

NETA Central Services

Initial Settlement and Reconciliation Agency (ISRA)

Function Definition and User Catalogue

Synopsis	This document describes the functions developed in the ISRA system.
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Prepared by	Cognizant
Approved by (Cognizant)	Project Manager

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1 Introduction

1.1 Purpose

This document [IFUNDEF] describes the functions to be developed for the ISRA system.

The content of this function definition is produced in accordance with the Logical Design Process Description [LDESPD]. It is derived from the requirements described in the Initial Settlement and Reconciliation Agency (ISRA) User Requirements Specification [ISRAURS] and where appropriate, from the data interfaces described in [DIS]. The Release 2 amendments are derived from the requirements described in the Invitation to Tender for Release 2 [ITTR2] as clarified in the Response to the ITT [RESPR2].

For settlement dates before P253 implementation, SSR Run will be triggered for settlement types 'SF', 'R1', 'R2', 'R3', 'RF', 'DF'.

For settlement dates on and after P253 implementation SSR Run will be triggered for all settlement types 'II', 'SF', 'R1', 'R2', 'R3', 'RF', 'DF'.

1.2 Scope

This document is one of the Logical Design stage deliverables and will be used as the basis for Physical Design of the ISRA system.

It should be read in conjunction with the following Logical Design documents:

- ISRA Logical Data Design [ILDATA] containing the following:
 - The Logical Data Model, which provides a detailed logical description of the data and its structure;
 - The Data Catalogue, which describes the data items for the system.
- ISRA Conceptual Process Model [ICONMOD], containing Event Descriptions.

1.3 Structure of Document

The remainder of this document consists of the following sections:

- Section 2 contains the User Catalogue, which describes the on-line users in terms of job titles, activity descriptions and user roles. This is based on the User Roles described in [ISRAURS];
- Section 3 contains the list of Function Definitions, which describe units of processing which need to be controlled as a whole. Each Function Definition is provided in a separate document identified by the Function ID. I/O Structure diagrams are included to show the structure of inputs and outputs for each function;
- Section 4 contains the list of Common Process descriptions and common I/O Structures for any processes that are common within the ISRA system. Each Common Process is provided in a separate document identified by the Process ID.

Appendix A provides an overview of the format of a Function Definition.

1.4 Amendment History

Version	Details
0.900	Issued for internal review
0.901	Issued to Pool for review
0.902	Issued for internal review
0.903	Issued to Pool for review Incorporates 1 st response to the Pool's review comments on Function Definitions v0.901
0.904	Issued for internal review
0.990	Issued for Electricity Pool Acceptance review Incorporates CRs: 22 (LCR022) 33 (LCR013) 38 (LCR018) 49 (LCR013) 51 (LCR001) 52 (LCR011) 58 (LCR002) 59 (LCR003) 63 (LCR012) 88 (LCR014) 94 (LCR024) Incorporates Clarifications: 4, 5, 12, 17, 19, 20, 21, 23, 24, 28, 29, 31, 32, 33, 34, 39, 40, 41, 42, 45 Note: For the key functions I0016 Calculate Daily Profiles and I0029 Run SSR, Clarifications and Change Requests have been included in the Requirements Catalogue Ref. However this has only been done to assist the reader. The definitive set of Clarifications and Change Requests included in the document is defined by the Amendment History. Incorporates response to the Pool's review comments on Function Definitions v0.901 and v0.903 Incorporates review changes from v0.904 internal review
1.000	Issued as definitive release Incorporates Clarifications: 51, 52, 53 Incorporates response to the Pool's review comments on ISRA Logical Design v0.990
1.001	Incorporates response to the Pool's review comments on ISRA Logical Design v1.000
1.100	Incorporates Change Request: CR371 (LCR047) CR346 (LCR049) Clarifications: 64, 69, 70, 83, 86, 88, 89, 90, 91, 95, 97, 99, 102, 104, 107, 108 Defects: 168, 746
2.000	Incorporates Change Requests: CR344 (LCR056) CR381 (LCR056) CR382 (LCR056)

Version	Details
	Defects: 33, 47, 87, 1066, 1125, 1190, 1259
3.000	Incorporates Pool Review comments on v2.000 Incorporates defect 1130. This version is consistent with Release 1.1 of the ISRA Software.
3.001	Cosmetic changes only. This version is consistent with Release 1.2 of the ISRA Software.
3.500	Incorporates review comments from v3.001 internal review.
3.901	Release 2 (package 1 only) ISRA for review
3.905	ISRA Release 2 (package 1 only) for Pool review
3.906	ISRA release 2 (package 1 only) incorporating Pool Comments Version includes amendments to release 2 functionality as specified in Pool CRS290v3
3.990	Incorporation of internal review comments, issued to Pool for review. Revision marks show all amendments since v3.000. Release 2 (package 1 only).
3.991	Incorporates amendments made under Release 2 ISRA Package 2 to address change requests: CR180 part 1 CR258
3.992	Incorporates internal review comments on amendments made under Release 2 ISRA Package 2 to address change requests: CR180 part 1 CR258 Issued to Pool for review. Revision marks show changes for Release 2 Package 2.
3.993	Incorporates Release 2 (Package 1) Pool Acceptance Review comments on version 3.990. Consistent with Pool CR290v4.
3.994	Incorporates Release 2 (Package 2) Pool Acceptance Review comments on version 3.992.
3.995	Incorporates Pool comments on amendments made for Release 2 (Package 2) in version 3.994.
3.996	Incorporates LCR086
3.997-3.998	Not produced for this document
3.999	Incorporates LCR077 for internal review
4.000	Interim version. Incorporates all R2 changes, as a merger of the separate designs for LCR077 and LCR086. This version does not include documentation defects raised since the acceptance of R2 designs. These defects will be included in the next version which will also include a merger with R1.3 changes made in version 5.000. Change bars show amendments since version 3.995.
5.000	Incorporates review comments from v3.500 external review. This version is consistent with Release 1.3 of the ISRA Software.
5.990	Incorporates Release 2 changes (copied from interim version 4.000) OR 2527 (R2 OR FAT/4) (pool defect 1513) OR 2620 (LCR077 OR FAT/4) (pool defect 1555) Change bars show amendments since v5.000.
6.000	Incorporating review comments from v5.990 external review.

Version	Details
	This version is consistent with Release 2.0 of the ISRA Software.
6.990	Issued version for Pool review incorporating TA2000 Changes: Package 1: LCR113 (SIR R577) LCR125 (SIR R669) LCR131, LCR131/3 (SIR R918) and Clarification: 001ldr30 (v3.0). Package 2: LCR85/2 (SIR R293) LCR88/2 (SIR R574) LCR104 (SIR R294) LCR111/2 (SIR R887) LCR137 (SIR R887) LCR124/2 (SIR R295) LCR126 (SIR R728) and Clarification: 002ldr50. Package 2 (MDD) LCR128/1, LCR128/3 (SIR R1116) and Clarifications: LCR136, letter ref. 294SCL01, 002ldr50 OR 2855 (Pool defect 144), OR 2868 (Corrections to TA2000 Logical Design documentation)
6.991	Updated the Project and Line Managers.
7.000	Authorised version, consistent with release 5.0.0 of the ISRA software. URS Baseline updated in line with CCN095.
7.001	Incorporating: OR2911 – Audit tables named ‘insert’ not ‘create’. (PMR 4160). LCR108 (SIR R1724).
7.990	Issued to the Pool for review.
8.000	Authorised version consistent with release 5.1.0 of the ISRA software.
8.100	Incorporating LCR150, LCR151 and LCR155 (SIR R2215).
8.990	Incorporating internal review comments. Issued to Pool for review.
8.991	Incorporating Pool review comments. OR 2969 (SIR R1724) to correct typing errors.
8.992	Incorporating Pool review comments.
8.993	Incorporating Pool review comments.
9.000	Authorised version.
9.100	Incorporating LCR159 (SIR R2327): Multiple BM Unit support for ISRA/SVAA.
9.990	Issued to the Pool for review.
9.991	Incorporating Pool review comments.
9.992	Incorporating Pool review comments.
9.993	Incorporating Pool review comments.
10.000	Authorised version.
10.001	Incorporating OR3009.
10.990	Consistent with LCR166 (further changes for SIR R2327). Updated copyright holder.

Version	Details
10.991	Incorporating Pool review comments.
11.000	Authorised version.
11.001	Incorporating LCR162 & LCR172 (SIR R2180).
11.002	Incorporating Pool review comments for SIR R2180.
11.003	Incorporating LCR174 & OR3118
11.004	Incorporating ELEXON review comments for LCR174.
11.005	Incorporating LCR198.
11.006	Incorporating internal review comments for LCR198.
11.007	Incorporating LCR201
11.990	Issued to ELEXON for review
11.991	Incorporating ELEXON review comments
11.992	Updated document template
11.993	Incorporating LCR191/5
11.994	Incorporating LCR202 (P91) – TUoS report changes Incorporating internal review updates for LCR191/5 Incorporating OR3341
11.995	Issued to ELEXON for review
11.996	Updated post ELEXON review.
12.000	Authorised version.
12.001	Updated for LCR203/7 (P81) Document Template Updated
12.002	Incorporating internal review comments for LCR203/7 (P81).
12.003	Further update after internal review comments for LCR203/7 (P81). Incorporating OR3385
12.004	Updated from ELEXON's review
13.000	Authorised version.
13.001	Incorporating BETTA
13.002	Updated following internal review
13.990	Issued to ELEXON for review
13.991	Updated from ELEXON's review.
14.000	Authorised version.
15.000	Updating document references.
15.990	Updated for LCR235 (Disable the ability for a P0214 file to be loaded into SVAA)
15.991	Updated from ELEXON's review.
16.000	Authorised version.
16.001	Updated for Changes CP892 and CP947. Issued to ELEXON for review.
16.002	Updated from feedback received from ELEXON. Updated with new logical structure for I0017B (Load Aggregated HH Data). Issued to ELEXON for review.
16.003	Amended after further feedback from ELEXON. Issued to ELEXON for review.
17.000	Authorised version

Version	Details
18.000	Incorporating changes for: CP929 Removal of performance reports from SVAA; CP1001 Improvements to facilitate reporting and improve usability; CP1093 Failure of suppliers to submit valid standing data relationships; OR3485 Reinsert sections incorrectly deleted in version 11.001.
18.990	Incorporating changes for: CP1209 Inclusion of MSID Counts on the GSP Group Consumption Totals Report
19.000	Authorised Version
19.900	Incorporating ISIS Enhancements changes
19.990	Updated following internal review. For ELEXON review.
19.991	Incorporating ELEXON review comments
20.000	Authorised version
20.010	Updated document classification
20.0	Back issued for exit management
20.1	P253 Changes Nov 11 Release
20.2	P253 Address review comments
20.5	P253 Reapply 20.2 changes.
21.0	P253 Final version
22.0	June 2014 Release – EMR ¹ Final Version
23.0	Clean version - Nov 2015 Release
23.1	P315 – Updated for June 2016 Release
23.2	P315 – Incorporated the ELEXON review comments

Table 1: Amendment History

¹EMR changes will be directed by the Secretary of State in summer 2014

1.5 References

Information	Details
Title: Author:	Elementary Process Description from [ISRAURS] ELEXON
Title: Author:	This document Cognizant
Title: Author:	ISRA Logical Data Design Cognizant
Title: Author:	ISRA Conceptual Process Model Cognizant
Title: Author:	ISRA Technical Specification Cognizant
Title: Author:	SVA Data Catalogue Volume 1: Data Interfaces Cognizant
Title: Author:	Logical Design Process Description Cognizant
Title: Author:	SVAA User Requirements Specification ELEXON
Title: Author:	Invitation to Tender-Release 2 of Pool Software ELEXON
Title: Author:	Response to ITT for Release 2 ELEXON

Table 2: References

1.6 Abbreviations

AA	Annualised Advance
AFYC	Average Fraction of Yearly Consumption
BETTA	British Electricity Trading and Transmission Arrangement
BM	Balancing Mechanism
BMUIGG	BM Unit In GSP Group
BSC	Balancing and Settlement Code
BUSTEV	BM Unit Supplier Take Energy Volume
BUSGDD	BM Unit SVA Gross Demand Data
CCC	Consumption Component Class
CDCA	Central Data Collection Agent
CTCU	Central Tele-switch Control Unit
DA	Data Aggregator
DC	Data Collector
DPP	Daily Profile Production
DRP	Data Retention Period

DUoS	Distribution Use of System
EPD	Elementary Process Description
EAC	Estimate of Annual Consumption
GMT	Greenwich Mean Time
GSP	Grid Supply Point
HH	Half-Hourly
HHDA	Half-Hourly Data Aggregator
ISR	Initial Settlement and Reconciliation
ISRA	ISR Agent
LDM	Logical Data Model
LDSO	Licensed Distribution System Operator
LLF	Line Loss Factor
LLFC	LLF Class
MDD	Market Domain Date
MDDA	MDD Agent
MSID	Metering System ID
NETA	New Electricity Trading Arrangements
NHH	Non-Half-Hourly
NHHDA	Non-Half-Hourly Data Aggregator
NPG	Non-Pooled Generation
PFA	Pool Funds Administrator
PPR	Profile Production Run
SAA	Settlement Administrator Agent
SPM	Supplier Purchase Matrix
SSA	Settlements System Administrator
SSC	Standard Settlement Configuration
SSR	Supplier Settlement and Reconciliation
SVA	Supplier Volume Allocation
SVAA	SVA Agent
TPR	Time Pattern Regime
TUoS	Transmission Use of System
UTC	Universal Time Clock
VMRPC	Valid Measurement Requirement Profile Class
VSCPC	Valid combinations of Settlement Configurations and Profile Classes

2 User Catalogue

The following job title has been identified for users of the ISRA system.

Job Title	Job Activities Description
ISR Agent	<p>Administrator of ISRA system for a GSP Group. The activities of this job cover all aspects of the operation of the GSP Group. This includes the following:</p> <ul style="list-style-type: none"> • Maintaining standing data for the system • Monitoring and support of the operation of the system • Monitoring the support of the operation of the interfaces • System monitoring for performance and capacity • Checking the collection of data for a run • Checking the electronic collection of daily data • Entering manually collected data • Initiating Settlement runs • Initiating Reconciliation runs • Initiating reporting runs • Managing audit, security and control • Managing backup, recovery and archive

Table 3: Job Titles

The following User Roles have been identified for users of the ISRA, and are shown with the corresponding job title and activities for each User Role.

User Role	Job Title	Activities
ISRA Standing Data Manager	ISR Agent	<p>The activities of this job include the following:</p> <ul style="list-style-type: none"> • Maintaining standing data for the system after the data has been used in a Final Initial Settlement Run <p>The ISRA Standing Data Manager can access the same function set as the ISRA Operations Supervisor.</p>
ISRA Operations Supervisor	ISR Agent	<p>The activities of this job include the following:</p> <ul style="list-style-type: none"> • Maintaining standing data for the system • Monitoring and support of the operation of the system • Monitoring and support of the operation of the interfaces
ISRA Operator	ISR Agent	<p>The activities of this job include the following:</p> <ul style="list-style-type: none"> • Checking the collection of data for a run • Checking the electronic collection of daily data • Entering manually collected data • Initiating Settlement runs • Initiating Reconciliation runs • Initiating reporting runs
ISRA System Manager	ISR Agent	<p>The activities of this job include the following:</p> <ul style="list-style-type: none"> • System monitoring for performance and capacity • Managing audit, security and control • Managing backup, recovery and archive
ISRA Auditor	Pool Auditor	<p>The activities of this job include the following:</p> <ul style="list-style-type: none"> • Examining database data • Examining exception and run logs • Examining audit trails

Table 4: User Roles

3 Functions

3.1 I0001 Define Line Loss Factor Classes

3.1.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.1.2 Function Description

This function is invoked by an ISRA user to allow line loss factor classes to be browsed and maintained.

A list of existing Line Loss Factor Class details is displayed. The user either selects one of them to amend, or delete, or enters a new one.

For creation, the user must specify a Distributor Id and Line Loss Factor Class Id, an Effective From Settlement Date, and an optional Effective To Settlement Date.

For amendment, deletion and browsing, the Line Loss Factor Class Id, Distributor Id and Effective Dates are displayed.

For amendment, the user amends the Effective To Settlement Date if required.

For deletion, the user deletes the Line Loss Factor Class.

The system validates the request and the details entered and if necessary rejects it. If validation is successful, the database is updated accordingly.

3.1.3 Processing Description

Reference: EPD 1.3.4 - Maintain Line Loss Factor Codes

See Event Descriptions

3.1.4 Error Handling

See Event Descriptions

3.1.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.1.6 Volumes

At market inception, 30 - 40 per GSP Group.

Thereafter, one change per Line Loss Factor Class per year.

An indeterminate number of Line Loss Factor Classes will be browsed on an ad hoc basis.

3.1.7 Events

Line Loss Factor Class Entered

Line Loss Factor Class Updated

Line Loss Factor Class Deleted

3.1.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Line Loss Factor Class events (entered, updated, deleted), and the enquiry (browse) is 1.

3.1.9 Enquiries

Browse Line Loss Factor Classes

3.1.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Line Loss Factor Class events (entered, updated, deleted), and the enquiry (browse) is 1.

3.1.11 Requirements Catalogue Ref.

1.5, 5.1, 5.3, 6.15, 6.21

3.1.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.1.13 I/O Structures

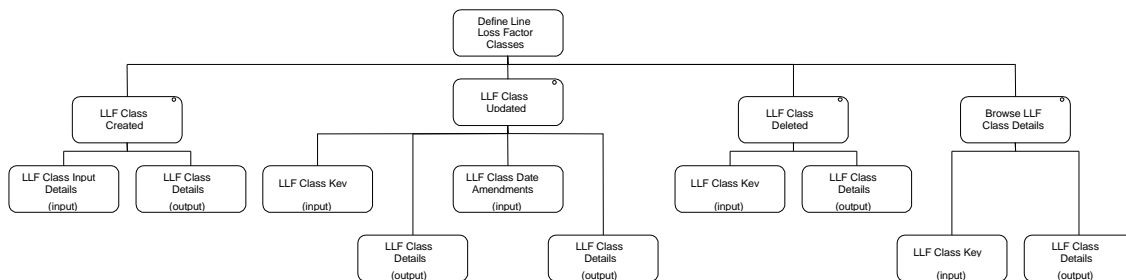


Figure 1: Define Line Loss Factor Classes

I/O Structure Element	Data Items
LLF Class Date Amendments	Effective To Settlement Date {LLFC} (O)
LLF Class Details	Distributor Id Distributor Name Effective From Settlement Date {LLFC} Effective To Settlement Date {LLFC} (O) Line Loss Factor Class Id
LLF Class Input Details	Distributor Id Effective From Settlement Date {LLFC} Effective To Settlement Date {LLFC} (O) Line Loss Factor Class Id
LLF Class Key	Distributor Id Effective From Settlement Date {LLFC} Line Loss Factor Class Id

Table 5: Define Line Loss Factor Classes - I/O Structure Elements

3.2 I0001E Browse Line Loss Factor Classes

3.2.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.2.2 Function Description

This function is invoked by an ISRA user to browse a set of valid line loss factor classes.

3.2.3 Processing Description

A list of existing Line Loss Factor Class details is displayed for the user to browse.

3.2.4 Error Handling

N/A

3.2.5 Common Processing

IC006 Restrict Access

3.2.6 Volumes

An indeterminate number of Line Loss Factor Classes will be browsed on an ad hoc basis.

3.2.7 Events

None

3.2.8 Event Frequency

N/A

3.2.9 Enquiries

Browse Line Loss Factor Classes

3.2.10 Enquiry Frequency

1

3.2.11 Requirements Catalogue Ref.

6.19

3.2.12 User Roles

ISRA Operator

3.2.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0001 Define Line Loss Factor Classes I/O Structure branch 'Browse Line Loss Factor Class Details'.

3.3 I0002 Define GSP Group

3.3.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.3.2 Function Description

This function is invoked by an ISRA user to allow GSP Groups to be browsed and maintained. This includes the dates which define the period for which the ISRA Agent is responsible for the GSP Group.

For update, deletion and browsing, a list of existing GSP Group Ids is displayed (this list is not shown in the I/O Structure, and should not be confused with the 'Browse GSP Group' branch of the I/O Structure). The user either selects one of them to update, browse or delete, or enters a new one.

For creation, the user must specify a valid GSP Group Id that does not already exist on the system. On creation a message is displayed stating that any GSP groups created are in England and Wales. New GSP Groups will be entered onto the system at start of trading, and in the event that GSP Groups are reorganised.

For update, the user may amend GSP Group Name.

Additionally, the user may select the GSP Group Id required to display a list of Data Collectors, Data Aggregators, Distributors and Suppliers associated with the GSP Group. The user must specify a date prior to browsing this associated data; only items effective on the date entered are displayed. The date defaults to today's date.

When displaying Data Aggregators for the GSP Group the effective from and to dates displayed are derived from the effective dates of all Data Aggregator links to the GSP Group i.e. potentially from more than 1 supplier. The Effective From Settlement Date is the earliest date that the Data Aggregator is effective in the GSP Group and Effective To Settlement Date is the latest date that the Data Aggregator is effective in the GSP Group. These two dates could potentially relate to the Data Aggregator working for different Suppliers.

If validation is successful, the database is updated accordingly. The data is redisplayed to the User.

3.3.3 Processing Description

Reference:EPD Process 2.1.1 - Enter GSP Group Details

See Event Descriptions

3.3.4 Error Handling

See Event Descriptions

3.3.5 Common Processing

IC001 Update on-line Audit Log

IC006 Restrict Access

3.3.6 Volumes

At market inception, 12 (1 per PES).

Thereafter data will be added when new GSP Groups are identified.

An indeterminate number of GSP Groups will be browsed on an ad hoc basis.

3.3.7 Events

GSP Group Deleted, GSP Group Entered, GSP Group Updated

3.3.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three GSP Group events (entered, updated, deleted) and the four enquiries is 1.

3.3.9 Enquiries

Browse Aggregators for GSP Group, Browse Data Collectors associated with GSP Group, Browse GSP Group Codes, Browse Distributors for GSP Group, Browse Supplier In GSP Group.

3.3.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three GSP Group events (entered, updated, deleted) and the four enquiries is 1.

3.3.11 Requirements Catalogue Ref.

2.12, 5.1, 5.3

3.3.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.3.13 I/O Structures

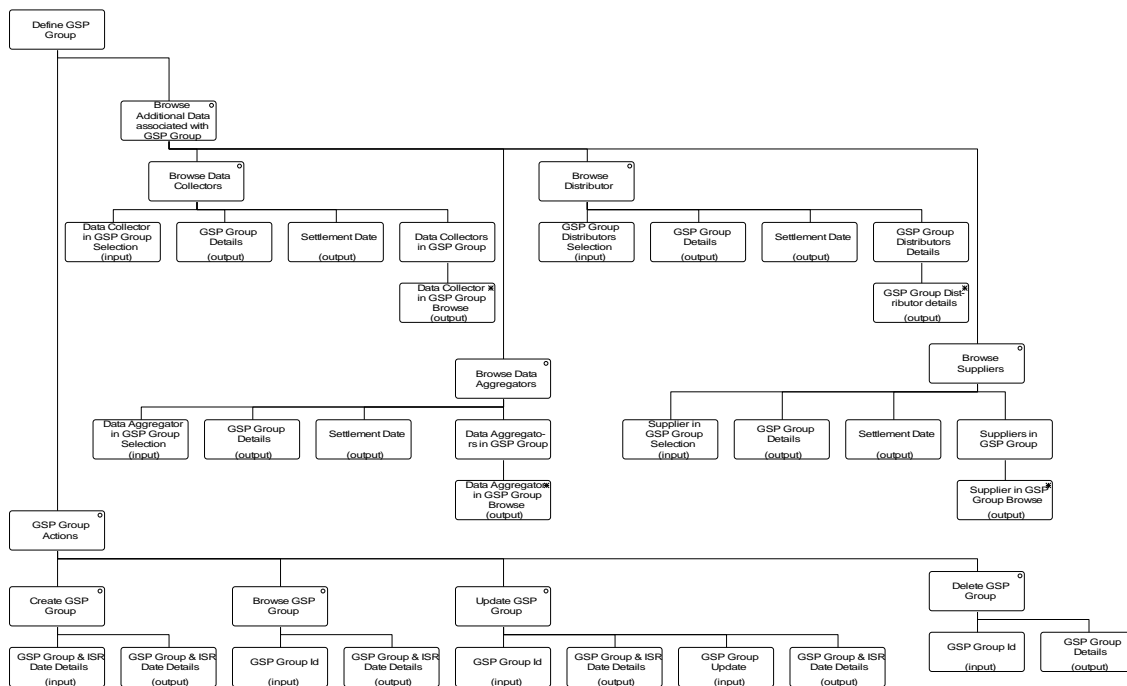


Figure 2: Define GSP Group

I/O Structure Element	Data Items
Data Aggregator in GSP Group Browse	Data Aggregation Type Data Aggregator Id Data Aggregator Name Effective From Settlement Date {DAIGG} Effective To Settlement Date {DAIGG}
Data Aggregator in GSP Group Selection	GSP Group Id Settlement Date

I/O Structure Element	Data Items
Data Collector in GSP Group Browse	Data Collector Id Data Collector Name Effective From Date {DCIGG} Effective To Date {DCIGG} (O)
Data Collector in GSP Group Selection	GSP Group Id Settlement Date
GSP Group & ISR Date Details	GSP Group Id GSP Group Name Effective From Date {GG} Effective To Date {GG} (O)
GSP Group Details	GSP Group Id GSP Group Name
GSP Group Distributor Details	Distributor Id Distributor Name Effective From Settlement Date {GGD} Effective To Settlement Date {GGD} (O)
GSP Group Distributors Selection	GSP Group Id Settlement Date
GSP Group Id	GSP Group Id
GSP Group Update	GSP Group Name Effective From Date {GG} Effective From Date {GG} (O)
Settlement Date	Settlement Date
Supplier In GSP Group Browse	Effective From Settlement Date {SIGG} Effective To Settlement Date {SIGG}(O) Supplier Name Supplier Id
Suppliers In GSP Group Selection	GSP Group Id Settlement Date

Table 6: Define GSP Group - I/O Structure Elements

3.4 I0002E Browse GSP Group

3.4.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.4.2 Function Description

This function is invoked by an ISRA user to browse GSP Groups.

A list of existing groups is displayed. The user selects one of them to browse additional information associated with the group i.e. Data Collectors, Data Aggregators, Distributors and Suppliers. The user must specify a date prior to browsing this associated data; only items effective on the date entered are displayed. The date defaults to today's date.

3.4.3 Processing Description

As above

3.4.4 Error Handling

n/a

3.4.5 Common Processing

IC006 Restrict Access

3.4.6 Volumes

An indeterminate number of GSP Groups will be browsed on an ad hoc basis.

3.4.7 Events

None

3.4.8 Event Frequency

n/a

3.4.9 Enquiries

Browse Aggregators for GSP Group, Browse Data Collectors associated with GSP Group, Browse GSP Group Codes, Browse Distributor(s) for GSP Group, Browse Supplier In GSP Group.

3.4.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the five enquiries is 1.

3.4.11 Requirements Catalogue Ref.

6.19

3.4.12 User Roles

ISRA Operator

3.4.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to 10002 Define GSP Group I/O Structure branches Browse GSP Group and Browse Additional Data associated with GSP Group.

3.5 I0003 Define Calendar**3.5.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.5.2 Function Description

This function is invoked by an ISRA user to allow the Day Type, Scottish Day Type, Season Id and any clock change to be specified for a Settlement Day not yet subjected to a Final Initial Settlement Run.

The user enters a range of Settlement Dates and optionally a Season Id. If a Season Id has been entered the function will then automatically assign that Season Id, a Day Type Id and a Scottish Day Type Id to each Settlement Date in the date range (see Processing Description).

The user will be displayed all Settlement Dates in the date range. The dates for which a Clock Time Change has been entered will be flagged. The user can select a Settlement Date and change the Day Type Id and the Scottish Day Type Id. A Clock Time Change can be entered, or deleted, provided that it comes after all other Clock Time Changes.

When entering a Clock Time Change the GMT time at which the time change occurs together with the local time after the change is entered.

3.5.3 Processing Description

Reference: EPD 2.1.2 - Enter Calendar Details

See Event Description

3.5.4 Error Handling

See Event Description

3.5.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.5.6 Volumes

Clock changes: 2 per year

Day Type and Season changes will probably occur together, probably once per year.

3.5.7 Events

Clock Change Deleted, Clock Change Entered, Clock Change Updated, Day Type Specified, Season Specified

3.5.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the Clock Change events (Create, Update, Delete), the Day Type and Season specification events and the Browse Calendar enquiry sum to one.

3.5.9 Enquiries

Browse Calendar

3.5.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the Clock Change events (Create, Update, Delete), the Day Type and Season specification events and the Browse Calendar enquiry sum to one.

3.5.11 Requirements Catalogue Ref.

2.13, 2.14, 5.1, 5.3, 5.5

3.5.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.5.13 I/O Structures

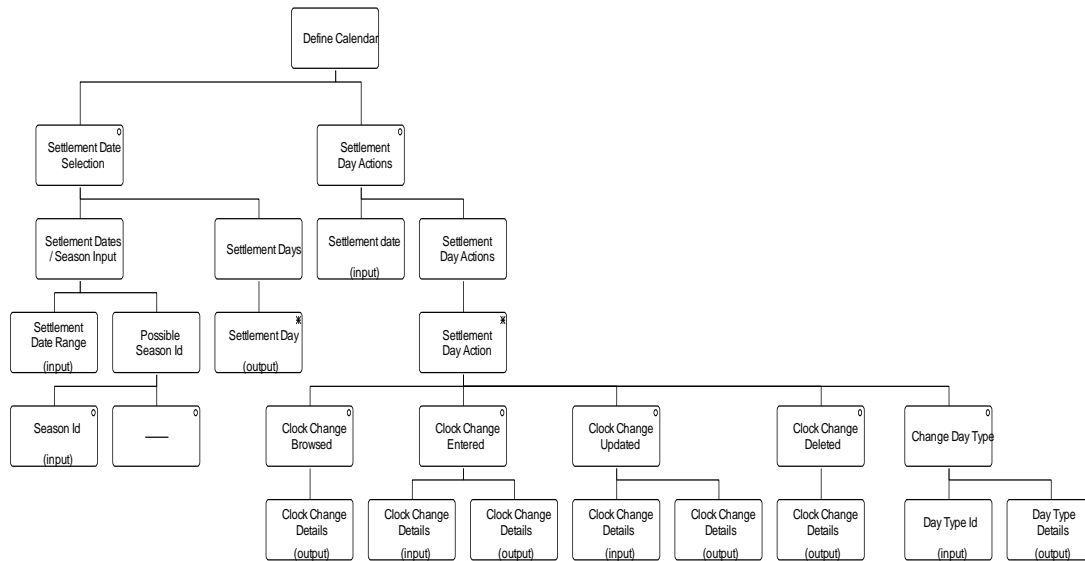


Figure 3: Define Calendar

I/O Structure Element	Data Items
Clock Change Details	Change Date GMT Time Post Change Local Time
Day Type Details	Day Type Id Scottish Day Type Id Settlement Date
Day Type Id	Day Type Id
Scottish Day Type Id	Scottish Day Type Id
Season Id	Season Id
Settlement Date	Settlement Date
Settlement Date Range	Settlement Date Range End Settlement Date Range Start
Settlement Day	Day Type Id Scottish Day Type Id Season Id Settlement Date

Table 7: Define Calendar - I/O Structure Elements

3.6 I0003E Browse Calendar

3.6.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.6.2 Function Description

This function is invoked by an ISRA user to browse the seasons and day types for a selected period.

The user may specify the range of Settlement Dates (the selection will require the year to be specified) and will be given a list of the Settlement Dates within that range. The list will include the Day Type Id, Scottish Day Type Id, Season Id and an indication of whether the date has a Clock Time Change associated with it.

The user can select a date and view the time at which the time change takes place and the local time after the change.

3.6.3 Processing Description

Browse the seasons, day types, Scottish day types and clock changes (e.g. for British Summer Time) for a range of Settlement Dates.

3.6.4 Error Handling

N/A

3.6.5 Common Processing

IC006 Restrict Access

3.6.6 Volumes

An indeterminate range of Settlement Dates will be browsed on an ad-hoc basis.

3.6.7 Events

None

3.6.8 Event Frequency

N/A

3.6.9 Enquiries

Browse Calendar

3.6.10 Enquiry Frequency

1

3.6.11 Requirements Catalogue Ref.

6.19

3.6.12 User Roles

ISRA Operator

3.6.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0003 Define Calendar

3.7 I0004 Define GSP Correction Scaling Factors

3.7.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.7.2 Function Description

This function is invoked by an ISRA user to allow GSP Group Correction scaling factors for a Consumption Component Class to be browsed and maintained.

A list of existing Consumption Component Class Ids is displayed (this list is not shown on the I/O Structure, and should not be confused with the 'Browse Scaling Factors for CC Class' branch of the I/O Structure). The user selects the Consumption Component Class Id required. A list of scaling factors for the Consumption Component Class selected is displayed, together with the date range for which each is effective (this list is not shown on the I/O Structure). The user either selects one of them to amend, delete or browse, or enters new ones.

For creation, the user must specify a Scaling Factor and an Effective From Settlement Date. New NHH Consumption Component Classes must have an Effective From Settlement Date before the earliest planned SSR run settlement date.

For amendment, deletion and browsing, Consumption Component Class Id, Scaling Factor and the Effective From Settlement Date are displayed.

For amendment, the user amends the Effective From Settlement Date and Scaling Factor if required. If amending Effective From Settlement Dates for a NHH Consumption Component Class the date must be before the earliest planned SSR run settlement date.

The system validates the request and the details entered, and if necessary rejects it. If validation is successful the database is updated accordingly.

3.7.3 Processing Description

Reference: EPD 1.3.3 - Maintain GSP Correction Scaling Factors

See Event Descriptions

3.7.4 Error Handling

See Event Descriptions

3.7.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.7.6 Volumes

19 at market inception. Thereafter occasional changes only.

An indeterminate number of Scaling Factors will be browsed on an ad hoc basis.

3.7.7 Events

GSP Correction Scaling Factors Entered

GSP Correction Scaling Factors Updated

GSP Correction Scaling Factors Deleted

3.7.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Scaling Factor events (entered, updated, deleted), and the enquiry (browse) is 1.

3.7.9 Enquiries

Browse GSP Group Correction Scaling Factors.

3.7.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Scaling Factor events (entered, updated, deleted), and the enquiry (browse) is 1.

3.7.11 Requirements Catalogue Ref.

1.11, 5.1, 5.3, 6.15, 6.21

3.7.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.7.13 I/O Structures

I/O Structure Element	Data Items
Amended Scaling Factor Details	Effective From Settlement Date {GGCSF} GSP Group Correction Scaling Factor
Consumption Component Details	AA/EAC Indicator Actual/Estimated Indicator Consumption Component Class Id Consumption Component Indicator Data Aggregation Type Measurement Quantity Id Metered/Unmetered Indicator
Scaling Factor Details	Consumption Component Class Id Effective From Settlement Date {GGCSF} GSP Group Correction Scaling Factor
Scaling Factor Key	Consumption Component Class Id Effective From Settlement Date {GGCSF}
Consumption Component Class Id	Consumption Component Class Id

Table 8: Define GSP Correction Scaling Factors – I/O Structure Elements

3.8 I0004E Browse GSP Correction Scaling Factors**3.8.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.8.2 Function Description

This function is invoked by the ISR Operator to browse GSP Group Correction scaling factors for a Consumption Component Class.

3.8.3 Processing Description

A list of existing Consumption Component Class Ids is displayed, from which the User selects the one required. A list of Scaling Factors for the Consumption Component Class is displayed, together with the date range for which each is effective.

3.8.4 Error Handling

N/A

3.8.5 Common Processing

IC006 Restrict Access

3.8.6 Volumes

An indeterminate number of Scaling Factors will be browsed on an ad hoc basis.

3.8.7 Events

None

3.8.8 Event Frequency

N/A

3.8.9 Enquiries

Browse GSP Group Correction Scaling Factors

3.8.10 Enquiry Frequency

1

3.8.11 Requirements Catalogue Ref.

6.19

3.8.12 User Roles

ISRA Operator

3.8.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to the I0004 Define GSP Correction Scaling Factors I/O Structure branch 'Browse Scaling Factors for CC Class'.

3.9 I0005 Specify Supplier in GSP Group**3.9.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.9.2 Function Description

This function is invoked by an ISRA user and allows details of Suppliers, and the links between Suppliers and GSP Groups (Supplier in GSP Group entity) to be defined and maintained.

A list of existing Supplier Ids together with Supplier Name and Pool Member Id is displayed (this list is not shown in the I/O Structure, and should not be confused with 'Browse Supplier' branch of I/O Structure). The user either selects one of them to amend, delete or browse, or enters a new one. When entering a new Supplier, the user may associate a Default BM Unit to the Supplier for each GSP Group, regardless of whether the Supplier will be actively trading in the GSP Group.

The list also allows the user to associate GSP Groups with each Supplier. By selecting a Supplier, a list of associated GSP Group Ids, Effective From Settlement Dates and Effective To Settlement Dates are displayed. The user can add a new entry to the list to associate the Supplier to a new GSP Group, amend the Effective From Settlement Date and Effective To Settlement Date of an existing GSP Group entry, or delete an existing GSP Group entry from the list.

The system validates the request and the details entered and if necessary rejects it. If validation is successful, the database is updated accordingly.

3.9.3 Processing Description

Reference:EPD 1.3.1 - Maintain Supplier Details

EPD 1.3.2 - Assign Suppliers to GSP Groups

See Event Descriptions

3.9.4 Error Handling

See Event Descriptions

3.9.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.9.6 Volumes

At market inception, 30 Suppliers per GSP Group.

Thereafter, data will be added when new Suppliers or GSP Groups are identified.

3.9.7 Events

Supplier Details Entered

Supplier Details Updated

Supplier Details Deleted

Supplier Starts Trading in GSP Group

Supplier Finishes Trading in GSP Group

3.9.8 Event Frequency

The sum of the frequencies of the three Supplier events (entered, updated, deleted), the two Supplier/GSP Group link events, and the enquiry is 1.

3.9.9 Enquiries

Browse GSP Groups associated with Supplier

3.9.10 Enquiry Frequency

The sum of the frequencies of the three Supplier events (entered, updated, deleted), the two Supplier/GSP Group link events, and the enquiry is 1.

3.9.11 Requirements Catalogue Ref.

1.5, 5.1, 5.3, 6.6, 6.15

3.9.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.9.13 I/O Structures

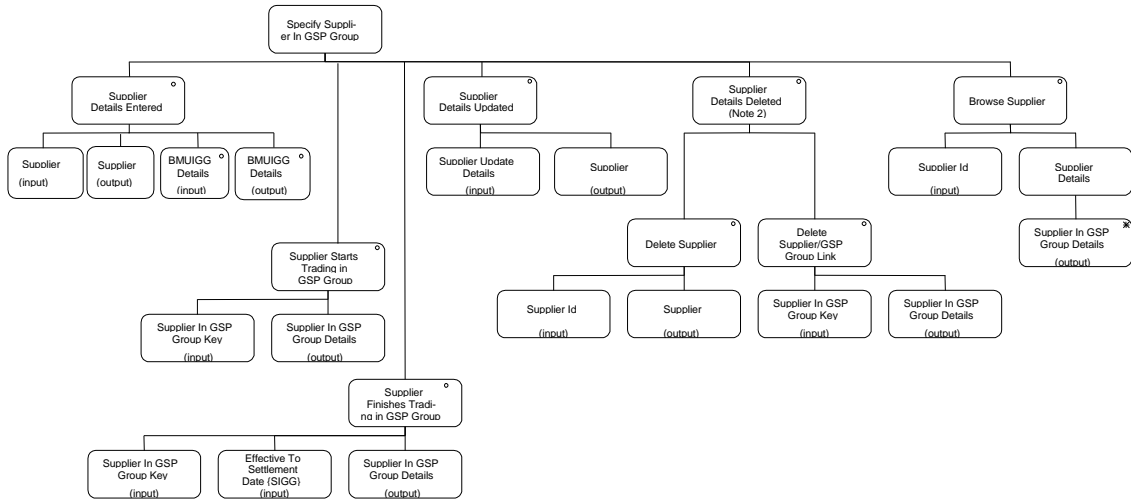


Figure 4: Specify Supplier in GSP Group

I/O Structure Element	Data Items
Supplier	Pool Member Id Supplier Id Supplier Name
Supplier In GSP Group	Effective From Settlement Date {SIGG} Effective To Settlement Date {SIGG} (O) GSP Group Id Supplier Id
Supplier In GSP Group Details	Effective From Settlement Date {SIGG} Effective To Settlement Date {SIGG} (O) GSP Group Id GSP Group Name Pool Member Id Supplier Id Supplier Name
Supplier In GSP Group Key	Effective From Settlement Date {SIGG} GSP Group Id Supplier Id
Supplier Id	Supplier Id
Supplier Update Details	Pool Member Id Supplier Name
Effective To Settlement Date {SIGG}	Effective To Settlement Date {SIGG}
BMUIGG Details	BM Unit Id GSP Group Id Supplier Id Default BM Unit Flag Effective From Settlement Date {BMUIGG} Effective To Settlement Date {BMUIGG} (O)

Table 9: Specify Supplier in GSP Group - I/O Structure Elements

3.10 I0005E Browse GSP Groups associated with Supplier

3.10.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.10.2 Function Description

This function is invoked by an ISRA user to browse a set of valid Suppliers trading in the GSP Groups covered by the ISRA system.

3.10.3 Processing Description

A list of valid Supplier Ids, Supplier Names and Pool Member Ids is displayed. The user can select one of these to browse. The Supplier details are displayed, together with a list of the GSP Groups in which that Supplier is trading.

3.10.4 Error Handling

None

3.10.5 Common Processing

IC006 Restrict Access

3.10.6 Volumes

An indeterminate number of Suppliers and their associated GSP Groups will be browsed on an ad-hoc basis.

3.10.7 Events

None

3.10.8 Event Frequency

N/A

3.10.9 Enquiries

Browse GSP Groups associated with Supplier

3.10.10 Enquiry Frequency

1

3.10.11 Requirements Catalogue Ref.

6.19

3.10.12 User Roles

ISRA Operator

3.10.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to the I0005 Specify Supplier In GSP Group I/O Structure branch 'Browse Supplier'.

3.11 I0006 Specify Distributor(s) for GSP Group**3.11.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.11.2 Function Description

This function is invoked by an ISRA user and allows details of Distributors, and the link between Distributor(s) and GSP Groups to be defined and maintained.

A list of existing Distributors is displayed (this list is not shown in the I/O Structure, and should not be confused with the 'Browse Distributor' branch of the I/O Structure). The user selects the Distributor required in order to browse the details, update the details, or delete the Distributor (subject to validation), or creates a new Distributor by adding details.

The list also allows the user to display the GSP Groups associated with the Distributor. By selecting a Distributor, a list of all associated GSP Group Ids, Effective From Settlement Date and Effective To Settlement Dates are displayed. The user can add a new entry to the list to associate the Distributor to a new GSP Group, amend the Effective From and Effective To Settlement Dates of an existing GSP Group entry, or delete an existing GSP Group entry.

The system validates the request and the details entered and if necessary rejects it. If validation is successful the database is updated accordingly.

3.11.3 Processing Description

Reference: EPD 1.3.5 - Specify Distributor(s) for GSP Group

See Event Descriptions

3.11.4 Error Handling

See Event Descriptions

3.11.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise and Produce Standing Data Audit Report

IC006 Restrict Access

3.11.6 Volumes

At market inception, 12 Distributors, 1 Distributor per GSP Group.

Thereafter data will be added when new Distributors or GSP Groups are identified.

3.11.7 Events

Distributor Entered

Distributor Updated

Distributor Deleted

Distributor Assigned to GSP Group

Distributor Assignment Deleted

3.11.8 Event Frequency

The sum of the frequencies of the three Distributor events (entered, updated, deleted), the two Distributor/GSP Group link events (assigned, assignment deleted) and the enquiry is 1.

3.11.9 Enquiries

Browse GSP Groups associated with Distributor

3.11.10 Enquiry Frequency

The sum of the frequencies of the three Distributor events (entered, updated, deleted), the two Distributor/GSP Group link events (assigned, assignment deleted) and the enquiry is 1.

3.11.11 Requirements Catalogue Ref.

1.5, 5.1, 5.3, 6.15, 6.21.

3.11.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.11.13 I/O Structures

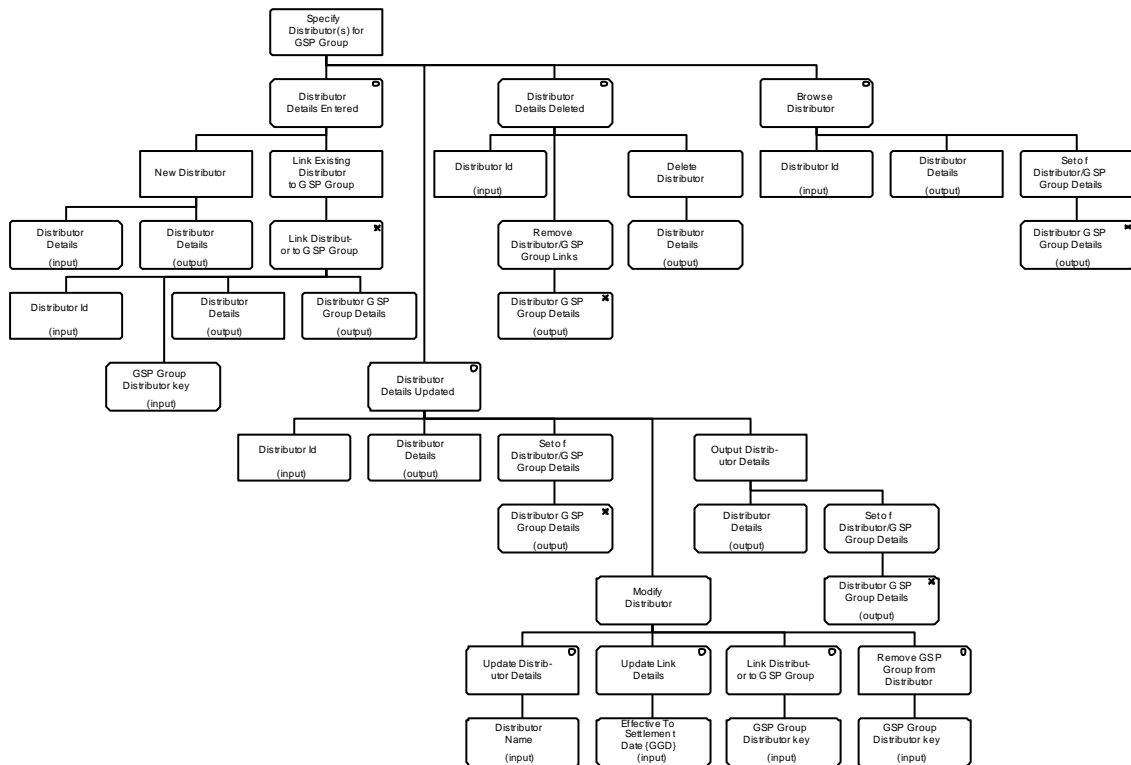


Figure 5: Specify Distributor(s) for GSP Group

I/O Structure Element	Data Items
Distributor Id	Distributor Id
Distributor Name	Distributor Name
Distributor Details	Distributor Id Distributor Name
Effective To Settlement Date {GGD}	Effective To Settlement Date {GGD}
Distributor GSP Group Details	GSP Group Id GSP Group Name Effective From Settlement Date {GGD} Effective To Settlement Date {GGD} (O)
GSP Group Distributor key	Effective From Settlement Date {GGD} GSP Group Id

Table 10: Specify Distributor(s) for GSP Group – I/O Structure Elements

3.12 I0006E Browse GSP Groups associated with Distributor

3.12.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.12.2 Function Description

This function is invoked by an ISRA user to browse a set of valid GSP Groups associated with Distributors.

