Migrations in Minutes (if Quantity of Failed Migrations > 0)	O	Integer	9
Maximum Duration of Longest Successfully Completed Migration in Minutes (if Quantity of Successful Migrations > 0)	0	Integer	9
Maximum Duration of Longest Failed Migration in Minutes (if Quantity of Failed Migrations > 0)	0	Integer	9
Quantity of Migrations representing 1 st Attempt	М	Integer	9
Quantity of Migrations representing 2 nd Attempt	М	Integer	9

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Data element	Mandatory/ Optional	Field Type	Max Length
Quantity of Migrations representing 3 rd Attempt	М	Integer	9
Quantity of Migrations representing more than 3 Attempts	М	Integer	9

<u>S1MIG-005 - Summary Report: Migration Activity for the Previous Day</u>

The report summarises the status and events pertaining to all Migrations on the day immediately before Reporting Time, irrespective of the original date on which the Migration was commenced. The report is thus a summary of in-day activity.

Note that a Migration can start several times for the same Installation, and thus the total numbers reported here may be greater than the total number of Installations eligible to be migrated.

This report counts Installations; Installations which are supplied by two Responsible Suppliers may be reported twice – once against each Responsible Supplier.

Frequency	Delivered to	Reporting Time	Trigger
Daily at 06:00	Relevant Responsible Supplier and Distribution Network Operator	23:59:59 Previous Migration Day	Time based.

Header record:

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Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2
Report Identifier ('S1MIG-005')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Date	M	Date (YYYYMMDD)	8

Detail record

A Detail record is supplied for each combination of Responsible Supplier and DNO for which Migration Activity took place.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	М	Text	2
Responsible Supplier User ID	М	Text	23
MPAN Distributor ID	О	Text	2
Group ID	M	Text	2

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Data element	Mandatory/ Optional	Field Type	Max Length
Quantity of Migrations Commenced	М	Integer	9
Quantity of Migrations Successfully Completed	М	Integer	9
Quantity of Failed Migrations	М	Integer	9
Quantity of Migrations in Progress	М	Integer	9

<u>S1MIG-006 - Detail Report: Migration Authorisation Outcomes</u> <u>for the Previous Migration Day</u>

This report shows the previously unreported outcome of each Migration Authorisation for which processing was completed (successfully, unsuccessfully or not yet commissioned) on or prior to the previous Migration Day.

For Group ID = "DA", some pre-migration validations may be carried out up to 7 days in advance as defined in TMAD clause 16.9. Should such validation fail, checking and processing in relation to that SMETS1 Installation shall not proceed to a subsequent step. Therefore, such pre-migration validation failures will be included in this report, but not considered as failed migrations in any of the other reports.

Frequency	Delivered to	Reporting Period	Trigger
Daily at 06:00	Relevant Responsible Supplier	Previous Migration Day	Time based.

Header record:

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Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2
Report Identifier ('S1MIG-006')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Date	M	Date (YYYYMMDD)	8

Detail Record

One record is created for each Migration Authorisation for which processing was completed on the previous Migration Day.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	М	Text	2
Responsible Supplier ID	М	Text	23
Migration Authorisation File ID (Name)	М	Text	100
Import MPAN	0	Text	13

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Data element	Mandatory/	Field Type	Max
	Optional		Length
MPRN	0	Text	13
Migrate On Date (if specified in Migration Authorisation)	0	Date (YYYYMMDD)	8
Migration Week Start Date	М	Date (YYYYMMDD)	8
Includes Dormant Status	М	Boolean (1 for true; 0 for false). This indicator is set to true if the Smart Meter that has been authorised for Migration is part of an Installation that includes a Dormant Meter.	1
Validation Response Date	M	Date (YYYYMMDD)	8
Validation Reason Code	0	Text — representing the Migration Authorisation Error including premigration validations errors	55
Completion Date	0	Date (YYYYMMDD)	8
Completion Status	O	Text – either "Success", "Failed", "In Progress" or "Warning" (not present if Migration is not completed)	55
Completion Reason Code	0	Text — representing the Migration Authorisation Error including premigration validations errors	55

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Data element	Mandatory/ Optional	Field Type	Max Length
Migration Common File Reference	0	Text	40
For each Device (CHF, GPF, ESME, GSME, PPMID, IHD, CAD):			
GUID	o	Text	23
Device Manufacturer;	О	Text	30
Device Model;	О	Text	30
Device Type;	o	Text	6
Firmware Version	o	Text	8
[NB not all Installations will include all types of Device, in which case corresponding fields will be empty]			