3.12.3 Processing Description

A list of valid Distributors is displayed. The user can select one of these to browse. A list of the GSP Groups associated with that Distributor is displayed.

3.12.4 Error Handling

None

3.12.5 Common Processing

IC006 Restrict Access

3.12.6 Volumes

An indeterminate number of Distributors and their associated GSP Groups will be browsed on an ad hoc basis.

3.12.7 Events

None

3.12.8 Event Frequency

N/A

3.12.9 Enquiries

Browse GSP Groups associated with Distributor

3.12.10 Enquiry Frequency

1

3.12.11 Requirements Catalogue Ref.

6.19

3.12.12 User Roles

ISRA Operator

3.12.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to the I0006 Specify Distributor(s) for GSP Group, I/O Structure branch 'Browse Distributor'.

3.13 I0007 Define Profiles**3.13.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.13.2 Function Description

This function is invoked by an ISRA user to allow Profile Classes and their corresponding Profiles to be browsed and maintained.

A list of existing Profile Class Ids can be displayed (this list is not shown in the I/O Structure, and should not be confused with 'Browse Profile Class' branch of I/O Structure). The user either selects one of them to amend, delete or browse, or enters a new one.

For creation, the user must enter Profile Class Id, Profile Class Description and Switched Load Profile Class Indicator. If the Profiles for the Profile Class are known at this time, the user may enter them and the associations between Profile Class and Profile will be created, otherwise they may be entered later using the amendment facility. If Profile details are entered, Profile Id, Profile Description, No of Settlement Periods, Effective From Date must be specified (Effective To Date is optional).

The number of Profiles associated with a Profile Class that may be effective at any one time depends on the value of Switched Load Profile Class Indicator (see Processing Description section). For Profile Classes that may have only one effective Profile at any one time, if a new Profile is created the function derives the Effective To Date for the previous Profile (to ensure that date ranges are continuous).

For amendment, deletion and browsing, the Profile Class Ids are displayed. The User selects one of them and a list of Profiles for the Profile Class is displayed (this list is not shown in the I/O Structure).

For amendment, the user amends the Profile Class details if required, and amends the details of the Profiles associated with the Profile Class, if required.

For deletion, the user deletes the Profile Class and all its associated Profiles.

The system validates the request and the details entered and if necessary rejects it.

If validation is successful, the database is updated accordingly. The data is redisplayed to the user.

3.13.3 Processing Description

Reference: EPD 2.5.1 - Enter Profile Details

See Event Descriptions

3.13.4 Error Handling

See Event Descriptions

3.13.5 Common Processing

IC001 Update on-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.13.6 Volumes

At market inception, 8 Profile Classes, roughly 54 Profiles. Thereafter, estimated as one change per year.

An indeterminate number of Profile Classes and Profiles will be browsed on an ad hoc basis.

3.13.7 Events

Profile Class Deleted, Profile Class Entered, Profile Class Updated, Profile Deleted, Profile Entered, Profile Updated

3.13.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Profile Class events (entered, updated, deleted), the three Profile events (entered, updated, deleted) and the enquiries (browse) is 1.

3.13.9 Enquiries

Browse Profile, Browse Profile Class

3.13.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Profile Class events (entered, updated, deleted), the three Profile events (entered, updated, deleted) and the enquiries (browse) is 1.

3.13.11 Requirements Catalogue Ref.

2.5, 5.1, 5.3, 5.7

3.13.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.13.13 I/O Structures

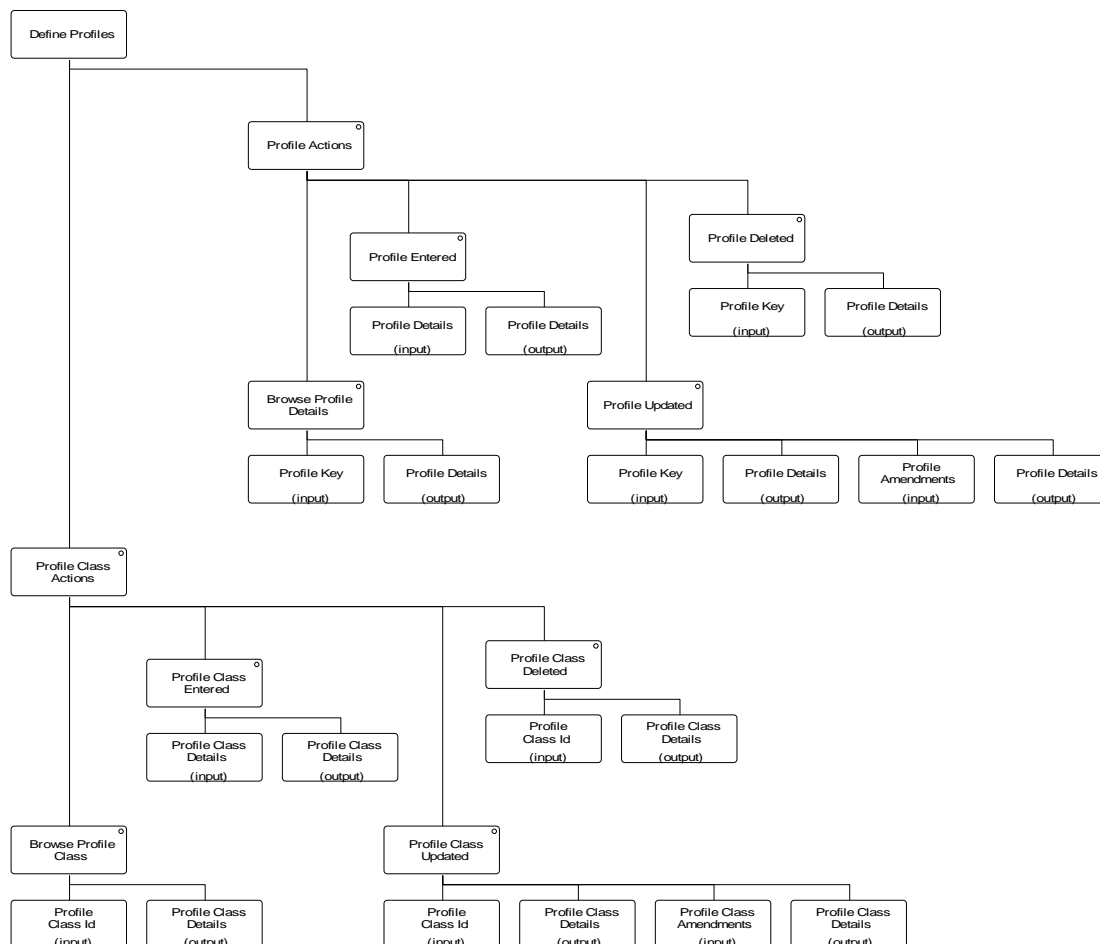


Figure 6: Define Profiles

I/O Structure Element	Data Items
Profile Amendments	Effective To Settlement Date {PROF} (O) Profile Description Profile Settlement Periods
Profile Class Amendments	Profile Class Description Switched Load Profile Class Ind
Profile Class Details	Profile Class Description Profile Class Id Switched Load Profile Class Ind
Profile Class Id	Profile Class Id
Profile Details	Effective From Settlement Date {PROF} Effective To Settlement Date {PROF} (O) Profile Class Id Profile Description Profile Id Profile Settlement Periods
Profile Key	Effective From Settlement Date {PROF} Profile Class Id Profile Id

Table 11: Define Profiles – I/O Structure Elements

3.14 I0007E Browse Profile Classes

3.14.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.14.2 Function Description

This function is invoked by an ISRA user to browse Profile Classes and their associated Profiles.

The user enters the Profile Class Id (or selects from a list the one) to browse. Profile Class details are displayed, together with a list of Profiles associated with the Profile Class.

3.14.3 Processing Description

Browse the Profile details e.g. the Profile description, the settlement date from which the profile becomes/became valid and (if it exists) the settlement date after which the profile ceases/ceased to be valid.

Browse the Profile Class details e.g. the Profile Class description and whether or not it is a switched load profile.

3.14.4 Error Handling

n/a

3.14.5 Common Processing

IC006 Restrict Access

3.14.6 Volumes

An indeterminate number of Profile Classes and Profiles will be browsed on an ad hoc basis.

3.14.7 Events

None

3.14.8 Event Frequency

n/a

3.14.9 Enquiries

Browse Profile, Browse Profile Class

3.14.10 Enquiry Frequency

The frequencies of the enquiries Browse Profile and Browse Profile Class sum to 1.

3.14.11 Requirements Catalogue Ref.

6.19

3.14.12 User Roles

ISRA Operator

3.14.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to 10007 Define Profile I/O Structure branches Browse Profile Class and Browse Profile Details.

3.15 I0008A Initiate Daily Profile Coefficient File Extraction**3.15.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.15.2 Function Description

This function allows an ISRA user to manually initiate the extraction of one data file for each Data Collector showing the Daily Profile Coefficient for every Valid Measurement Requirement Profile Class for a particular Profile Production Run.

The user enters the Settlement Date for which output is requested. The latest Profile Production Run Number is displayed for this Settlement Date.

This function initiates the batch extract described in I0008B (see I/O Structure I0008_02 for details of extract process).

3.15.3 Processing Description

Reference: EPD 2.4.2 - Extract Data For EAC Calculator

As above

3.15.4 Error Handling

None

3.15.5 Common Processing

IC006 Restrict Access

3.15.6 Volumes

It is expected that the majority of files will be extracted automatically (see I0008B for details). This manual method of extracting the data is a backup for I0008B, and as such will be invoked occasionally.

3.15.7 Events

None

3.15.8 Event Frequency

n/a

3.15.9 Enquiries

None

3.15.10 Enquiry Frequency

n/a

3.15.11 Requirements Catalogue Ref.

5.1, 5.13

3.15.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.15.13 I/O Structures

This is only the on-line initiation. The extraction of the Daily Profile Coefficient file to be distributed to the Data Collectors is as per I/O Structure I0008_02.

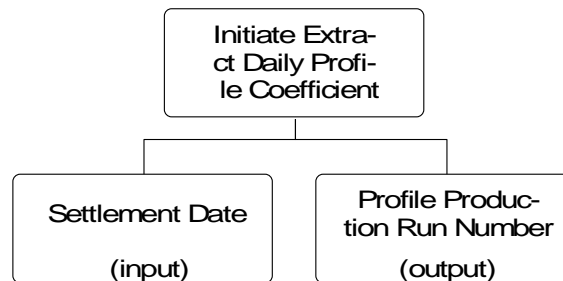


Figure 7: Initiate Daily Profile Coefficient File Extraction

I/O Structure Element	Data Items
Profile Production Run Number	Profile Production Run Number
Settlement Date	Settlement Date

Table 12: Initiate Daily Profile Coefficient File Extraction – I/O Structure Elements

3.16 I0008B Automatic Daily Profile Coefficient File Extraction

3.16.1 Function Type

Batch	Enquiry	System initiated
-------	---------	------------------

3.16.2 Function Description

Daily Profile Coefficient extracts can be:

1. For a normal daily extract for all GSP Groups in which a Data Collector is active, produced by this function, or
2. For when a Data Collector starts trading in a new GSP Group, i.e. for one selected GSP Group, produced by function I0039 Extract Selected EAC Data.

The Daily Profile Production run calculates Daily Profile Coefficients for selected GSP Groups for a Settlement Day. On completion of each run the system sends to each Data Collector operating in any GSP Group on the Settlement Day a file containing the Daily Profile Coefficients calculated in the run for the set of GSP Groups in which the Data Collector is operating on the Settlement Day. If the Profile Production Run does not include data from some of the GSP Groups that the Data Collector operates in, then data from the latest Profile Production Run for that Settlement Date and GSP group combination will be used (if any).

In addition to this automatic extraction, the ISR Agent can request via function I0008A the sending of Daily Profile Coefficients previously calculated for a selected Settlement Day for a Daily Profile Production run.

This function extracts a data file for each Data Collector showing the daily Profile Coefficient for every Valid Measurement Requirement Profile Class for a given Settlement Date and those GSP Groups in which the Data Collector operates.

This function may be initiated in one of two ways:

1. Automatically by the completion of the Daily Profile Production Run
2. By I0008A Initiate Daily Profile Coefficient File Extraction

3.16.3 Processing Description

Reference: 2.4.2 Extract Data For EAC Calculator

For each Data Collector, create a data file containing the Daily Profile Coefficients calculated for each Valid Measurement Requirement Profile Class for the GSP Groups in which the Data Collector is active. For each GSP Group, data is read from Daily Profile Coefficient for the latest Profile Production Run for that Settlement Date and GSP Group combination. If no combination exists then no data for that GSP Group is included in the file.

The Profile Production Run Number in the file header is set to the highest Profile Production Run Number for the Settlement Date, although some of the data in the file may relate to an earlier Profile Production Run.

3.16.4 Error Handling

As above

3.16.5 Common Processing

IC005 Create File Header

IC007 Update File Log

- 3.16.6 Volumes**
Once, after the Daily Profile Production Run has been completed. On an ad-hoc basis via I0008A.
- 3.16.7 Events**
None
- 3.16.8 Event Frequency**
Not applicable
- 3.16.9 Enquiries**
Daily Profile Coefficient File Extraction
- 3.16.10 Enquiry Frequency**
1
- 3.16.11 Requirements Catalogue Ref.**
5.1, 5.13
- 3.16.12 User Roles**
None, system initiated
- 3.16.13 I/O Structures**
I0008_02 Automatic Daily Profile Coefficient File Extract

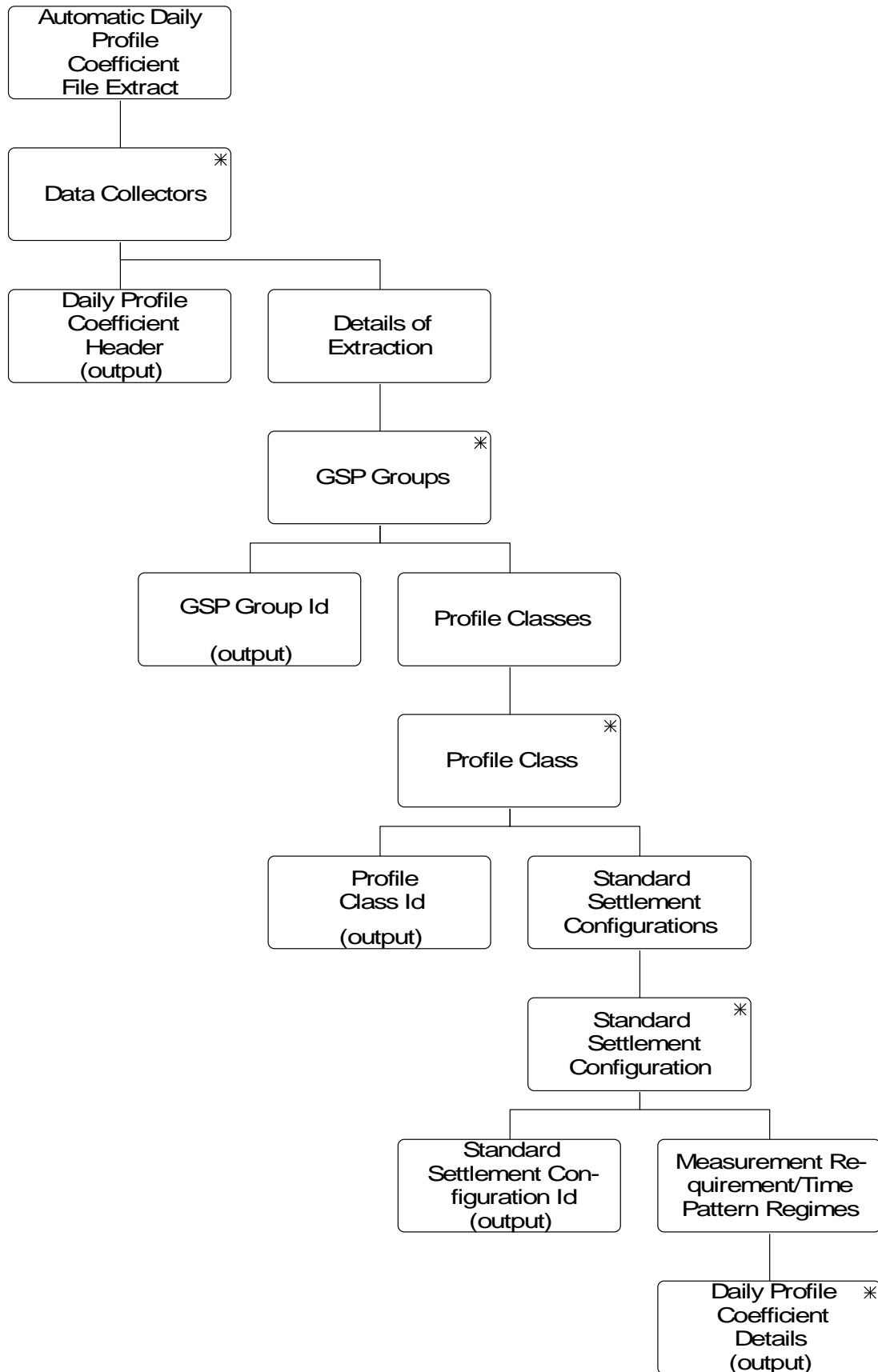


Figure 8: I0008_02 Automatic Daily Profile Coefficient File Extraction

I/O Structure Element	Data Items
Daily Profile Coefficient Details	Daily Profile Coefficient Time Pattern Regime Id
Daily Profile Coefficient Header	Data Collector Id System Market Participant Id Profile Production Run Number Settlement Date
GSP Group Id	GSP Group Id
Profile Class Id	Profile Class Id
Standard Settlement Configuration Id	Standard Settlement Configuration Id

Table 13: Automatic Daily Profile Coefficient File Extraction – I/O Structure Elements

3.17 I0009 Specify Data Collector for GSP Group

3.17.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.17.2 Function Description

In this section Data Collector refers to NHH Data Collector.

This function is invoked by an ISRA user to allow Data Collectors, and the link between Data Collectors and GSP Groups (Data Collector in GSP Group) to be browsed and maintained.

A list of existing Data Collector Ids can be displayed (this list is not shown in the I/O Structure, and should not be confused with the 'Browse DC and/or GSP Groups linked to DC' branch of I/O Structure). The user selects one of them to amend, delete or browse, or enters a new one.

For creation, the user enters the Data Collector Id and Data Collector Name.

For amendment, deletion and browsing, the Data Collector Id and Name are displayed. For amendment, the user amends Data Collector Name, if required.

For deletion, the User deletes the Data Collector.

Additionally, the User may select a Data Collector in order to browse or maintain the Data Collectors in the GSP Group. A list of all GSP Group Ids is displayed (this list is not shown in the I/O Structure). Those associated with the Data Collector are marked as such. This screen can be used to add or remove GSP Groups from the Data Collector. A separate Browse screen is available which lists the GSP Groups associated with the Data Collector.

The system validates the request and the details entered and if necessary rejects it. If validation is successful, the database is updated accordingly. The data is redisplayed to the User.

3.17.3 Processing Description

Reference: EPD 2.1.5 - Enter Data Collector Details.

See Event Descriptions

3.17.4 Error Handling

See Event Descriptions

3.17.5 Common Processing

IC001 Update On-Line Audit Log

IC006 Restrict Access

3.17.6 Volumes

At market inception, 1 Data Collector per GSP Group.

Thereafter data will be added when new Data Collectors or GSP Groups are identified.

3.17.7 Events

Data Collector Appointed to GSP Group, Data Collector Appointment Deleted, Data Collector Deleted, Data Collector Details Entered, Data Collector Details Updated

3.17.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Data Collector events (entered, updated, deleted), the two Data Collector/GSP Group association events (appointed, appointment deleted) and the enquiries (browse) is 1.

3.17.9 Enquiries

Browse Data Collector, Browse GSP Groups associated with Data Collector

3.17.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Data Collector events (entered, updated, deleted), the two Data Collector/GSP Group association events (appointed, appointment deleted) and the enquiries (browse) is 1.

3.17.11 Requirements Catalogue Ref.

5.1, 5.13

3.17.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.17.13 I/O Structures

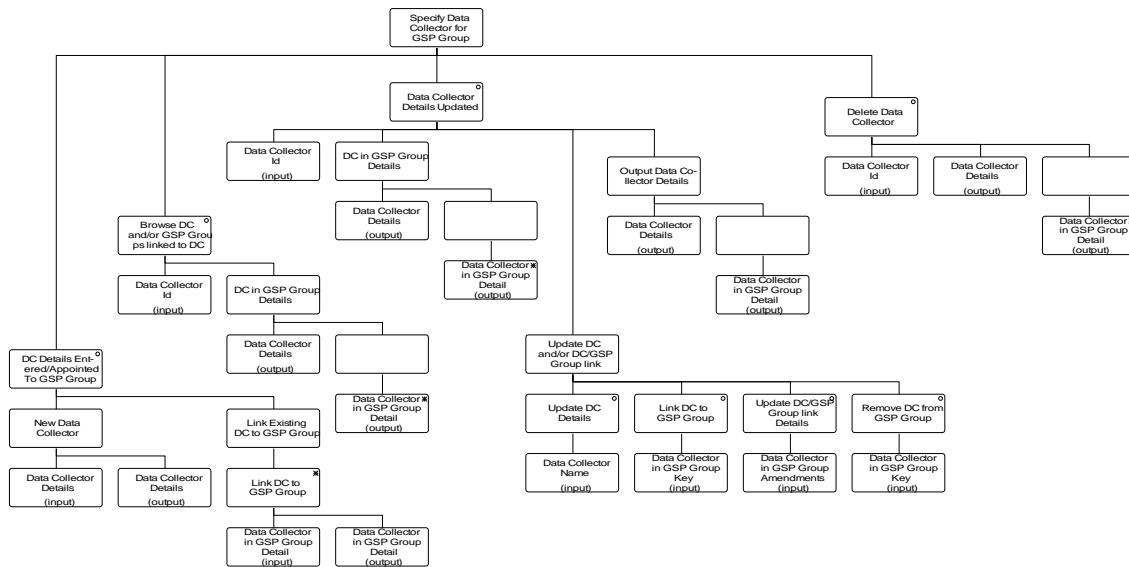


Figure 9: Specify Data Collector for GSP Group

I/O Structure Element	Data Items
Data Collector Details	Data Collector Id Data Collector Name
Data Collector Id	Data Collector Id
Data Collector in GSP Group Amendments	Effective From Date {DCIGG} Effective To Date {DCIGG}(O)
Data Collector in GSP Group Detail	Effective From Date {DCIGG} Effective To Date {DCIGG}(O) GSP Group Id GSP Group Name
Data Collector in GSP Group Key	Data Collector Id Effective From Date {DCIGG} GSP Group Id
Data Collector Name	Data Collector Name

Table 14: Specify Data Collector for GSP Group – I/O Structure Elements

3.18 I0009E Browse GSP Groups for Data Collector

3.18.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.18.2 Function Description

In this section Data Collector refers to NHH data Collector.

This function is invoked by the ISRA user to browse Data Collectors and their associated GSP Groups.

A list of existing Data Collectors can be displayed. The User selects the Data Collector required. A list of GSP Groups associated with the Data Collector is displayed for the User to browse.

3.18.3 Processing Description

Browse the details of a Data Collector.

Browse the GSP Groups associated with a Data Collector.

3.18.4 Error Handling

n/a

3.18.5 Common Processing

IC006 Restrict Access

3.18.6 Volumes

An indeterminate number of Data Collectors and associated GSP Groups will be browsed on an ad hoc basis.

3.18.7 Events

n/a

3.18.8 Event Frequency

n/a

3.18.9 Enquiries

Browse Data Collector, Browse GSP Groups associated with Data Collector

3.18.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the two enquiries (Browse Data Collector, Browse GSP Groups associated with Data Collector) is 1.

3.18.11 Requirements Catalogue Ref.

6.19

3.18.12 User Roles

ISRA Operator

3.18.13 I/O Structures

See 'Browse DC and/or GSP Groups linked to DC' within the I/O structure of I0009 Specify Data Collector for GSP Group.

3.19 I0010 Specify Aggregator for GSP Group

3.19.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.19.2 Function Description

This function is invoked by an ISRA user to allow Data Aggregators, and the link between Supplier, GSP Group and Data Aggregator to be browsed and maintained.

A list of existing Data Aggregators is displayed (this list is not shown in the I/O Structure). The user either selects one of them to amend, delete or browse, or enters a new one.

The list also allows the user to associate GSP Groups and Suppliers with the Data Aggregator. By selecting a Data Aggregator, a list of associated GSP Group Ids, Effective From Settlement Dates, Effective To Settlement Dates and Supplier Ids is displayed. The user can add a new entry to this list to associate the Data Aggregator to a new GSP Group/Supplier combination, amend the Effective To Settlement Date of an existing GSP Group/Supplier entry, or delete an existing GSP Group/Supplier association.

The system validates the request and the details entered, and if necessary rejects it. If validation is successful the database is updated accordingly.

3.19.3 Processing Description

Reference: EPD 1.3.6 - Specify Aggregator for GSP Group

See Event Descriptions

3.19.4 Error Handling

See Event Descriptions

3.19.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.19.6 Volumes

At market inception, 1 Data Aggregator per Supplier per GSP Group (HH), 1 Data Aggregator (i.e. current PES) per GSP Group (NHH). Thereafter, data will be added when new GSP Groups or Data Aggregators are added (after year 2000, NHH volumes likely to increase considerably).

3.19.7 Events

Date Aggregator Entered

Data Aggregator Updated

Data Aggregator Deleted

Aggregator Assigned to GSP Group

Aggregator Assignment Deleted

3.19.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Data Aggregator events (entered, updated, deleted), the two Aggregator in GSP Group events (assigned, assignment deleted) and the enquiries (browse) is 1.

3.19.9 Enquiries

Browse Aggregators for Supplier

Browse Data Aggregator

Browse GSP Groups associated with Data Aggregator

3.19.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Data Aggregator events (entered, updated, deleted), the two Aggregator in GSP Group events (assigned, assignment deleted) and the enquiries (browse) is 1.

3.19.11 Requirements Catalogue Ref.

1.5, 5.1, 5.3, 6.15, 6.21

3.19.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.19.13 I/O Structures

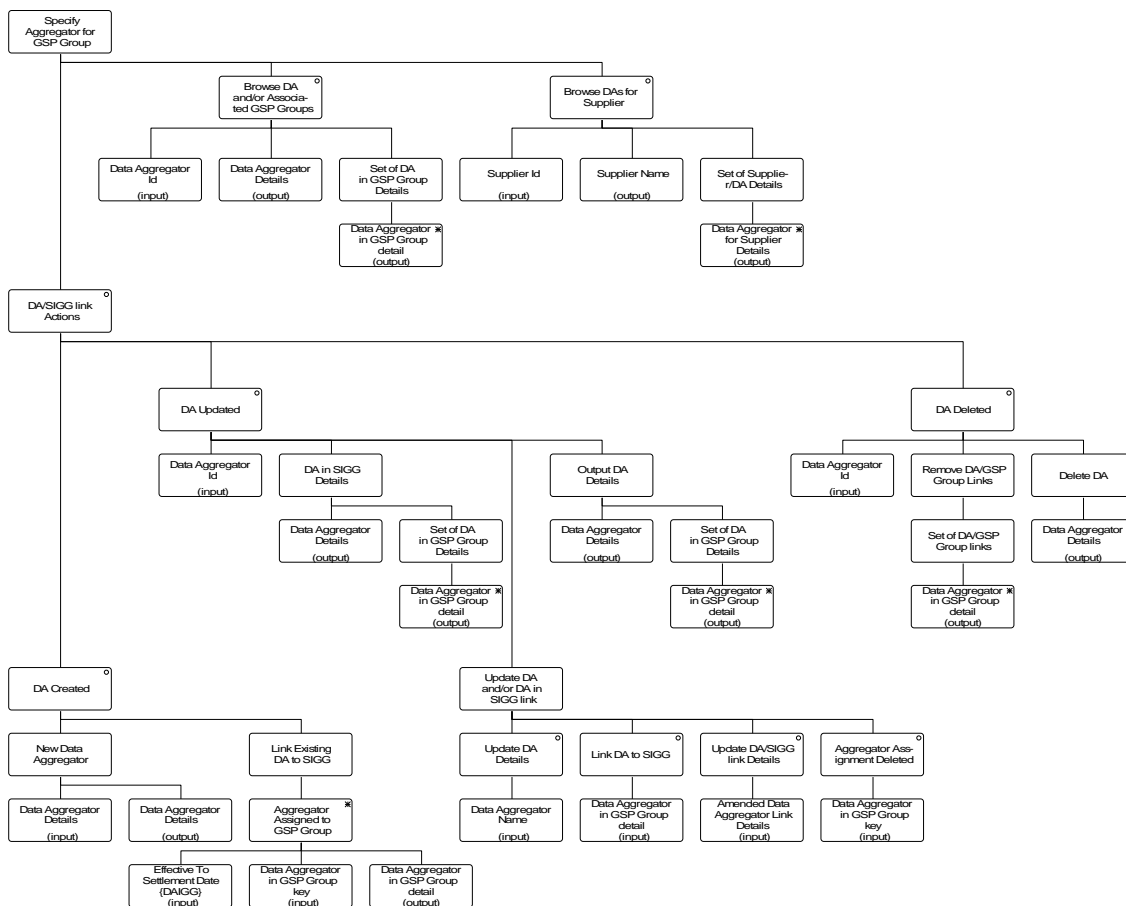


Figure 10: Specify Aggregator for GSP Group

I/O Structure Element	Data Items
Data Aggregator Details	Data Aggregator Id Data Aggregator Name
Data Aggregator Id	Data Aggregator Id
Data Aggregator in GSP Group detail	Data Aggregation Type Data Aggregator Id Effective From Settlement Date {DAIGG} Effective To Settlement Date {DAIGG} (O) GSP Group Id GSP Group Name Supplier Id Supplier Name
Data Aggregator in GSP Group key	Data Aggregation Type Data Aggregator Id Effective From Settlement Date {DAIGG} GSP Group Id Supplier Id
Data Aggregator Name	Data Aggregator Name
Amended Data Aggregator Link Detail	Effective To Settlement Date {DAIGG} (O)
Effective From Settlement Date {DAIGG}	Effective From Settlement Date {DAIGG} (O)
Supplier Id	Supplier Id
Supplier Name	Supplier Name
Data Aggregator for Supplier Details	Data Aggregator Id Data Aggregator Name Data Aggregation Type Effective From Settlement Date {DAIGG} Effective To Settlement Date {DAIGG} (O) GSP Group Id GSP Group Name

Table 15: Specify Aggregator for GSP Group – I/O Structure Elements

3.20 I0010E Browse Data Aggregator

3.20.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.20.2 Function Description

This function is invoked by an ISRA user to browse Data Aggregators, and the link between Supplier, GSP Group and Data Aggregator.

3.20.3 Processing Description

A list of existing Data Aggregators is displayed. The user selects one to browse its details, and all the Suppliers and GSP Groups associated with it.

An additional enquiry is available to browse Data Aggregators associated with a selected supplier.

3.20.4 Error Handling

N/A

3.20.5 Common Processing

IC006 Restrict Access

3.20.6 Volumes

An indeterminate number of items will be browsed on an ad hoc basis.

3.20.7 Events

None

3.20.8 Event Frequency

N/A

3.20.9 Enquiries

Browse Data Aggregator

Browse Aggregators for Supplier

Browse GSP Groups associated with Data Aggregator

3.20.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three enquiries (Browse Data Aggregator, Browse Aggregators for Supplier, Browse GSP Groups associated with Data Aggregator) is 1.

3.20.11 Requirements Catalogue Ref.

6.19

3.20.12 User Roles

ISRA Operator

3.20.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to 10010_01 Specify Aggregator for GSP Group I/O Structure branches 'Browse DA and/or Associated GSP Groups' and 'Browse Das for Supplier'.

3.21 I0011 Enter Temperature**3.21.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.21.2 Function Description

This function is invoked by an ISRA user and calculates the Noon Effective Temperature for the set of GSP Groups. The Noon Effective Temperature for a GSP Group and Settlement Day combination is calculated from the Actual Noon Temperatures for the Settlement Day and the previous two Settlement Days for that GSP Group entered by the operator.

If the sunset data has not been loaded for the Settlement Date then an error message will be displayed to the user and temperature details cannot be entered.

3.21.3 Processing Description

Reference: EPD 2.1.3 - Calculate Noon Effective Temperature

See Event Descriptions

3.21.4 Error Handling

See Event Descriptions

3.21.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.21.6 Volumes

Once per day

3.21.7 Events

Actual Noon Temperature Entered

3.21.8 Event Frequency

1

3.21.9 Enquiries

Browse Temperature

3.21.10 Enquiry Frequency

1

3.21.11 Requirements Catalogue Ref.

2.13, 2.15, 5.1, 5.3, 5.5, 6.5

3.21.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.21.13 I/O Structures

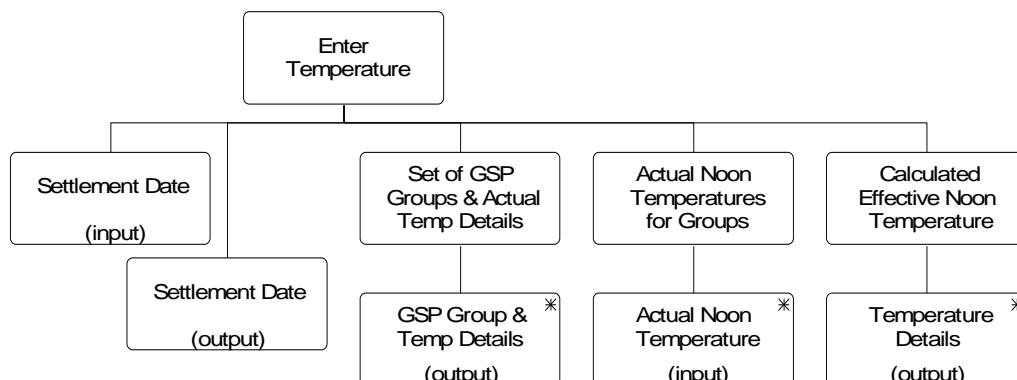


Figure 11: Enter Temperature

I/O Structure Element	Data Items
Actual Noon Temperature	Actual Noon Temperature
GSP Group & Temp Details	GSP Group Id GSP Group Name Actual Noon Temperature Noon Effective Temperature
Noon Effective Temperature	Noon Effective Temperature
Settlement Date	Settlement Date
Temperature Details	Actual Noon Temperature Noon Effective Temperature

Table 16: Enter Temperature - I/O Structure Elements

3.22 I0012 Enter Tele-switch Contact Intervals

3.22.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.22.2 Function Description

This function is invoked by an ISRA user as a backup to the automatic load of tele-switch Groups and contact times from a file. The operator may enter new Tele-switch Contact Interval details for a Tele-switch Group or browse, update or delete Tele-switch Contact Intervals which have been manually entered or automatically loaded from a Tele-switch Contact Switching Times file.

The system validates the request and the details entered and if necessary rejects them. If validation is successful, the database is updated accordingly. New or amended Tele-switch data is re-displayed to the user.

3.22.3 Processing Description

Reference: None

See Event Descriptions

3.22.4 Error Handling

See Event Descriptions

3.22.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Producing Standing Data Audit Report

IC006 Restrict Access

3.22.6 Volumes

This function will rarely be invoked because the Tele-switch Contact Intervals are received via the batch input function I0028B Receive Tele-switch Contact Switching Times. The volumes could be once per Settlement Day if the batch input proves to give faulty data on a daily basis, but is expected to be far less.

3.22.7 Events

Tele-switch Contact Interval Deleted, Tele-switch Contact Interval Entered, Tele-switch Contact Interval Updated

3.22.8 Event Frequency

The frequency of the three Tele-switch Contact events (Enter, Update, Delete), the Browse Tele-switch Contact Interval enquiry and the Tele-switch Group events sum to 1.

3.22.9 Enquiries

Browse Tele-switch Contact Interval

3.22.10 Enquiry Frequency

The frequency of the three Tele-switch Contact events (Enter, Update, Delete) and the Browse Tele-switch Contact Interval enquiry sum to 1.

3.22.11 Requirements Catalogue Ref.

2.9, 5.1

3.22.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.22.13 I/O Structures

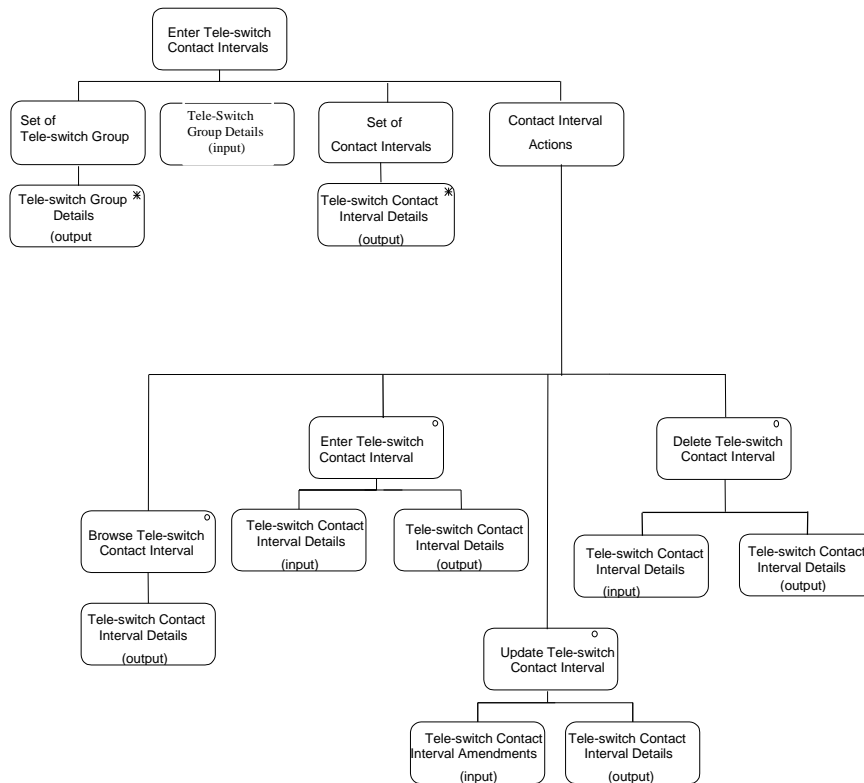


Figure 12: Enter Tele-switch Contact Intervals

I/O Structure Element	Data Items
Tele-Switch Group Details	Tele-switch Group Id Tele-switch User Id
Tele-switch Contact Interval Amendments	Tele-switch End Date and Time Tele-switch Contact State
Tele-switch Contact Interval Details	Tele-switch Group Id Tele-switch User Id Tele-switch Start Date and Time Tele-switch End Date and Time Tele-switch Contact Code Tele-switch Contact State

Table 17: Enter Tele-switch Contact Intervals - I/O Structure Elements

3.23 I0013A Initiate Load GSP Group Take

3.23.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.23.2 Function Description

This function allows an ISRA user to load selected files of GSP Group Take data for a Settlement Day from the Settlement System Administrator for Settlement Dates before the NETA Start Date, and from the Central Data Collection Agent for Settlement Dates on or after the NETA Start Date into the ISR system.

A list of files available for loading is displayed. The list consists of files that have not been previously loaded, and those that have failed during a previous load.

Details of the data file header are displayed to enable the user to correctly identify versions of the files available for loading. The user selects the files required for loading into the database.

3.23.3 Processing Description

This function initiates the batch load described in I0013B

3.23.4 Error Handling

See Error Handling section for function I0013B.

3.23.5 Common Processing

IC006 Restrict Access

3.23.6 Volumes

It is expected that the majority of files will be loaded automatically (see I0013B for details). This manual method of loading the files is a backup for I0013B, and as such will be loaded occasionally.

3.23.7 Events

None

3.23.8 Event Frequency

N/A

3.23.9 Enquiries

None

3.23.10 Enquiry Frequency

N/A

3.23.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.10.

3.23.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.23.13 I/O Structures

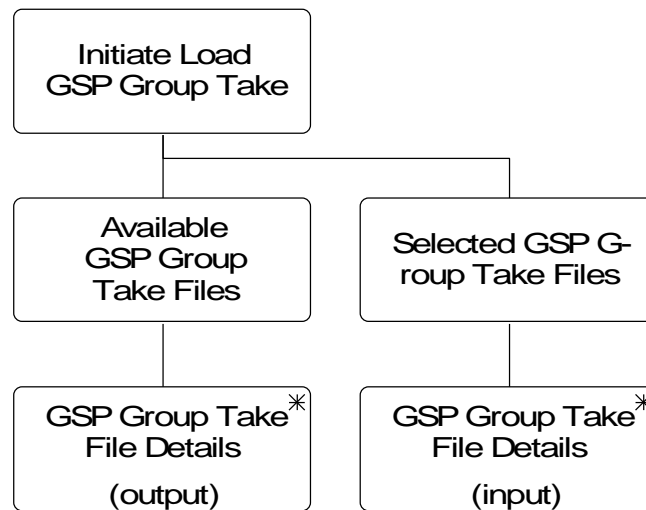


Figure 13: Initiate Load GSP Group Take

I/O Structure Elements for files sent by SSA for Settlement Dates before the NETA Start Date

I/O Structure Element	Data Items
GSP Group Take File Details	File Creation Timestamp GSP Group Id SSA Settlement Date SSA Settlement Run Number SSA Settlement Run Type Id

Table 18: Initiate Load GSP Group Take (SSA Files) - I/O Structure Elements

I/O Structure Elements for files sent by CDCA for Settlement Dates on or after the NETA Start Date

I/O Structure Element	Data Items
GSP Group Take File Details	File Creation Timestamp GSP Group Id CDCA Settlement Date CDCA Set Number Filler-1 (N)

Table 19: Initiate Load GSP Group Take (CDCA Files) - I/O Structure Elements

3.24 I0013B Load GSP Group Take

3.24.1 Function Type

Batch	Update	System initiated
-------	--------	------------------

3.24.2 Function Description

This function validates and loads GSP Group Take data received from the Settlements System Administrator for Settlement Dates before the NETA Start Date, and from the Central Data Collection Agent for Settlement Dates on or after the NETA Start Date. The file data is used in the main SSR calculations.

This function may be initiated in one of two ways:

1. Automatically by the presence of files to be loaded on the system
2. By I0013A Initiate Load GSP Group Take

3.24.3 Processing Description

Reference: EPD 1.1.1 Validate Settlements Data

See Event Description.

3.24.4 Error Handling

See Event Description

3.24.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

3.24.6 Volumes

Once per Settlement (i.e. 6 times per day on average).

3.24.7 Events

GSP Group Take Available

3.24.8 Event Frequency

1

3.24.9 Enquiries

None

3.24.10 Enquiry Frequency

N/A

3.24.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.10, 9.3

3.24.12 User Roles

None

3.24.13 I/O Structures

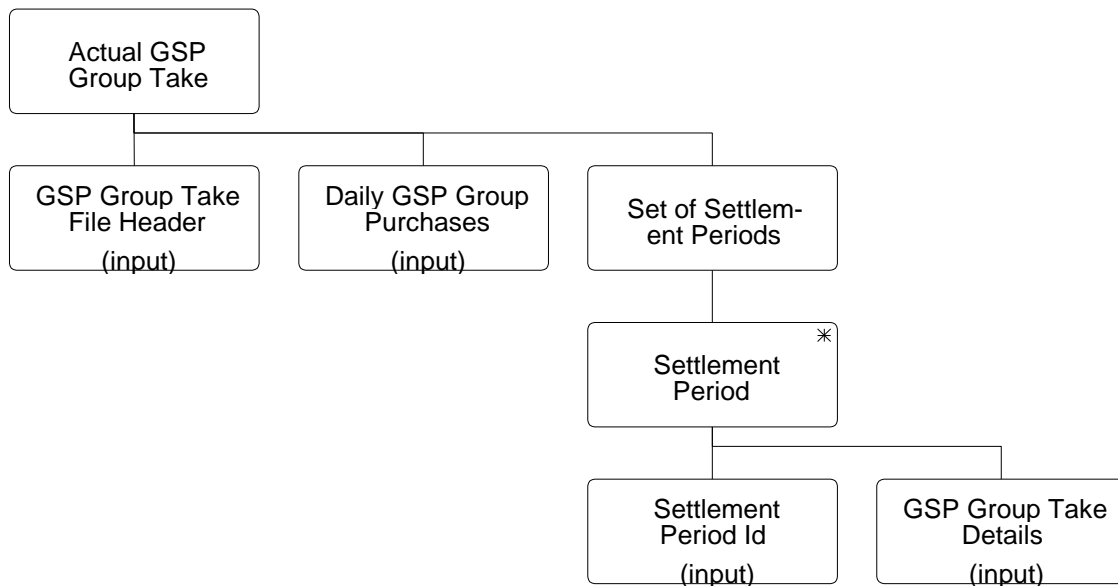


Figure 14: Load GSP Group Take – Actual GSP Group Take

I/O Structure Elements for files sent by SSA for Settlement Dates before the NETA Start Date

I/O Structure Element	Data Items
Daily GSP Group Purchases	Daily GSP Group Purchases
GSP Group Take Details	Period GSP Group Purchases GSP Group Take
GSP Group Take File Header	CDCA Extract Number GSP Group Id SSA Settlement Date SSA Settlement Run Number SSA Settlement Run Type Id
Settlement Period Id	Settlement Period Id

Table 20: Load GSP Group Take(SSA Files)- I/O Structure Elements

I/O Structure Elements for files sent by CDCA for Settlement Dates on or after the NETA Start Date

I/O Structure Element	Data Items
Daily GSP Group Purchases	Filler-2 (0)
GSP Group Take Details	Filler-3 (0) GSP Group Take
GSP Group Take File Header	CDCA Extract Number GSP Group Id CDCA Settlement Date CDCA Set Number Filler-1 (N)
Settlement Period Id	Settlement Period Id

Table 21: Load GSP Group Take(CDCA Files) - I/O Structure Elements

3.25 I0014 Load Line Loss Factor Data

3.25.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.25.2 Function Description

This function validates and loads files Line Loss Factors.

A list of files which are available for loading is displayed. The list consists of files that have never been loaded, have been partially loaded (e.g. invalid Line Loss Factor Class), and files that have been rejected.

Details of the data file header are displayed to enable the user to correctly identify versions of the files available for loading. The user selects the files required for loading into the database.

3.25.3 Processing Description

Reference: EPD 1.1.2 Validate Line Loss Factors

See Event Description.

3.25.4 Error Handling

See Event Description

3.25.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

- 3.25.6 Volumes**
Occasional (expected annually)
- 3.25.7 Events**
Line Loss Factors Available
- 3.25.8 Event Frequency**
1
- 3.25.9 Enquiries**
None
- 3.25.10 Enquiry Frequency**
N/A
- 3.25.11 Requirements Catalogue Ref.**
5.1, 5.3, 5.9
- 3.25.12 User Roles**
ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager
- 3.25.13 I/O Structures**

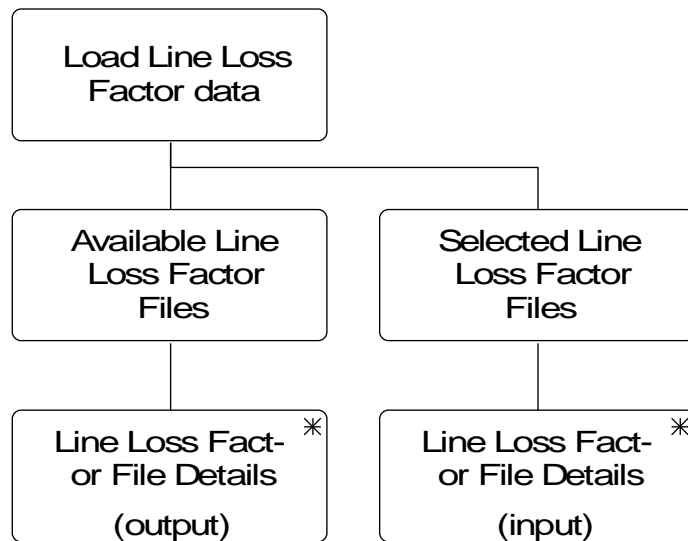


Figure 15: Load Line Loss Factor Data

I/O Structure Element	Data Items
Line Loss Factor File Details	Market Participant Id Market Participant Name File Creation Timestamp

Table 22: Load Line Loss Factor Data - I/O Structure Elements

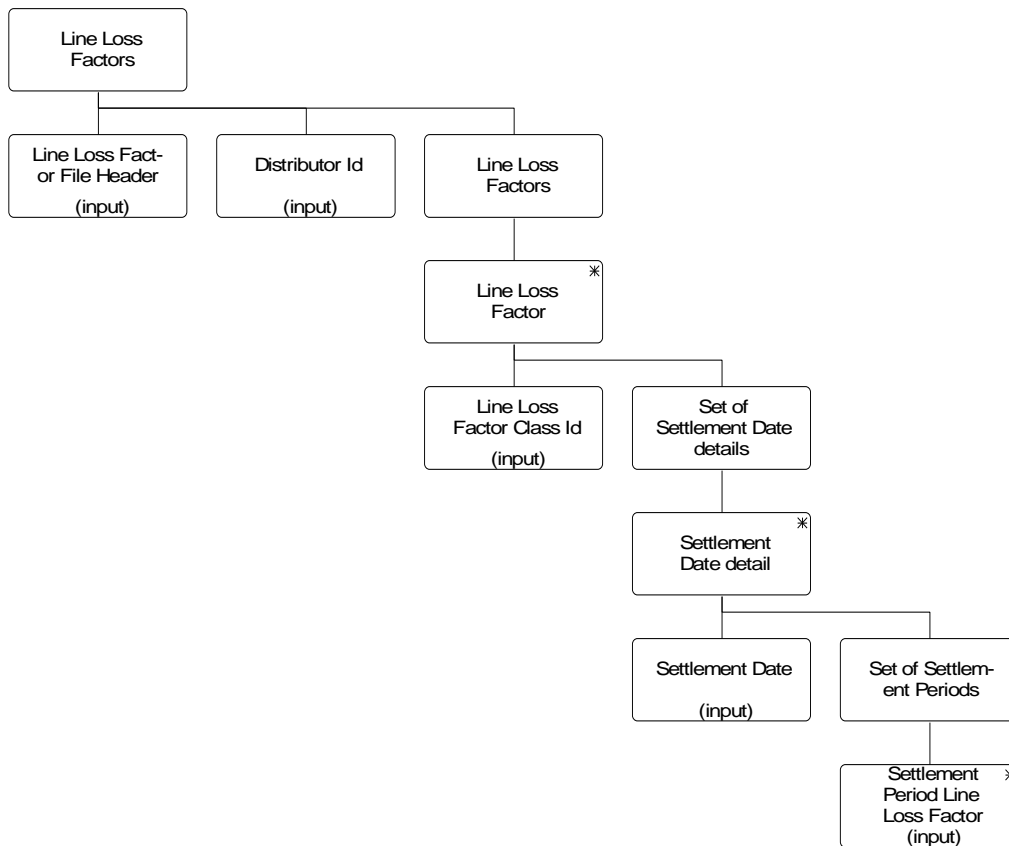


Figure 16: Load Line Loss Factor Data – Line Loss Factors

I/O Structure Element	Data Items
Distributor Id	Distributor Id
Line Loss Factor Class Id	Line Loss Factor Class Id
Line Loss Factor File Header	Market Participant Id {Source} Market Participant Role Code {Source} System Market Participant Id System Market Participant Role Code
Settlement Date	Settlement Date
Settlement Period Line Loss Factor	Line Loss Factor Settlement Period Id

Table 23: Line Loss Factors - I/O Structure Elements

3.26 I0015 Archive ISRA Data

3.26.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.26.2 Function Description

This function enables the removal of data from the system to a secure storage media. This applies to data for which final reconciliation has taken place.

The purpose of the function is to manage the amount of data which has to be held within the system.

The user specifies a settlement date which represents the latest (inclusive) settlement day which should be archived. The system checks that final reconciliation has taken place for all days prior to this, if not an error message is displayed. The Data Retention Period system parameter (DRP) is also checked to ensure that it has been set to a value of 24 months or longer. If it has not then archiving is aborted and an error message is displayed. If the DRP is valid then archiving will proceed and if the archive date specified is within the DRP then archiving is carried out up to, but not including the DRP.

It is noted that in order to meet the specified audit requirements, a very large volume of data needs to be retained on-line for 2 years.

Note: No I/O structure or screen have been included for this function as it is envisaged as being implemented with a command line interface.

3.26.3 Processing Description

See Event Description

3.26.4 Error Handling

See the Event description

3.26.5 Common Processing

IC006 Restrict Access

3.26.6 Volumes

Each archive is expected to contain about 1 month's data, with a maximum of 3 months.

3.26.7 Events

Archive SSR and DPP daily data.

3.26.8 Event Frequency

About once a month, at least once every 3 months.

3.26.9 Enquiries

None

3.26.10 Enquiry Frequency

N/A

3.26.11 Requirements Catalogue Ref.

6.11, 6.13, 6.14, 7.4, 7.5, 7.6, 8.3

3.26.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager, ISRA System Manager

3.26.13 I/O Structures

An i/o structure is not appropriate for this function.

3.27 I0016 Calculate Daily Profiles

3.27.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.27.2 Function Description

This function is invoked by the ISRA User and calculates Profile Coefficients for a given Settlement Day for selected GSP Groups, by evaluating regression equations and carrying out algorithmic profiling and chunking.

The operator enters a Settlement Date and selects one or more GSP Groups from a list of all GSP Groups which the ISR Agent is responsible for. For Settlement Dates prior to the BETTA Start Date, the list comprises English and Welsh GSP Groups only. For Settlement Dates on or after the BETTA Start Date, the list comprises English, Welsh and Scottish GSP Groups. The default is that all GSP Groups in the list are selected.

Details of any previous runs for the Settlement Date are displayed for information.

The date for Tele-switch Data is set to the Settlement Date selected. If no tele-switch data exists for the selected date the user must enter an alternative date for which data does exist before a profiling run can be initiated. The user can also choose an earlier date for which Tele-switch data exists even if data is available for the selected settlement date. A warning will be displayed if the date is changed. Only tele-switch data held online for the date specified will be used in the profiling run.

If a profile production run for the settlement day and any of the selected GSP groups has already been carried out, a warning will be displayed and the operator will be required to confirm that a recalculation is intended.

A run cannot be requested if a Final Initial Settlement Run has taken place for the Settlement Day. An error will be displayed to the user.

The Profiling Run request details are stored in Profile Production Run. The run itself will be carried out in batch mode, as described in the Event Description. As an integral part of the run function I0025B Produce Profile Reports will be invoked automatically to record the standing data at the time of the run and the results produced. Subsequently I0008B Automatic Daily Profile File Extraction will be invoked automatically.

Whilst the run is taking place and the reports generated users will be prevented from changing the standing data that are read by the process. This ensures that the data extracted for the reports matches the data used in the run.

An additional flat file is generated as a result of the daily profile production run, which contains the time pattern states determined for the dummy SSCs received from the Distributor in the LLF/SSC Mapping Data file. The time pattern states are determined based on the start time and end time of the respective Time Pattern Regime Ids for a particular settlement date.

3.27.3 Processing Description

Reference: EPD 2.3.1 - Determine Time Pattern State, 2.3.2 - Evaluate Regression Equations, 2.3.3 - Combine Base and Switched Load, Profiles 2.3.4 - Chunk Profile

See Event Description

3.27.4 Error Handling

See Event Description

3.27.5 Common Processing

- IC002 Batch Audit
- IC006 Restrict Access
- IC009 Report Exception

3.27.6 Volumes

One per Settlement Day, plus one more for each Daily Profile recalculation required.

3.27.7 Events

- Profiling Run
- LLF/SSC Clock Intervals Deleted
- LLF/SSC Clock Intervals Entered
- Standard Settlement Configuration Entered
- Standard Settlement Configuration Updated

3.27.8 Event Frequency

The sum of the frequencies of the Event and Enquiry is 1.

3.27.9 Enquiries

View Profile Production Runs.

3.27.10 Enquiry Frequency

The sum of the frequencies of the Event and Enquiry is 1.

3.27.11 Requirements Catalogue Ref.

- 2.1, 2.2, 2.3, 2.4, 2.17, 2.18, 5.1, 8.18, 8.20
- Change Requests: 33 (LCR013), 51 (LCR001), 52 (LCR011), 58 (LCR002)
- Clarifications: 4, 5, 20, 21
- Release 2 ITT (incorporating change requests 136, 150, 290)

3.27.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.27.13 I/O Structures

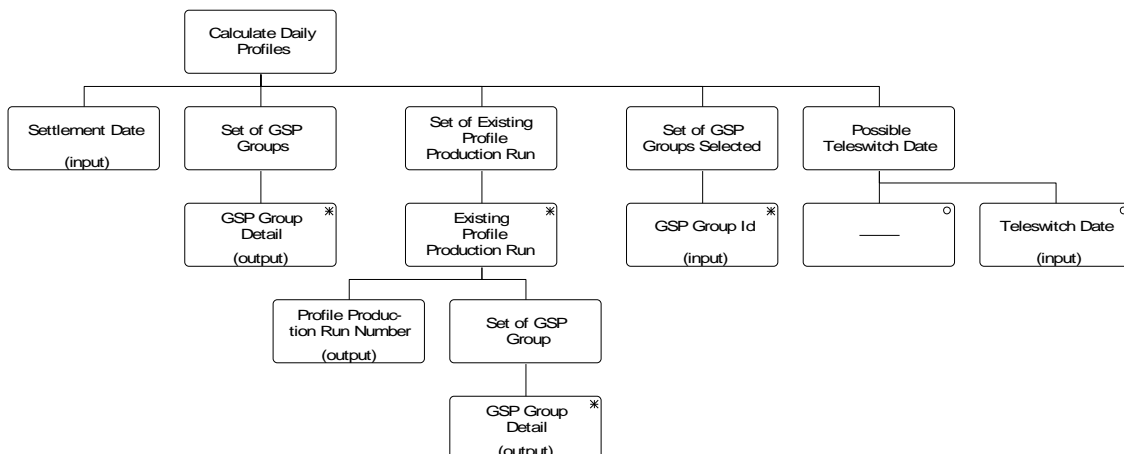


Figure 17: Calculate Daily Profiles

I/O Structure Element	Data Items
GSP Group Detail	GSP Group Id GSP Group Name
GSP Group Id	GSP Group Id
Tele-switch Date	Tele-switch Date
Profile Production Run Number	Profile Production Run Number

Table 24: Calculate Daily Profiles - I/O Structure Elements

3.27.14 Derivation of fractions

This section shows the derivation of the Base and Switched Load fractions referred to in the 'Combine Base and Switched Load Profiles' section of the event description. This section does not define functionality to be supported and is included for information only.

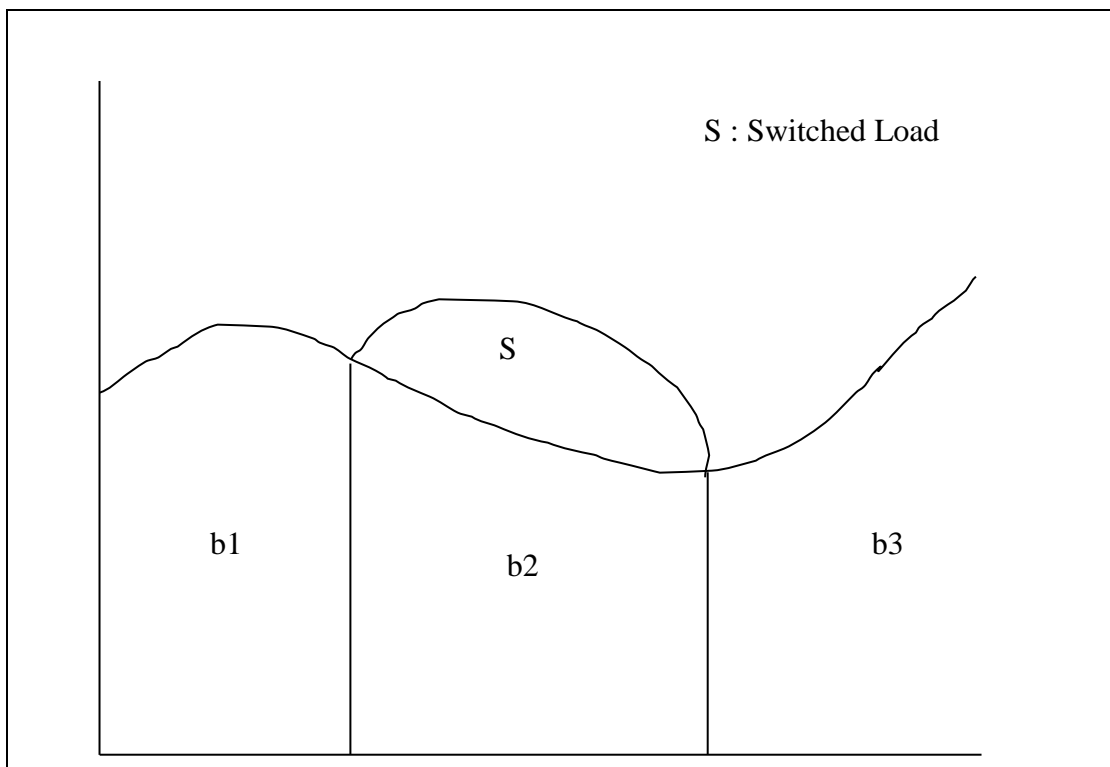


Figure 18: Consumption Profile for a Settlement Configuration with Base and Switched Load

This graph shows a consumption profile for a settlement configuration with base and switched load. Only one period of switched load is included and the consumption used by the switched load is shown by the area S. The normal base load is shown as areas b1, b2 and b3.

The normal register will be operational when the switched load is not on and relates to consumption b1+b3. The switched load register measures consumption

when the switched load is on and records the switched load S and the base load b2 during this period.

Normal Register, $N = b_1 + b_3$

Low Register, $L = S + b_2$

Switched Load = S

Base Load = $b_1 + b_2 + b_3$

Write S as

$$S = S + b_2 - b_2(b_1 + b_3) / (b_1 + b_3)$$

$$S = L - b_2(b_1 + b_3) / (b_1 + b_3)$$

$$S = L - (b_2 / (b_1 + b_3))N$$

i.e. Switched Load, $S = L - H * N$

Base Load = $b_1 + b_2 + b_3$

$B = N + L - S$

$B = N + L - (L - H * N)$

Base Load $B = N + H * N$

3.28 I0017A Initiate Load Aggregated Half Hour Data

3.28.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.28.2 Function Description

This function allows an ISRA user to load selected files of aggregated half hour meter data into the ISR system.

A list of files which are available for loading is displayed. The list consists of data files that have never been loaded and those that have failed during a previous load.

Details of the file header are displayed to enable the user to correctly identify the versions of the files available for loading. The user selects the files required for loading into the database.

3.28.3 Processing Description

This function initiates the batch load described in I0017B.

3.28.4 Error Handling

See Error Handling section for function I0017B.

3.28.5 Common Processing

IC006 Restrict Access

3.28.6 Volumes

It is expected that the majority of files will be loaded automatically (see I0017B for details). This manual method of loading the files is a backup for I0017B, and as such will be loaded occasionally.

3.28.7 Events

None

3.28.8 Event Frequency

N/A

3.28.9 Enquiries

None

3.28.10 Enquiry Frequency

N/A

3.28.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.11.

3.28.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.28.13 I/O Structures

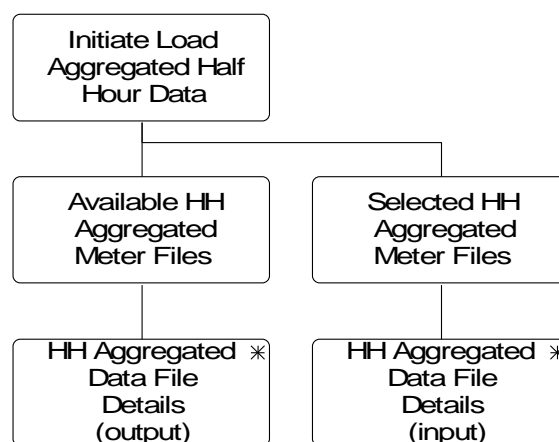


Figure 19: Initiate Load Aggregated Half Hour Data

I/O Structure Element	Data Items
HH Aggregated Data File Details	Data Aggregator Id Data Aggregator Name Data Aggregation Run Number GSP Group Id Settlement Date Settlement Code

Table 25: Initiate Load Aggregated Half Hour Data - I/O Structure Elements

3.29 I0017B Load Aggregated Half Hour Data

3.29.1 Function Type

Batch	Update	System initiated
-------	--------	------------------

3.29.2 Function Description

This function validates and loads Half Hourly meter data received from the Data Aggregators, which is used in the main SSR calculations. From the start of the NETA, this data can be sent in two different file formats.

This function may be initiated in one of two ways:

1. Automatically by the presence of files to be loaded on the system
2. By I0017A Initiate Load Aggregated Half Hour Data

3.29.3 Processing Description

Reference: EPD 1.1.3 Validate HH Data

See Event Description.

3.29.4 Error Handling

See Event Description

3.29.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.29.6 Volumes

One per active half hourly Data Aggregator to GSP Group relationship per Data Aggregation Run.

3.29.7 Events

Aggregated Half Hour Data Available

3.29.8 Event Frequency

1

3.29.9 Enquiries

None

3.29.10 Enquiry Frequency

N/A

3.29.11 Requirements Catalogue Ref.

1.1, 5.1, 5.11, 5.3

3.29.12 User Roles

None

3.29.13 I/O Structures

I0017_01 - File Format (valid for all Settlement Days)

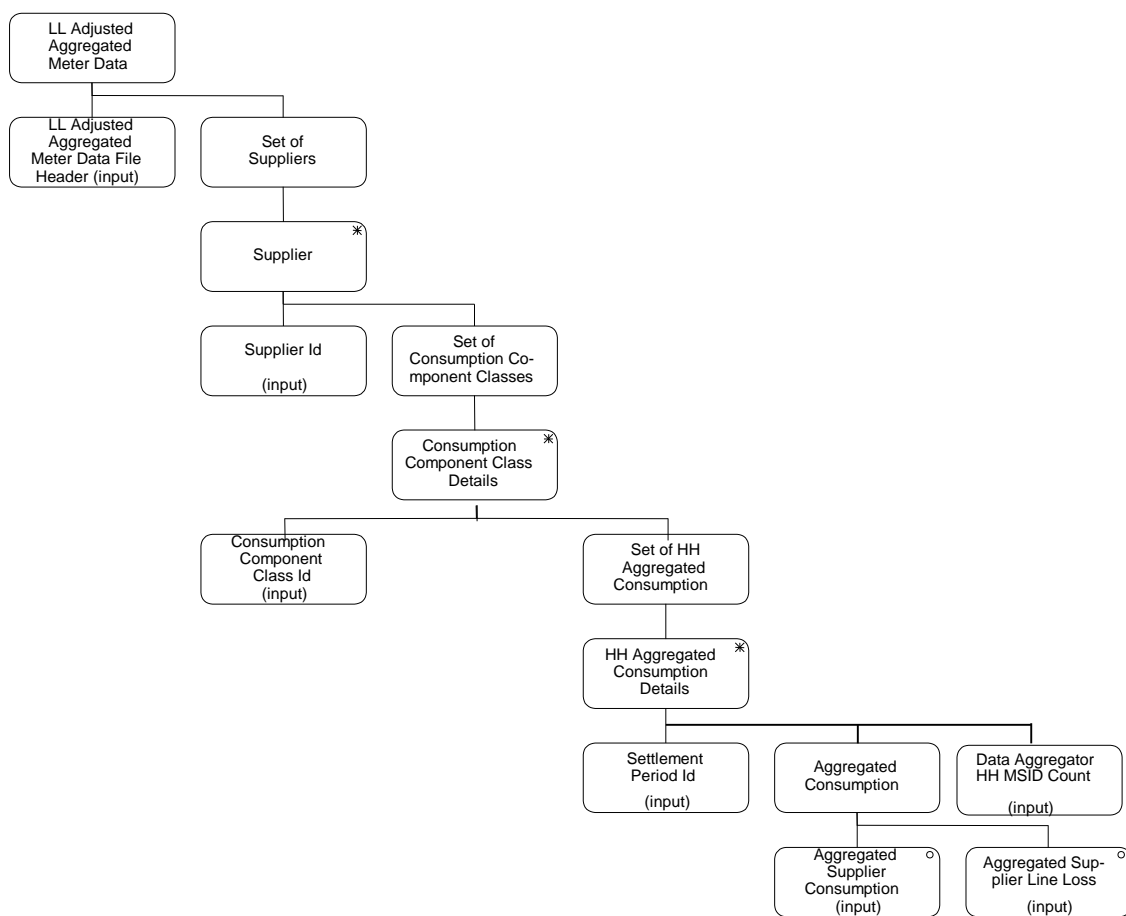


Figure 20: I0017_01 - File Format

I/O Structure Element	Data Items
Aggregated Supplier Consumption	Aggregated Supplier Consumption (Optional)
Aggregated Supplier Line Loss	Aggregated Supplier Line Loss (Optional)
Consumption Component Class Id	Consumption Component Class Id
Data Aggregator HH MSID Count	Data Aggregator HH MSID Count
LL Adjusted Aggregated Meter Data File Header	Data Aggregation Run Number Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date
Settlement Period Id	Settlement Period Id
Supplier Id	Supplier Id

Table 26: I0017_01 - File Format - I/O Structure Elements

I0017_02 - File format

This has been replaced by the I0017_03 file format below.

I0017_03 - File format (valid for Settlement Days on or after NETA)

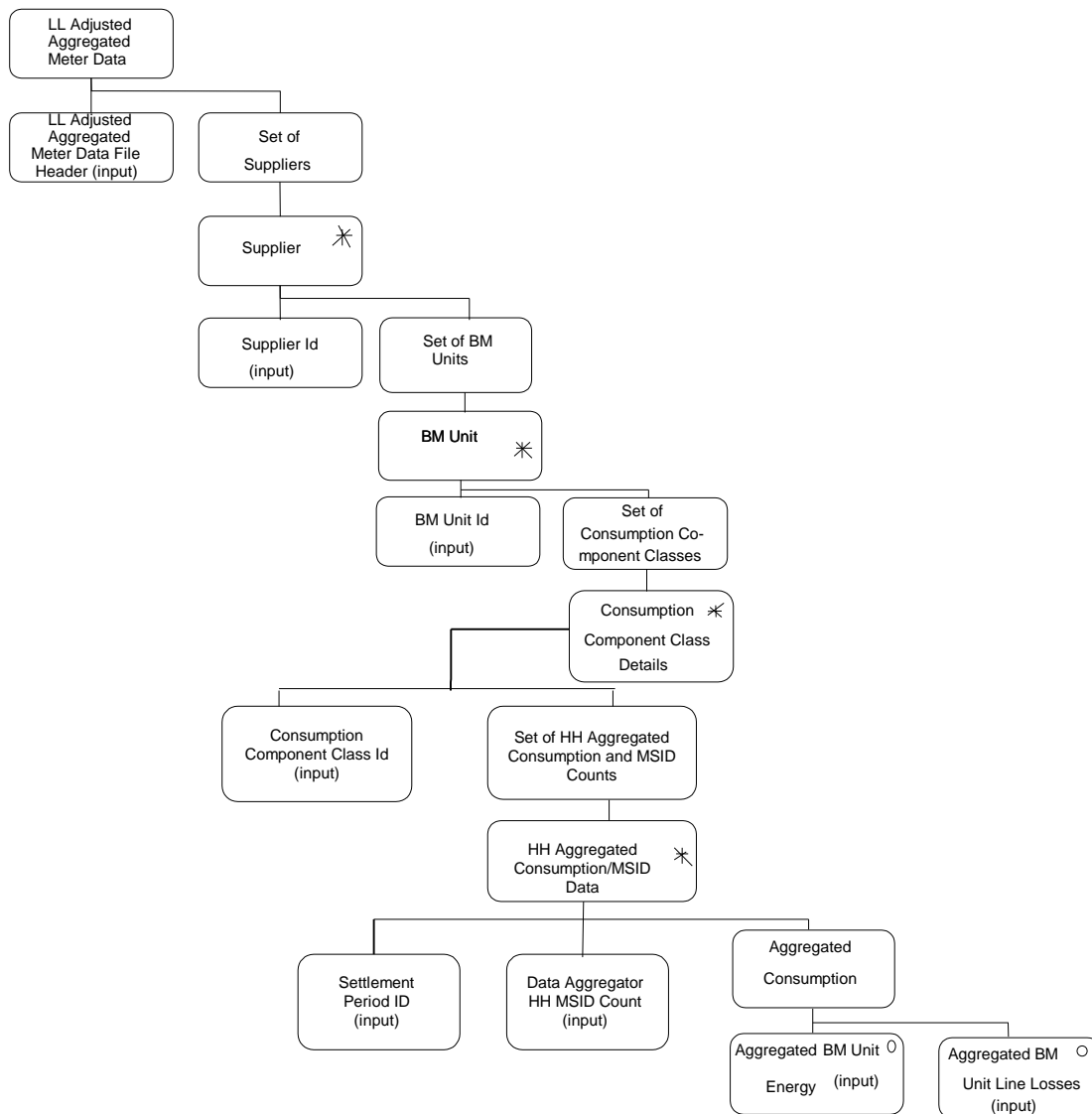


Figure 21: I0017_03 - File format

I/O Structure Element	Data Items
Aggregated BM Unit Energy	Aggregated BM Unit Energy (Optional)
Aggregated BM Unit Line Losses	Aggregated BM Unit Line Losses (Optional)
BM Unit Id	BM Unit Id
Consumption Component Class Id	Consumption Component Class Id
LL Adjusted Aggregated Meter Data File Header	Data Aggregation Run Number Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date
Settlement Period Id	Settlement Period Id
Data Aggregator HH MSID Count	Data Aggregator HH MSID Count
Supplier Id	Supplier Id

Table 27: I0017_03 - File format**3.30 I0017C Load Aggregated Half Hour Data_Line Loss****3.30.1 Function Type**

Batch Update System initiated

3.30.2 Function Description

This function validates and loads Half Hourly meter data received from the Data Aggregators, which is used in the SSR reporting module.

This function may be initiated in one of two ways:

1. Automatically by the presence of files to be loaded on the system
2. By I0017A Initiate Load Aggregated Half Hour Data.

3.30.3 Processing Description

Reference: EPD 1.1.3 Validate HH Data

See Event Description.

3.30.4 Error Handling

See Event Description.

3.30.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

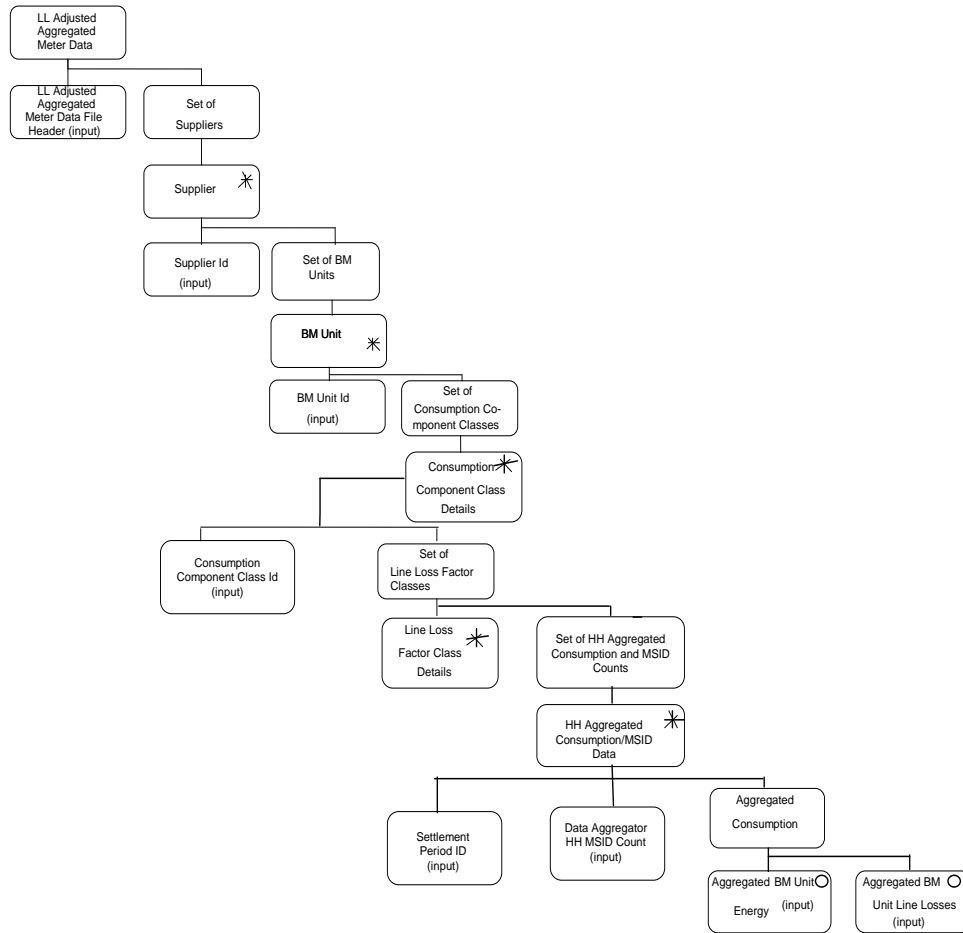
3.30.6 Volumes

One per active half hourly Data Aggregator to GSP Group relationship per Data Aggregation Run.

- 3.30.7 Events**
Aggregated Half Hour Data Available
- 3.30.8 Event Frequency**
1
- 3.30.9 Enquiries**
None.
- 3.30.10 Enquiry Frequency**
N/A
- 3.30.11 Requirements Catalogue Ref.**
1.1, 5.1, 5.11, 5.3
- 3.30.12 User Roles**
None.
- 3.30.13**

I/O Structures

I0017C_01



I/O Structure Element	Data Items
Aggregated BM Unit Energy	Aggregated BM Unit Energy (Optional)
Aggregated BM Unit Line Losses	Aggregated BM Unit Line Losses (Optional)
BM Unit Id	BM Unit Id
Consumption Component Class Id	Consumption Component Class Id
Line Loss Factor Class Id	Distributor Id Line Loss Factor Class Id
LL Adjusted Aggregated Meter Data File Header	Data Aggregation Run Number Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date
Settlement Period Id	Settlement Period Id
Data Aggregator HH MSID Count	Data Aggregator HH MSID Count
Supplier Id	Supplier Id

3.31 I0018 Load Tele-switch Pool Market Domain Data

3.31.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.31.2 Function Description

This function validates and loads Standard Settlement Configurations and associated data prepared by the Pools Market Domain Data Agent, into the ISR system.

A list of files which are available for loading is displayed (not in the I/O structure), from which the ISRA Operations Supervisor, ISRA Standing Data Manager selects the file required. The list consists of Tele-switch Pool Market Domain Data files which have either never been loaded or have failed a loading attempt previously. The user selects the file required.

The file contents are validated, If the data is successfully validated, the database is updated with the Standard Settlement Configuration and related data, the file management database is updated to indicate the load is successful, and a message is written to a log to indicate that the load is successful. An Exception report is produced detailing warnings of all updates to the data, including a summary of the number of successful insertions and updates.

If validation is not successful, the file management database is updated to show the load has failed and an Exception Report is written to report the errors detected.

This function will only be required at market inception, or when new or updated Standard Settlement Configurations are agreed by the Pool, or the Pool agrees an amendment to Average Fractions of Yearly Consumption for an existing Standard Settlement Configuration.

3.31.3 Processing Description

Reference: EPD 2.2.7 - Load Tele-switch Pool Market Domain Data

See Event Descriptions

3.31.4 Error Handling

See Event Descriptions

3.31.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

3.31.6 Volumes

Two files per month

3.31.7 Events

Tele-switch Pool Market Domain Data Loaded

3.31.8 Event Frequency

1

3.31.9 Enquiries

None

3.31.10 Enquiry Frequency

n/a

3.31.11 Requirements Catalogue Ref.

2.7, 5.3, 5.14, 7.17

3.31.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.31.13 I/O Structures

I0018_01 Load Tele-switch Pool Market Domain Data

I0018_02 Tele-switch Pool Market Domain Data

I0018_01:

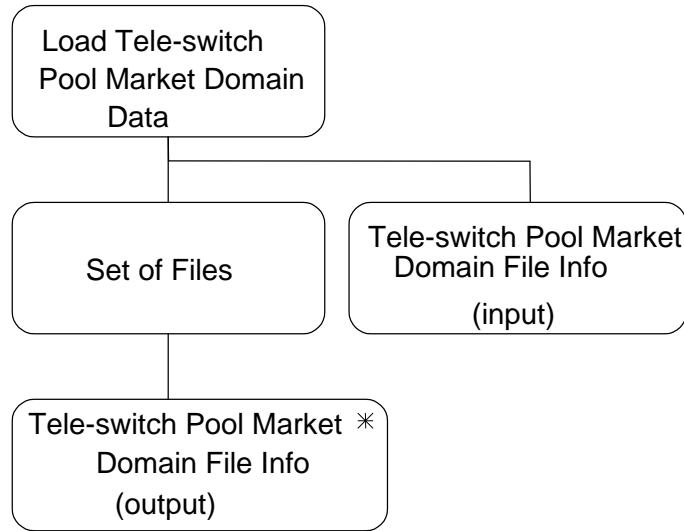


Figure 22: I0018_01 Load Tele-switch Pool Market Domain Data

I/O Structure Element	Data Items
Tele-switch Pool Market Domain File Info.	File Creation Timestamp Market Participant Id Market Participant Name

Table 28: Load Tele-switch Pool Market Domain Data - I/O Structure Elements

I0018_02:

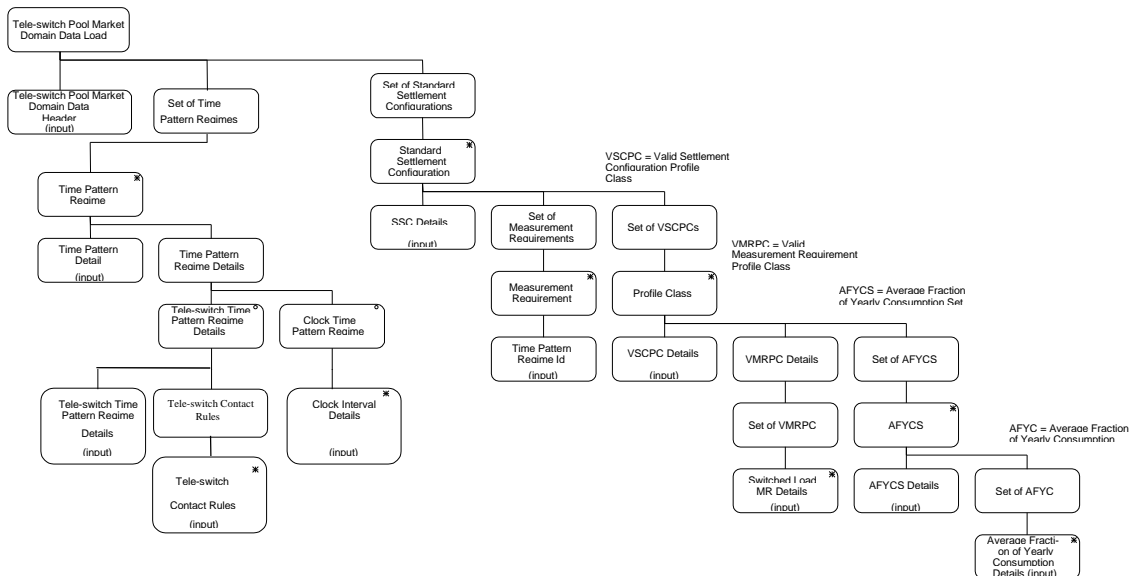


Figure 23: I0018_02 Tele-switch Pool Market Domain Data

I/O Structure Element	Data Items
AFYCS Details	Effective From Settlement Date {AFOYCS} Effective To Settlement Date {AFOYCS} (O) GSP Group Id
Average Fraction of Yearly Consumption	Average Fraction of Yearly Consumption Time Pattern Regime Id
Clock Interval Details	Day of the Week Id End Day {Data Block} End Month {Date Block} End Time Start Day {Date Block} Start Month {Date Block} Start Time
Tele-switch Pool Market Domain Data Header	Market Participant Id Market Participant Role Code File Creation Timestamp
SSC Details	Standard Settlement Configuration Desc Standard Settlement Configuration Id Standard Settlement Configuration Type Tele-switch User Id (O) Tele-switch Group Id (O)
Switched Load MR Details	Switched Load Indicator Time Pattern Regime Id
Tele-switch Time Pattern Regime Details	Tele-switch Group Id Tele-switch User Id
Tele-switch Contact Rules	Tele-switch Register Rule Id Tele-switch Contact Code Tele-switch Contact Rule
Time Pattern Detail	GMT/Local Time Indicator Tele-switch/Clock Indicator Time Pattern Regime Id
Time Pattern Regime Id	Time Pattern Regime Id
VSCPC Details	Effective From Settlement Date {VSCPC} Effective To Settlement Date {VSCPC} (O) Profile Class Id

Table 29: Tele-switch Pool Market Domain Data - I/O Structure Elements

3.32 I0019 Load Regression Equations

3.32.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.32.2 Function Description

This function is invoked by the ISRA User and allows a set of Regression Equations and their associated Regression Coefficients to be loaded into the ISRA system for each Day Type and Season for each Profile within each Profile Class.

The file also contains associated GSP Group Average Annual Consumption values which are identified by the Id of their Profile Class, Profile, GSP Group and the Effective From Settlement Date of their Profile Set.

The user will be able to view the data files that have been received by the ISRA system awaiting loading (location recorded in the File Location entity). The file list consists of files which have never been loaded and those for which loading has failed previously. From this the user will be able to select the appropriate Regression Equation Set file for loading.

The file data is validated as it is loaded. The success or failure of the load is recorded in the File entity.

More than one Regression Equation Set cannot be effective for a Settlement Day. Therefore a new Regression Equation Set overwrites any existing Regression Equation Set which is effective for Settlement Days on or after the effective date of the new Regression Equation Set. This process will not overwrite Scottish Regression Coefficients, however GSP Group Average Annual Consumption values loaded from this or the Load Scottish Regression Equations process will be updated.

If two sets of Regression Equations are loaded (i.e. one set loaded by the “Load Regression Equations” function and the other set loaded by the “Load Scottish Regression Equations” function) then both sets must have the same effective from settlement dates.

If the load fails, the file will have been saved for audit purposes, so the file can be retrieved and a reload performed.

3.32.3 Processing Description

Reference: EPD 2.5.2 Enter Regression Equations

See Event Description

3.32.4 Error Handling

See Event Description

3.32.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report.

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

3.32.6 Volumes

Once per year

3.32.7 Events

Regression Equation Set File Available

3.32.8 Event Frequency

The triggering event will occur once for each invocation of the function.

3.32.9 Enquiries

None

3.32.10 Enquiry Frequency

Not applicable

3.32.11 Requirements Catalogue Ref.

2.6, 5.1, 5.3, 5.6

3.32.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.32.13 I/O Structures

I0019_01 Load Regression Equations, I0019_02 Regression Equation Load Initiation

I0019_02.DAT:

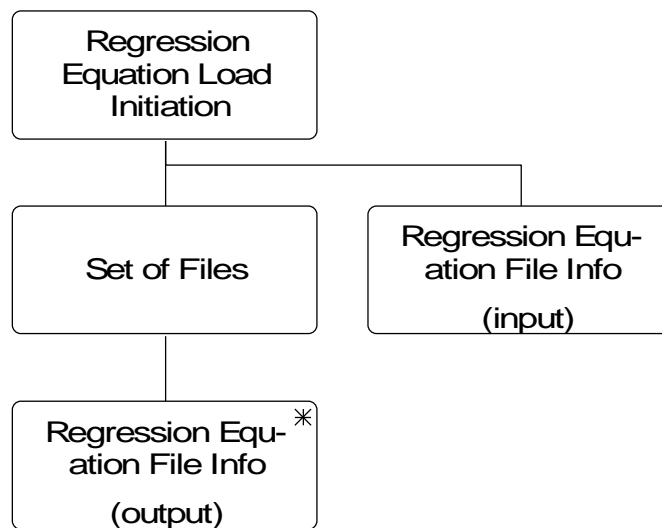


Figure 24: I0019_02 Regression Equation Load Initiation

I/O Structure Element	Data Items
Regression Equation File Info.	File Creation Timestamp Market Participant Id Market Participant Name

Table 30: Regression Equation Load Initiation - I/O Structure Elements

I0019_01.DAT:

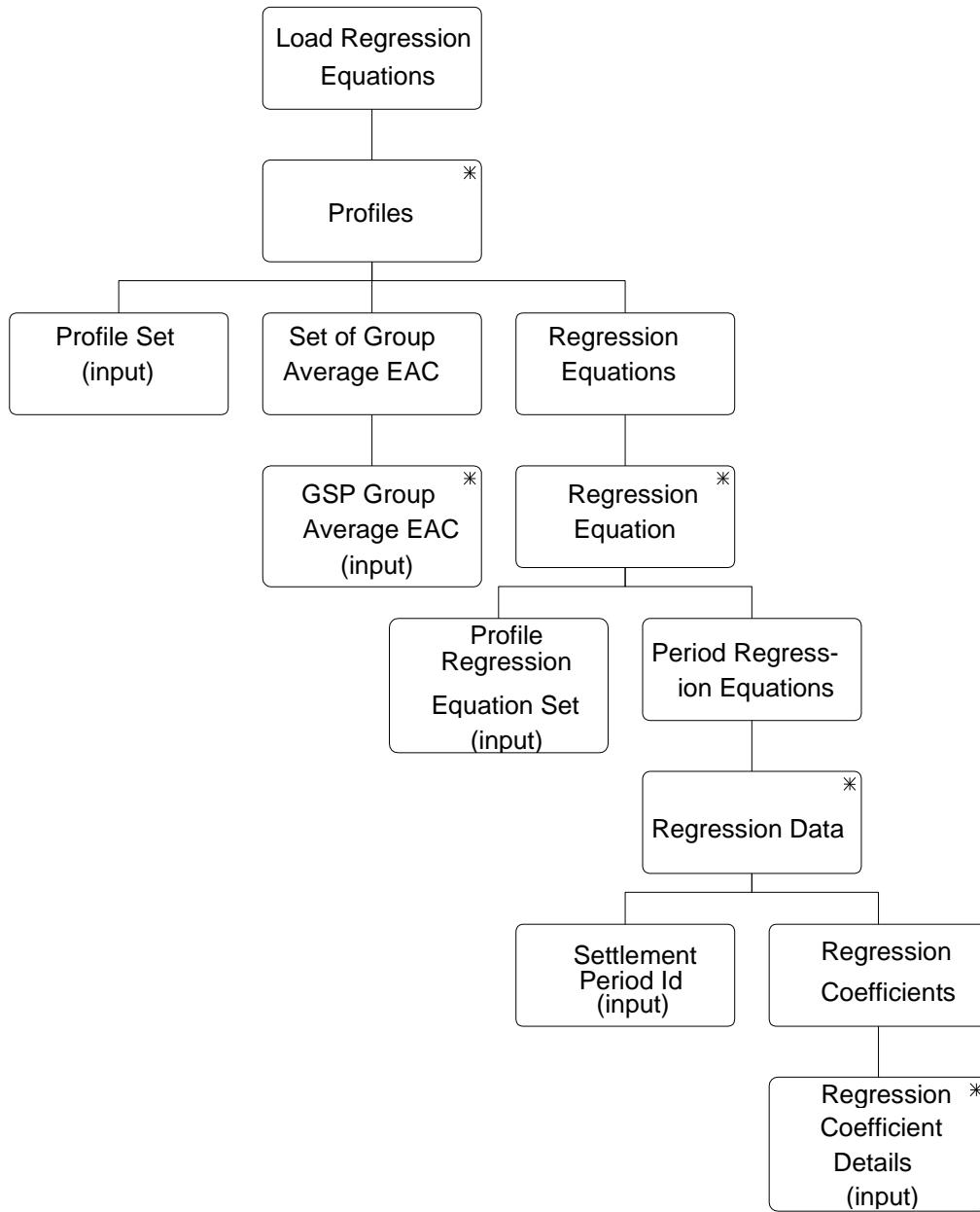


Figure 25: I0019_01 Load Regression Equations

I/O Structure Element	Data Items
Profile Set	Profile Class Id Profile Id Effective From Settlement Date {PSET}
Profile Regression Equation Set	Day Type IdSeason Id
Regression Coefficient Details	Regression Coefficient Regression Coefficient Type
Settlement Period Id	Settlement Period Id
GSP Group Average EAC	GSP Group Id Group Average Annual Consumption

Table 31: Load Regression Equations - I/O Structure Elements

3.33 I0019B Load Scottish Regression Equations²

3.33.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.33.2 Function Description

This function is invoked by the ISRA User and allows a set of Scottish Regression Equations and their associated Regression Coefficients to be loaded into the ISRA system for each Day Type and Season for each Profile within each Profile Class. The file also contains associated GSP Group Average Annual Consumption values which are identified by the Id of their Profile Class, Profile, GSP Group and the Effective From Settlement Date of their Profile Set.