Optionality:

- Import MPAN and MPRN must both be present unless the Installation only includes a single electricity or gas meter, or unless the Supplier is only Responsible for one of the Metering Points.
- Information concerning Devices will be present for all Devices within the Installation, with the exception of any Smart Meter for which the report recipient is not the Responsible Supplier.
- Note that fields may be empty depending on when processing of the Migration Authorisation and the corresponding Migration ceased. Where Migration Authorisations fail initial Validation or where they expire, no Migration Common File will be created, and therefore no Device IDs will be recorded against the Migration Authorisation.

S1MIG-007 - Summary Report: Commenced Active Meter Migrations against Installation Commitment

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This report shows how many Migrations of Installations with one or more Active Meters were commenced, compared to the DCC's Migration Commitment for each Responsible Supplier.

A Migration is commenced when its corresponding Migration Group File or Migration Group Encrypted File is created.

Frequency	Delivered to	Reporting Period	Trigger
Weekly – 06:00 Monday	Relevant Responsible Supplier	Previous Migration Week	Time based.

Header record:

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	М	Text	2
Report Identifier ('S1MIG-007')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Date	М	Date(YYYYMMDD)	8

Detail Record

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One record is created for each day of the week that: the DCC has published a Migration Demand Commitment with respect to an Energy Supplier and to that day; or the DCC has actually commenced Migrations with respect to that Supplier.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	М	Text	2
Responsible Supplier ID	М	Text	23
Migration Commencement Date	М	Date(YYYYMMDD)	8
DCC Migration Commencement Commitment Quantity	М	Integer	9
Quantity of Migrations of Active Installations Commenced	М	Integer	9

<u>S1MIG-008 - Summary Report: Migration Authorisations against DCC Migration Commitment</u>

The purpose of this report is to ensure that the Energy Supplier has provided sufficient valid Migration Authorisations to enable the DCC to meet its committed volume of Migrations.

Frequency	Delivered to	Reporting Time	Trigger
Weekly- 06:00 Monday	Relevant Responsible Supplier	Previous Four Migration Weeks	Time based.

Header record:

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Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2
Report Identifier ('S1MIG-008')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	M	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Date Commencing (Monday)	М	Date (YYYYMMDD)	8

Detail record

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	М	Text	2
Responsible Supplier User ID	М	Text	23
DCC Migration Week Commencement Date [Monday]	М	Date(YYYYMMDD)	8
DCC Migration Week Commitment Quantity	М	Integer	9

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Data element	Mandatory/ Optional	Field Type	Max Length
Quantity of Migration Authorisations Received for Week	М	Integer	9
Quantity of Migration Authorisations Successfully Validated for Week	М	Integer	9
Quantity of Migration Authorisations Failing Validation for Week	M	Integer	9

<u>S1MIG-009 - Summary Report: Migration Authorisations by Priority Indicator</u>

The purpose of this report is to provide an analysis of Responsible Suppliers' use of the Priority Indicator on Migration Authorisations. The report shows the recipient's use of the Indicator against use by other Suppliers. In order to preserve anonymity, the identity of the other Suppliers is not provided.

Frequency	Delivered to	Reporting Time	Trigger
Weekly- 06:00 Monday	Relevant Responsible Supplier	Previous Migration Week	Time based.

Header record:

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2

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Data element	Mandatory/	Field Type	Max Length
	Optional		J
Report Identifier ('S1MIG-009')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15
Report Applicable Date Commencing (Monday)	М	Date(YYYYMMDD)	8
FOR THE REPORT RECIPIENT			
Total Quantity of Active Migration Authorisations Successfully Validated	М	Integer	9
Quantity of Active Migration Authorisations with Priority Indicator set to 'true'	М	Integer	9
Total Quantity of Dormant Migration Authorisations Processed	М	Integer	9
Quantity of Dormant Migration Authorisations with Priority Indicator set to 'true'	М	Integer	9
Percentage of Active Migration Authorisations with Priority Indicator set to 'true'	0	Integer (rounded)	3

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Data element	Mandatory/ Optional	Field Type	Max Length
Percentage of Dormant Migration Authorisations with Priority Indicator set to 'true'	O	Integer (rounded)	3
Percentage of All Migration Authorisations with Priority Indicator set to 'true'	0	Integer (rounded)	3

Percentages are not provided where the relevant divisor is zero.