The user will be able to view the data files that have been received by the ISRA system awaiting loading (location recorded in the File Location entity). The file list consists of files which have never been loaded and those for which loading has failed previously. From this the user will be able to select the appropriate Scottish Regression Equation Set file for loading.

The file data is validated as it is loaded. The success or failure of the load is recorded in the File entity.

More than one Regression Equation Set cannot be effective for a Settlement Day. Therefore a new Regression Equation Set overwrites any existing Regression Equation Set which is effective for Settlement Days on or after the effective date of the new Regression Equation Set. This process will not overwrite England and Wales Regression Coefficients, however GSP Group Average Annual Consumption values loaded from this or the Load Regression Equations process will be updated.

If two sets of Regression Equations are being used (i.e. one set loaded by the “Load Regression Equations” function and the other set loaded by the “Load Scottish Regression Equations” function) then both sets must have the same effective from settlement dates. In addition to this requirement, in order for Profile

²This functionality is disabled as a result of LCR235.

Production Runs to complete successfully, files loaded by this function must be loaded after files loaded via the “Load Regression Equations” function.

If the load fails, the file will have been saved for audit purposes, so the file can be retrieved and a reload performed.

3.33.3 Processing Description

Reference: EPD 2.5.2 Enter Regression Equations

See Event Description

3.33.4 Error Handling

See Event Description

3.33.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report.

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

3.33.6 Volumes

Once per year

3.33.7 Events

Scottish Regression Equation Set File Available

3.33.8 Event Frequency

The triggering event will occur once for each invocation of the function.

3.33.9 Enquiries

None

3.33.10 Enquiry Frequency

Not applicable

3.33.11 Requirements Catalogue Ref.

2.6, 5.1, 5.3, 5.6

3.33.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.33.13 I/O Structures

I0019B_01 Load Scottish Regression Equations, I0019B_02 Scottish Regression Equation Load Initiation

I0019_02.DAT:

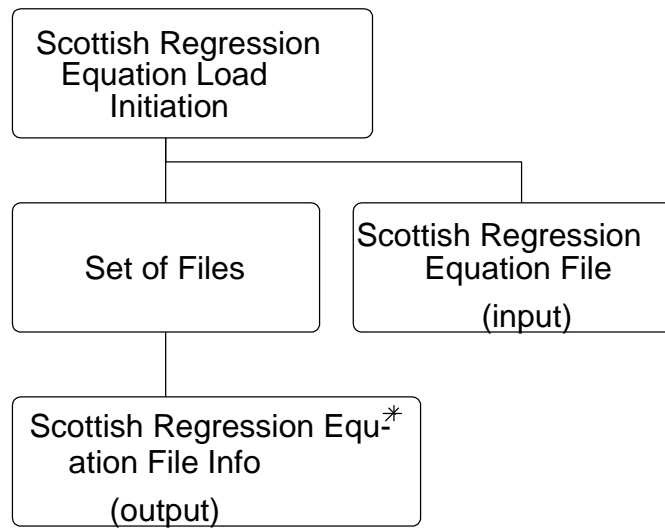


Figure 26: I0019B_02 Scottish Regression Equation Load Initiation

I/O Structure Element	Data Items
Scottish Regression Equation File Info.	File Creation Timestamp Market Participant Id Market Participant Name

Table 32: Scottish Regression Equation Load Initiation - I/O Structure Elements

I0019B_01.DAT:

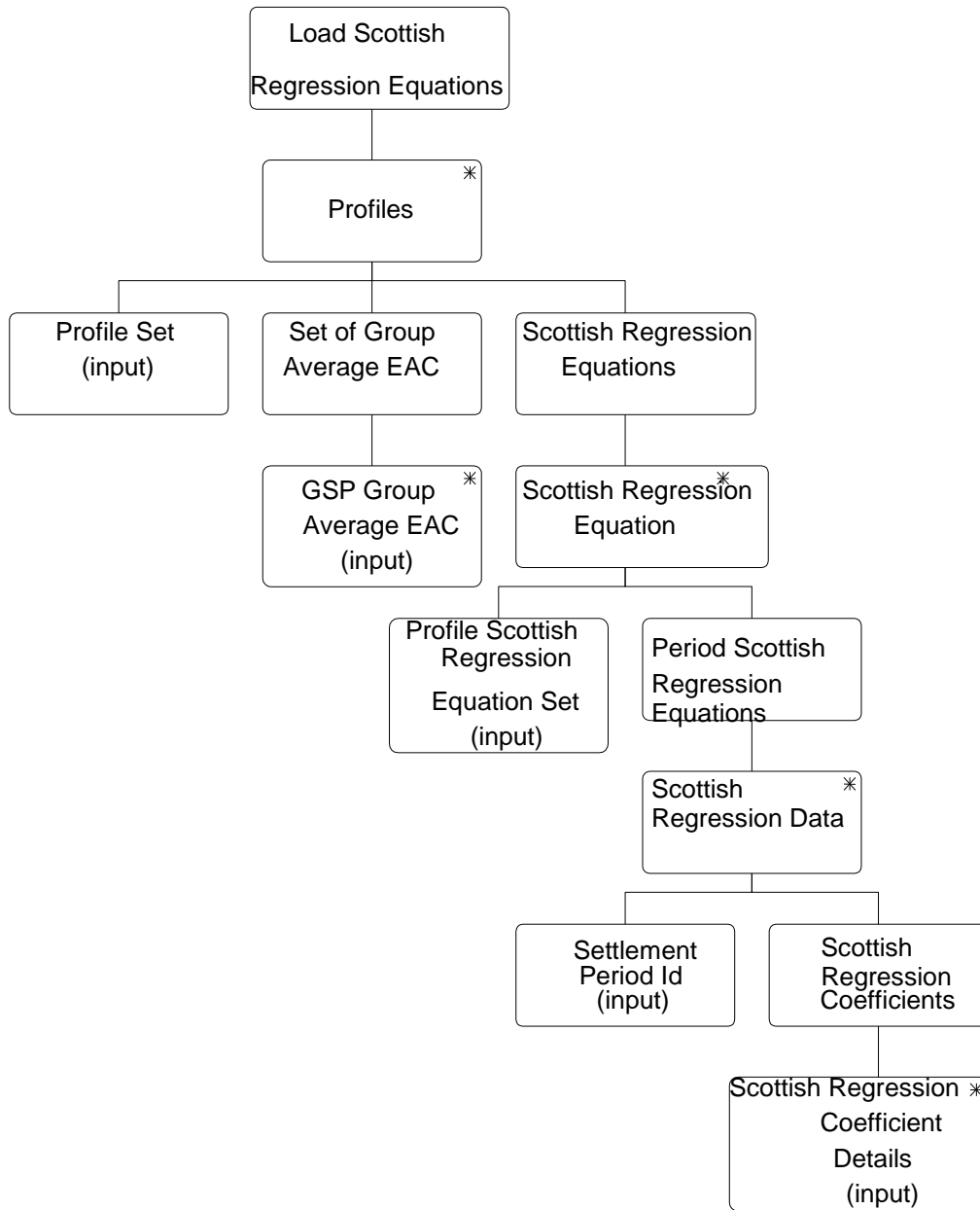


Figure 27: I0019B_01 Load Scottish Regression Equations

I/O Structure Element	Data Items
Profile Set	Profile Class Id Profile Id Effective From Settlement Date {PSET}
Profile Scottish Regression Equation Set	Day Type IdSeason Id
Scottish Regression Coefficient Details	Regression Coefficient Regression Coefficient Type
Settlement Period Id	Settlement Period Id
GSP Group Average EAC	GSP Group Id Group Average Annual Consumption

Table 33: Load Scottish Regression Equations - I/O Structure Elements

3.34 I0020A Initiate Load Settlement Price Data

3.34.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.34.2 Function Description

This function allows an ISRA user to load selected files of Settlement Price data for a Settlement Day from the Settlement System Administrator for Settlement Dates before the NETA Start Date into the ISR system.

A list of files which are available for loading is displayed. The list includes files that have not been loaded and those that have failed during a previous load.

Details of the data file header are displayed to enable the user to correctly identify versions of the files available for loading. The user selects the files required for loading into the database.

3.34.3 Processing Description

This function initiates the batch load described in I0020B.

3.34.4 Error Handling

See Error Handling section for function I0020B.

3.34.5 Common Processing

IC006 Restrict Access

3.34.6 Volumes

It is expected that the majority of files will be loaded automatically (see I0020B for details). This manual method of loading the files is a backup for I0020B, and as such will be loaded occasionally.

3.34.7 Events

None

3.34.8 Event Frequency

N/A

3.34.9 Enquiries

None

3.34.10 Enquiry Frequency

N/A

3.34.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.10.

3.34.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.34.13 I/O Structures

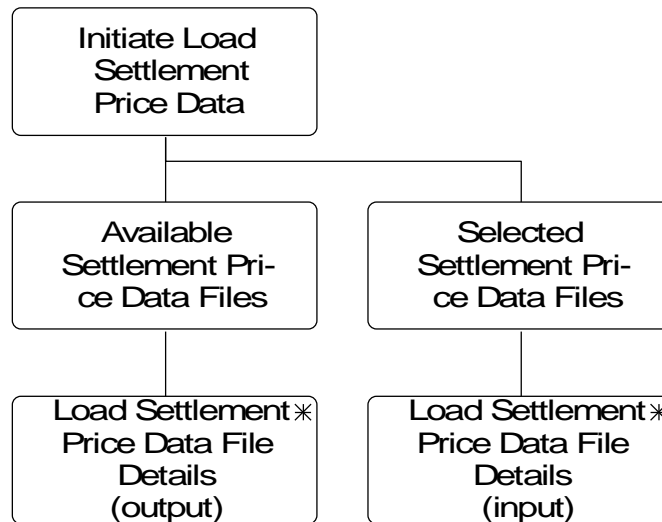


Figure 28: Initiate Load Settlement Price Data

I/O Structure Element	Data Items
Load Settlement Price Data File Details	File Creation Timestamp SSA Settlement Date SSA Settlement Run Number SSA Settlement Run Type Id

Table 34: Initiate Load Settlement Price Data - I/O Structure Elements

3.35 I0020B Load Settlement Price Data

3.35.1 Function Type

Batch	Update	System initiated
-------	--------	------------------

3.35.2 Function Description

This function validates and loads Settlement Price data, for Settlement Dates before the NETA Start Date, received from the Settlements System Administrator, which is used in the main SSR calculations.

This function may be initiated in one of two ways:

1. Automatically by the presence of files to be loaded on the system
2. By I0020A Initiate Load Settlement Price Data

3.35.3 Processing Description

Reference: EPD 1.1.1 Validate Settlements Data

See Event Description

3.35.4 Error Handling

See Event Description

3.35.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

3.35.6 Volumes

Once per Settlement (i.e. 6 times per day on average).

3.35.7 Events

Settlement Price Data Available

3.35.8 Event Frequency

1

3.35.9 Enquiries

None

3.35.10 Enquiry Frequency

N/A

3.35.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.10, 9.3

3.35.12 User Roles

None

3.35.13 I/O Structures

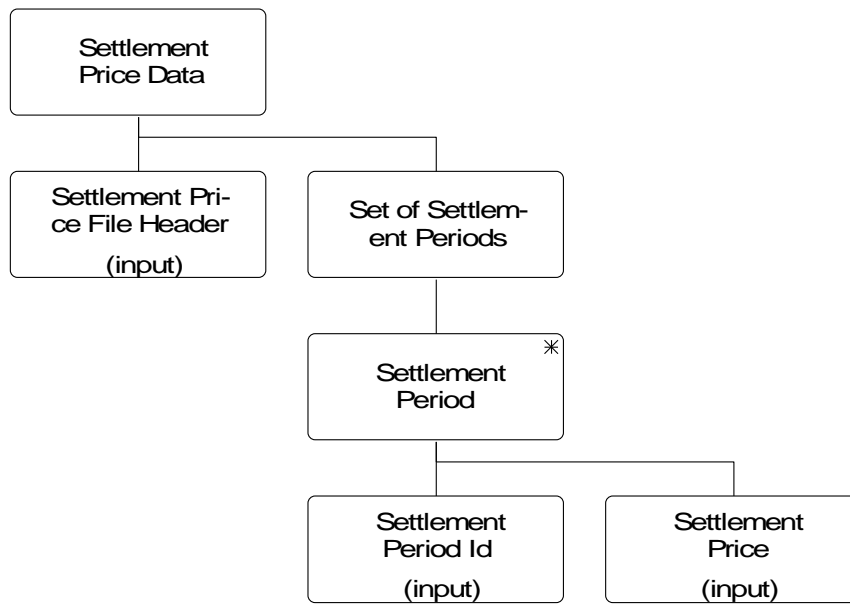


Figure 29: Load Settlement Price Data

I/O Structure Element	Data Items
Settlement Period Id	Settlement Period Id
Settlement Price	Pool Selling Price Transmission Loss Multiplier Transmission Losses Reconciliation Multiplier
Settlement Price File Header	CDCS Extract Number SSA Settlement Run Number SSA Settlement Run Type Id Settlement Date

Table 35: Load Settlement Price Data - I/O Structure Elements

3.36 I0021 Load Sunset Data

3.36.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.36.2 Function Description

This function is invoked by the ISRA User and allows a file of sunset times to be loaded into the database.

A list of files which are available for loading is displayed, from which the User selects the file required. The file list consists of both files which have never been loaded and those for which loading has failed previously.

3.36.3 Processing Description

Reference: EPD 2.1.4 Enter Time of Sunset

See Event Description

3.36.4 Error Handling

See Event Description

3.36.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

3.36.6 Volumes

Infrequent - probably once per year or less.

3.36.7 Events

Sunset Data Loaded

3.36.8 Event Frequency

Once per function invocation.

3.36.9 Enquiries

None

3.36.10 Enquiry Frequency

Not Applicable

3.36.11 Requirements Catalogue Ref.

2.13, 2.16, 5.1, 5.3, 5.5

3.36.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.36.13 I/O Structures

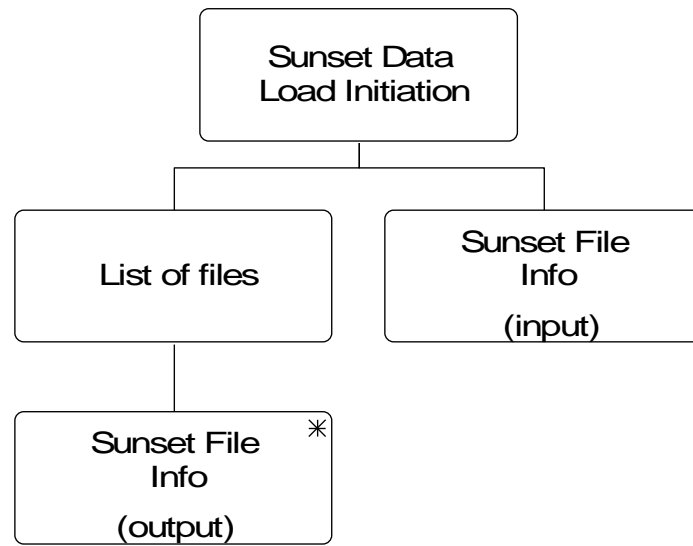


Figure 30: Load Sunset Data – Sunset Data Load Initiation

I/O Structure Element	Data Items
Sunset File Info.	File Creation Timestamp Market Participant Id Market Participant Name

Table 36: Sunset Data Load Initiation - I/O Structure Elements

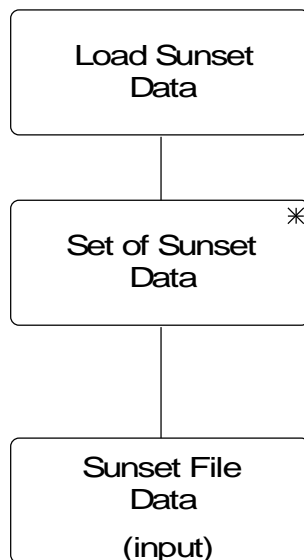


Figure 31: Load Sunset Data

I/O Structure Element	Data Items
Sunset File Data	GSP Group Id Settlement Date Time of Sunset

Table 37: Load Sunset Data - I/O Structure Elements**3.37 I0022A Initiate Load Supplier Purchase Matrix Data****3.37.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.37.2 Function Description

This function allows one or more files of Supplier Purchase Matrix data for a Settlement Day for a Data Aggregator to be loaded into the ISRA system.

The user is presented with a list of SPM files which are available for loading. The list consists of files that have not been loaded into the database, and those that have failed during a previous load.

Details of the file header are presented to enable the user to correctly identify versions of the files available for loading. The user selects the files required for loading into the database.

3.37.3 Processing Description

This function initiates the batch load described in I0022B.

3.37.4 Error Handling

See Error Handling section for function I0022B.

3.37.5 Common Processing

IC006 Restrict Access

3.37.6 Volumes

It is expected that the majority of files will be loaded automatically (see I0022B for details). This manual method of loading the files is a backup for I0022B, and as such will be loaded occasionally.

3.37.7 Events

None

3.37.8 Event Frequency

N/A

3.37.9 Enquiries

None

3.37.10 Enquiry Frequency

N/A

3.37.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.12.

3.37.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.37.13 I/O Structures

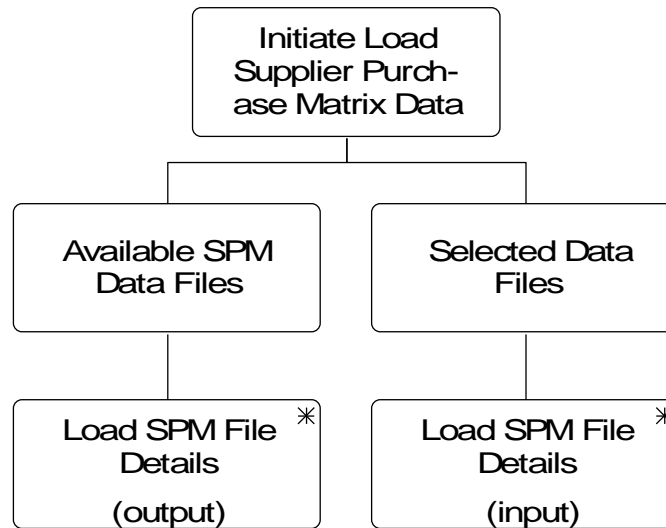


Figure 32: Initiate Load Supplier Purchase Matrix Data

I/O Structure Element	Data Items
Load SPM File Details	Data Aggregation Run Number Data Aggregator Id Data Aggregator Name GSP Group Id Settlement Code Settlement Date

Table 38: Initiate Load Supplier Purchase Matrix Data - I/O Structure Elements

3.38 I0022B Load Supplier Purchase Matrix Data

3.38.1 Function Type

Batch	Update	System initiated
-------	--------	------------------

3.38.2 Function Description

This function allows one or more files of Supplier Purchase Matrix data for a Settlement Day for a Data Aggregator to be loaded into the ISRA system.

This function may be initiated in one of two ways:

1. Automatically by the presence of files to be loaded on the system
2. By I0022B Initiate Load Supplier Purchase Matrix Data

3.38.3 Processing Description

Reference: EPD 1.1.4 Validate SPM Data

See Event Description

3.38.4 Error Handling

See Event Description

3.38.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.38.6 Volumes

One per active non-half hourly Data Aggregator to GSP Group relationship per Data Aggregation Run.

3.38.7 Events

SPM Data Available

3.38.8 Event Frequency

1

3.38.9 Enquiries

None

3.38.10 Enquiry Frequency

N/A

3.38.11 Requirements Catalogue Ref.

1.1, 5.1, 5.3, 5.12

3.38.12 User Roles

None

3.38.13 I/O Structures

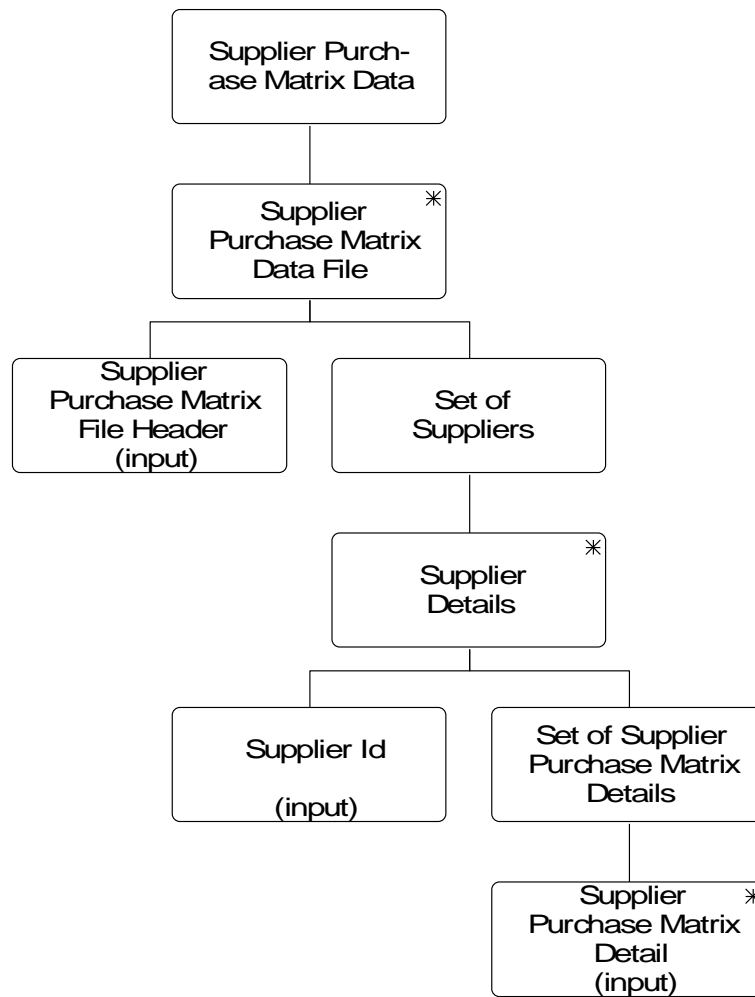


Figure 33: Load Supplier Purchase Matrix Data

I/O Structure Element	Data Items
Supplier Id	Supplier Id
Supplier Purchase Matrix Detail	Distributor Id Line Loss Factor Class Id Profile Class Id SPM Default EAC MSID Count SPM Default Unmetered MSID Count SPM Total AA MSID Count SPM Total Annualised Advance SPM Total EAC SPM Total EAC MSID Count SPM Total Unmetered Consumption SPM Total Unmetered MSID Count Standard Settlement Configuration Id Time Pattern Regime Id
Supplier Purchase Matrix File Header	Data Aggregation Run Number Data Aggregation Type Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date

Table 39: Load Supplier Purchase Matrix Data - I/O Structure Elements

3.39 I0023 Produce Audit Reports

3.39.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.39.2 Function Description

This function allows the ISR User to produce Audit reports for the Pool Auditor. Audit trails will be maintained so that changes to standing data can be tracked through the ISRA system. These changes are recorded within the audit entities as defined in, and written to, by function IC001 Update On-Line Audit Log. This function queries these audit entities to produce the reports.

The user is presented with options to generate an Audit Report on changes made by one or all users, changes made to one or all standing data entities, and changes made on days in a date range, or for the current day. If only the From Date is entered then only changes on a single day are reported on.

The Audit Report is then generated to contain details of all changes made by the specified users, to the specified entities, on days in the specified date range, or for the current day. An Audit Report for current day activity will only contain details of changes made up to the time of report generation.

3.39.3 Processing Description

n/a

3.39.4 Error Handling

n/a

3.39.5 Common Processing

IC005 Create File Header

IC006 Restrict Access

IC007 Update File Log

IC008 Create Report Header

3.39.6 Volumes

An indeterminate number of Audit reports will be produced.

3.39.7 Events

None

3.39.8 Event Frequency

n/a

3.39.9 Enquiries

Audit Report Requested

3.39.10 Enquiry Frequency

1

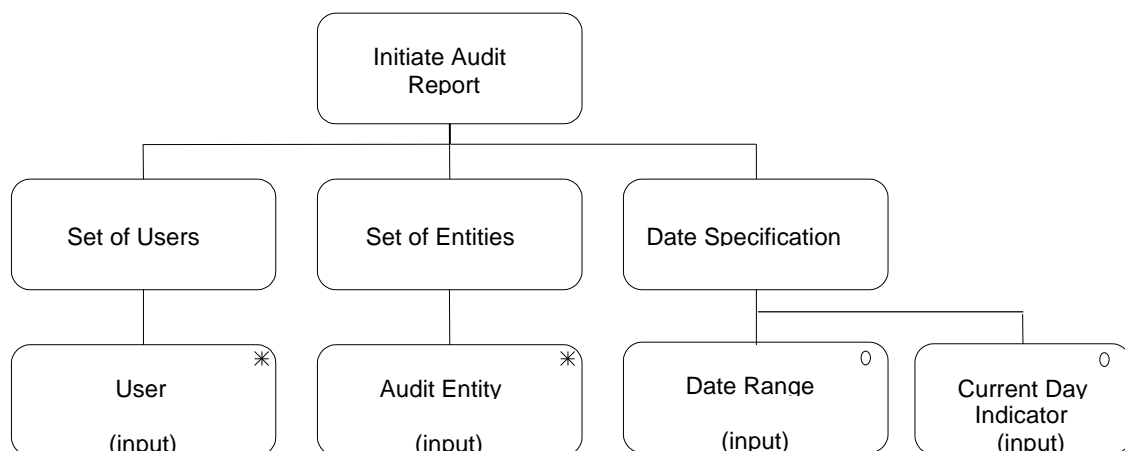
3.39.11 Requirements Catalogue Ref.

4.5, 7.10, 7.25, 7.8

Also, the requirement for an Audit Report for current day activity (SIR R294) is stated in the ITT for TA2000 ISRA Package 2.

3.39.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager, ISRA Auditor

3.39.13 I/O Structures**Figure 34: Produce Audit Reports – Initiate Audit Report**

Please note the data items listed below have not been included in the Logical Data Model.

I/O Structure Element	Data Items
User	User Name - The name of the selected user.
Audit Entity	Audit Entity - The selected entity name
Date Range	Start Date - The specified start date. End Date - The specified end date (O)
Current Day Indicator	Current Day Indicator - Indicator for whether Audit Report requested for Current Day (O).

Table 40: Initiate Audit Report - I/O Structure Elements

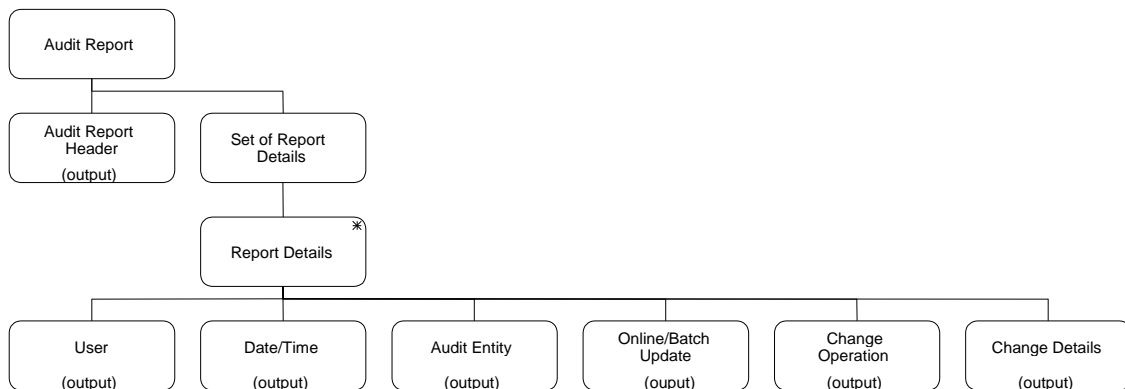


Figure 35: Produce Audit Reports – Audit Report

Please note that the data items listed below have not been included in the Logical Data Model.

I/O Structure Element	Data Items
Audit Report Header	User Name - Name of user being reported on. Audit Entity - Name of entity being reported on. Date Range - Date range being reported on.
User	User Name - Name of user making the change.
Date/Time	Date And Time - The data and time the change was made.
Audit Entity	Audit Entity - The name of the entity affected.
Online/Batch Update	Batch/Online Indicator - Whether update was performed online or by a batch process.
Change Operation	Operation Type - One of insert, update or delete.
Change Details	Attribute Values - Details of the after image of the entity.

Table 41: Audit Report - I/O Structure Elements

3.40 I0025A Initiate Profile Reports**3.40.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.40.2 Function Description

This function allows the ISRA User to manually request the daily profile reports. Output will be based on the data from the time of the latest Profile Production Run for the Settlement Date chosen.

A list of reports is displayed, from which the User selects the reports required, specifying the parameters necessary to identify the report output required. Settlement Date is entered for all reports and the Profile Production Run number and set of GSP Groups for the latest run are shown for confirmation. The user can choose a different Profile Production Run Number for the Settlement Date if required, the GSP Groups for which data has not been superseded by the subsequent run are displayed as confirmation.

If the user has selected the Standing Data Report or the Daily Profile Data report then they can choose 1 GSP Group rather than the default of all GSP Groups in the run.

List screens are not shown on the I/O Structure I0025_04. The User inputs the reports required (by selecting the reports from a list) and enters the data required, and the system redisplay the reports and data selected to the User.

This function initiates the batch production of reports described in I0025B.

3.40.3 Processing Description

Reference: EPD 2.4.1 Produce Supplier & DC Profile Reports

This process allows the user to select reports for production by I0025B Produce Profile Reports.

A report will be created for each Data Collector and Supplier.

3.40.4 Error Handling

None

3.40.5 Common Processing

IC006 Restrict Access

3.40.6 Volumes

It is expected that the majority of reports will be produced automatically (see I0025B), and that this manual method will be used occasionally.

3.40.7 Events

None

3.40.8 Event Frequency

Not applicable

3.40.9 Enquiries

Standard Settlement Configuration Report, Daily Profile Data Report, Standing Profile Data Report, Tele-switch Contact Interval Data Report

3.40.10 Enquiry Frequency

1

3.40.11 Requirements Catalogue Ref.

4.4, 4.5, 5.1, 7.25, 8.19

3.40.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.40.13 I/O Structures

I0025_04 Initiate Profile Reports

I0025_04.DAT:

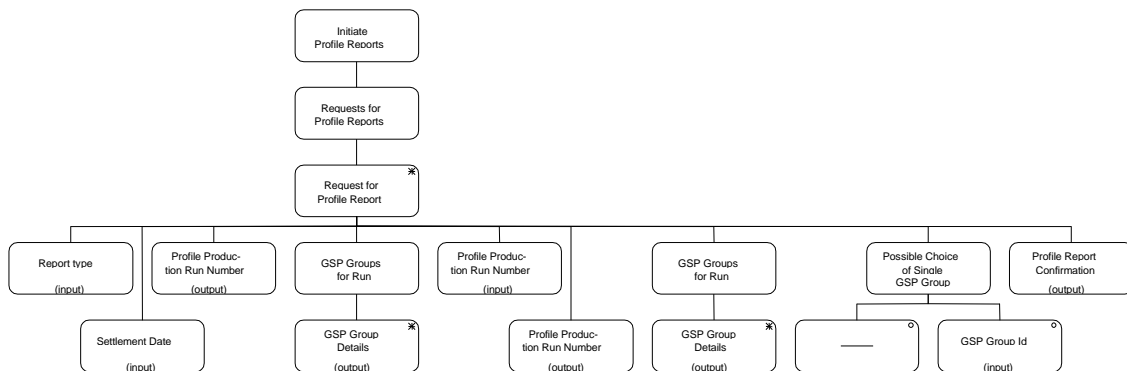


Figure 36: Initiate Profile Reports

I/O Structure Element	Data Items
GSP Group Details	GSP Group Id GSP Group Name
Profile Production Run Number	Profile Production Run Number
Profile Report Confirmation	Profile Production Run Number Settlement Date
Settlement Date	Settlement Date
Report Type	Report Type
GSP Group Id	GSP Group Id

Table 42: Initiate Profile Reports - I/O Structure Elements

3.41 I0025B Produce Profile Reports

3.41.1 Function Type

Batch	Enquiry	System initiated
-------	---------	------------------

3.41.2 Function Description

This function produces four reports for Suppliers on the generation of Profile Coefficients and the data used to derive them:

- Standard Settlement Configuration Report

- Standing Profile Data Report
- Daily Profile Data Report
- Tele-switch Contact Interval Data Report

The reports are only sent to all Suppliers who are linked to one or more of the GSP Groups on the Settlement Date (regardless of whether the GSP Groups to which they are linked were included in the run). They can use the reports to validate the results of the profiling calculation.

The first two report types are also sent to Data Collectors who are linked to one or more of the GSP Groups on the Calendar Date of the run (regardless of whether the GSP Groups to which they are linked were included in the run).

This function may be initiated in one of two ways:

1. Automatically following the completion of a profile production run
2. By I0025A Initiate Profile Reports

The Standard Settlement Configuration report, Tele-Switch Contact Intervals Report and the Daily Profile Data reports produce report files containing details of the data which was used in the production of the Profile Coefficients for the specified Settlement Day.

For the Standard Settlement Configuration, data for reporting is selected on the basis of the Valid Settlement Configuration Profile Classes which were effective on the Settlement Day.

For the Standing Profile Data Report, data is selected on the basis of the Profiles which were effective on the Settlement Day and the Regression Equations for the Day Type and Season which were valid on the Settlement Day.

For the Tele-switch Contact Intervals report, the Tele-switch Contact intervals reported are those used during the profiling run, i.e. those applicable to the settlement date selected as the Tele-switch data date for the profiling run. This may or may not be the same as the settlement date of the profiling run and may include contact switching times from more than one UTC day due to clock changes.

3.41.3 Processing Description

Reference: EPD 2.4.1 Produce Supplier & DC Profile Reports

This process will produce the following reports:

1. A Standard Settlement Configuration report which reports the set of clock intervals or tele-switch intervals and the set of Average Fraction of Yearly Consumption for each Valid Measurement Requirement Profile Class for each Valid Settlement Configuration Profile Class for a specified Settlement Day.
2. A Daily Profile Data report which for one specified GSP Group, or all GSP Groups, for a specified Settlement Day, reports (1) the set of Basic Period Profile Coefficients, for each Profile, for each Profile Class, (2) the set of Combined Period Profile Coefficients for each Valid Settlement Configuration Profile Class, (3) the set of Period Profile Class Coefficients for each Valid Measurement Requirement Profile Class.

3. A Standing Profile Data report which for one specified GSP Group, or all GSP Groups, for a specified Settlement Day, reports (1) the set of GSP Group Average EACs for each Profile, for each Profile Class, (2) the set of Regression Coefficients for each Period Regression Equation for each Profile, for each Profile Class.
4. A Tele-Switch Contact Intervals report which lists, by tele-switch group id/ tele-switch user id combination, the set of tele-switch contact intervals which apply to the applicable settlement date.

3.41.4 Error Handling

None

3.41.5 Common Processing

IC005 Create File Header

IC007 Update File Log

IC008 Create Report Header

3.41.6 Volumes

Once per Daily Profile Production Run and occasionally on an ad-hoc basis.

3.41.7 Events

None

3.41.8 Event Frequency

Not applicable

3.41.9 Enquiries

Daily Profile Data Report, Standard Settlement Configuration Report, Standing Profile Data Report, Tele-switch Contact Interval Data Report.

3.41.10 Enquiry Frequency

The frequencies of the enquiries associated with this function sum to 1.

3.41.11 Requirements Catalogue Ref.

4.4, 4.5, 5.1, 7.25, 8.19

3.41.12 User Roles

None

3.41.13 I/O Structures

I0025_01 Standard Settlement Configuration Report, I0025_02 Daily Profile Data Report, I0025_03 Standing Profile Data Report, I0025_05 Tele-switch Contact Interval Data Report

I0025_01.DAT:

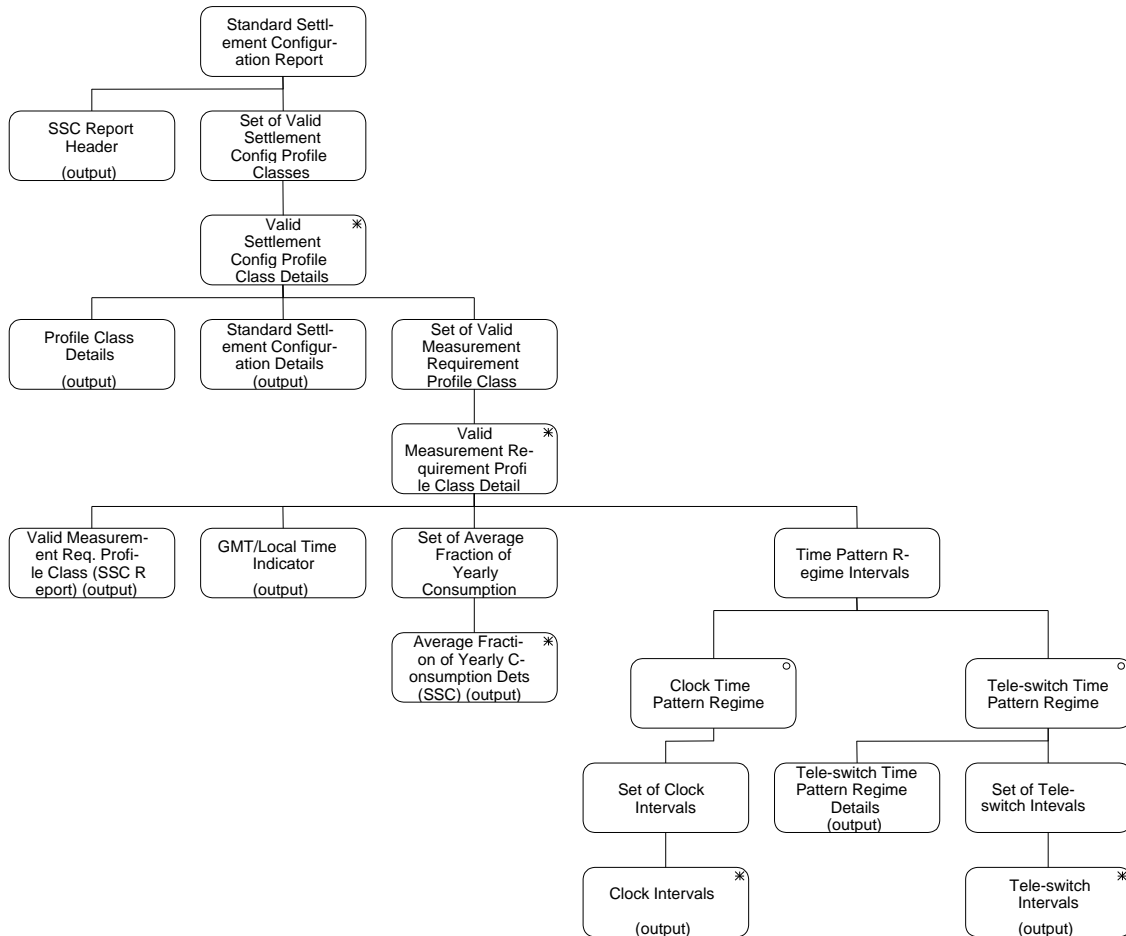


Figure 37: I0025_01 Standard Settlement Configuration Report

I/O Structure Element	Data Items
Clock Intervals	Day of the Week Id End Day {Date Block} End Month {Date Block} End Time Start Time Start Day {Date Block} Start Month {Date Block}
GMT/Local Time Indicator	GMT/Local Time Indicator
Profile Class Details	Profile Class Description Profile Class Id Switched Load Profile Class Ind
SSC Report Header	Profile Production Run Number Profile Production Run Date Profile Production Run Time Settlement Date
Standard Settlement Configuration Details	Standard Settlement Configuration Desc Standard Settlement Configuration Id
Tele-switch Intervals	Tele-switch Start Time

I/O Structure Element	Data Items
	Tele-switch End Time
Valid Measurement Requirement Profile Class (SSC Report)	Switched Load Indicator Time Pattern Regime Id
Tele-switch Time Pattern Regime Details	Tele-switch Group Id Tele-switch SSC Dummy Tele-switch User Id
Average Fraction of Yearly Consumption Details	GSP Group Id Average Fraction of Yearly Consumption

Table 43: Standard Settlement Configuration Report - I/O Structure Elements

I0025_02.DAT:

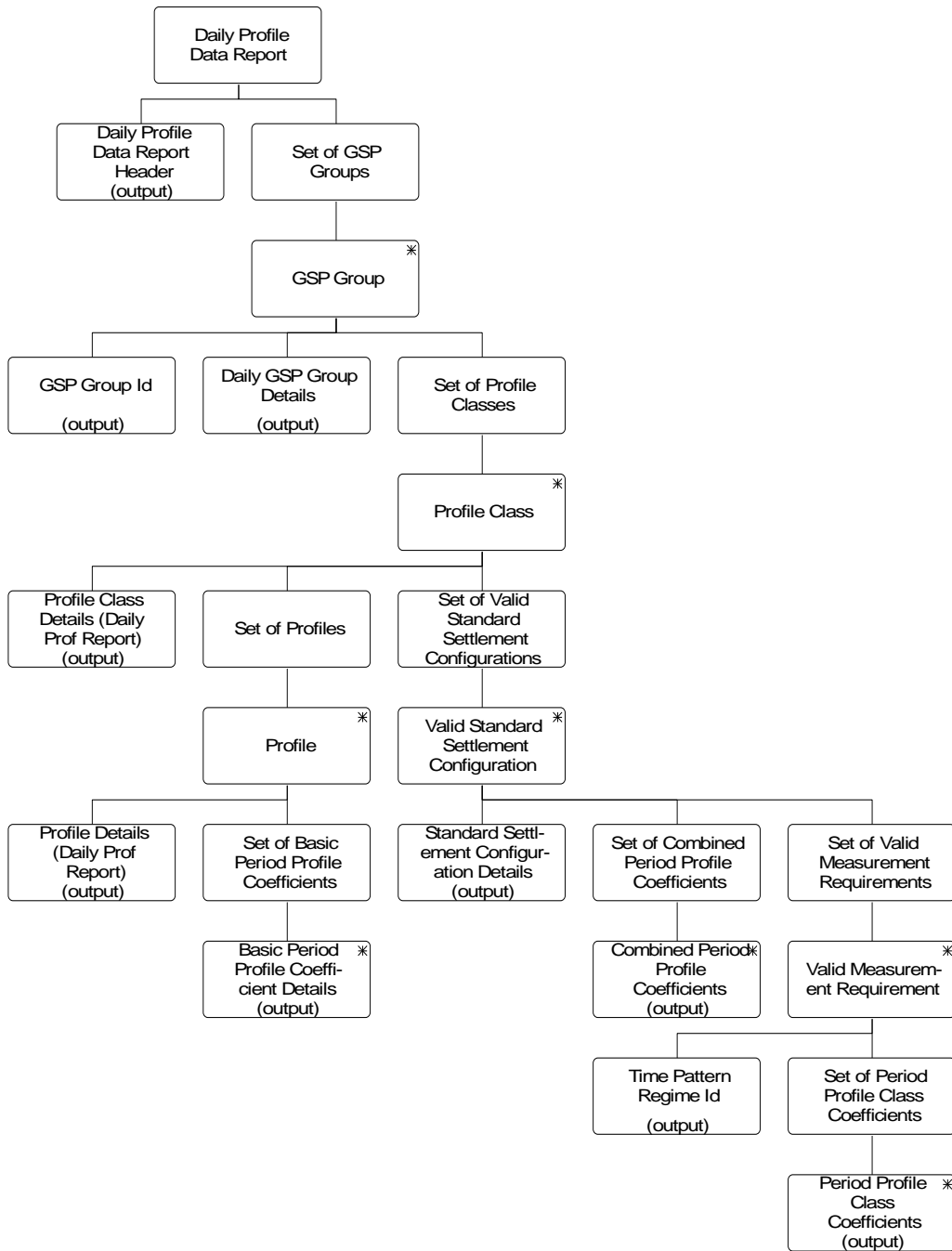


Figure 38: I0025_02 Daily Profile Data Report

I/O Structure Element	Data Items
Daily GSP Group Details	Actual Noon Temperature Noon Effective Temperature Sunset Variable Time of Sunset
Daily Profile Data Report Header	Profile Production Run Number Profile Production Run Date Profile Production Run Time Settlement Date
GSP Group Id	GSP Group Id
Period Profile Class Coefficients	Period Profile Class Coefficient Period Register On State Indicator
Profile Class Details (Daily Prof Reports)	Profile Class Id
Profile Details (Daily Prof Reports)	Profile Id
Basic Period Profile Coefficients	Basic Period Profile Coefficient
Combined Period Profile Coefficients	Low Register Profile Coefficient Normal Register Profile Coefficient
Standard Settlement Configuration Details	Standard Settlement Configuration Id
Time Pattern Regime Id	Time Pattern Regime Id

Table 44: Daily Profile Data Report - I/O Structure Elements

I0025_03.DAT:

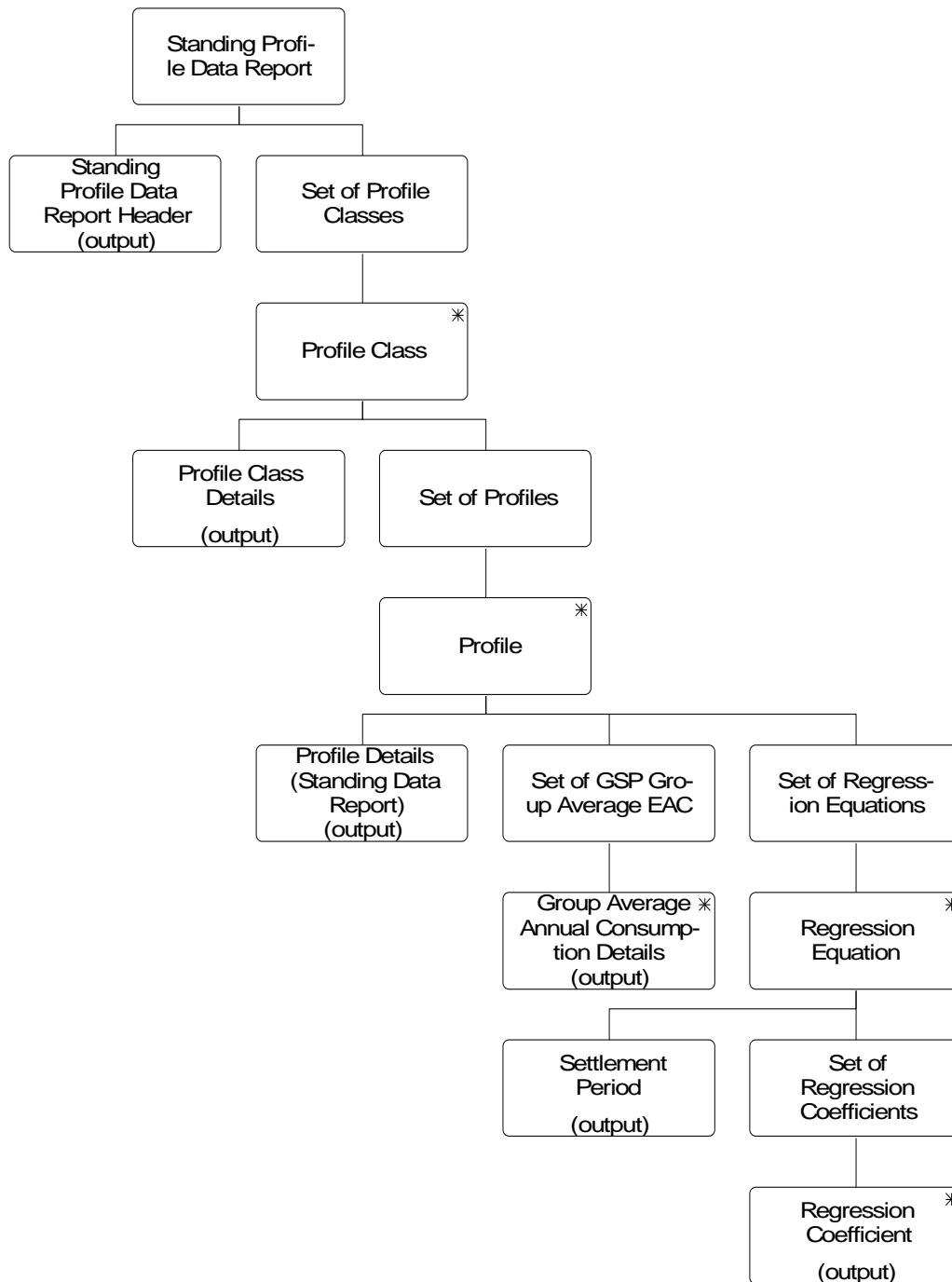


Figure 39: I0025_03 Standing Profile Data Report

I/O Structure Element	Data Items
Group Average Annual Consumption Details	GSP Group Id Group Average Annual Consumption
Profile Class Details	Profile Class Description Profile Class Id Switched Load Profile Class Ind
Profile Details (Standing Data Report)	Profile Description Profile Id Profile Settlement Periods
Regression Coefficient	Regression Coefficient Regression Coefficient Type
Settlement Period	Settlement Period Id Settlement Period Label
Standing Profile Data Report Header	Settlement Date Season Id Day Type Id Profile Production Run Number Profile Production Run Date Profile Production Run Time

Table 45: Standing Profile Data Report - I/O Structure Elements

I0025_05.DAT:

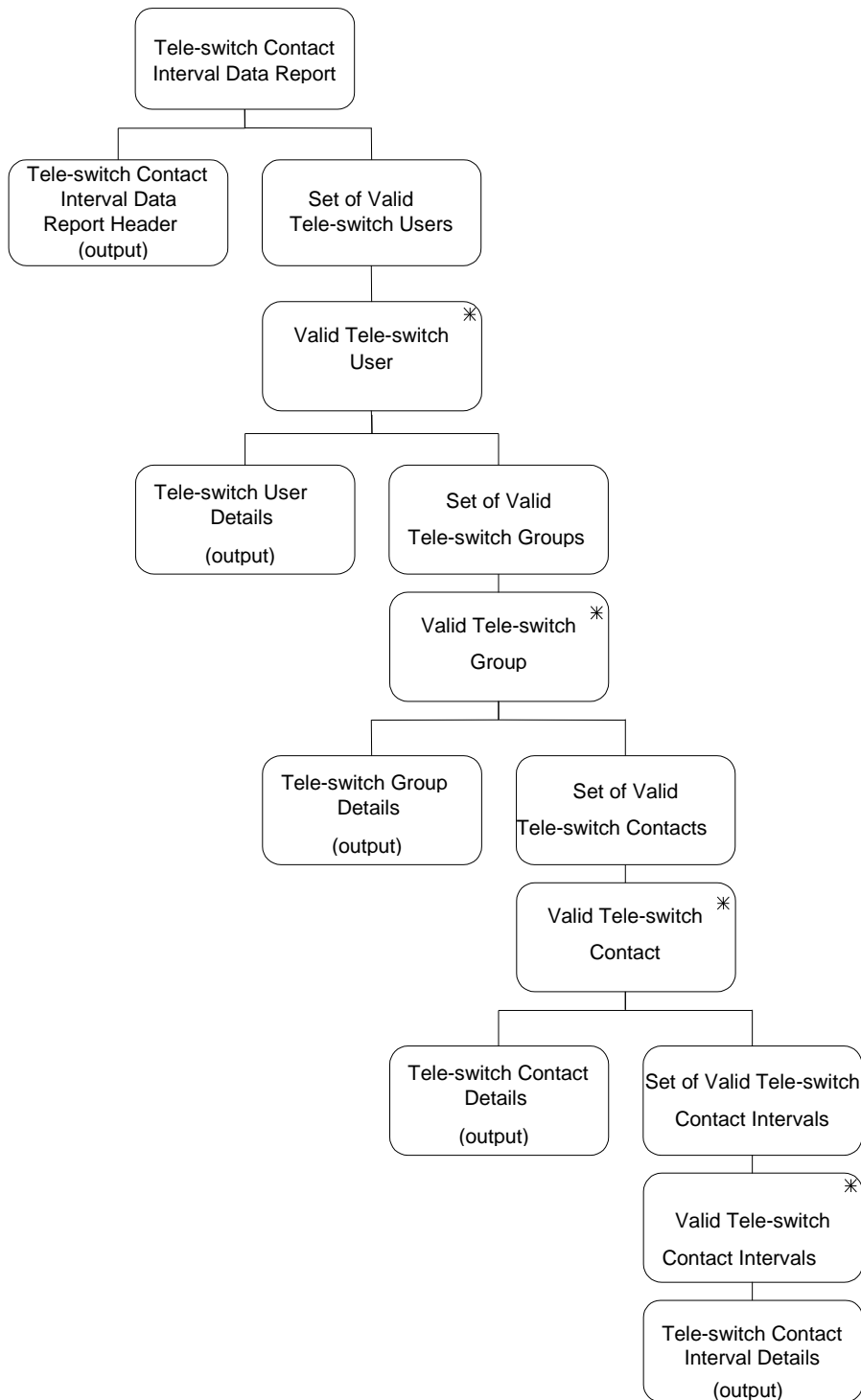


Figure 40: I0025_05 Tele-switch Contact Interval Data Report

I/O Structure Element	Data Items
Tele-switch Contact Details	Tele-switch Contact Code
Tele-switch Contact Interval Data Report Header	Settlement Date Tele-switch Data Date Profile Production Run Number Profile Production Run Date Profile Production Run Time
Tele-switch Contact Interval Details	Tele-Switch Start Date and Time {Tele-switch Contact Interval} Tele-Switch End Date and Time {Tele-switch Contact Interval} Tele-switch Contact State
Tele-switch Group Details	Tele-switch Group Id
Tele-switch User Details	Tele-switch User Id

Table 46: Tele-switch Contact Interval Data Report - I/O Structure Elements

3.42 I0026A Initiate Produce Supplier Settlement Reports

3.42.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.42.2 Function Description

This function allows an ISRA user to manually request the Supplier Settlement reports. These reports are produced automatically at the completion of each Settlement Run (see I0026B for details).

A list of reports is displayed (this list is not shown on the I/O Structure). The user selects the types of report required, and specifies the SSR Run for which the reports are required. The SSR Run selection is restricted to runs that have previously been performed.

3.42.3 Processing Description

This function initiates the batch production of reports described in I0026B.

3.42.4 Error Handling

None

3.42.5 Common Processing

IC006 Restrict Access

3.42.6 Volumes

It is expected that the majority of reports will be produced automatically (see I0026B), and that this manual method will be used occasionally.

3.42.7 Events

None

3.42.8 Event Frequency

N/A

3.42.9 Enquiries

None

3.42.10 Enquiry Frequency

N/A

3.42.11 Requirements Catalogue Ref.

4.3, 4.5, 5.1.

3.42.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.42.13 I/O Structures

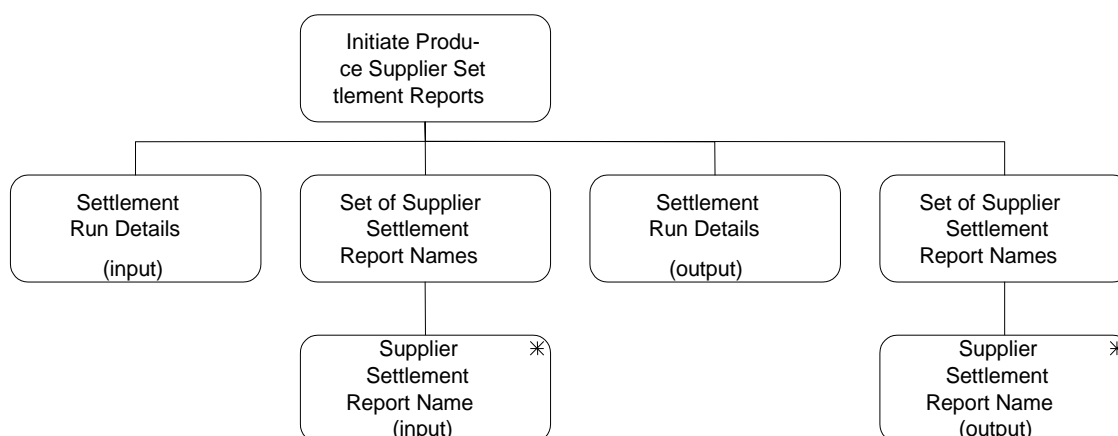


Figure 41: Initiate Produce Supplier Settlement Reports

I/O Structure Element	Data Items
Settlement Run Details	Settlement Code Settlement Date SSR Run Number
Supplier Settlement Report Name	Supplier Settlement Report Name - This is the selected report types, not included in the Logical Data Model.

Table 47: Initiate Produce Supplier Settlement Reports - I/O Structure Elements

3.43 I0026B Produce Supplier Settlement Reports

3.43.1 Function Type

Batch	Enquiry	System initiated
-------	---------	------------------

3.43.2 Function Description

This function allows the ISR Agent to report on Supplier Settlement data held on the ISR system.

This function produces the following reports for each Supplier:

1. Supplier Purchase Matrix report. This contains details of the SPM occurrences used in the calculation for the specified Settlement Run, i.e. detailed input data from individual NHH Data Aggregators.
2. HH Demand report. This contains details of HH Demand values for a Supplier by consumption component class used in the specified Settlement Run. This includes the profiled and actual demand separately: part 1 of the report contains result of the GSP Group Aggregation Process, part 2 contains detailed input data from HH Data Aggregators.
3. Deemed Take report. This contains details of deemed take calculations, including GSP Group Correction and NPG spill processing for a specified Settlement Run, i.e. breakdown of Supplier's HH deemed take and the various interim values used in the deemed take calculations across Consumption Component Classes.
4. Supplier Purchase report. This contains details of Supplier purchases for each Settlement Period in the specified Settlement Run and the settlement variables used to generate them, i.e. breakdown of Supplier's GSP Group liability and SSA data used to derive the purchases from the deemed take. Each Supplier report contains data detailing their own purchases only. For Settlement Dates after the NETA Start Date the report will contain dummy values (set to zero) and should not be trusted by Suppliers.
5. GSP Group Consumption Totals Report. This contains details of the total deemed take summed over all suppliers for each settlement period for each Consumption Component Class and GSP Group before and after GSP Group Correction. If a GSP Group Consumption Component Class has no consumption (as distinct from zero consumption), it is omitted. This allows suppliers to verify that the GSP Group Correction Factor has been correctly calculated.
6. Supplier BM Unit Report. For Settlement Days from the start of the NETA, this contains details of the Supplier's valid BM Units, Non-Half Hourly BM Unit Allocations, the Half Hourly consumption/generation data input into the system and the combined Half Hourly and Non-Half Hourly consumption/generation by BM Unit and Consumption Component Class calculated by the SSR run.
7. Supplier Disconnection Matrix report. This contains details of the DPM occurrences used in the calculation for the specified Settlement Run, i.e. detailed input data from individual NHH Data Aggregators.
8. HH Demand Disconnection report. This contains details of HH Demand Disconnection values for a Supplier by consumption component class used in the specified Settlement Run. This includes the profiled and actual demand separately: part 1 of the report contains result of the GSP Group Aggregation Process, part 2 contains detailed input data from HH Data Aggregators.
9. GSP Group Demand Disconnection Totals Report. This contains details of the total deemed take summed over all suppliers for each settlement period for each Consumption Component Class and GSP Group before and after

GSP Group Correction. If a GSP Group Consumption Component Class has no consumption (as distinct from zero consumption), it is omitted. This allows suppliers to verify that the GSP Group Correction Factor has been correctly calculated.

10. Supplier BM Unit Demand Disconnection Report. This contains details of the Supplier's valid BM Units, Non-Half Hourly BM Unit Allocations, the Half Hourly demand disconnection energy data input into the system and the combined Half Hourly and Non-Half Hourly demand disconnection energy by BM Unit and Consumption Component Class calculated by the SSR run.

~~Supplier Market Share Summary Data Report. The Quarterly Aggregated Supplier Volumes in MWh and Quarterly Average MPAN counts by Supplier are grouped by "Supplier Volume Reporting Groups" for each supplier. Supplier Volume Data will be adjusted for distribution losses and GSP Group Correction and the related number of Metering Systems averaged over a calendar quarter, and these values will be grouped by Supplier Volume Reporting Group. This will contain Quarterly Aggregated Supplier Volumes in MWh and Quarterly Average MPAN counts, grouped by "Supplier Volume Reporting Groups", for each Supplier. Supplier volume data will be adjusted for GSP Group Correction.~~

11. GSP Group Consumption Totals Report (P0276) will contain the same contents as the GSP Group Consumption Totals Report (D0276 flow), for SF, RF and DF run types but will not contain a recipient Supplier ID and will not be a DTC D-flow (therefore renamed as P0276). In addition, SVAA will make two years of historical P0276 data available for SF, RF and DF runs
12. The GSP Group Market Matrix Report will contain GSP Group consumption data by Profile Class (PC), Standard Settlement Configuration (SSC), Line Loss Factor Class (LLFC), Distributor and Time Pattern Regime (TPR). This report shall be created by summing Supplier Purchase Matrix Report (D0082 flow) across all Suppliers and Data Aggregators, resulting in a single consumption report per GSP Group. This report will not contain any Supplier level data or data that could be used to derive the market share of Suppliers.

Details of the Profile Production, Data Aggregation and SSA Settlement Runs used to derive input data to the SSR Run being reported on are presented in a separate Supplier report header.

This function may be initiated in one of two ways:

1. Automatically following the completion of each Settlement Run (i.e. up to 6 times per day)
2. By I0026A Initiate Produce Supplier Settlement Reports

Reports will be generated for all Suppliers associated with an SSR Run. An I/O structure is included for this.

3.43.3 Processing Description

Reference:EPD 1.2.1 Supplier Purchase Matrix Report

EPD 1.2.2 HH Demand Report

EPD 1.2.3 Deemed Take Report

EPD 1.2.4 Supplier Purchases Report

CR479 v3 Report of Consumption Component Class totals for each GSP Group

E.P.D 1.2.7 Supplier BM Unit Report

3.43.4 Error Handling

None

3.43.5 Common Processing

IC005 Create File Header

IC007 Update File Log

IC008 Create Report Header

3.43.6 Volumes

Once per Settlement run (i.e. up to 6 times per day).

3.43.7 Events

None

3.43.8 Event Frequency

N/A

3.43.9 Enquiries

List all Suppliers associated with an SSR Run

Create Supplier Settlement Report Header

Supplier Purchase Matrix Report Requested

HH Demand Report Requested

Deemed Take Report Requested

Supplier Purchases Report Requested

GSP Group Consumption Totals Report Requested

Supplier BM Unit Report Requested

[Supplier Market Share Summary Report Requested](#)

[GSP Group Consumption Totals without supplier Report Requested](#)

[GSP Group Market Matrix Report Requested](#)

3.43.10 Enquiry Frequency

1

3.43.11 Requirements Catalogue Ref.

4.3, 4.5, 5.1, 7.25, CRS180

3.43.12 User Roles

None

3.43.13 I/O Structures

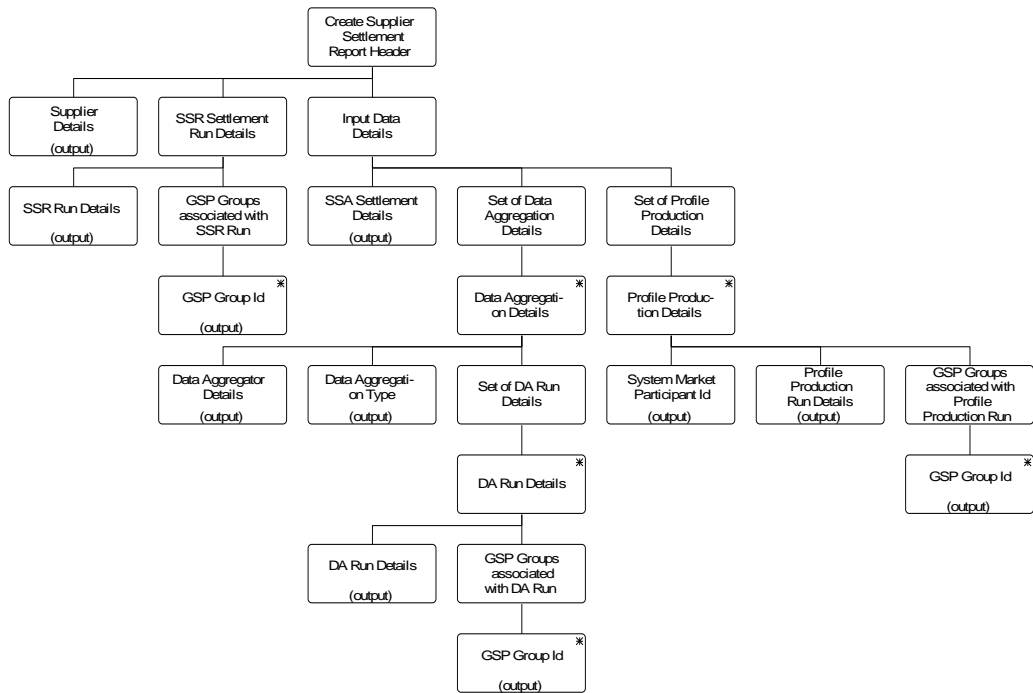


Figure 42: Produce Supplier Settlement Reports – Create Supplier Settlement Report Header

I/O Structure Element	Data Items
DA Run Details	Data Aggregation Run Number
Data Aggregation Type	Data Aggregation Type
Data Aggregator Details	Data Aggregator Id Data Aggregator Name
GSP Group Id	GSP Group Id
System Market Participant Id	System Market Participant Id
Profile Production Run Details	Profile Production Run Date Profile Production Run Number Profile Production Run Time Settlement Date
SSR Run Details	Settlement Code Settlement Code Description Settlement Date SSR Run Date SSR Run Number SSR Run Status SSR Run Type Id
SSA Settlement Details	CDCS Extract Number SSA Settlement Date SSA Settlement Run Number SSA Settlement Run Type Id
Supplier Details	Pool Member Id Supplier Id Supplier Name

Table 48: Create Supplier Settlement Report Header - I/O Structure Elements

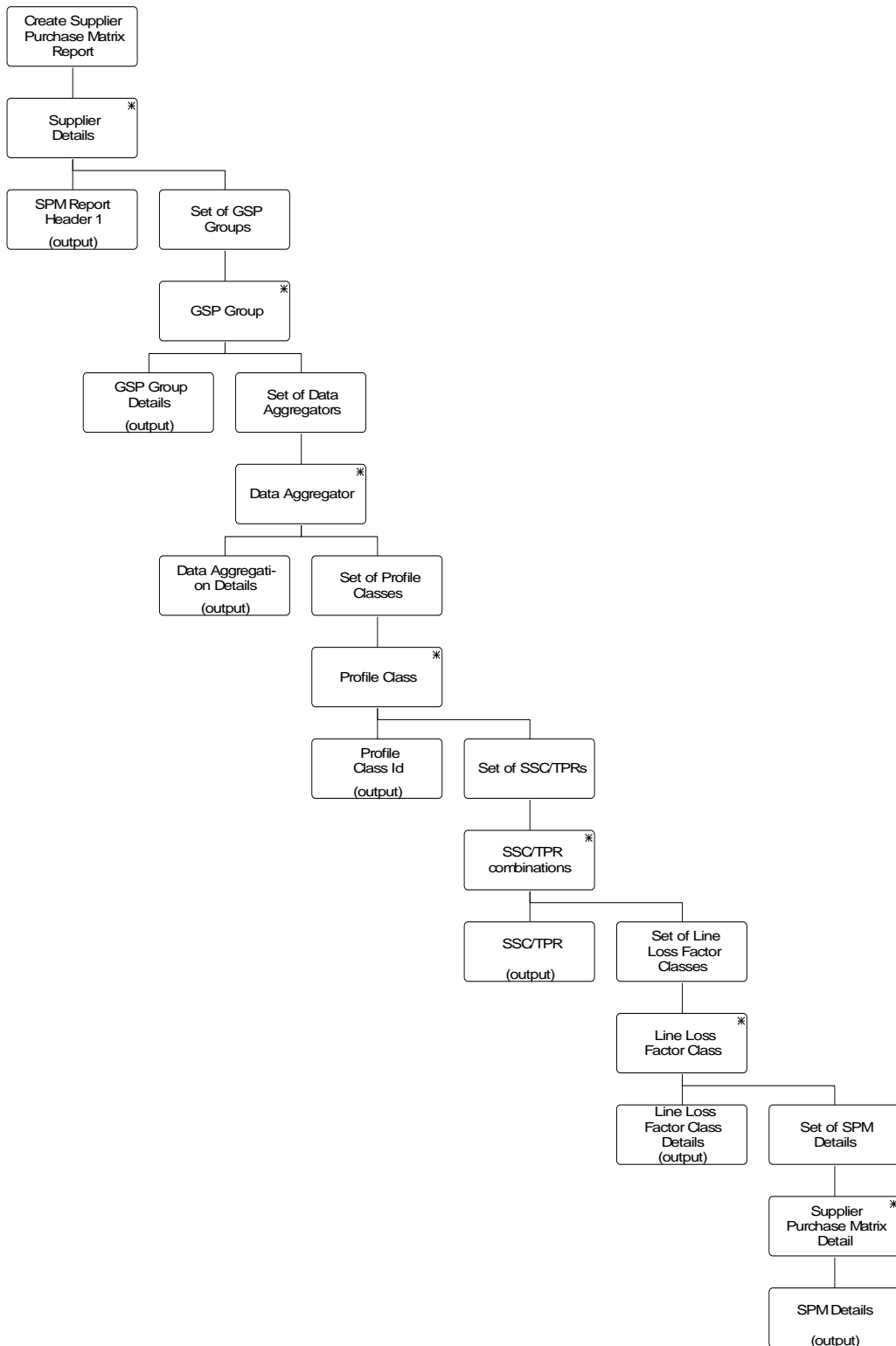


Figure 43: Produce Supplier Settlement Reports – Create Supplier Purchase Matrix Report

I/O Structure Element	Data Items
Data Aggregation Details	Data Aggregation Run Number Data Aggregation Type Data Aggregator Id Data Aggregator Name
GSP Group Details	GSP Group Id GSP Group Name
Line Loss Factor Class Details	Distributor Id Line Loss Factor Class Id
Profile Class Id	Profile Class Id
SPM Details	SPM Default EAC MSID Count SPM Default Unmetered MSID Count SPM Total AA MSID Count SPM Total Annualised Advance SPM Total EAC SPM Total EAC MSID Count SPM Total Unmetered Consumption SPM Total Unmetered MSID Count
SPM Report Header	SSR Run Date SSR Run Number SSR Run Type Id Settlement Code Settlement Code Description Settlement Date Supplier Id Supplier Name
SSC/TPR	Standard Settlement Configuration Id Time Pattern Regime Id

Table 49: Create Supplier Purchase Matrix Report - I/O Structure Elements

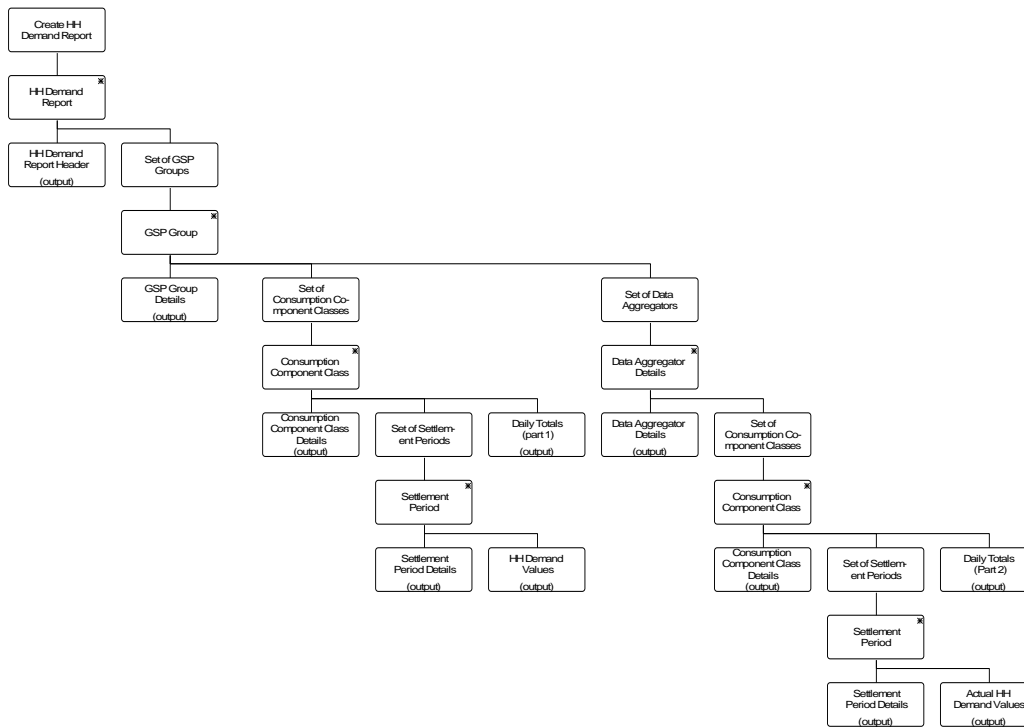


Figure 44: Produce Supplier Settlement Reports – Create HH Demand Report

I/O Structure Element	Data Items
Actual HH Demand Values	Data Aggregator HH MSID Count Aggregated Supplier Consumption Aggregated Supplier Line Loss
Consumption Component Class Details	AA/EAC Indicator Actual/Estimated Indicator Consumption Component Class Id Consumption Component Indicator Data Aggregation Type GSP Group Correction Scaling Factor Measurement Quantity Id Metered/Unmetered Indicator
Data Aggregator Details	Data Aggregator Id Data Aggregator Name
Daily Totals (Part 1)	Daily CCC Aggregated Supplier Consumption Daily CCC Aggregated Supplier Line Loss Daily CCC Corrected Supplier Consumption Daily CCC Corrected Supplier Line Loss
Daily Totals (Part 2)	Daily DA Aggregated Supplier Consumption Daily DA Aggregated Supplier Line Loss
GSP Group Details	GSP Group Id GSP Group Name
HH Demand Report Header	SSR Run Date SSR Run Number SSR Run Type Id

I/O Structure Element	Data Items
	Settlement Code Settlement Code Description Settlement Date Supplier Id Supplier Name
HH Demand Values	Aggregated Supplier Consumption Aggregated Supplier Line Loss Corrected Supplier Consumption Corrected Supplier Line Loss
Settlement Period Details	Settlement Period Id Settlement Period Label

Table 50: Create HH Demand Report - I/O Structure Elements

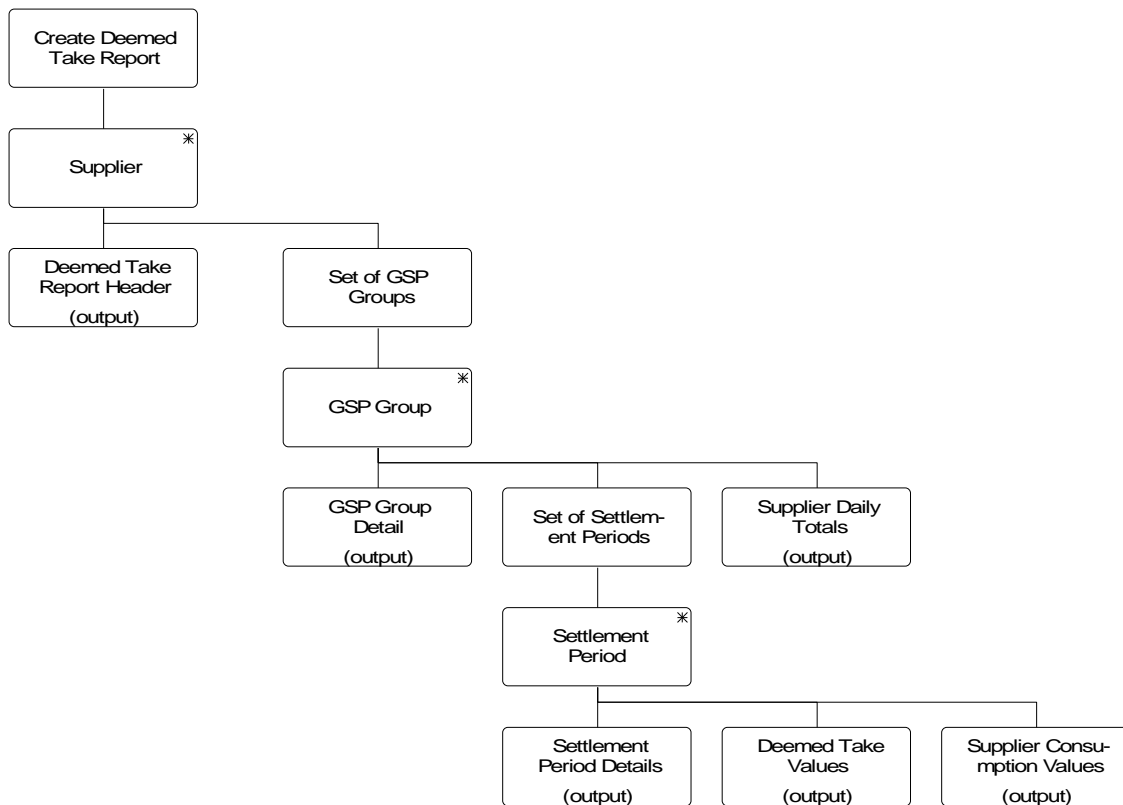


Figure 45: Produce Supplier Settlement Reports – Create Deemed Take Report

I/O Structure Element	Data Items
Supplier Daily Totals	Daily CCC Aggregated Supplier Consumption Daily CCC Aggregated Supplier Line Loss Daily CCC Corrected Supplier Consumption Daily CCC Corrected Supplier Line Loss Daily Supplier Weighted Consumption Daily Supplier Deemed Take Daily Unadjusted Supplier Deemed Take
Deemed Take Report Header	SSR Run Date SSR Run Number SSR Run Type Id Settlement Code Settlement Code Description Settlement Date Supplier Id Supplier Name
Deemed Take Values	GSP Group Correction Factor Period Supplier Deemed Take Supplier Period Weighted Consumption Total Period NPG Spill Total Period Weighted Consumption Unadjusted Supplier Deemed Take
GSP Group Detail	GSP Group Id GSP Group Name
Settlement Period Details	Settlement Period Id Settlement Period Label
Supplier Consumption Values	CCC Aggregated Supplier Consumption CCC Aggregated Supplier Line Loss CCC Corrected Supplier Consumption CCC Corrected Supplier Line Loss

Table 51: Create Deemed Take Report - I/O Structure Elements

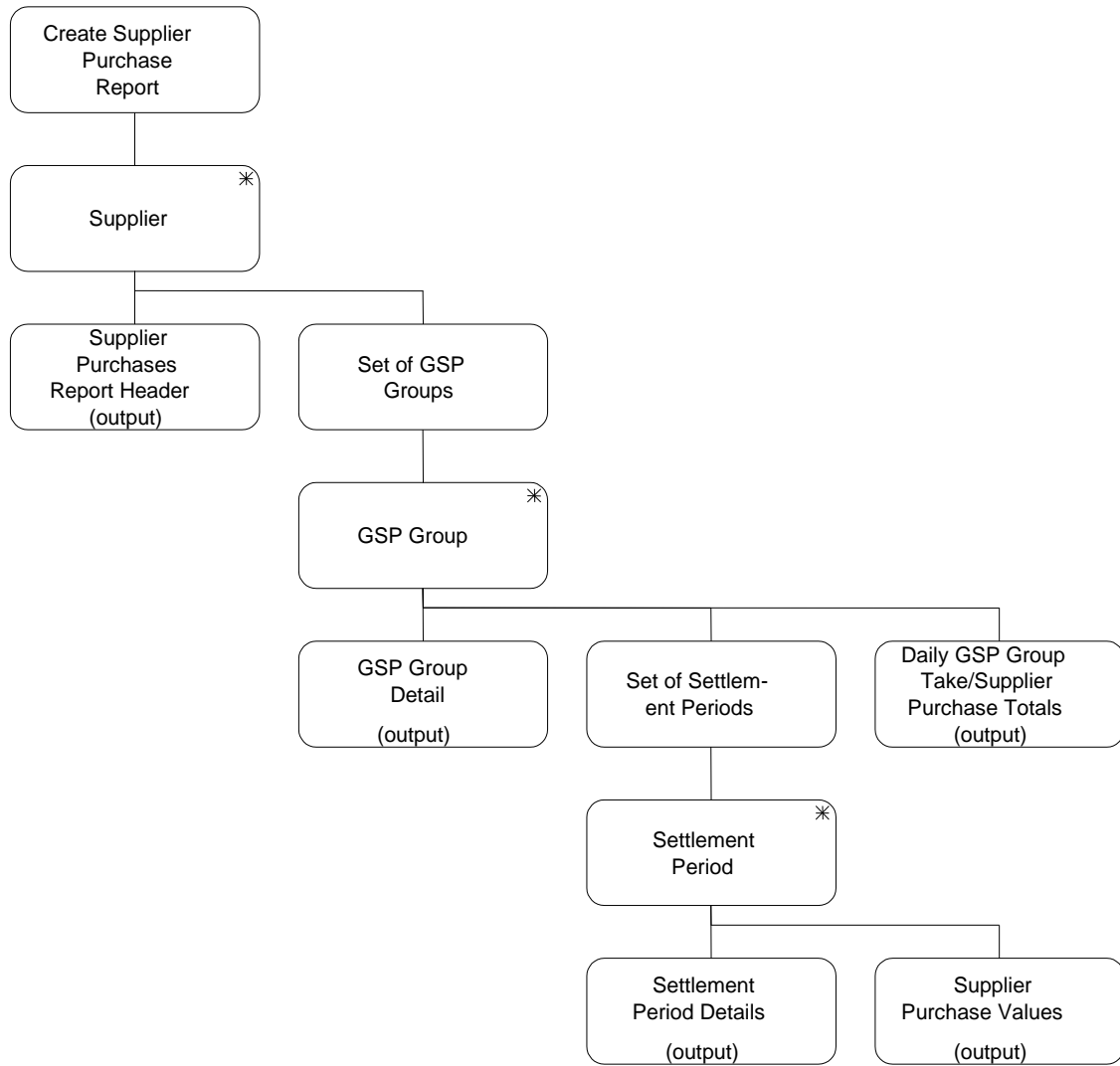


Figure 46: Produce Supplier Settlement Reports – Create Supplier Purchase Report

I/O Structure Element	Data Items
Daily GSP Group Take /Supplier Purchase Totals	Daily GSP Group Take Daily Supplier Deemed Take Daily Supplier Purchase Total
GSP Group Detail	GSP Group Id GSP Group Name
Settlement Period Details	Settlement Period Id Settlement Period Label
Supplier Purchase Values	GSP Group Take Period Supplier Deemed Take Period Supplier Purchase Total Pool Selling Price Transmission Loss Multiplier Transmission Losses Reconciliation Multiplier
Supplier Purchases Report Header	Pool Member Id SSR Run Date SSR Run Number SSR Run Type Id Settlement Code Settlement Code Description Settlement Date Supplier Id Supplier Name

Table 52: Create Supplier Purchase Report - I/O Structure Elements

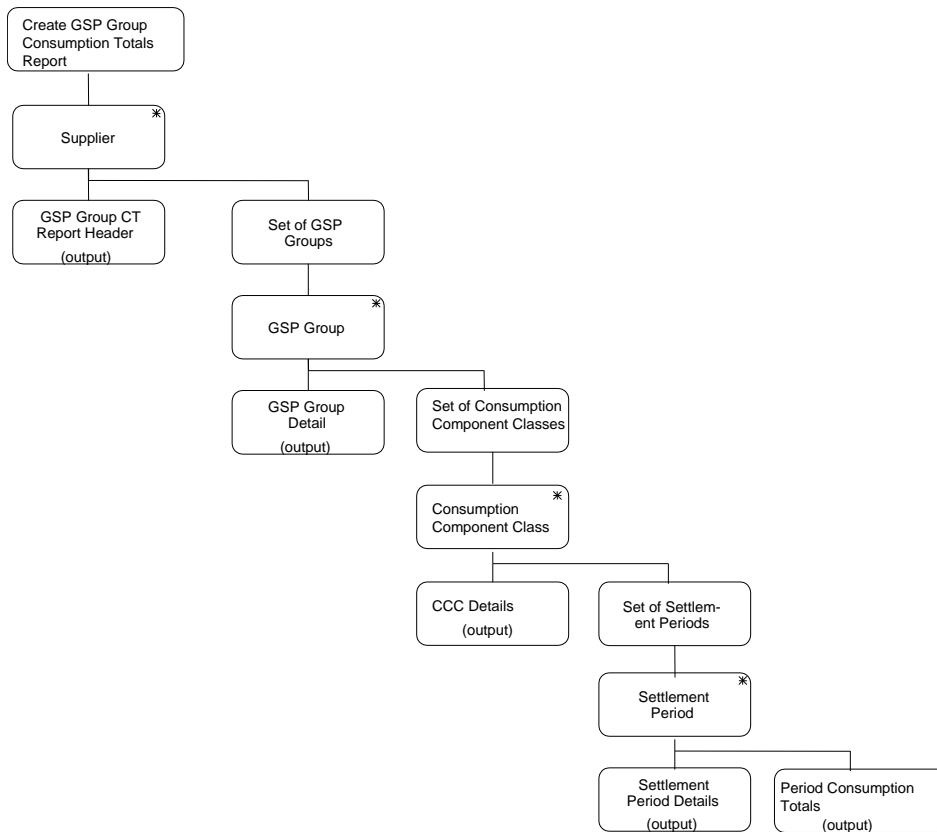


Figure 47: Produce Supplier Settlement Reports – Create GSP Group Consumption Totals Report

I/O Structure Element	Data Items
CCC Details	AA/EAC Indicator (O) Actual/Estimated Indicator (O) Consumption Component Class Id Consumption Component Indicator Data Aggregation Type GSP Group Correction Scaling Factor Measurement Quantity Id Metered/Unmetered Indicator
GSP Group CT Report Header	SSR Run Date SSR Run Number SSR Run Type Id Settlement Code Settlement Code Description Settlement Date Supplier Id Supplier Name
GSP Group Detail	GSP Group Id GSP Group Name
Period Consumption Totals	Total CCC Aggregated Supplier Consumption(O) Total CCC Aggregated Supplier Line Loss(O) Total CCC Corrected Supplier Consumption(O) Total CCC Corrected Supplier Line Loss(O) Total CCC MSID Count (O)
Settlement Period Details	Settlement Period Id Settlement Period Label

Table 53: Create GSP Group Consumption Totals Report - I/O Structure Elements

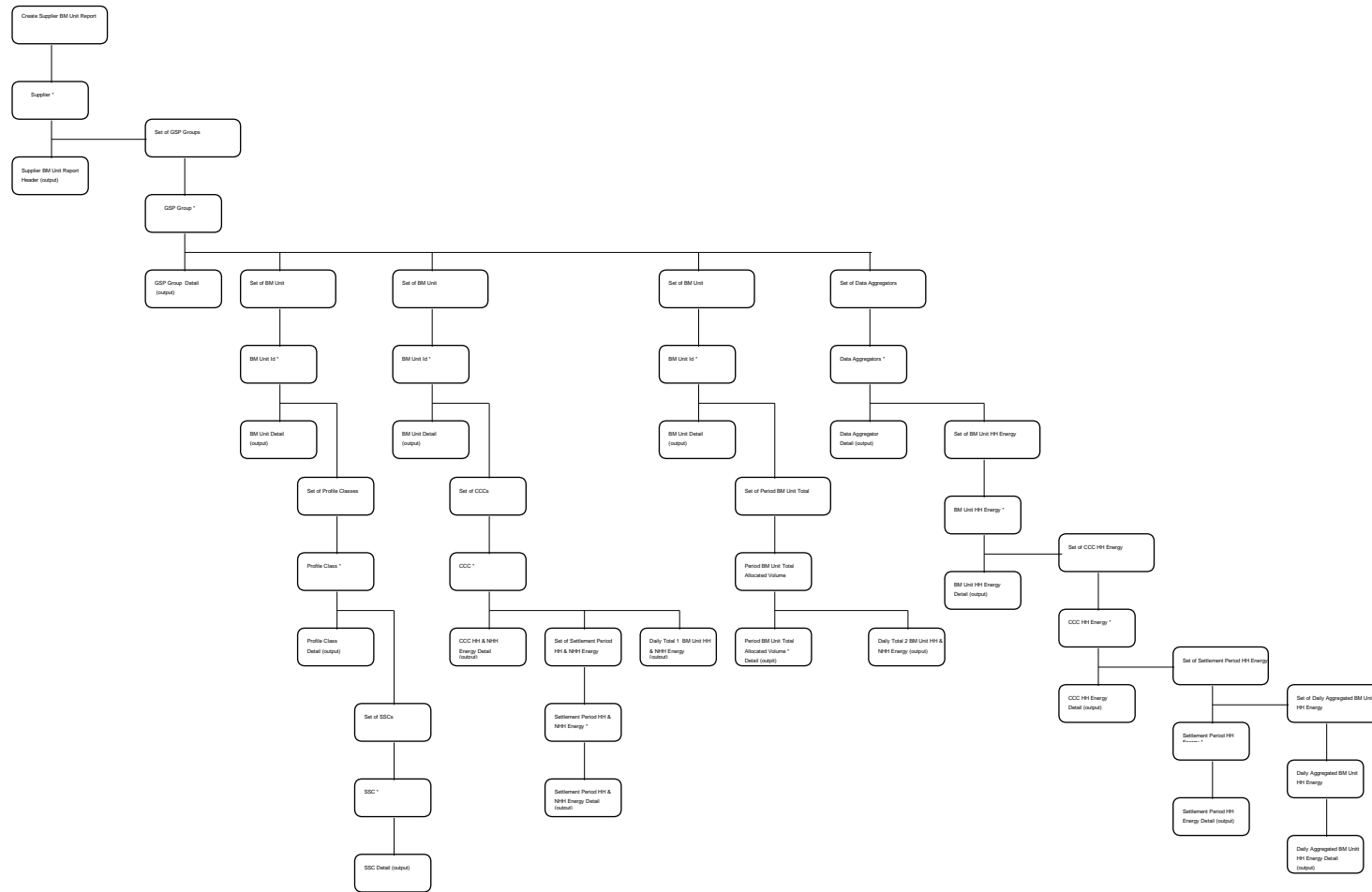


Figure 48: Produce Supplier Settlement Reports –Create Supplier BM Unit Report

I/O Structure Element	Data Items
Supplier BM Unit Report Header	Settlement Date Settlement Code Settlement Code Description SSR Run Number SSR Run Date SSR Run Type Id Supplier Id Supplier Name
GSP Group Detail	GSP Group Id GSP Group Name
BM Unit Detail	BM Unit Id Default BM Unit Flag
Profile Class Detail	Profile Class Id
Standard Settlement Configuration Detail	Standard Settlement Configuration Id
CCC HH and NHH Energy Detail	Consumption Component Class Id GSP Group Correction Scaling Factor AA/EAC Indicator (O) Actual Estimated Indicator (O) Data Aggregation Type Metered/Unmetered Indicator Consumption Component Indicator Measurement Quantity Id
Settlement Period HH and NHH Energy Detail	Settlement Period Id Settlement Period Label Aggregated BM Unit Energy (O) Aggregated BM Unit Line Losses (O) Corrected BM Unit Energy (O) Corrected BM Unit Line Losses (O)
Daily Total 1 BM Unit HH and NHH Energy Detail	Daily Aggregated BM Unit Energy (O) Daily Aggregated BM Unit Line Losses (O) Daily Corrected BM Unit Energy (O) Daily Corrected BM Unit Line Losses (O)
Period BM Unit Total Allocated Volume Detail	Settlement Period Id Settlement Period Label Uncorrected Period BM Unit Total Allocated Volume Period BM Unit Total Allocated Volume
Daily Total 2 BM Unit HH and NHH Energy Detail	Daily Uncorrected Period BM Unit Total Allocated Volume Daily Period BM Unit Total Allocated Volume
Data Aggregator Detail	Data Aggregator Id Data Aggregator Name
BM Unit HH Energy Detail	BM Unit Id supplied by HHDA (O) SSR Run BM Unit Id Default BM Unit Reason Code (O)

I/O Structure Element	Data Items
CCC HH Energy Detail	AA/EAC Indicator (O) Actual Estimated Indicator (O) Consumption Component Class Id Consumption Component Indicator Data Aggregation Type Measurement Quantity Id Metered/Unmetered Indicator
Settlement Period HH Energy Detail	Settlement Period Id Settlement Period Label Aggregated BM Unit Energy (O) Aggregated BM Unit Line Losses (O) Data Aggregator HH MSID Count
Daily Aggregated BM Unit HH Energy Detail	Daily Aggregated BM Unit Energy (O) Daily Aggregated BM Unit Line Losses (O) Daily Data Aggregator HH MSID Count