Detail record

A record is present for each Responsible Supplier (other than the Recipient of the Report) who has sent successfully validated Migrations Authorisations in the Reporting Period. The Supplier User ID is not provided in this report and is substituted with an ordinal. The records are present in order, with the Supplier User ID for the highest number of Migration Authorisations being presented first.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	M	Text	2
Responsible Supplier Ordinal	М	Integer	3
Total Quantity of Active Migration Authorisations Successfully Validated	М	Integer	9
Quantity of Active Migration Authorisations with Priority Indicator set to 'true'	М	Integer	9

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Data element	Mandatory/ Optional	Field Type	Max Length
Total Quantity of Dormant Migration Authorisations Processed	М	Integer	9
Quantity of Dormant Migration Authorisations with Priority Indicator set to 'true'	М	Integer	9
Percentage of Active Migration Authorisations with Priority Indicator set to 'true'	0	Integer (rounded)	3
Percentage of Dormant Migration Authorisations with Priority Indicator set to 'true'	0	Integer (rounded)	3
Percentage of All Migration Authorisations with Priority Indicator set to 'true'	М	Integer (rounded)	3

<u>S1MIG-010 - Detail Report: Migration Authorisation Validation</u> Responses

This report produces a detail record in response to each Migration Authorisation sent by the Responsible Supplier.

This report is produced in support of the Migration Authorisation Mechanism and provides information about the validity of the Migration Authorisation.

This report will also inform the Responsible Supplier if the Active Meter referenced in the Migration Authorisation is associated within the same SMETS1 Installation with a Dormant Meter.

 This report is primarily produced in order to notify the Responsible Supplier who has sent a Migration Authorisation in respect of an Active Meter that the SMETS1 Installation in question also includes a

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Dormant Meter. This notification process is described in Clause 4.37 of the Transition and Migration Approach Document (TMAD).

Frequency	Delivered to	Reporting Period	Trigger
In response to each Migration Authorisation (MA) File. All MA files received by the cut-off time defined in the MAM will be reported by Thursday 23:59 at the latest.	Responsible Supplier	All previously unreported Migration Authorisations that have been received by the cut off time	Validation of Migration Authorisation

A version of the report will be produced weekly, and will include responses to:

 all previously unreported Migration Authorisations that have been produced in response to Migration Authorisations sent by Responsible Supplier

Header record:

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('00')	M	Text	2
Report Identifier (e.g. 'S1MIG-010')	М	Text	9
Report Recipient (Responsible Supplier) User ID	М	Text	23
Report Sequence Number	М	Integer	6
Report Title	М	Text	100

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Data element	Mandatory/ Optional	Field Type	Max Length
Report Creation DateTime	М	DateTime (YYYYMMDDThhmmss)	15

Detail record

One detail record is created for each successful Migration Authorisation validated (successfully or unsuccessfully) by the DCC.

Data element	Mandatory/ Optional	Field Type	Max Length
Record type ('10')	M	Text	2
Import MPAN	0	Text	13
MPRN	0	Text	13
Migrate on	0	Date (YYYYMMDD)	8
Migration Week	М	Date (YYYYMMDD)	8
Installation Includes Dormant Meter Indicator	М	Boolean (1 for true; 0 for false)	1
Reason Code	0	Text	5
Comments	0	Text	100

Note that where an Installation is split between two Responsible Suppliers, the report sent to each Supplier will show only that Supplier's own MPxN. The only information regarding the 'other' Meter included in the Installation is the data item called "Installation Includes Dormant Meter Indicator".

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Appendix B Report Distribution Mechanism

SMETS1 Migration Reports will be distributed as CSV Files via DCC's SharePoint site, providing named user reports into each participating Energy Supplier and Distribution Network Operator's Party folder, as identified by SEC Party Signifier and SECAS Party Name.

Reports will be contained within files named using the following scheme:

<ReportID>_<6 character SEC Party Signifier>_<23 character User ID>_<Report Sequence Number>_<Report DateTime>

as it is displayed in the example of the report filename below.

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

The User ID is the User ID of the Responsible Supplier or DNO in respect of which the report is generated.

The Report Sequence number is ordinal, which is set at '000001' for the report generated in respect of the Report ID and User 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:

```
S1MIG-07_PXX999_70-B3-D5-1F-30-00-A0-
01_10_20190501060000.csv
```

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