Table 54: Create Supplier BM Unit Report - I/O Structure Elements

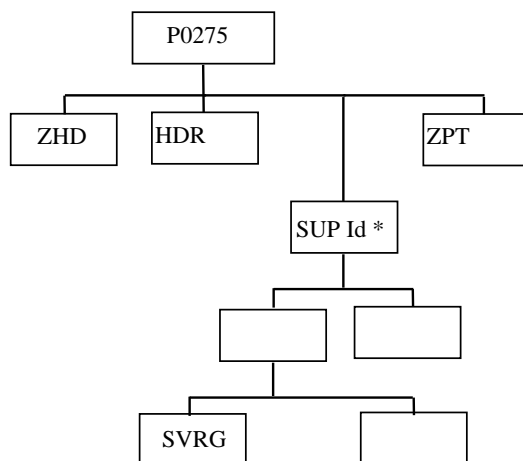


Figure 49: Produce Supplier Market Share Summary Data Report

<u>I/O Structure Element</u>	<u>Data Items</u>
<u>Report Header</u>	<u>Quarter ID</u> <u>Settlement Run from Date</u> <u>Settlement Run to date</u> <u>No of days in a quarter</u> <u>Days of data available in a Quarter</u>
<u>SUP Detail</u>	<u>Supplier ID</u> <u>SVRG ID (1-8)</u> <u>Quarterly Average Mpan count</u> <u>Quarterly volume</u>

Table 55: Create Supplier Market Share Summary Data - I/O Structure Elements

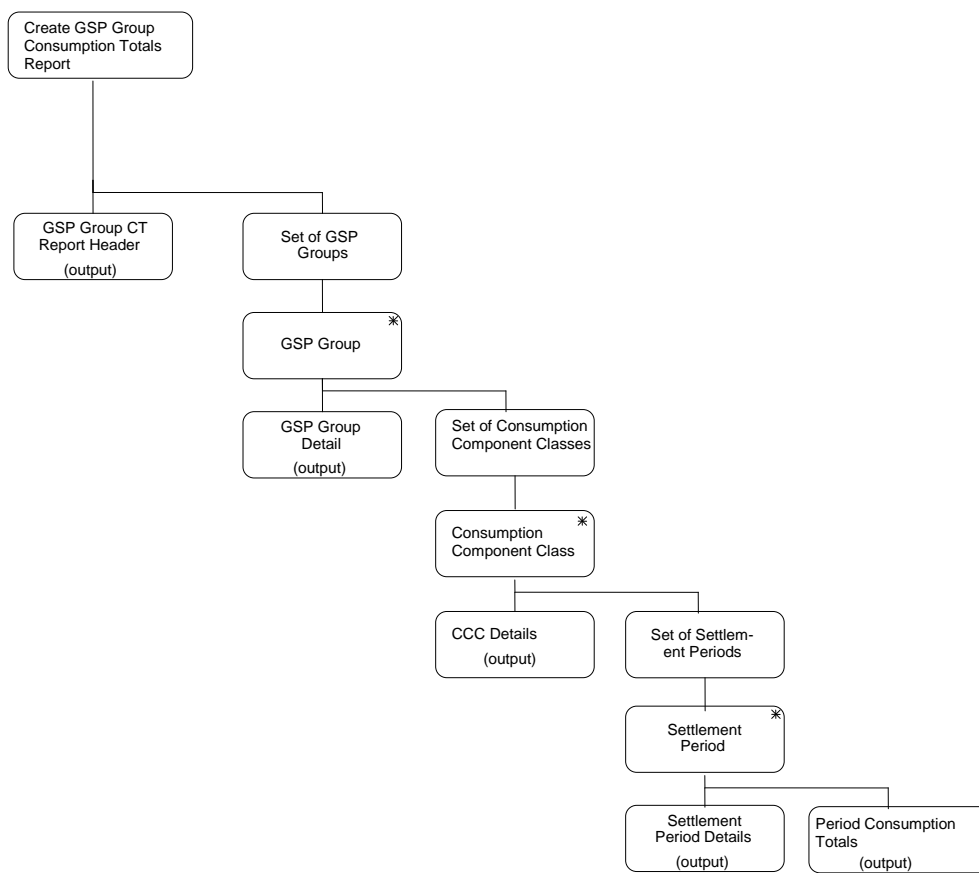


Figure 50: Produce Supplier Settlement Reports – Create GSP Group Consumption Totals Report without suppliers

<u>I/O Structure Element</u>	<u>Data Items</u>
<u>CCC Details</u>	<u>AA/EAC Indicator (O)</u> <u>Actual/Estimated Indicator (O)</u> <u>Consumption Component Class Id</u> <u>Consumption Component Indicator</u> <u>Data Aggregation Type</u> <u>GSP Group Correction Scaling Factor</u> <u>Measurement Quantity Id</u> <u>Metered/Unmetered Indicator</u>
<u>GSP Group CT Report Header</u>	<u>SSR Run Date</u> <u>SSR Run Number</u> <u>SSR Run Type Id</u> <u>Settlement Code</u> <u>Settlement Code Description</u> <u>Settlement Date</u>
<u>GSP Group Detail</u>	<u>GSP Group Id</u> <u>GSP Group Name</u>
<u>Period Consumption Totals</u>	<u>Total CCC Aggregated Supplier Consumption(O)</u> <u>Total CCC Aggregated Supplier Line Loss(O)</u> <u>Total CCC Corrected Supplier Consumption(O)</u> <u>Total CCC Corrected Supplier Line Loss(O)</u> <u>Total CCC MSID Count (O)</u>
<u>Settlement Period Details</u>	<u>Settlement Period Id</u> <u>Settlement Period Label</u>

Table 56: Create GSP Group Consumption Totals Report without suppliers - I/O Structure Elements

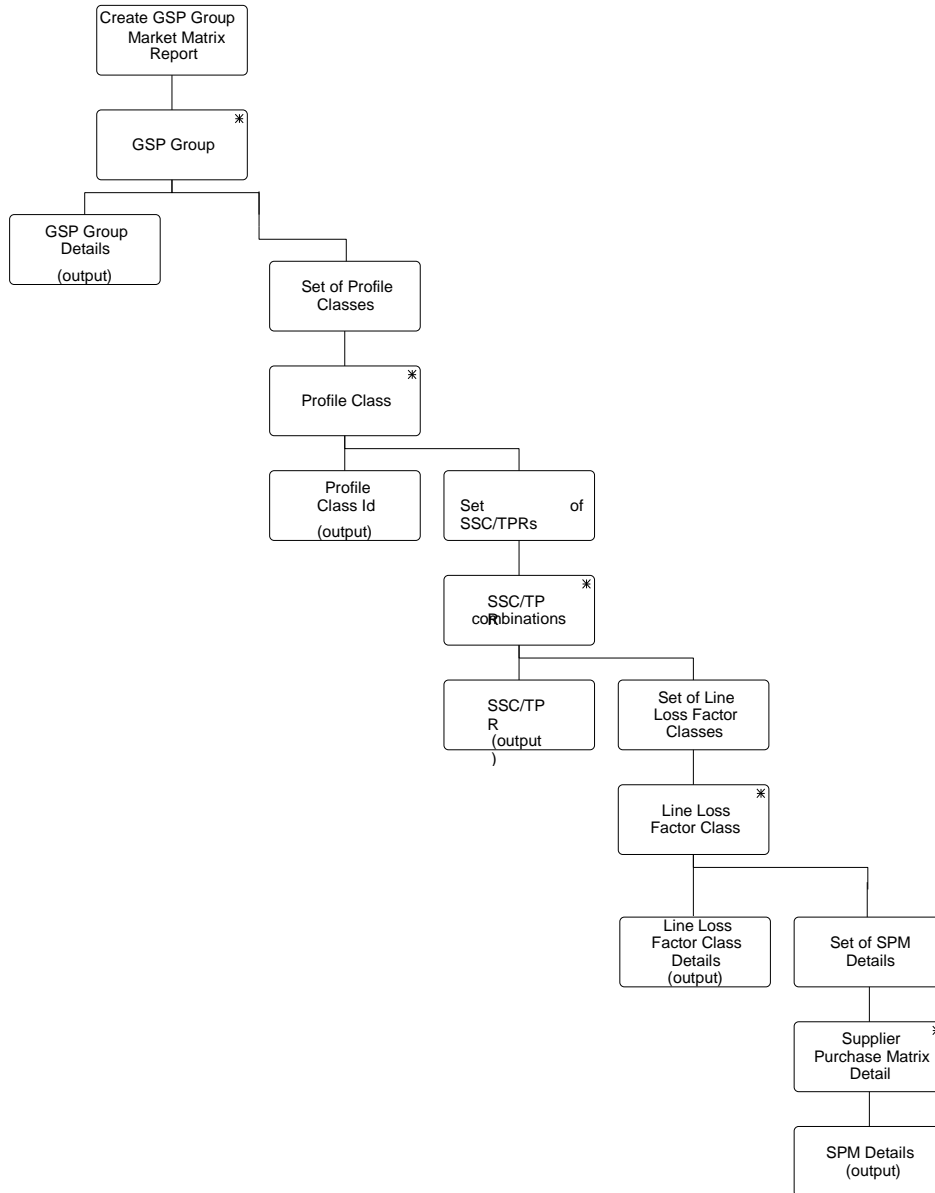


Figure 51: Produce Supplier Settlement Reports – Create Supplier Purchase Matrix Report

<u>I/O Structure Element</u>	<u>Data Items</u>
<u>GSP Group Details</u>	<u>GSP Group Id</u> <u>GSP Group Name</u>
<u>Line Loss Factor Class Details</u>	<u>Distributor Id</u> <u>Line Loss Factor Class Id</u>
<u>Profile Class Id</u>	<u>Profile Class Id</u>
<u>SPM Details</u>	<u>SPM Default EAC MSID Count</u> <u>SPM Default Unmetered MSID Count</u> <u>SPM Total AA MSID Count</u> <u>SPM Total Annualised Advance</u> <u>SPM Total EAC</u> <u>SPM Total EAC MSID Count</u> <u>SPM Total Unmetered Consumption</u> <u>SPM Total Unmetered MSID Count</u>
<u>SPM Report Header</u>	<u>SSR Run Date</u> <u>SSR Run Number</u> <u>SSR Run Type Id</u> <u>Settlement Code</u> <u>Settlement Code Description</u> <u>Settlement Date</u> <u>Supplier Id</u> <u>Supplier Name</u>
<u>SSC/TPR</u>	<u>Standard Settlement Configuration Id</u> <u>Time Pattern Regime Id</u>

Table 57: Create Supplier Purchase Matrix Report - I/O Structure Elements

3.44 I0027A Initiate Produce SSR Reports

3.44.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.44.2 Function Description

This function allows an ISRA user to manually request the SSR reports. These reports are produced automatically at the completion of each Settlement Run (see I0027B for details).

A list of reports is displayed (this list is not shown on the I/O Structure). The user selects the report types required, and specifies the SSR Run for which the reports are required. The SSR Run selection is restricted to those that have previously been performed.

3.44.3 Processing Description

This function initiates the batch production of reports described in I0027B.

3.44.4 Error Handling

None

3.44.5 Common Processing

IC006 Restrict Access

3.44.6 Volumes

It is expected that the majority of reports will be produced automatically (see I0027B for details) and that this manual method will be used occasionally.

3.44.7 Events

None

3.44.8 Event Frequency

N/A

3.44.9 Enquiries

None

3.44.10 Enquiry Frequency

N/A

3.44.11 Requirements Catalogue Ref.

4.1, 4.2, 4.5, 4.7, 5.1, 6.7.

3.44.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.44.13 I/O Structures

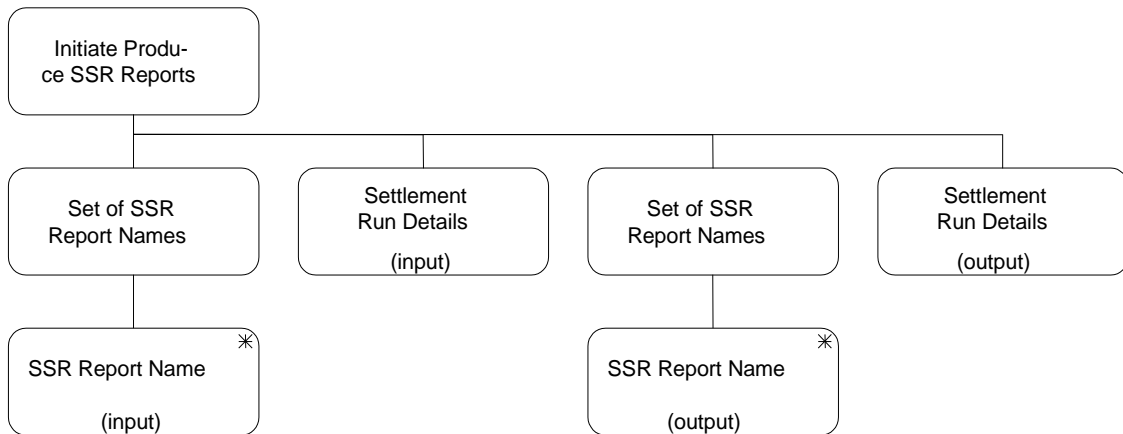


Figure 49: Initiate Produce SSR Reports

I/O Structure Element	Data Items
Settlement Run Details	Settlement Code Settlement Date SSR Run Number
SSR Report Name	SSR Report Name - This is the selected report type, not included the logical Data Model.

Table 55: Initiate Produce SSR Reports - I/O Structure Elements

3.45 I0027B Produce SSR Reports (TUoS, DUoS, BUSTEV,BUSGDD)

3.45.1 Function Type

Batch	Enquiry	System initiated
-------	---------	------------------

3.45.2 Function Description

This function allows the ISRA Agent to report on SSR data held on the ISR system.

For Settlement Days on or after the P253 implementation date, the TUoS and DUoS reports for II VAR will be produced, but not issued to BSC Parties and Supplier Agents. The BUSDEV report for the II VAR will be issued to the SAA

This function produces the following reports:

- TUoS report for TUoS. This contains details of Supplier deemed take for each half hour. To support the calculation of dispute charges, daily and period Supplier deemed take are broken down into Corrected Supplier deemed take (deemed take attributable to supplies which are subject to group correction) and Non-Corrected Supplier deemed take. The report also includes the Period BMU HH and NHH Allocated Volumes, reported for each supplier within each GSP group and also reports the corresponding daily values.
- DUoS report for the Distribution Business and Suppliers. This is a two-part report. The first part details half-hourly consumption for non-Half Hourly metering systems (i.e., the Profiled SPM values and the Total SPM values from which these are derived). The second part contains the data used in the GSP Group Correction process. Each Supplier in the GSP Group will receive a DUoS report containing data relating to the Supplier. All Distribution Businesses receive a DUoS Report relating to all active Suppliers in the GSP Groups (used in the SSR run) for which they are active. For some of these Supplier/GSP Group combinations the Distributor receiving the report may not be the appointed Distributor.
- BM Unit Supplier Take Energy Volume report for the Settlement Administration Agent. The report contains the Period BM Unit Total Allocated Volume by BM Unit for Supplier in GSP Group and Settlement Period. This report is generated and sent to the SAA only for Settlement Dates from the date that the New Electricity Trading Arrangements become effective.
- BMUnit SVA Gross Demand report for the Settlement Administration Agent. The report contains the Period BM Unit Gross Demand by BM Unit for Supplier in GSP Group and Settlement Period. This report is generated and sent to the SAA only for Settlement Dates from the date that the New Electricity Trading Arrangements become effective.

Details of the Profile Production, Data Aggregation and SSA Settlement Runs used to derive input data to the SSR Run being reported on are presented in a separate Supplier report header (see I0026B I/O structure for Create Supplier Settlement Report Header).

This function may be initiated in two independent ways:

1. Automatically following the completion of each Settlement run (i.e. up to 6 times per day)
2. By I0027A Initiate Produce SSR Reports

3.45.3 Processing Description

Reference:EPD 1.4.9.4 Produce TUoS Report

EPD 1.4.9.5 Produce DUoS Report

3.45.4 Error Handling

To be defined during Physical Design.

3.45.5 Common Processing

IC005 Create File Header

IC007 Update File Log

IC008 Create Report Header

3.45.6 Volumes

Once per Settlement run (on average 6 times per day).

3.45.7 Events

None

3.45.8 Event Frequency

N/A

3.45.9 Enquiries

TUoS Report Requested

DUoS Report Requested

BM Unit Supplier Take Energy Volume Data Report Requested

BMUnit SVA Gross Demand Report Requested

3.45.10 Enquiry Frequency

1

3.45.11 Requirements Catalogue Ref.

4.1, 4.2, 4.5, 4.7, 5.1, 6.7, 7.25

The requirement for a TUoS Report with consumption values split into corrected and non-corrected parts (CR515) is stated in the ITT for TA2000 ISRA Package 1.

3.45.12 User Roles

None

3.45.13 I/O Structures

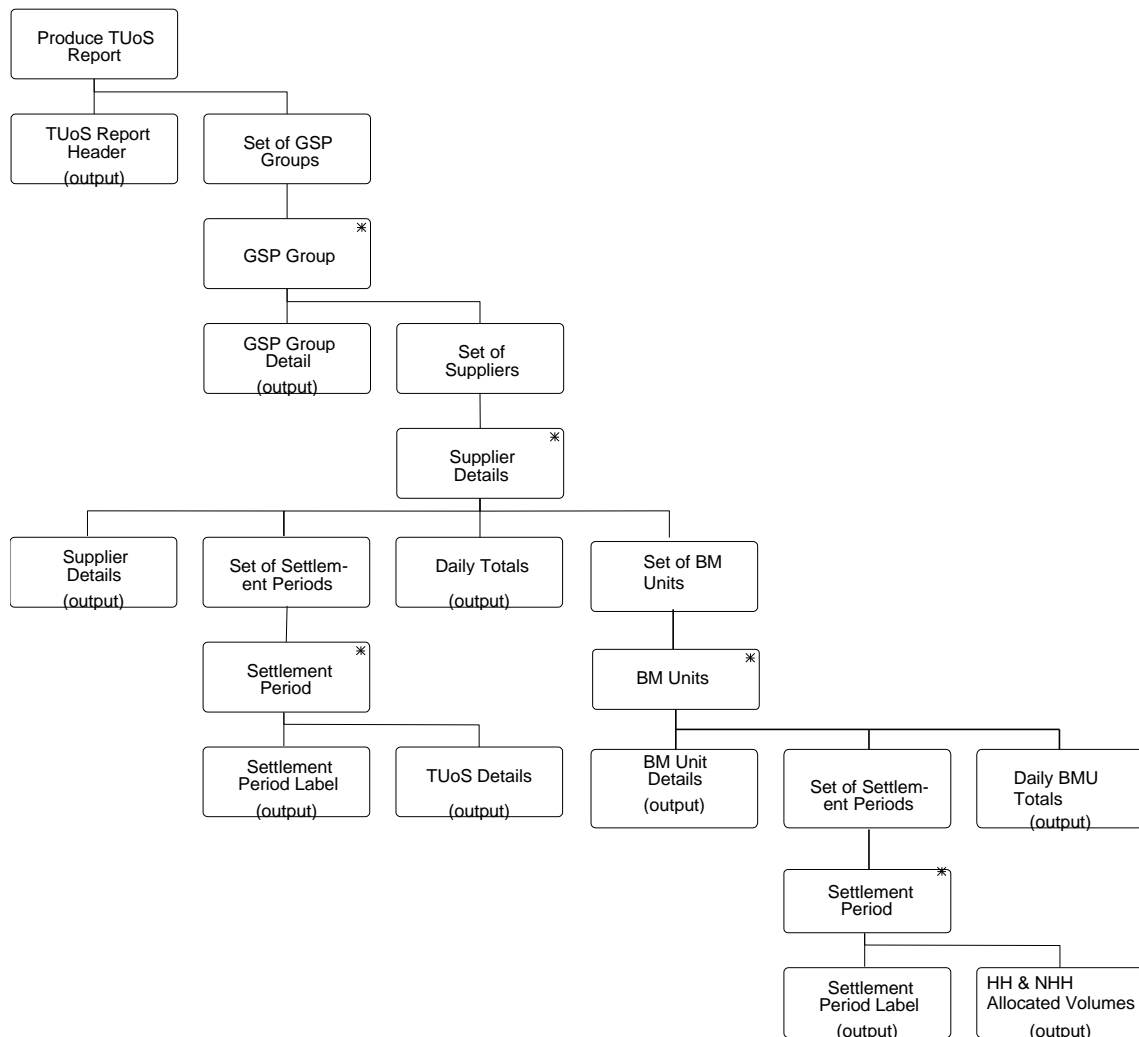


Figure 50: Produce SSR Reports - TUoS

I/O Structure Element	Data Items
BM Unit Details	BM Unit Id Default Flag
Daily BMU Totals	HH Allocated Volume NHH Allocated Volume
Daily Totals	Daily GSP Group Take Daily Supplier Deemed Take Daily Corrected Supplier Deemed Take Daily Non-corrected Supplier Deemed Take
GSP Group Detail	GSP Group Id GSP Group Name
HH & NHH Allocated Volumes	HH Allocated Volume NHH Allocated Volume
Settlement Period Label	Settlement Period Id

I/O Structure Element	Data Items
	Settlement Period Label
Supplier Details	Supplier Id Supplier Name
TUoS Details	GSP Group Take Period Supplier Deemed Take Period Corrected Supplier Deemed Take Period Non-corrected Supplier Deemed Take
TUoS Report Header	SSR Run Date SSR Run Number SSR Run Type Id Settlement Code Settlement Code Description Settlement Date

Table 56: Produce SSR Reports - TUoS - I/O Structure Elements

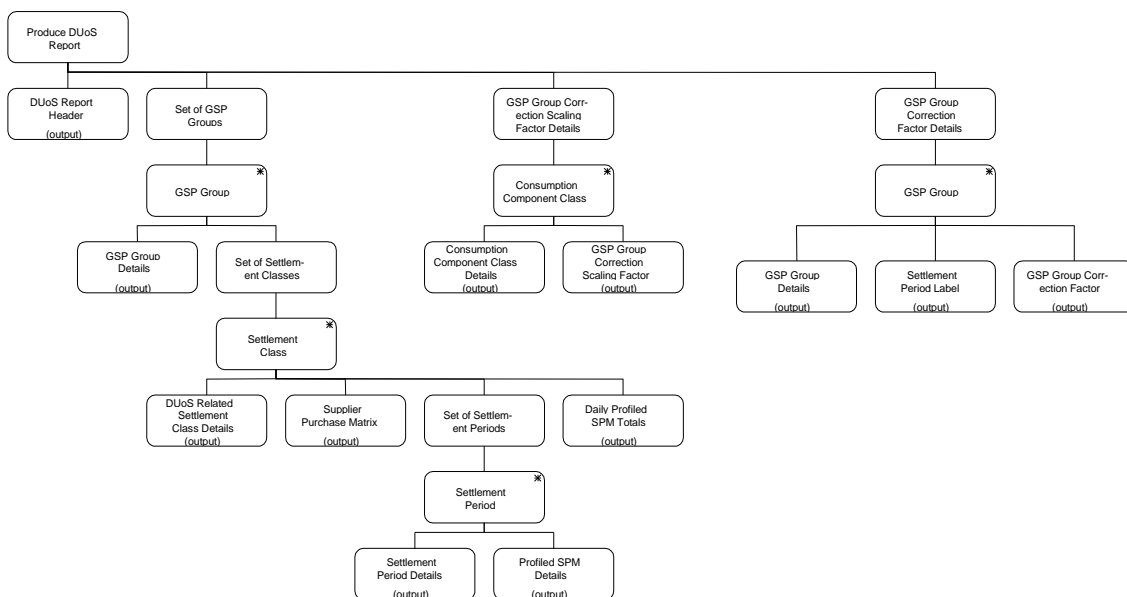


Figure 51: Produce SSR Reports - DUoS

I/O Structure Element	Data Items
Consumption Component Class Details	AA/EAC Indicator Actual/Estimated Indicator Consumption Component Class Id Consumption Component Indicator Data Aggregation Type Measurement Quantity Id Metered/Unmetered Indicator
Daily Profiled SPM Totals	Daily Profiled SPM Total Actual Consumption Daily Profiled SPM Total Estimated Consumption
DUoS Report Header	Distributor Id Distributor Name Pool Member Id Settlement Code Settlement Code Description Settlement Date SSR Run Date SSR Run Number SSR Run Type Id Supplier Id Supplier Name
GSP Group Correction Factor	GSP Group Correction Factor
GSP Group Correction Scaling Factor	GSP Group Correction Scaling Factor
GSP Group Details	GSP Group Id GSP Group Name
DUoS Related Settlement Class Details	Distributor Id Line Loss Factor Class Id Profile Class Id Standard Settlement Configuration Id Time Pattern Regime Id
Profiled SPM Details	Profiled Supplier Purchase Total
Settlement Period Details	Settlement Period Id
Settlement Period Label	Settlement Period Id Settlement Period Label
Supplier Purchase Matrix	SPM Default Estimated MSID Count SPM Total AA MSID Count SPM Total Estimated Consumption SPM Total Annualised Advance SPM Total Estimated MSID Count

Table 57: Produce SSR Reports - DUoS - I/O Structure Elements

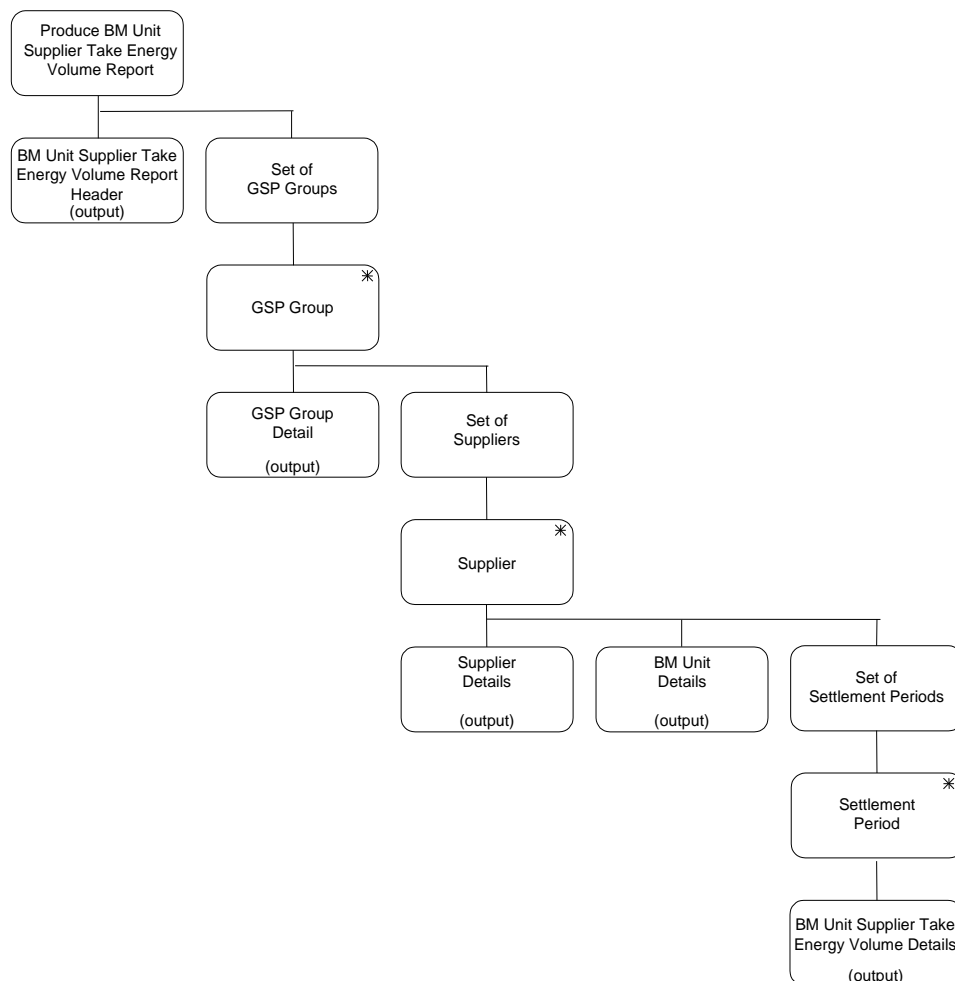


Figure 52: Produce SSR Reports - BUSTEV

I/O Structure Element	Data Items
BM Unit Details	BM Unit Id
BM Unit Supplier Take Energy Volume Details	Settlement Period Id Period BM Unit Total Allocated Volume
BM Unit Supplier Take Energy VolumeReport Header	SSR Run Date CDCA Set Number CDCA Settlement Date
GSP Group Detail	GSP Group Id
Supplier Details	Supplier Id

Table 58: Produce SSR Reports - BUSTEV - I/O Structure Elements

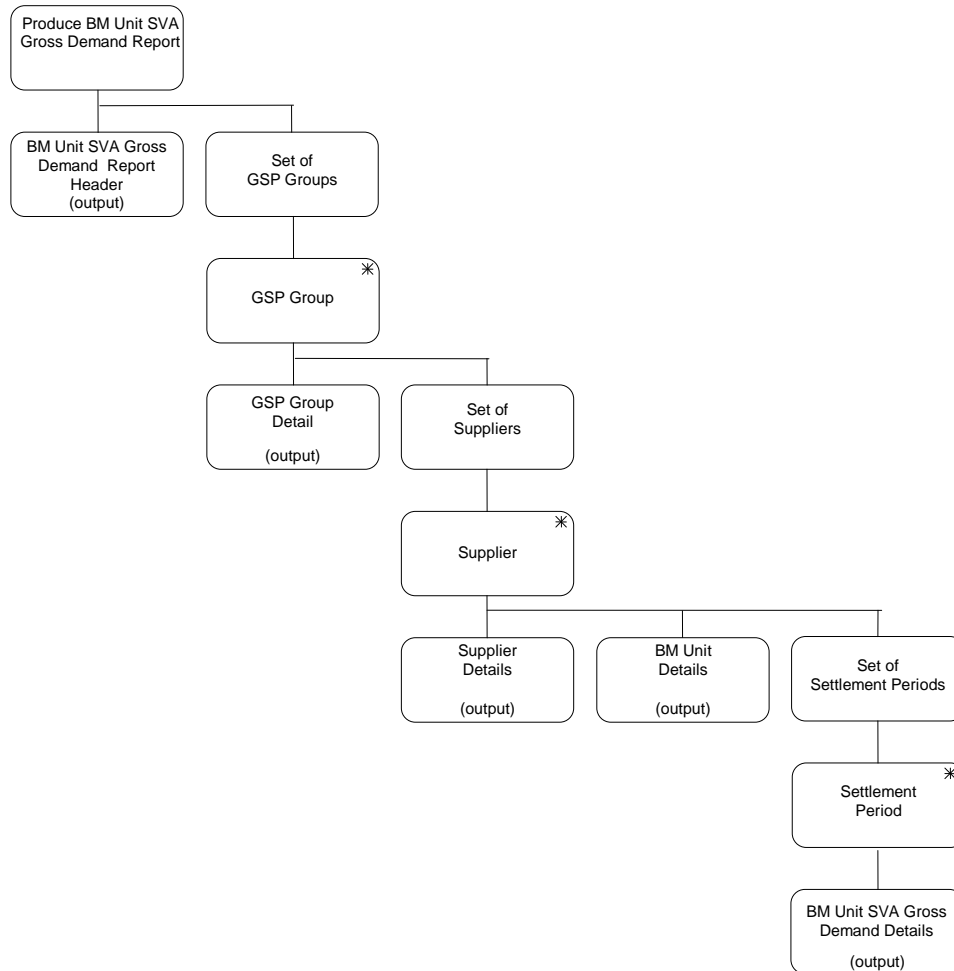


Figure 53: Produce SSR Reports - BUSGDD

I/O Structure Element	Data Items
BM Unit Details	BM Unit Id
BM Unit SVA Gross Demand Details	Settlement Period Id Period BM Unit Total Allocated Volume
BM Unit SVA Gross Demand Report Header	SSR Run Date CDCA Set Number CDCA Settlement Date
GSP Group Detail	GSP Group Id
Supplier Details	Supplier Id

Table 59: Produce SSR Reports - BUSGDD - I/O Structure Elements

3.46 I0028A Initiate Load Tele-switch Contact Switching Times

3.46.1 Function Type

On-Line	Update	User initiated
---------	--------	----------------

3.46.2 **Function Description**

This function allows one or more files of Tele-switch Contact Switching Times to be loaded into the ISRA application.

The user is presented with a list of Tele-switch Switching Times files which are available for loading. The list consists of files that have not been loaded into the database and those that have failed during a previous attempted load.

Details of the data file header are displayed to enable the user to correctly identify versions of the files available for loading. The user selects the files required for loading into the database.

The user selects the files required for loading into the database.

3.46.3 **Processing Description**

This function initiates the batch load described in I0028B

3.46.4 **Error Handling**

See Error handling section for function I0028B.

3.46.5 **Common Processing**

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.46.6 **Volumes**

It is expected that the majority of files will be loaded automatically (see I0028B for details). This manual method of loading the files is a backup for I0028B and as such will be used only occasionally.

3.46.7 **Events**

None

3.46.8 **Event Frequency**

N/A

3.46.9 **Enquiries**

None

3.46.10 **Enquiry Frequency**

N/A

3.46.11 **Requirements Catalogue Ref.**

2.10, 2.11, 2.8, 5.1, 5.8

3.46.12 **User Roles**

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data manager.

3.46.13 I/O Structures

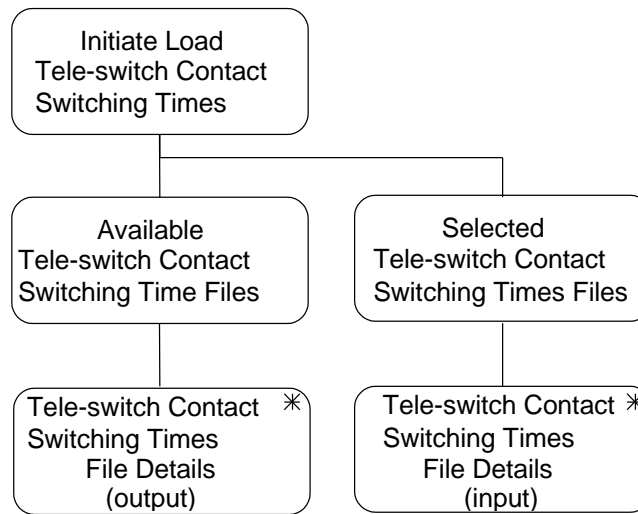


Figure 54: Initiate Load Tele-switch Contact Switching Times

I/O Structure Element	Data Items
Tele-switch Contact Switching Times File Details	File Creation Timestamp Market Participant Id Market Participant Name

Table 60: Initiate Load Tele-switch Contact Switching Times - I/O Structure Elements

3.47 I0028B Load Tele-switch Contact Switching Times

3.47.1 Function Type

Batch	Update	System initiated
-------	--------	------------------

3.47.2 Function Description

This function loads files containing Tele-switch Contact Switching Times into the ISRA application.

This function may be initiated in one of two ways:

1. Automatically by the presence of files to be loaded on the system
2. By I0028A Initiate Load Contact Switching Times

3.47.3 Processing Description

Reference: EPD 2.2.6 Receive Tele-switch Messages

See Event Description

3.47.4 Error Handling

See Event Description

3.47.5 Common Processing

IC002 Batch Audit

IC003	Authorise & Produce Standing Data Audit Report
IC004	Check File Header
IC007	Update File Log
IC009	Report Exception

3.47.6 Volumes

One per settlement day.

3.47.7 Events

Tele-switch Switching Times available

3.47.8 Event Frequency

1

3.47.9 Enquiries

None

3.47.10 Enquiry Frequency

N/A

3.47.11 Requirements Catalogue Ref.

2.10, 2.11, 2.8, 5.1, 5.8

3.47.12 User Roles

None

3.47.13 I/O Structures

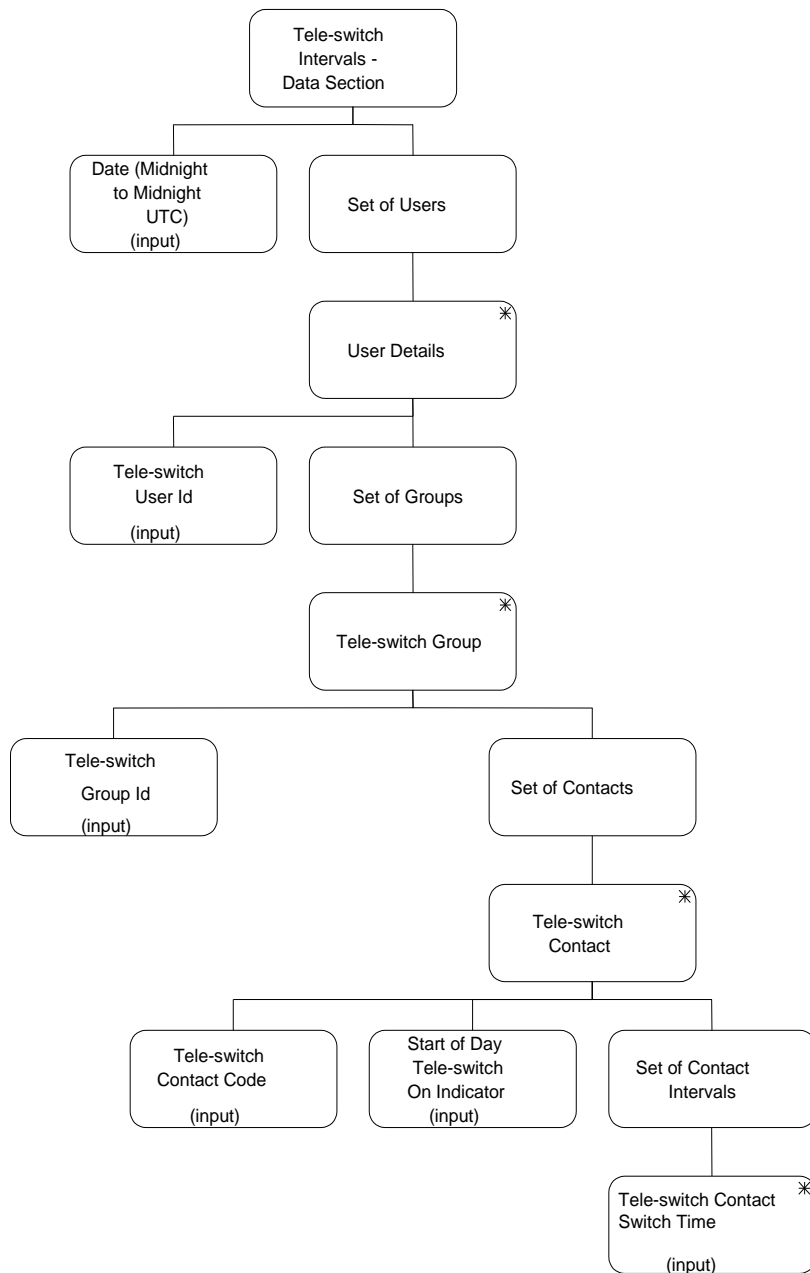


Figure 55: Load Tele-switch Contact Switching Times

I/O Structure Element	Data Items
Date (Midnight to Midnight UTC)	Tele-switch Date
Tele-switch User Id	Tele-switch User Id
Tele-switch Group Id	Tele-switch Group Id
Tele-switch Contact Code	Tele-switch Contact Code
Start of Day Tele-switch On Indicator	Tele-switch Contact State
Tele-switch Contact Switch Time	Tele-switch Effective Time Tele-switch Contact State

Table 61: Load Tele-switch Contact Switching Times - I/O Structure Elements

3.48 I0029 Run SSR

3.48.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.48.2 Function Description

For settlement dates before P253 implementation this function allows an operator to trigger an SSR run for a Settlementrun for a given Settlement Day for all GSP Groups in which the ISR Agent is active or a selected subset of these GSP Groups.

The operator enters the Settlement Day required, the system responds with the Settlement Code for the next run for that day for confirmation. This run is selected by finding the Settlement Code of the last successfully completed SSR Run for the Settlement Date and then selecting the next run from the Settlement Calendar in Planned Run Date order. The user can override the default Settlement Code if required. If the specified run is not scheduled for the current day, a warning will be indicated to the user, from which the user may choose to continue or terminate the current operation.

The user selects which GSP Groups are required from a list. For Settlement Dates prior to the BETTA Start Date, the list comprises English and Welsh GSP Groups only. For Settlement Dates on or after the BETTA Start Date, the list comprises English, Welsh and Scottish GSP Groups. The default is that all GSP Groups in the list are selected. The SSR Run Type is defaulted to the Settlement Code value but the user can amend if required.

Once the user selects to proceed with the initiation, the function then validates that all the required data is available as described in the event description. If any of the Aggregation files are not available then the user must specify the defaults to be used for each missing NHH Data Aggregator/GSP combination and they can also specify defaults for HH Data Aggregator/ GSP combination.

For Final Dispute Settlement runs ONLY, missing file details are automatically selected/populated using data used in the previous Final Reconciliation Settlement Run. The user can override this and manually specify the use of previous Data Aggregator files for the missing records, unless the runs have a matching instance in the Final Dispute Expected Data Aggregation entity.

For all runs other than Final Dispute, the user is given a list of all missing aggregation files, for which they must specify a substitution file. This can be done in one of three ways; enter the value of the Data Aggregation Run No for a file which has been received from the Data Aggregator, or enter the Settlement Date and Settlement Code for a file which has been received from the Data Aggregator, or select from a list of values (not represented in the I/O structure).

The list shows files received from the Data Aggregator in descending chronological Settlement Date, ascending Settlement Code order and descending Data Aggregation Run Number order. The selection list is limited to RF settlement run files for DF settlement runs, and to files with the same Settlement Date for settlement runs of R1 and above.

If there is no SSA/CDCA Settlement data for the Settlement Date then the user can choose a SSA/CDCA Settlement Run from a different Settlement Date. If there is a complete valid set of SSA/CDCA Settlement data for the Settlement Date then the SSA/CDCA run details are displayed for confirmation by the user. The user can change the SSA/CDCA Settlement Run details if necessary. If the latest SSA/CDCA Settlement Run data is invalid or consists of an incomplete set then a message is displayed to the user. The user must specify a different SSA/CDCA Settlement Run to use. The SSR Run uses SSA data for Settlement Days before the NETA Start Date and CDCA data for Settlement Days on or after the NETA Start Date. The user is warned if an SSR Run for the same Settlement Date and Settlement Code has already been carried out.

After the validation is completed, the run is initiated and will be processed in batch mode as described in the event description.

Once completed, the function I0027B will be invoked to produce reports on the results of the run.

3.48.3 Processing Description

See Event Description

3.48.4 Error Handling

See Event Description

3.48.5 Common Processing

IC002 Batch Audit

IC006 Restrict Access

IC009 Report Exception

3.48.6 Volumes

Normally five per Settlement Day, max of 25 per Settlement Day

3.48.7 Events

SSR Run Event

3.48.8 Event Frequency

1

3.48.9 Enquiries

None

3.48.10 Enquiry Frequency

N/A

3.48.11 Requirements Catalogue Ref.

1.10, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.2, 1.3, 1.4, 1.6, 1.7, 1.8, 1.9, 5.1, 6.10, 8.1, 8.15, 8.2, 8.21, 8.4, 8.5

Change Requests: 38 (LCR018), 58 (LCR002), 63 (LCR012), 94 (LCR024)

Clarifications: CLAR020, CLAR039, CLAR041

3.48.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.48.13 I/O Structures

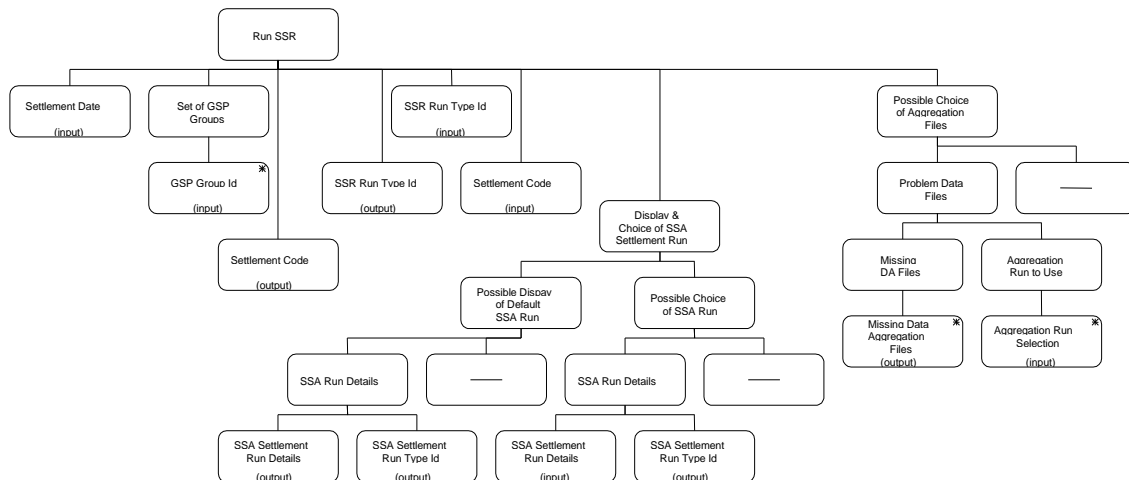


Figure 56: Run SSR

I/O Structure Element	Data Items
Aggregation Run Selection	Data Aggregation Run Number Settlement Code Settlement Date
GSP Group Id	GSP Group Id
Missing Data Aggregation Files	Data Aggregation Type Data Aggregator Id Data Aggregator Name GSP Group Id GSP Group Name
Settlement Code	Settlement Code
Settlement Date	Settlement Date
SSA Settlement Run Details	SSA Settlement Date SSA Settlement Run Number
SSA Settlement Run Type Id	SSA Settlement Run Type Id
SSR Run Type Id	SSR Run Type Id

Table 62: Run SSR - I/O Structure Elements

3.49 I0030 Define Settlement Calendar**3.49.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.49.2 Function Description

This function is invoked by an ISRA user and enables the Settlement Calendar to be browsed and maintained.

For input, the user inputs a Settlement Date and then enters a number of Settlement Codes with associated Payment Dates and Planned SSR Run Dates indicating when SSR Runs are planned to take place. The Planned SSR Run Date is defaulted to the Payment Date but can be amended to an earlier date.

For update, the user enters a Settlement Date for which run schedule information has been entered. The Settlements proposed for this Settlement Date are displayed along with an indication of whether an SSR Run has been done for the Settlement. The user will be able to make changes to Settlements provided that:

1. The SSR Run has not been performed and
2. SSA Data not been loaded for that Settlement Date (this condition does not apply to DF runs)

The Planned SSR Run Date or the Payment Date can be changed.

For deletion, the user enters a Settlement Date for which run schedule information has been entered. The Settlements for this date are displayed and the user can then delete Settlements for the Settlement Date provided that the update conditions 1. and 2. above are met, and also;

3. Half Hourly Aggregator Data has not been loaded for the Settlement Date (this condition does not apply for deleting DF runs)

3.49.3 Processing Description

Reference: EPD 1.3.7 - Maintain Settlement Timetable

See Event Descriptions

3.49.4 Error Handling

See Event Descriptions

3.49.5 Common Processing

IC001 Update On-line Audit Log

IC006 Restrict Access

3.49.6 Volumes

Expected volume of Settlement Calendar entry: once per year. There may also be an indeterminate number of ad hoc changes.

Each Settlement Day will be linked up to 6 runs (one day for each Settlement Code).

3.49.7 Events

Settlement Deleted, Settlement Entered, Settlement Updated

3.49.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the Settlement events (Create, Update, Delete) and enquiry (Browse Settlements Calendar) sum to one.

3.49.9 Enquiries

Browse Settlements Calendar

3.49.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the Settlement events (Create, Update, Delete) and enquiry (Browse Settlements Calendar) sum to one.

3.49.11 Requirements Catalogue Ref.

1.4, 2.13, 5.1, 5.3, 6.15, 6.21, 8.11, 8.16, 8.17

3.49.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.49.13 I/O Structures

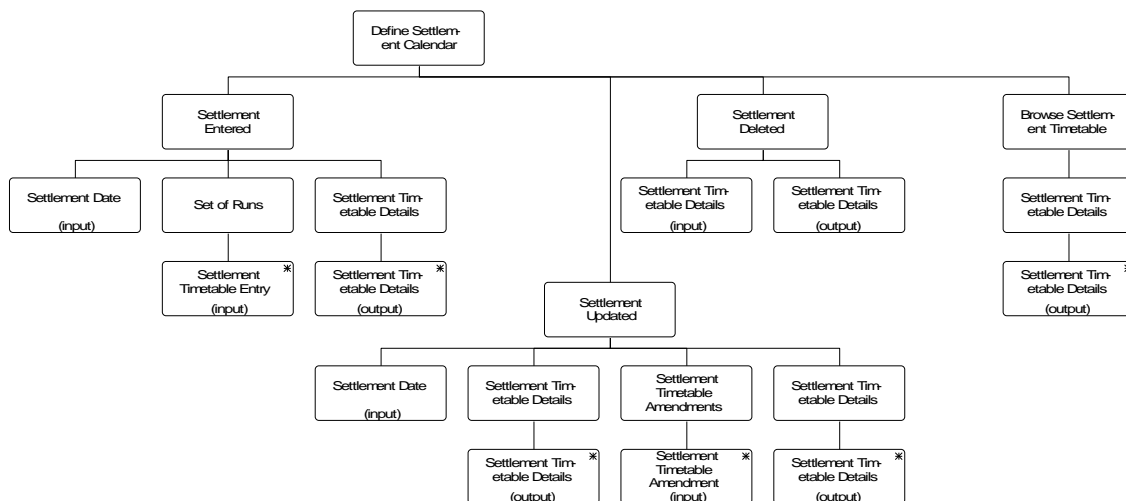


Figure 57: Define Settlement Calendar

I/O Structure Element	Data Items
Planned SSR Run Date	Planned SSR Run Date
Settlement Date	Settlement Date
Settlement Timetable Amendment	Payment Date Planned SSR Run Date
Settlement Timetable Details	Payment Date Planned SSR Run Date Completed Run Indicator Settlement Code
Settlement Timetable Entry	Payment Date Planned SSR Run Date Settlement Code

Table 63: Define Settlement Calendar - I/O Structure Elements

3.50 I0030E Browse Settlement Calendar

3.50.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.50.2 Function Description

This function is invoked by an ISRA user to browse the Settlement Calendar to obtain information on what SSR Runs are planned for which calendar dates.

The operator enters a date or range of dates (Planned SSR Run dates). Information on the runs planned for dates in this range is displayed, consisting of Settlement Dates and Settlement types (Settlement Codes).

3.50.3 Processing Description

Browse the Settlements Calendar to see the dates on which SSR Runs are planned to take place.

3.50.4 Error Handling

n/a

3.50.5 Common Processing

IC006 Restrict Access

3.50.6 Volumes

An indeterminate number of dates with their respective SSR Runs will be browsed on an ad-hoc basis

3.50.7 Events

None

3.50.8 Event Frequency

n/a

3.50.9 Enquiries

Browse Settlements Calendar

3.50.10 Enquiry Frequency

The enquiry frequency for each invocation of this function is one

3.50.11 Requirements Catalogue Ref.

6.19

3.50.12 User Roles

ISRA Operator

3.50.13 I/O Structures

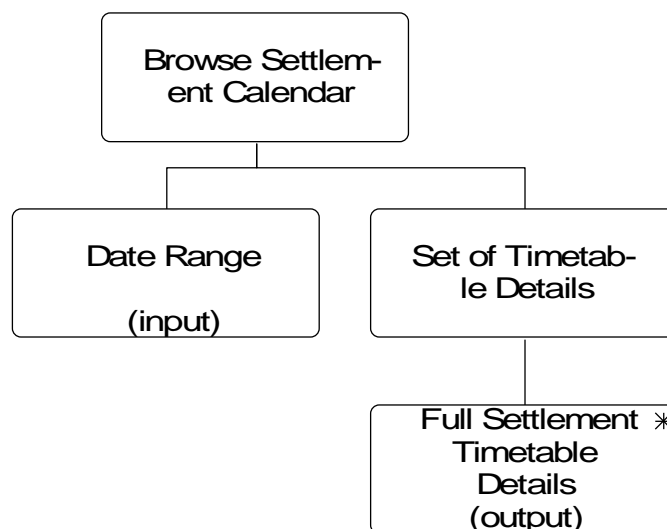


Figure 58: Browse Settlement Calendar

I/O Structure Element	Data Items
Date Range	Start Date End Date
Full Settlement Timetable Details	Completed Run Indicator Payment Date Planned SSR Run Date Settlement Code Settlement Date

Table 64: Browse Settlement Calendar - I/O Structure Elements

3.51 I0031 Define Standard Settlement Configurations and Assign Time Patterns

3.51.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.51.2 Function Description

This function is invoked by an ISRA user to allow a set of Standard Settlement Configurations and their associated Measurement Requirements to be browsed and maintained.

A list of existing Standard Settlement Configurations can be displayed (this list is not shown in the I/O Structure, and should not be confused with the 'Browse SSC' branch of the I/O Structure). The User either selects one of them to amend, delete or browse, or enters a new one. If the User enters an existing Standard Settlement Configuration Id, the Standard Settlement Configuration Id and Standard Settlement Configuration Description are displayed, together with the Tele-switch Group Id and Tele-switch User Id (for tele-switched SSCs), Standard Settlement Configuration Type and any associated Time Pattern Regimes.

For creation, Standard Settlement Configuration Id, Standard Settlement Configuration Description and Standard Settlement Type must be entered and optionally Measurement Requirements can also be specified. Standard Settlement Type will default to I(mport) but can be changed to E(xport), and Tele-Switch Group Id and Tele-Switch User Id must be entered for Tele-switched SSC configurations. (NOTE: It is the existence of these two values that define a SSC as Tele-switched; either both must be entered or neither must be entered). Measurement Requirements are created either by entering an existing Time Pattern Regime Id or by selection. For Tele-switched SSCs, the tele-switch group and user of the Time Pattern Regime must match that of the SSC.

For amendment, the User amends the Standard Settlement Configuration Description if required, and can also create or delete Measurement Requirements for the Standard Settlement Configuration. Standard Settlement Type can only be amended to either of its valid values of E(xport) or I(mport). Tele-switch Group Id and Tele-switch User Id can only be amended if there are no linked Time Pattern Regimes with the same Group and User combination. No amendment of Tele-switch Group Id and Tele-switch User Id is allowed if a measurement requirement exists linking the SSC to a TPR as this would violate the constraint that a linked pair must have the same Tele-switch Group Id and Tele-switch User Id.

For deletion, the User can delete the Standard Settlement Configuration once all of its associated Measurement Requirements have been deleted.

3.51.3 Processing Description

Reference: EPD 2.2.1 - Enter Settlement Configurations

2.2.3 - Assign Time Patterns to Configurations

See Event Descriptions

3.51.4 Error Handling

See Event Descriptions

3.51.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.51.6 Volumes

Occasional (this manual process is a backup for an off-line load process).

An indeterminate number of Standard Settlement Configurations and Measurement Requirements will be browsed on an ad hoc basis.

3.51.7 Events

Standard Settlement Configuration Deleted,
Standard Settlement Configuration Entered,
Standard Settlement Configuration Updated,
Time Pattern Assigned to Standard Sett Config,
Time Pattern Deassigned From Standard Sett Config.

3.51.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Standard Settlement Configuration events (entered, updated, deleted), the two Measurement Requirement events (assigned, deassigned) and the enquiry is 1.

3.51.9 Enquiries

Browse SSC & Measurement Requirements

3.51.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Standard Settlement Configuration events (entered, updated, deleted), the two Measurement Requirement events (assigned, deassigned) and the enquiry is 1.

3.51.11 Requirements Catalogue Ref.

2.7, 5.1, 5.15, 5.3

3.51.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.51.13 I/O Structures

The I/O Structure is split between three diagrams as follows:

I0031_01 Define SSCs and Assign Time Pattern Regimes

I0031_02 Browse Standard Settlement Configuration

I0031_03 Update Standard Settlement Configuration

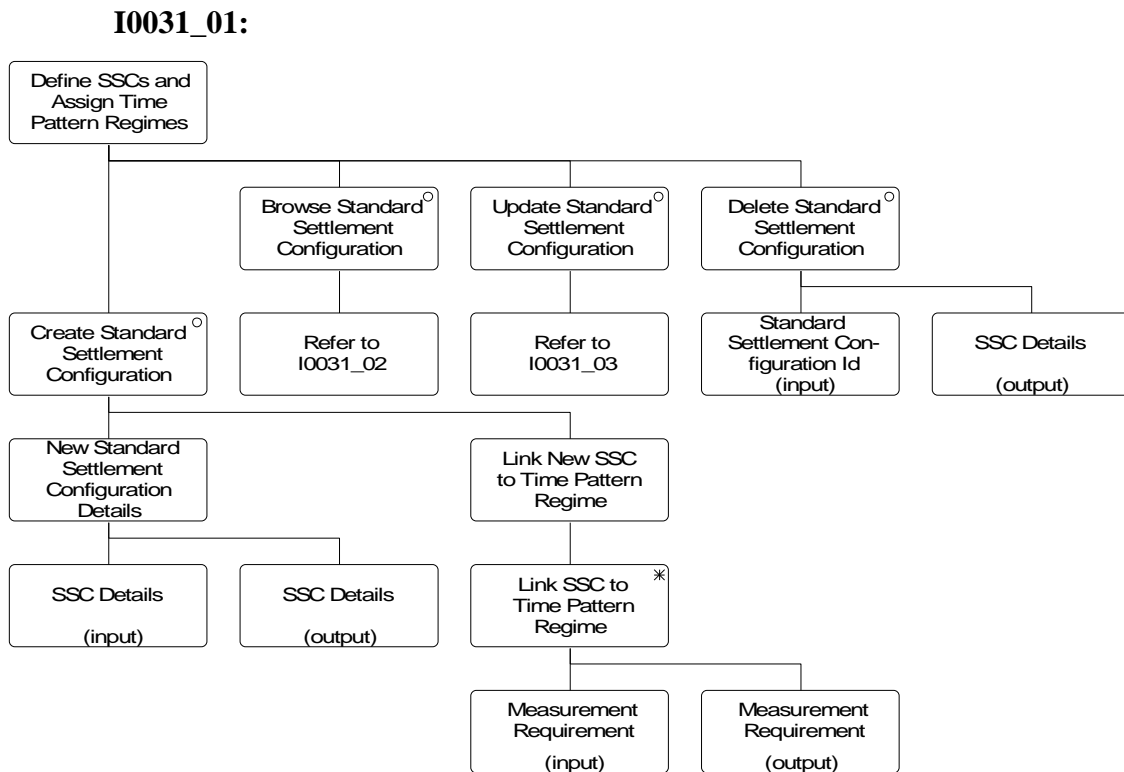


Figure 59: I0031_01 Define SSCs and Assign Time Pattern Regimes

I/O Structure Element	Data Items
Measurement Requirement	Time Pattern Regime Id
SSC Details	Standard Settlement Configuration Desc Standard Settlement Configuration Id Standard Settlement Configuration Type Tele-switch User Id (O) Tele-switch Group Id (O)
Standard Settlement Configuration Id	Standard Settlement Configuration Id

Table 65: Define SSCs and Assign Time Pattern Regimes - I/O Structure Elements

I0031_02:

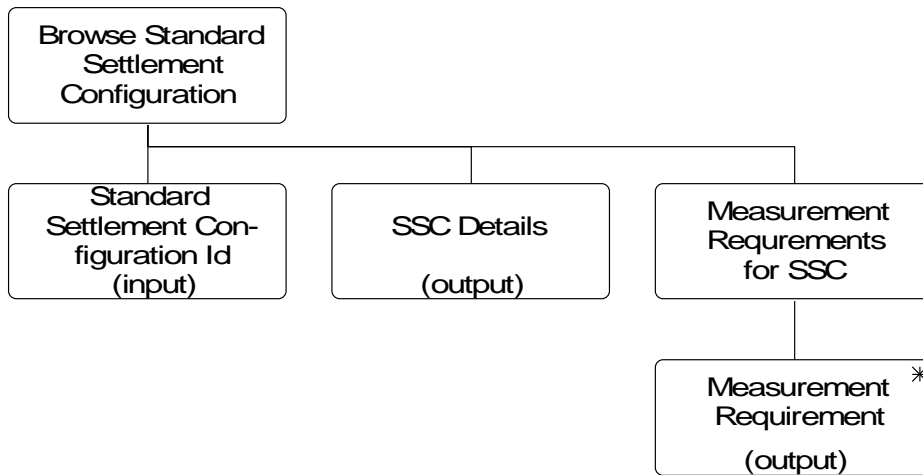


Figure 60: I0031_02 Browse Standard Settlement Configuration

I/O Structure Element	Data Items
Measurement Requirement	Time Pattern Regime Id
SSC Details	Standard Settlement Configuration Desc Standard Settlement Configuration Id Standard Settlement Configuration Type Tele-switch User Id (O) Tele-switch Group Id (O)
Standard Settlement Configuration Id	Standard Settlement Configuration Id

Table 66: Browse Standard Settlement Configuration - I/O Structure Elements

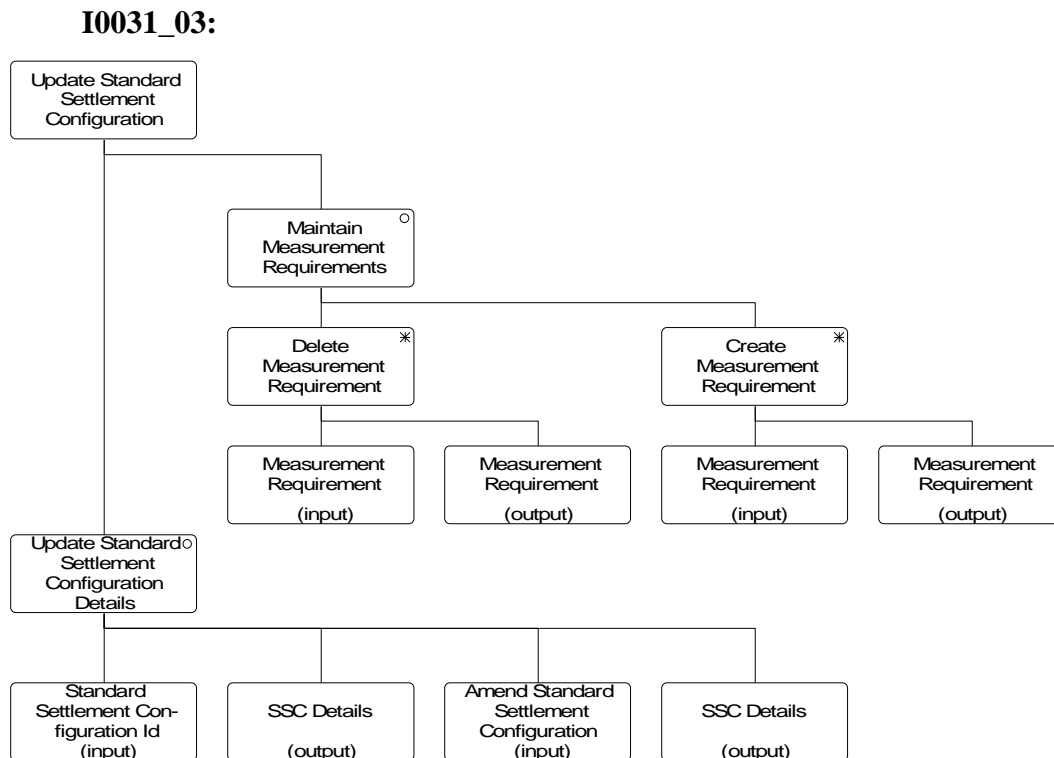


Figure 61: I0031_03 Update Standard Settlement Configuration

I/O Structure Element	Data Items
Amend Standard Settlement Configuration	Standard Settlement Configuration Desc Tele-switch User Id (O) Tele-switch Group Id (O)
Measurement Requirement	Time Pattern Regime Id
SSC Details	Standard Settlement Configuration Desc Standard Settlement Configuration Id Standard Settlement Configuration Type Tele-switch User Id (O) Tele-switch Group Id (O)
Standard Settlement Configuration Id	Standard Settlement Configuration Id

Table 67: Update Standard Settlement Configuration - I/O Structure Elements

3.52 I0032 Specify Profile Class and Configuration Combinations

3.52.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.52.2 Function Description

This function is invoked by an ISRA user to allow details of valid combinations of Profile Class and Standard Settlement Configuration (Valid Settlement Configuration Profile Classes - VSCPC) to be maintained along with their associated Valid Measurement Requirement Profile Class (VMRPC) instances.

The user enters the Profile Class Id required. A list of the existing Standard Settlement Configuration Ids linked to the Profile Class is displayed. The user can assign Standard Settlement Configurations (a Configuration can be selected from a list of all Standard Settlement Configurations if the Id is not known), de-assign Standard Settlement Configurations, amend an existing assignment or browse the assignments. For creating new Valid Settlement Configuration Profile Class instances the user must enter an Effective From Settlement Date, this date may be retrospective. If not specified, this will default to the current date. They may also enter an Effective To Settlement Date. For amending an existing Valid Settlement Configuration Profile Class only the Effective To Settlement Date can be entered/changed.

When amending, deleting or browsing an existing VSCPC, the Valid Measurement Requirement Profile Class instances associated with the currently selected VSCPC are displayed in the Time Pattern Regime block on the screen. When creating a new VSCPC the Time Pattern block is automatically populated with the set of Time Pattern Regimes associated with the Standard Settlement Configuration i.e. Measurement Requirement. This forms the set of VMRPC for the VSCPC. If the Profile Class is a Switched Load type at least one VMRPC must represent switched loads. On creation of the VSCPC the user must specify which of the VMRPC instances which represent switched loads. These Switched Load Indicators can be amended for existing VSCPCs.

For deletion, the User specifies the Standard Settlement Configurations to be removed from the Profile Class.

The system validates the request and details entered and if necessary rejects it. If validation is successful, the database is updated accordingly. The data is redisplayed to the User.

3.52.3 Processing Description

Reference: EPD 2.2.4 - Assign Configurations to Profile Classes

See Event Descriptions

3.52.4 Error Handling

See Event Descriptions

3.52.5 Common Processing

IC001 Update Online Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.52.6 Volumes

Occasional (this manual process is a backup for an off-line data load process).

An indeterminate number of Profile Class and Configuration Combinations will be browsed on an ad hoc basis.

3.52.7 Events

Assignment to Profile Class Updated, Standard Sett Config Assigned To Profile Class, Standard Sett Config De-assigned From Profile Class

3.52.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three events (entered, updated, deleted) and the enquiry (browsed) is 1.

3.52.9 Enquiries

Browse Profile Class and Configuration Combination

3.52.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three events (entered, updated, deleted) and the enquiry (browsed) is 1.

3.52.11 Requirements Catalogue Ref.

2.7, 5.1, 5.15, 5.3

3.52.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.52.13 I/O Structures

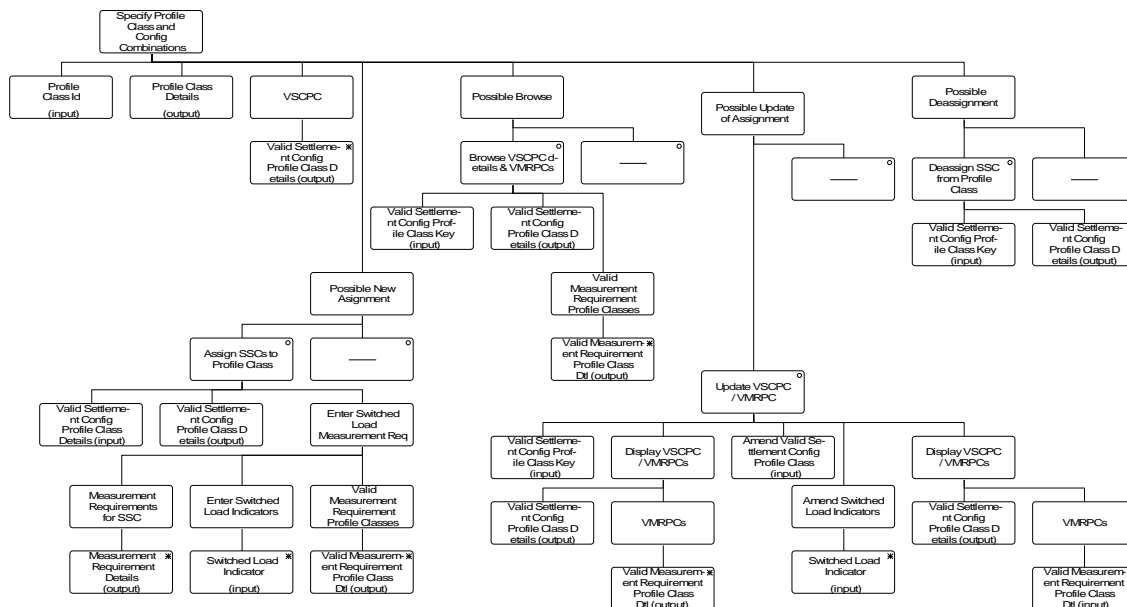


Figure 62: Specify Profile Class and Configuration Combinations

I/O Structure Element	Data Items
Amend Valid Settlement Config Profile Class	Effective To Settlement Date { VSCPC } (O)
Measurement Requirement Details	Standard Settlement Configuration Id Time Pattern Regime Id
Profile Class Id	Profile Class Id
Profile Class Details	Profile Class Id Switched Load Profile Class Ind
Switched Load Indicator	Switched Load Indicator
Valid Measurement Requirement Profile Class Dtl	Effective From Settlement Date { VSCPC } Effective To Settlement Date { VSCPC } (O) Profile Class Id

I/O Structure Element	Data Items
	Standard Settlement Configuration Id Switched Load Indicator Time Pattern Regime Id
Valid Settlement Config Profile Class Details	Effective From Settlement Date {VSCPC} Effective To Settlement Date {VSCPC} (O) Profile Class Id Standard Settlement Configuration Id
Valid Settlement Config Profile Class Key	Effective From Settlement Date {VSCPC} Profile Class Id Standard Settlement Configuration Id

Table 68: Specify Profile Class and Configuration Combinations - I/O Structure Elements

3.53 I0032E Browse Profile Class & Configuration Combinations

3.53.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.53.2 Function Description

This function is invoked by an ISRA user to browse a set of valid Profile Class and Standard Settlement Configuration Combinations.

A list of existing Profile Classes is displayed. The User selects the Profile Class required. A list of Standard Settlement Configurations that are related to the Profile Class are displayed. The User selects one of them to browse.

3.53.3 Processing Description

Browse the Standard Settlement Configurations that a Profile Class is associated with.

3.53.4 Error Handling

n/a

3.53.5 Common Processing

IC006 Restrict Access

3.53.6 Volumes

An indeterminate number of Profile Class and Standard Settlement Configuration Combinations will be browsed on an ad hoc basis.

3.53.7 Events

None

3.53.8 Event Frequency

n/a

3.53.9 Enquiries

Browse Profile Class and Configuration Combination

3.53.10 Enquiry Frequency

1

3.53.11 Requirements Catalogue Ref.

6.19

3.53.12 User Roles

ISRA Operator

3.53.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0032 Specify Profile Class and Configuration Combinations I/O Structure branch 'Browse SSCs assigned to Profile Class'.

3.54 I0033 Define Average Fractions of Yearly Consumption**3.54.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.54.2 Function Description

This function is invoked by an ISRA user to allow details of Average Fractions of Yearly Consumption for a given combination of Standard Settlement Configuration, Profile Class and GSP Group to be defined and maintained.

The user enters a Standard Settlement Configuration Id and Profile Class Id which are already associated with each other (i.e. Valid Settlement Configuration Profile Class). A list of existing Valid Settlement Configuration Profile Classes is available for display (this list is not shown in the I/O Structure) from which the user can select the one required.

The user enters a GSP Group Id or can access a list of existing GSP Groups (this list is not shown in the I/O Structure) and select the one required.

For each set of Average Fractions of Yearly Consumption associated with the Valid Settlement Configuration Profile Class the effective dates are displayed along with the list of Valid Measurement Requirement Profile Classes (VMRPC) and the fraction of consumption for that VMRPC (this is not shown in the I/O structure). Note: that the From Settlement Date repeats for each VMRPC in the set of Average Fractions of Yearly Consumption.

The User selects one set to amend, delete or browse, or enters details of a new one.

For creation of a new set, the User must specify an Effective Date for the set of Average Fractions of Yearly Consumption and the Average Fraction of Yearly Consumption Value for each of the Measurement Requirements associated with the Standard Settlement Configuration chosen.

For amendment, the User amends the Average Fraction of Yearly Consumption values and the Effective To Date.

For deletion, the User deletes the complete Average Fraction of Yearly Consumption Set.

The system validates the request and details entered and if necessary rejects it. If validation is successful, the database is updated accordingly. The data is redisplayed to the User.

3.54.3 Processing Description

Reference: EPD 2.2.8 - Specify Average Fraction of Yearly Consumption

See Event Descriptions

3.54.4 Error Handling

See Event Descriptions

3.54.5 Common Processing

IC001 Update Online Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.54.6 Volumes

Occasional (this manual process is a backup for an off-line data load process).

An indeterminate number of Average Fractions of Yearly Consumption will be browsed on an ad hoc basis.

3.54.7 Events

Set of Average Consumption Fractions Deleted, Set of Average Consumption Fractions Entered, Set of Average Consumption Fractions Updated

3.54.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Average Fractions of Yearly Consumption events (entered, updated, deleted), and the enquiry (browsed) is 1.

3.54.9 Enquiries

Browse Average Fractions of Yearly Consumption

3.54.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three Average Fractions of Yearly Consumption events (entered, updated, deleted), and the enquiry (browsed) is 1.

3.54.11 Requirements Catalogue Ref.

2.7, 5.1, 5.15, 5.3

3.54.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.54.13 I/O Structures

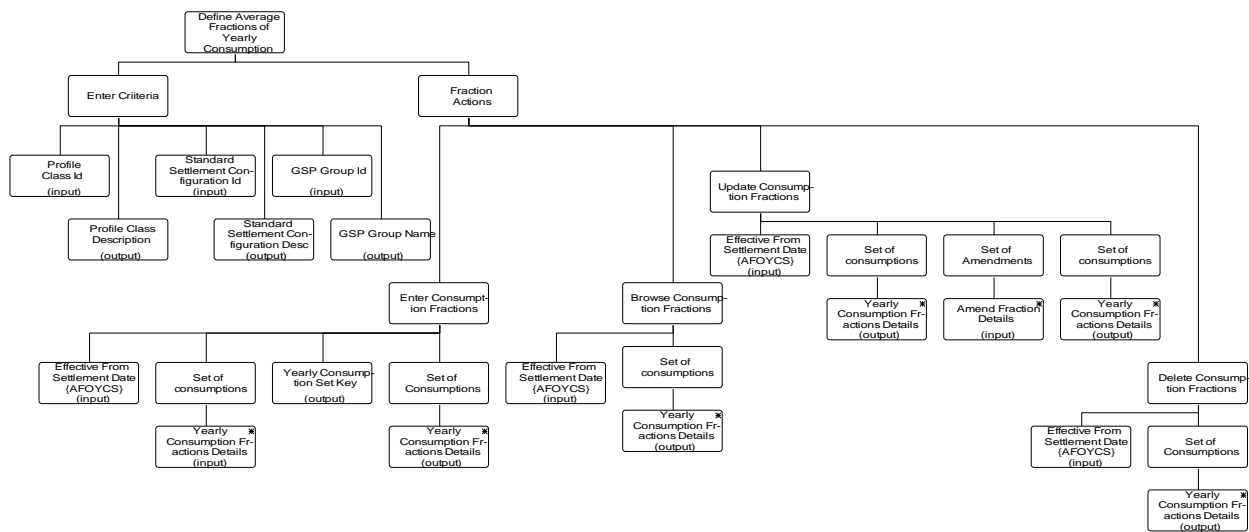


Figure 63: Define Average Fractions of Yearly Consumption

I/O Structure Element	Data Items
Amend Fraction Details	Average Fraction of Yearly Consumption Effective To Settlement Date {AFOYCS}
Effective From Settlement Date {AFOYCS}	Effective From Settlement Date {AFOYCS}
GSP Group Id	GSP Group Id
GSP Group Name	GSP Group Name
Yearly Consumption Fractions Details	Average Fraction of Yearly Consumption Time Pattern Regime Id Effective To Settlement Date {AFOYCS}
Profile Class Id	Profile Class Id
Profile Class Description	Profile Class Description
Standard Settlement Configuration Id	Standard Settlement Configuration Id
Standard Settlement Configuration Description	Standard Settlement Configuration Description
Yearly Consumption Set Key	GSP Group Id Profile Class Id Standard Settlement Configuration Id Effective From Settlement Date {AFOYCS}

Table 69: Define Average Fractions of Yearly Consumption - I/O Structure Elements

3.55 I0033E Browse Average Fractions of Yearly Consumption

3.55.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.55.2 Function Description

This function is invoked by an ISRA user to browse a set of valid Average Fractions of Yearly Consumption.

A list of existing Valid Settlement Configuration Profile Classes is displayed. The User selects the combination of Standard Settlement Configuration and Profile Class required.

A list of existing GSP Groups with Valid Fraction of Yearly Consumption figures defined for the Valid Settlement Configuration Profile Class is displayed. The User selects the GSP Group required.

A list of existing Time Pattern Ids associated with the Standard Settlement Configuration is displayed (i.e. Measurement Requirement), together with associated fractions of consumption and an effective dates for the set of values.

3.55.3 Processing Description

See Enquiry Description

3.55.4 Error Handling

n/a

3.55.5 Common Processing

IC006 Restrict Access

3.55.6 Volumes

An indeterminate number of Average Fractions of Yearly Consumption will be browsed on an ad hoc basis

3.55.7 Events

None

3.55.8 Event Frequency

n/a

3.55.9 Enquiries

Browse Average Fractions of Yearly Consumption

3.55.10 Enquiry Frequency

1

3.55.11 Requirements Catalogue Ref.

6.19

3.55.12 User Roles

ISRA Operator

3.55.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0033 Define Average Fraction of Yearly Consumption I/O Structure branch 'Browse Consumption Fractions'.

3.56 I0034 View SSR Run Status**3.56.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.56.2 Function Description

This function allows an ISRA user to monitor the status of an SSR run for a given Settlement Date.

3.56.3 Processing Description

The operator enters the settlement day of interest, and the system responds with details of all runs for that settlement day.

3.56.4 Error Handling

N/A

3.56.5 Common Processing

IC006 Restrict Access

3.56.6 Volumes

Daily

3.56.7 Events

None

3.56.8 Event Frequency

N/A

3.56.9 Enquiries

View SSR Run Status

3.56.10 Enquiry Frequency

1

3.56.11 Requirements Catalogue Ref.

1.4

3.56.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.56.13 I/O Structures

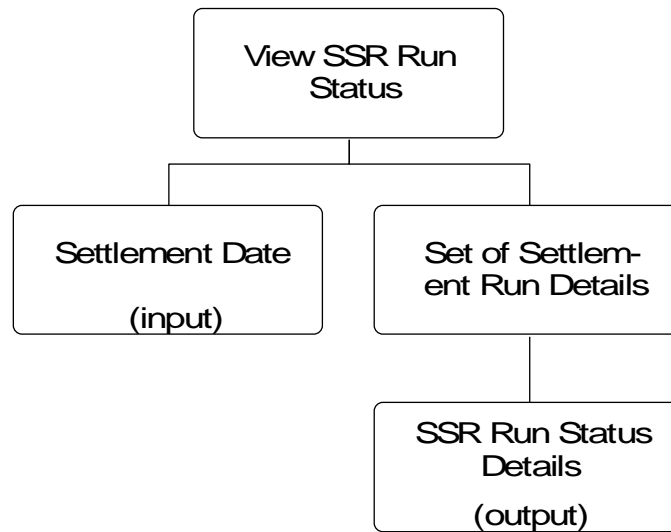


Figure 64: View SSR Run Status

I/O Structure Element	Data Items
Settlement Date	Settlement Date
SSR Run Details	SSR Run Date SSR Run Number SSR Run Status Settlement Date Settlement Code

Table 70: View SSR Run Status - I/O Structure Elements

3.57 I0035 Maintain System Configuration Data

3.57.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.57.2 Function Description

This function allows the ISRA Operations Supervisor, ISRA Standing Data Manager to edit and browse the system configuration data required to run the system.

I/O Structures, window designs and a detailed processing specification are not appropriate to this function because the means of implementation will be decided during Physical Design. This function has been included in order to be consistent with the Logical Data Design, which contains entities for system configuration data.

3.57.3 Processing Description

This process maintains system configuration data needed to run the system, such as the data on the System Configuration entity.

Data items can be entered and amended.

3.57.4 Error Handling

N/A

3.57.5 Common Processing

IC001 Update On-Line Audit Log

IC006 Restrict Access

3.57.6 Volumes

Ad hoc

3.57.7 Events

System Configuration Data updated

3.57.8 Event Frequency

1

3.57.9 Enquiries

System Configuration Data browsed.

3.57.10 Enquiry Frequency

1

3.57.11 Requirements Catalogue Ref.

No specific requirement

3.57.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.57.13 I/O Structures

I/O Structures are not appropriate for this function as the implementation will be decided during the Physical Design stage.

3.58 I0037 Restore Archived Data**3.58.1 Function Type**

Batch	Update	User initiated
-------	--------	----------------

3.58.2 Function Description

This function is invoked by the user to allow restoration of data previously archived by function I0015 Archive ISRA Data.

This will involve restoring to an area isolated from the current production data, this may or may not be on the same machine as the production data.

The data can be enquired and reported on using the standard ISRA software. If the restore is to the production machine, then the version of the software used must be the current production version. As up to 7 years may have elapsed between the archive and the restore it is possible that changes in the production software will prevent it from using the archived data. This will have to be considered as part of the impact of any changes to the software after production starts.

If the restore is to a separate machine, then a previous version of the software (typically the one in use at the time of archive) can be restored from a system backup. The restore must be for all software including the operating system, layered products e.g. Oracle and the ISRA software itself.

The restore application is invoked by a system manager with direct access to the server on which the restore will take place. It is not part of the main ISRA application, and does not have a PC based client.

Note: No screen have been included for this function as it is envisaged as being implemented with a command line interface. The user can selectively restore files for a specific Settlement Date or a range of Settlement Dates by specifying a Start and End Settlement Date.

3.58.3 Processing Description

See Event Description

3.58.4 Error Handling

See Event Description

3.58.5 Common Processing

IC006 Restrict Access

3.58.6 Volumes

It is expected that ISRA data will be restored rarely on an ad hoc basis.

3.58.7 Events

Restore ISRA Data

3.58.8 Event Frequency

Very rare. Probably once or twice a year.

3.58.9 Enquiries

None

3.58.10 Enquiry Frequency

n/a

3.58.11 Requirements Catalogue Ref.

6.11, 6.14, 7.4, 7.5, 7.6, 7.11, 7.12, 7.13, 8.3

3.58.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager, ISRA System Manager

3.58.13 I/O Structures

It is not considered appropriate to produce an I/O structure for this function.

3.59 I0038 Ad hoc Audit Reporting

3.59.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.59.2 Function Description

This function is invoked by the user to define a query of the audit data held in the system and a layout for the result of the query, to produce a report by running the query, and to save the query and the report.

The reporting product used to support this function will be defined and described in the Physical Design.

3.59.3 Processing Description

A user will define queries based on audit data held in the system, and as part of each query a layout for its output will be specified. A set of queries and its associated layout may then be saved.

Users may then produce a report on the data held on the system by running it.

3.59.4 Error Handling

n/a

3.59.5 Common Processing

IC006 Restrict Access

3.59.6 Volumes

An indeterminate number of audit reports will be requested on an ad hoc basis.

3.59.7 Events

None

3.59.8 Event Frequency

n/a

3.59.9 Enquiries

Ad Hoc Audit Report Requested

3.59.10 Enquiry Frequency

Indeterminate, but probably low frequency (less than 1 a day on average).

3.59.11 Requirements Catalogue Ref.

6.20

3.59.12 User Roles

ISRA Auditor, ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.59.13 I/O Structures

An i/o structure is not appropriate for this function.

3.60 I0039 Extract Selected EAC Data**3.60.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.60.2 Function Description

This function allows the ISR User to produce a number of extract files containing Daily Profile Coefficients for each valid combination of Profile Class and Measurement Requirement for a specified GSP Group for a range of Settlement Days.

The User must specify the Settlement Date Range and GSP Group for which the files are to be produced. Each file applies to a single settlement day.

3.60.3 Processing Description

This process will allow the ISR Agent to produce data files for a Data Collector showing the Daily Profile Coefficient for every Valid Measurement Requirement Profile Class for a specific GSP Group for a range of Settlement Days. There will be one file produced for each settlement day specified.

The Profile Production Run Number in the header is set to the highest Profile Production Run Number for the Settlement Date which included the GSP Group. This is not necessarily the latest run for the Settlement Date.

3.60.4 Error Handling

The End Date need not be specified if only one settlement day is required but if specified then the End Date must be greater than the Start Date.

If Daily Profile Coefficient data does not exist for the GSP Group on any of the Settlement Dates then a file will not be generated for that date.

3.60.5 Common Processing

IC005 Create File Header

IC006 Restrict Access

IC007 Update File Log

3.60.6 Volumes

This function will enable new Data Collectors entering the market to calculate EAC data, and hence will not be invoked very frequently (new non-Half Hour Data Collectors will not be allowed until 2000).

3.60.7 Events

None

3.60.8 Event Frequency

n/a

3.60.9 Enquiries

EAC Data Extract Requested

3.60.10 Enquiry Frequency

One enquiry per invocation of the function.

3.60.11 Requirements Catalogue Ref.

5.16

3.60.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.60.13 I/O Structures

I0039_01:

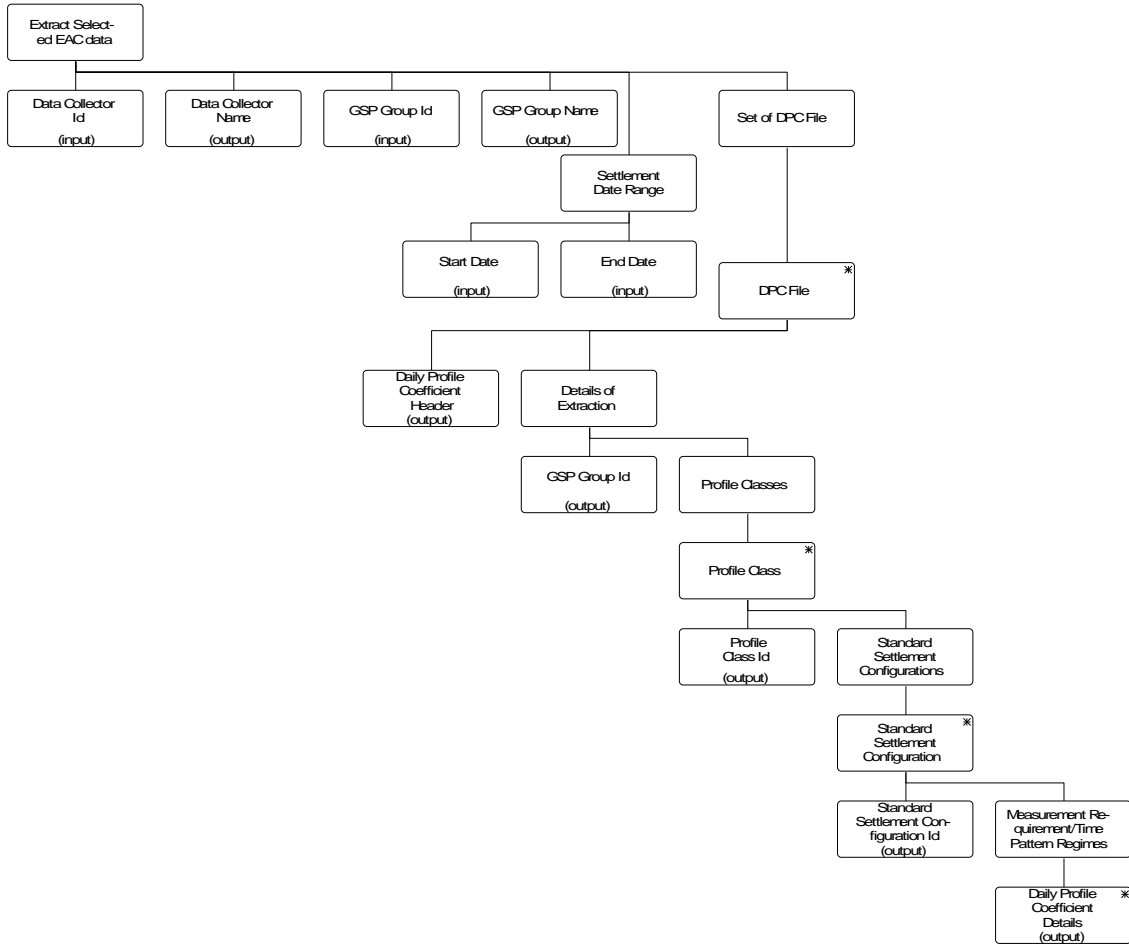


Figure 65: Extract Selected EAC Data

I/O Structure Element	Data Items
Data Profile Coefficient Details	Daily Profile Coefficient Time Pattern Regime Id
Data Collector Id	Data Collector Id
Data Collector Name	Data Collector Name
Daily Profile Coefficient Header	Data Collector Id System Market Participant Id Profile Production Run Number Settlement Date
Start Date	Settlement Date
End Date	Settlement Date
GSP Group Id	GSP Group Id
GSP Group Name	GSP Group Name
Profile Class Id	Profile Class Id
Standard Settlement Configuration Id	Standard Settlement Configuration Id

Table 71: Extract Selected EAC Data - I/O Structure Elements

3.61 10040 Define Time Pattern Regimes

3.61.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.61.2 Function Description

This function is invoked by an ISRA user to allow a set of Time Pattern Regimes, Clock Intervals and tele-switch register contact switching rules (i.e. a register rule plus its associated contact rules) to be browsed and maintained.

A list of all existing Time Pattern Regimes is displayed (this list is not shown in the I/O Structure). The User may select one of them to amend, delete or browse, or enter a new one.

For creation, Time Pattern Regime Id is entered and the user must specify how the Pattern is controlled (either by Clock Intervals or Tele-switching) and whether it is for GMT or local time. If the Pattern is controlled through Tele-switching, then Tele-switch User Id, Group Id and register contact switching rules must be specified. If clock switched the user can enter Clock Intervals for the Time Pattern Regime.

For amendment, deletion and browsing, the Time Pattern Regime Id, the GMT/Local Time Indicator and the Tele-switch/Clock Indicator are displayed. For tele-switched Time Patterns Tele-switch User Id, Group Id and the associated register contact switching rules are displayed. For Clock-controlled Patterns, the associated Clock Interval data is displayed.

For amendment, the User amends the Tele-switch Indicator, Tele-switch User Id, Group Id and the associated register contact switching rules if required. A Tele-switch Group Id and User Id may only be amended if there are no linked Standard Settlement Configurations with the same combination of Tele-switch User Id and

Tele-switch Group Id. The User may also create or delete Clock Intervals for Clock-controlled Time Pattern Regimes (NB. Tele-switch Contact Interval data is maintained using I0028 Load Tele-switch Contact Switching Times and I0012 Enter Tele-switch Contact Intervals).

For deletion, the User deletes the Time Pattern Regime and all of its associated Interval data or tele-switch register contact switching rules (subsequent to validation).

If the user changes a Time Pattern Regime associated with a Standard Settlement Configuration (i.e. there are instances of Measurement Requirement) a warning will be given to indicate that the changes may render the Standard Settlement Configuration inconsistent.

3.61.3 Processing Description

Reference: EPD 2.2.2 - Enter Time Patterns

2.2.5 - Enter Clock Intervals

See Event Descriptions

3.61.4 Error Handling

See Event Descriptions

3.61.5 Common Processing

IC001 Update On-line Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.61.6 Volumes

Occasional (this manual process is a backup for an off-line load process).

An indeterminate number of Time Pattern Regimes and Clock Intervals will be browsed on an ad hoc basis.

3.61.7 Events

Clock Interval Deleted

Clock Interval Entered

Tele-switch Register Rule Deleted

Tele-switch Register Rule Entered

Tele-switch register Rule Updated

Time Pattern Regime Deleted

Time Pattern Regime Entered

Time Pattern Regime Updated

3.61.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the events listed above is 1.

3.61.9 Enquiries

Browse Clock Intervals for Time Pattern Regime

Browse Time Pattern Regime Details

Browse Register Contact Switching Rules

3.61.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the two enquiry frequencies sums to 1.

3.61.11 Requirements Catalogue Ref.

2.7, 5.1, 5.15, 5.3

3.61.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.61.13 I/O Structures

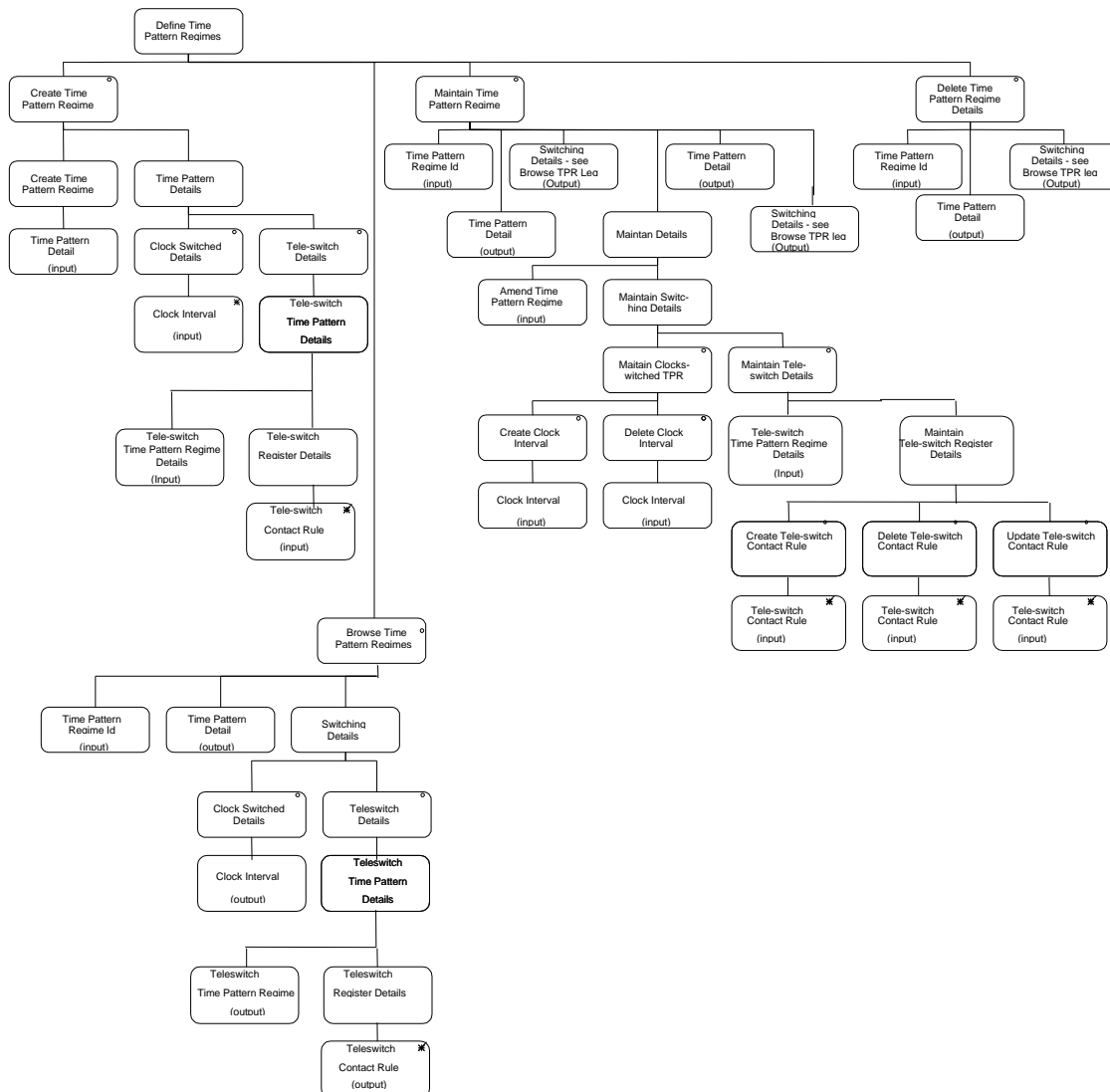


Figure 66: Define Time Pattern Regimes

I/O Structure Element	Data Items
Amend Time Pattern Regime	GMT/Local Time Indicator
Clock Interval	Day of the Week Id End Day {Date Block} End Month {Date Block} End Time Start Day {Date Block} Start Month {Date Block} Start Time
Tele-switch Time Pattern Regime Details	GMT/Local Time Indicator Tele-switch Group Id Tele-switch User Id Tele-switch/Clock Indicator Time Pattern Regime Id
Tele-switch Contact Rule	Tele-switch Register Rule Id Tele-switch Contact Code Tele-switch Contact Rule
Time Pattern Detail	GMT/Local Time Indicator Tele-switch/Clock Indicator Time Pattern Regime Id
Time Pattern Regime Id	Time Pattern Regime Id

Table 72: Define Time Pattern Regimes - I/O Structure Elements

3.62 I0041 Load Profile Data

3.62.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.62.2 Function Description

This function validates and loads Profile & Profile Class information as prepared by the Pool Market Domain Data Agent, into the ISRA system. The file contains newly created Profile Classes and Profiles and any updates required to existing Profile Classes and Profiles. The loading mechanism does not support deletes of Profiles or Profile Classes which will be done manually.

A list of files which are available for loading is displayed, from which the ISRA user selects the file required. The list consists of Profile Data files which have either never been loaded or have failed a loading attempt previously. The user selects the file required.

The file contents are validated, if the data is successfully validated, the database is updated, the file management database is updated to indicate the load is successful and a message is written to a log to indicate that the load is successful.

If validation is not successful, the file management database is updated to show the load has failed and an Exception Report is written to report the errors detected.

3.62.3 Processing Description

Reference: EPD 2.5.1 - Enter Profile Details

See Event Description

3.62.4 Error Handling

See Event Description

3.62.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

3.62.6 Volumes

Occasional (at most 1/month)

3.62.7 Events

ProfileData Loaded

3.62.8 Event Frequency

1

3.62.9 Enquiries

None

3.62.10 Enquiry Frequency

n/a

3.62.11 Requirements Catalogue Ref.

5.3, 5.7, 7.17

3.62.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.62.13 I/O Structures

I0041_01 Load Profile Data

I0041_02 Profile Data

I0041_01:

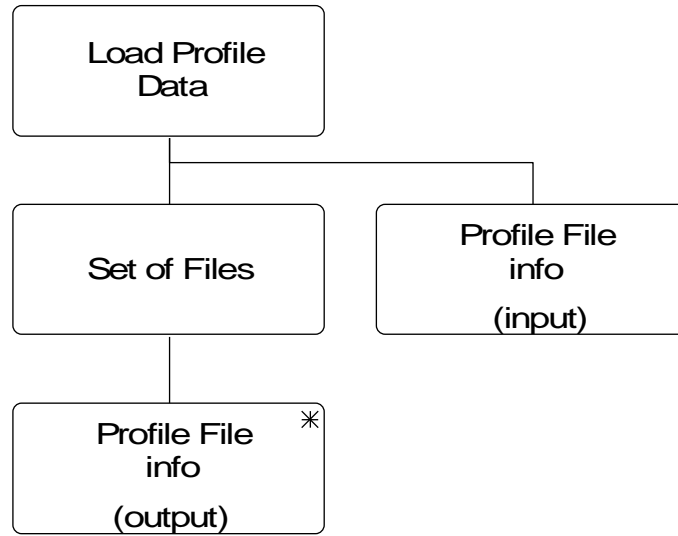


Figure 67: I0041_01 Load Profile Data

I/O Structure Element	Data Items
Profile File Info.	File Creation Timestamp Market Participant Id Market Participant Role Code

Table 73: Load Profile Data - I/O Structure Elements

I0041_02:

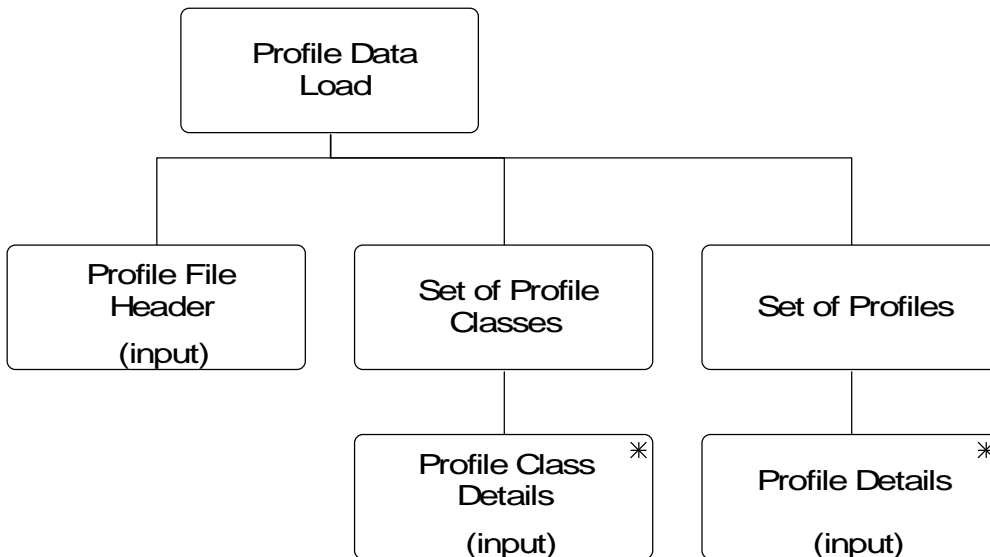


Figure 68: I0041_02 Profile Data

I/O Structure Element	Data Items
Profile Class Details	Profile Class Id Profile Class Description Switched Load Profile Class Ind.
Profile Details	Profile Class Id Profile Id Profile Description Profile Settlement Periods Effective From Settlement Date {PROF} Effective To Settlement Date {PROF}(O)
Profile File Header	Market Participant Id Market Participant Role Code File Creation Timestamp

Table 74: Profile Data - I/O Structure Elements

3.63 I0043 Load Market Domain Data Complete Set

3.63.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.63.2 Function Description

This function validates and loads Settlement Day data with associated Day types and Seasons along with Line Loss Factor Class data prepared by the Pools Market Domain Data Agent, into the ISR system.

A list of files which are available for loading is displayed (not in the I/O structure), from which the ISRA Operations Supervisor, ISRA Standing Data Manager selects the file required. The list consists of Market Domain Data Complete Setfiles which have either never been loaded or have failed a loading attempt previously. The user selects the file required.

The file contents are validated. If the data is successfully validated, the database is updated with the Settlement Day data and LLFC data. The file management database is updated to indicate the load is successful and a message is written to a log to indicate that the load is successful. An Exception report is produced detailing warnings of all updates to the data and includes a summary of the number of successful record insertions and updates.

If validation is not successful, the file management database is updated to show the load has failed and an Exception Report is written to report the errors detected.

This function will only be required at market inception, or when changes to Settlement Day and Line Loss Factor Class data are published by the Market Domain Data Agent and agreed by the Pool.

3.63.3 Processing Description

See Event Descriptions

3.63.4 Error Handling

See Event Descriptions

3.63.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009 Report Exception

3.63.6 Volumes

Two files per month

3.63.7 Events

Market Domain Data Complete Set Loaded

3.63.8 Event Frequency

1

3.63.9 Enquiries

None

3.63.10 Enquiry Frequency

n/a

3.63.11 Requirements Catalogue Ref.

5.3, 7.17

3.63.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.63.13 I/O Structures

I0043_01 Load Market Domain Data Complete Set

I0043_02 Market Domain Data Complete Set

I0043_01:

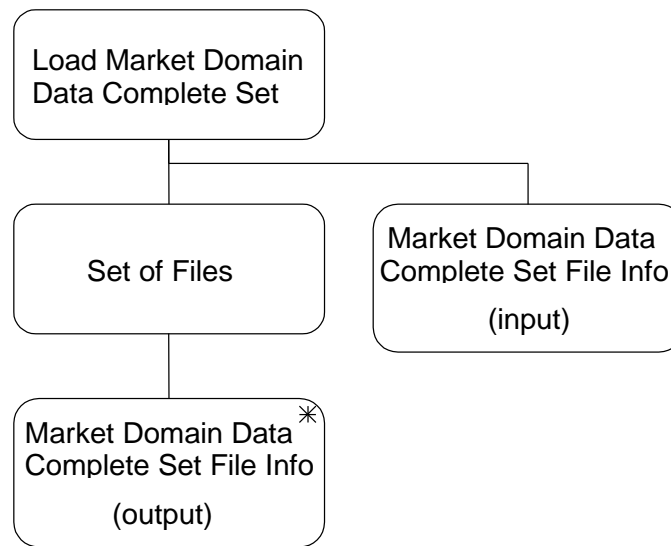


Figure 69: I0043_01 Load Market Domain Data Complete Set

I/O Structure Element	Data Items
Market Domain Data Complete Set File Info.	File Creation Timestamp Market Participant Id Market Participant Name

Table 75: Load Market Domain Data Complete Set - I/O Structure Elements

I0043_02:

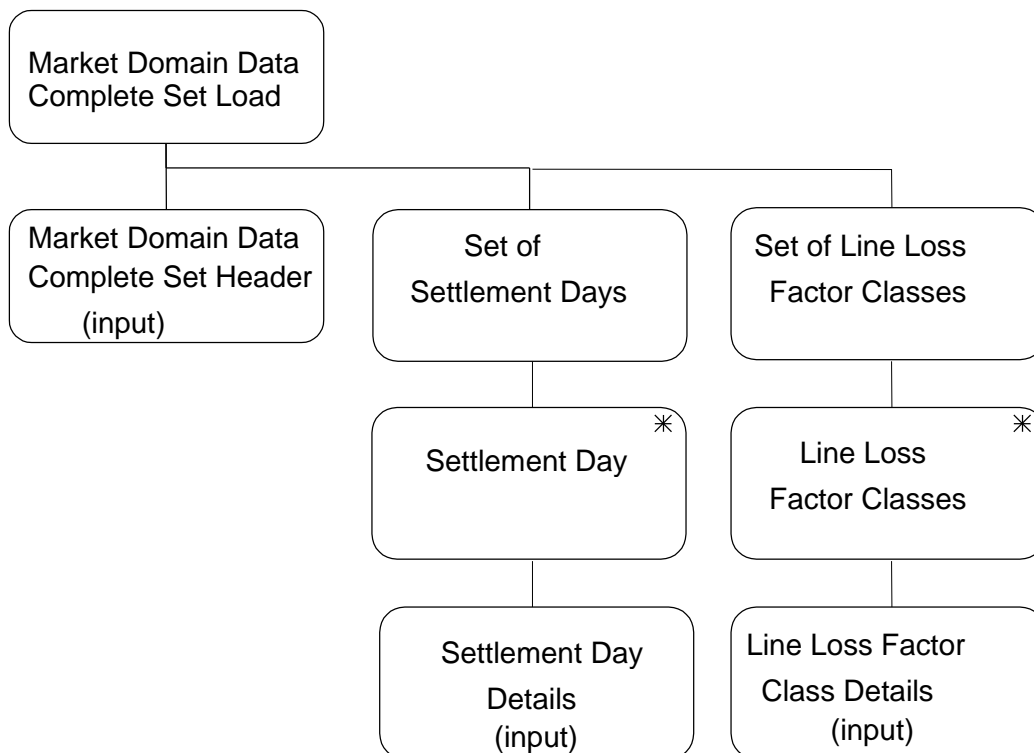


Figure 70: I0043_02 Market Domain Data Complete Set

I/O Structure Element	Data Items
Settlement Day	Settlement Date Day Type Id Season Id
Line Loss Factor Classes	Distributor Id Market Participant Role Code Line Loss Factor Class Id MS Specific LLF Class Indicator Effective From Settlement Date {LLFC} Effective to Settlement Date {LLFC}

Table 76: Market Domain Data Complete Set - I/O Structure Elements

3.64 I0044 Load Settlement Calendar Data

3.64.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.64.2 Function Description

This function validates and loads Settlement Calendar data prepared by the Market Domain Data Agent, into the ISR system.

A list of files which are available for loading is displayed (not in the I/O structure), from which the ISRA Operations Supervisor or ISRA Standing Data Manager selects the file(s) required. The list consists of Settlement Calendar data files which have either never been loaded or have failed a loading attempt previously. The user selects the file required.

The physical integrity and timestamp of the file are validated. If successful, the database is updated with valid Settlement Calendar data contained in the file, the file management database is updated to indicate the load is successful, and a message is written to a log to indicate that the load is successful. An Exception Report is written to report details of all updates, and to provide totals for the number of each record type created or updated.

If the validation for a Settlement record in the data file is not successful, the associated data is not loaded, and corresponding warning(s) written to the Exception Report. However, the load of other valid data in the file will be unaffected.

If the timestamp and physical integrity validation is unsuccessful, the file management database is updated to show the load has failed and an Exception Report is written to report the errors detected.

3.64.3 Processing Description

See Event Description

3.64.4 Error Handling

See Event Description

3.64.5 Common Processing

IC002 Batch Audit
IC004 Check File Header
IC006 Restrict Access
IC007 Update File Log
IC009 Report Exception

3.64.6 Volumes

Expected volume of Settlement Calendar Load: once per year.
Each Settlement Day will be linked up to 6 runs (one day for each Settlement Code).

3.64.7 Events

Settlement Calendar Timetable Available

3.64.8 Event Frequency

1 per Year

3.64.9 Enquiries

None

3.64.10 Enquiry Frequency

N/A

3.64.11 Requirements Catalogue Ref.

1.4, 2.13, 5.1, 5.3, 6.21, 8.11, 8.16, 8.17

Also, the requirement for an automatic interface for Settlement Calendar data from MDD into ISRA (SIR R887) is stated in CCN77 for TA2000 ISRA Package 2.

3.64.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager.

3.64.13 I/O Structures

I0044_01 Load Settlement Calendar Data
I0044_02 Settlement Calendar Data

I0044_01:

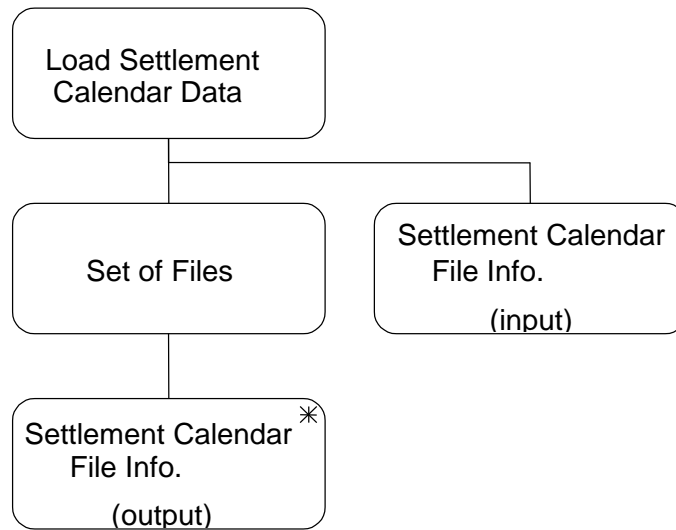


Figure 71: I0044_01 Load Settlement Calendar Data

I/O Structure Element	Data Items
Settlement Calendar File Info.	File Creation Timestamp Market Participant Id Market Participant Name

Table 77: Load Settlement Calendar Data - I/O Structure Elements

I0044_02:

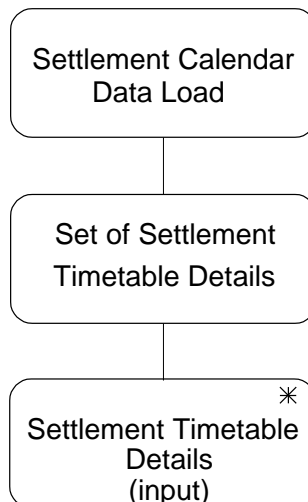


Figure 72: I0044_02 Settlement Calendar Data

I/O Structure Element	Data Items
Settlement Timetable Details	Settlement Code Settlement Date Payment Date Planned SSR Run Date

Table 78: Settlement Calendar Data - I/O Structure Elements**3.65 I0045 Produce AFYC Recalculation Report****3.65.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.65.2 Function Description

This function allows the ISR Agent to generate an AFYC Recalculation Report. The user enters the start date and end date of the range of Settlement Dates to be used for the calculation, and the Effective From Settlement Date of the recalculated data.

The report contains recalculated values for the following Data Items, for each GSP Group active in the range of Settlement Dates:

- The Default EAC, for each Profile Class;
- The Average EAC, for each Profile Class / Standard Settlement Configuration combination;
- The Average Fraction of Yearly Consumption, for each Profile Class / Standard Settlement Configuration / Time Pattern Regime combination.

3.65.3 Error Handling

None

3.65.4 Common Processing

IC005 Create File Header

IC006 Restrict Access

IC007 Update File Log

IC008 Create Report Header

IC009 Report Exception

3.65.5 Volumes

Not Known

3.65.6 Events

None

3.65.7 Event Frequency

N/A

3.65.8 Enquiries

AFYC Recalculation Report Requested

3.65.9 Enquiry Frequency

1

3.65.10 Requirements Catalogue Ref.

Change Requests: SIR R1724 (LCR108)

3.65.11 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager, ISRA Auditor

3.65.12 I/O Structures

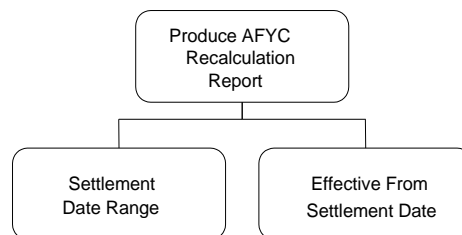


Figure 73: Produce AFYC Recalculation Report

I/O Structure Element	Data Items
Settlement Date Range	Settlement Date Range Start Settlement Date RangeEnd
Effective From Settlement Date	Effective From Settlement Date {AFOYCS}

Table 79: Produce AFYC Recalculation Report - I/O Structure Elements

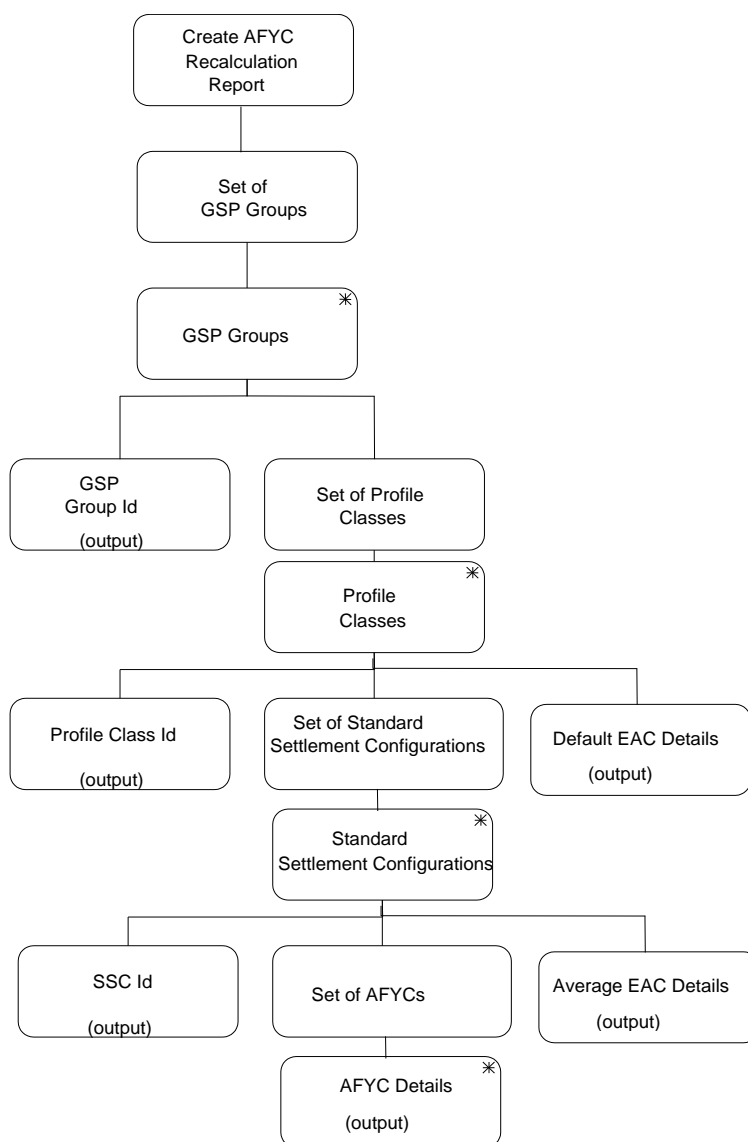


Figure 74: Create AFYC Recalculation Report

I/O Structure Element	Data Items
GSP Group Id	GSP Group Id
Profile Class Id	Profile Class Id
Average EAC Details	Researched Average EAC Effective From Settlement Date {GCPCAE}
Standard SettlementConfiguration Id	Standard SettlementConfiguration Id
Default EAC Details	Researched Default EAC Effective From Settlement Date {GCPCDE}
AFYC Details	Time Pattern Regime Id Average Fraction of Yearly Consumption Effective From Settlement Date {AFOYCS} Effective To Settlement Date {AFOYCS}

Table 80: Create AFYC Recalculation Report - I/O Structure Elements

3.66 I0046 Define BM Units For Supplier In GSP Group**3.66.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.66.2 Function Description

This function is invoked by an ISRA user to allow details of BM Units For Supplier In GSP Group for a given combination of Supplier and GSP Group to be defined and maintained.

The user enters a GSP Group Id or can access a list of existing GSP Groups (this list is not shown in the I/O Structure) and selects the one required. The user then enters a Supplier Id or can access a list of existing Suppliers (this list is not shown in the I/O Structure) and selects the one required.

For each BM Unit associated with the Supplier in the GSP Group the BM Unit Id and effective dates are displayed together with the flag denoting whether the BM Unit is the default for the Supplier and GSP Group combination.

The User selects a BM Unit to amend, delete or browse, or enters details of a new one.

For creation of a new BM Unit, the User must specify a BM Unit Id, a Supplier Id, an Effective From Settlement Date and optionally an Effective to Settlement Date for the BM Unit. The User must also set the Default BM Unit Flag to TRUE or FALSE.

For amendment, the User amends the BM Unit Id, the GSP Group Id, the Supplier Id, the Effective From Settlement Date, the Default BM Unit Flag and the Effective To Settlement Date.

The user cannot set the Effective From Settlement Date before the BETTA Start Date for Scottish GSP Groups during creation or amendment.

For deletion, the User deletes the BM Units For Supplier In GSP Group Association.

The system validates the request and details entered and if necessary rejects it. If validation is successful, the database is updated accordingly. The data is redisplayed to the User.

3.66.3 Processing Description

Reference: Awaiting reference from Pool

See Event Descriptions

3.66.4 Error Handling

See Event Descriptions

3.66.5 Common Processing

IC001 Update Online Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.66.6 Volumes

Occasional.

An indeterminate number of BM Units For Supplier In GSP Group will be browsed on an ad hoc basis.

3.66.7 Events

BM Units For Supplier In GSP Group Deleted

BM Units For Supplier In GSP Group Entered

BM Units For Supplier In GSP Group Updated

3.66.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three BM Units For Supplier In GSP Group events (entered, updated, deleted), and the enquiry (browsed) is 1.

3.66.9 Enquiries

Browse BM Units For Supplier In GSP Group

3.66.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three BM Units For Supplier In GSP Group events (entered, updated, deleted), and the enquiry (browsed) is 1.

3.66.11 Requirements Catalogue Ref.

Awaiting reference numbers from Pool

3.66.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.66.13 I/O Structures

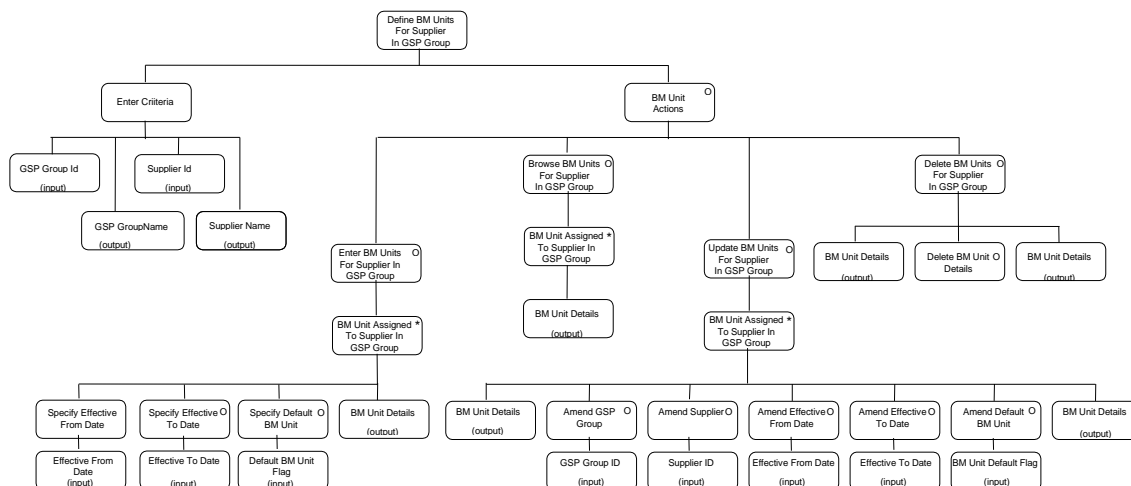


Figure 75: Define BM Units For Supplier In GSP Group

I/O Structure Element	Data Items
BM Unit Amendments	Default BM Unit Flag GSP Group Id Supplier Id Effective From Settlement Date {BMUIGG} Effective To Settlement Date {BMUIGG}
BM Unit Details	BM Unit Id GSP Group Id Supplier Id Default BM Unit Flag Effective From Settlement Date {BMUIGG} Effective To Settlement Date {BMUIGG}
GSP Group Id	GSP Group Id
GSP Group Name	GSP Group Name
Supplier Id	Supplier Id
Supplier Name	Supplier Name

Table 81: Define BM Units For Supplier In GSP Group - I/O Structure Elements

3.67 I0046E Browse BM Units For Supplier In GSP Group

3.67.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.67.2 Function Description

This function is invoked by an ISRA user to browse BM Units For Supplier In GSP Group.

The user enters a GSP Group Id or can access a list of existing GSP Groups (this list is not shown in the I/O Structure) and selects the one required. The user then enters a Supplier Id or can access a list of existing Suppliers (this list is not shown in the I/O Structure) and selects the one required.

A list of existing BM Units For Supplier In GSP Group associated with the Supplier and the GSP Group displayed together with associated effective dates and Default BM Unit Flag for the BM Unit.

3.67.3 Processing Description

See Enquiry Description

3.67.4 Error Handling

n/a

3.67.5 Common Processing

IC006 Restrict Access

3.67.6 Volumes

An indeterminate number of BM Units For Supplier In GSP Group will be browsed on an ad hoc basis

3.67.7 Events

None

3.67.8 Event Frequency

n/a

3.67.9 Enquiries

Browse BM Units For Supplier In GSP Group

3.67.10 Enquiry Frequency

1

3.67.11 Requirements Catalogue Ref.

6.19

3.67.12 User Roles

ISRA Operator

3.67.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0046 Define BM Units For Supplier In GSP Group I/O Structure branch 'Browse BM Units'.

3.68 I0047 Specify Non-Half Hourly BM Unit Allocation**3.68.1 Function Type**

On-line	Update	User initiated
---------	--------	----------------

3.68.2 Function Description

This function is invoked by an ISRA user to allow details of Non-Half Hourly BM Unit Allocations to be maintained.

The user enters the BM Unit for Supplier in GSP Group (GSP Group Id, Supplier Id, BM Unit Id and BM Unit Effective From Settlement Date) required. A list of the existing Valid Settlement Configuration Profile Class (VSCPC) allocated to the BM Unit for Supplier in GSP Group is displayed. The user can allocate VSCPCs (a Profile Class and Settlement Configuration can both be selected from a list if the particular VSCPC is not known), unallocate (i.e. delete) VSCPCs, amend an existing allocation or browse the allocations. For creating new allocations the user must enter the Valid Settlement Configuration Profile Class (Profile Class and Standard Settlement Configuration) and an Effective From Settlement Date (which may be retrospective). They may also enter an Effective To Settlement Date. For amending an existing allocation, only the Effective From Settlement Date and Effective To Settlement Dates can be entered/changed.

To unallocate (delete) a VSCPC from a BM Unit for Supplier in GSP Group, the user specifies the VSCPC to be removed from the BM Unit for Supplier in GSP Group.

The system validates the request and details entered and if necessary rejects it. If validation is successful, the database is updated accordingly. The data is redisplayed to the User.

3.68.3 Processing Description

Awaiting URS EPD Reference.

See Event Descriptions

3.68.4 Error Handling

See Event Descriptions

3.68.5 Common Processing

IC001 Update Online Audit Log

IC003 Authorise & Produce Standing Data Audit Report

IC006 Restrict Access

3.68.6 Volumes

Occasional

3.68.7 Events

Non-Half Hourly BM Unit Allocation Entered, Non-Half Hourly BM Unit Allocation Updated, Non-Half Hourly BM Unit Allocation Deleted.

3.68.8 Event Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three events (entered, updated, deleted) and the enquiry (browsed) is 1.

3.68.9 Enquiries

Browse Non-Half Hourly BM Unit Allocation

3.68.10 Enquiry Frequency

The exact frequency cannot be determined, but the sum of the frequencies of the three events (entered, updated, deleted) and the enquiry (browsed) is 1.

3.68.11 Requirements Catalogue Ref.

Awaiting URS References.

3.68.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.68.13 I/O Structures

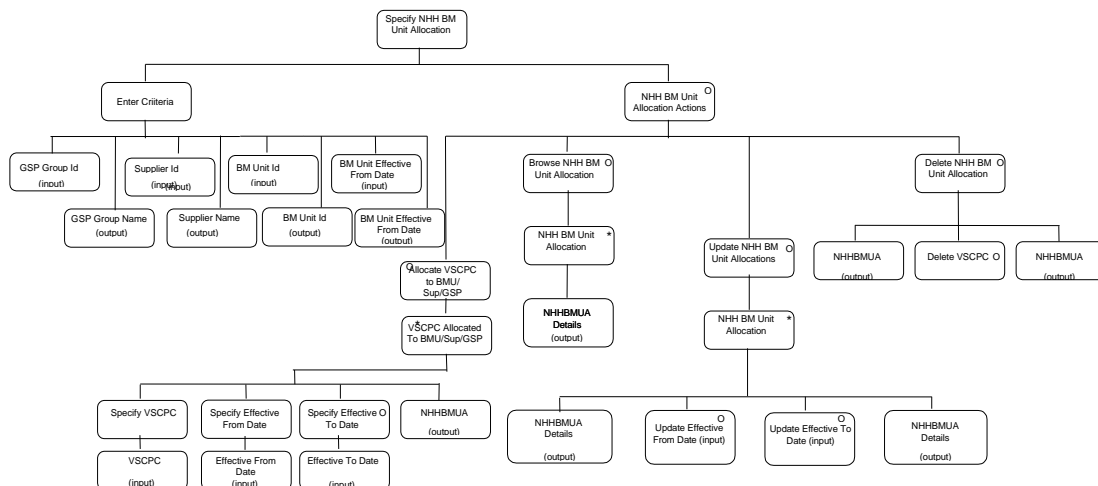


Figure 76: Specify Non-Half Hourly BM Unit Allocation

I/O Structure Element	Data Items
BM Unit Id	BM Unit Id
BM Unit Effective From Date	Effective From Settlement Date {BMUIGG}
GSP Group Id	GSP Group Id
GSP Group Name	GSP Group Name
Non-Half Hourly BM Unit Allocation Updates	Effective From Settlement Date {NHHBMUA} Effective To Settlement Date {NHHBMUA} (O)
Non-Half Hourly BM Unit Allocation Details	Profile Class Id Standard Settlement Configuration Id Effective From Settlement Date {NHHBMUA} Effective To Settlement Date {NHHBMUA} (O)
Profile Class Id	Profile Class Id
Standard Settlement Configuration Id	Standard Settlement Configuration Id
Supplier Id	Supplier Id
Supplier Name	Supplier Name

Table 82: Specify Non-Half Hourly BM Unit Allocation - I/O Structure Elements

3.69 I0047E Browse Non-Half Hourly BM Unit Allocation

3.69.1 Function Type

On-line	Enquiry	User initiated
---------	---------	----------------

3.69.2 Function Description

This function is invoked by an ISRA user to browse a set of Non-Half Hourly BM Unit Allocations.

A list of existing BM Unit for Supplier in GSP Groups is displayed. The user selects the BM Unit for Supplier in GSP Group required. A list of Valid

Settlement Configuration Profile Classes that are allocated to the BM Unit for Supplier in GSP Group is displayed. The user selects one of them to browse.

3.69.3 Processing Description

Browse Non-Half Hourly BM Unit Allocations.

3.69.4 Error Handling

n/a

3.69.5 Common Processing

IC006 Restrict Access

3.69.6 Volumes

An indeterminate number of Non-Half Hourly BM Unit Allocations will be browsed on an ad hoc basis.

3.69.7 Events

None

3.69.8 Event Frequency

n/a

3.69.9 Enquiries

Browse Non-Half Hourly BM Unit Allocation

3.69.10 Enquiry Frequency

1

3.69.11 Requirements Catalogue Ref.

Awaiting URS reference.

3.69.12 User Roles

ISRA Operator

3.69.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0047 Specify Non-Half Hourly BM Unit Allocation I/O Structure branch 'Browse Non-Half Hourly BM Unit Allocation'.

3.70 I0048 Load BM Unit Registration Data

3.70.1 Function Type

Batch	Update	User initiated
-------	--------	----------------

3.70.2 Function Description

This function validates and loads BM Unit for Supplier in GSP Group information as prepared by the Market Domain Data Agent, into the SVAA system. The file contains newly created BM Units for Supplier in GSP Group and any updates required to existing BM Units for Supplier in GSP Group. The loading mechanism does not support deletes of BM Units for Supplier in GSP Group which will be done manually.

A list of files which are available for loading is displayed, from which the user selects the file required. The list consists of BM Unit Registration Data files which have either never been loaded or have failed a loading attempt previously. The user selects the file required.

The file contents are validated, if the data is successfully validated, the database is updated, the file management database is updated to indicate the load is successful and a message is written to a log to indicate that the load is successful.

If validation is not successful, the file management database is updated to show the load has failed and an Exception Report is written to report the errors detected.

3.70.3 Processing Description

Awaiting URS EPD reference.

See Event Description

3.70.4 Error Handling

See Event Description

3.70.5 Common Processing

IC002 Batch Audit

IC003 Authorise & Produce Standing Data Audit Report

IC004 Check File Header

IC006 Restrict Access

IC007 Update File Log

IC009Report Exception

3.70.6 Volumes

Occasional (at most 1/month).

3.70.7 Events

BM Unit for Supplier in GSP Group Loaded

3.70.8 Event Frequency

1

3.70.9 Enquiries

None

3.70.10 Enquiry Frequency

n/a

3.70.11 Requirements Catalogue Ref.

Awaiting URS reference.

3.70.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.70.13 I/O Structures

I0048_Load BM Unit Registration Data

I0048 01:

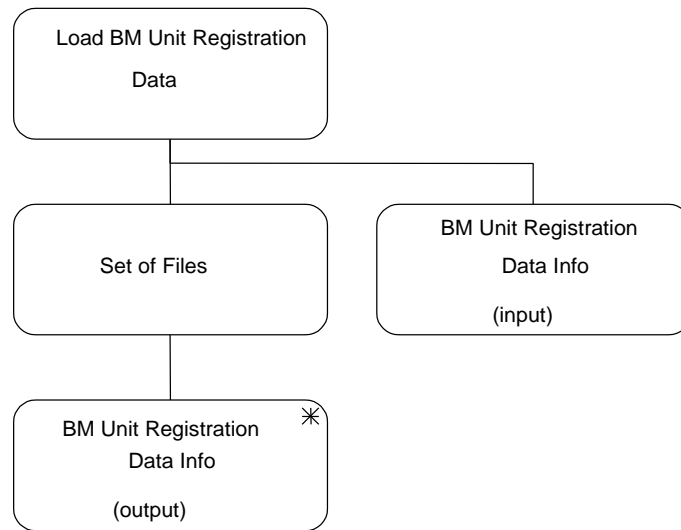


Figure 77: I0048 01 - Load BM Unit Registration Data

I/O Structure Element	Data Items
BM Unit Registration Data Info.	File Creation Timestamp Market Participant Id Market Participant Role Code

Table 83: I0048 01 - I/O Structure Elements

I0048_02:

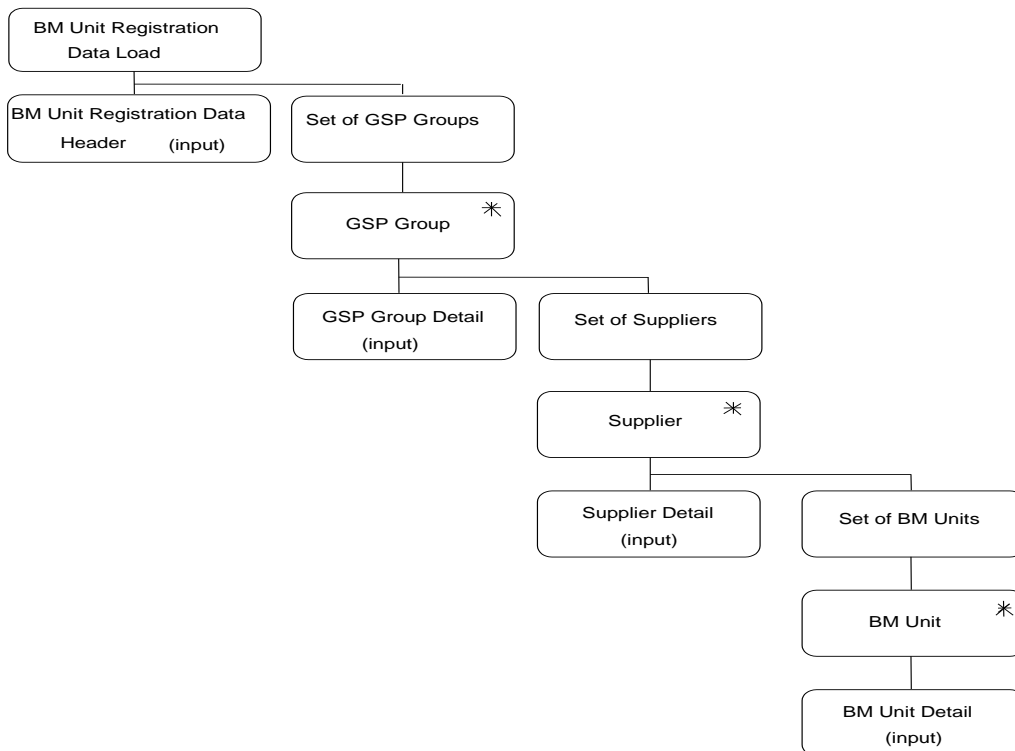


Figure 78: I0048 02 - Load BM Unit Registration Data

I/O Structure Element	Data Items
BM Unit Registration Data Header Detail	Market Participant Id Market Participant Role Code File Creation Timestamp
GSP Group Detail	GSP Group Id GSP Group Name
Supplier Detail	Supplier Id
BM Unit Detail	BM Unit Id Effective From Settlement Date {BMUIGG} Effective To Settlement Date {BMUIGG} (O) Default BM Unit Flag

Table 84: 10048 02 - I/O Structure Elements**3.71 10049 Produce Standing Data Update Report For Suppliers****3.71.1 Function Type**

Online	Enquiry	User initiated
--------	---------	----------------

3.71.2 Function Description

This function allows the SVA Agent to generate a Standing Data Update Report for a single Supplier or all Suppliers.

The user enters the Supplier (or enters no Supplier if a report for all Suppliers is to be generated), start date and the end date of the range of update dates to be used in the data selection. There will be an option to view results on-line or as a printed report.

The report will contain details of the standing data modifications as logged by function IC010 Log Data Load Standing Data Updates, grouped by Supplier.

3.71.3 Processing Description

None

3.71.4 Error Handling

None

3.71.5 Common Processing

None

3.71.6 Volumes

Occasional.

3.71.7 Events

None

3.71.8 Event Frequency

n/a

3.71.9 Enquiries
Enquiry on Results of Standing Data Update Report.

3.71.10 Enquiry Frequency

1

3.71.11 Requirements Catalogue Ref.

CP1093

3.71.12 User Roles

None

3.72 I0050 Produce LLF Confirmation Report

3.72.1 Function Type

Online	Enquiry	User initiated
--------	---------	----------------

3.72.2 Function Description

This function allows the SVA Agent to generate LLF Confirmation reports to confirm that LLFs have been loaded for all the expected LLFCs. The report is based on the Settlement Period Line Loss Factor entity.

The user enters the Distributor, Settlement Date and Settlement Period to be used in the data selection.

The report is used after the annual LLF loads and will contain the details: Line Loss Factor ClassId and Line LossFactor.

3.72.3 Processing Description

None

3.72.4 Error Handling

None

3.72.5 Common Processing

None

3.72.6 Volumes

Occasional.

3.72.7 Events

None

3.72.8 Event Frequency

n/a

3.72.9 Enquiries

Request LLF Confirmation Report.

3.72.10 Enquiry Frequency

1

3.72.11 Requirements Catalogue Ref.

ISIS

3.72.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.72.13 I/O Structures

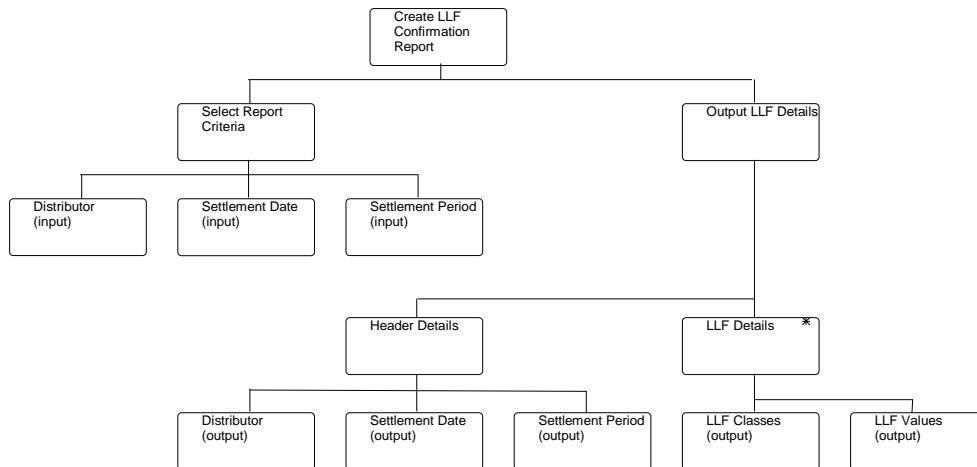


Figure 79: Produce LLF Confirmation Report

I/O Structure Element	Data Items
Header Details	Distributor Market Participant Id Settlement Date Settlement Period
LLF Details	Line Loss Factor Class Id Line Loss Factor

Table 85: Produce LLF Confirmation Report - I/O Structure Elements

3.73 I0051 Define Final Dispute Expected Data Aggregation

3.73.1 Function Type

On-line	Update	User initiated
---------	--------	----------------

3.73.2 Function Description

This function is invoked by an ISRA user to create and maintain the Final Dispute Expected Data Aggregation for selected GSP groups and Data Aggregator Market Participants.

For creation, the user must enter the Settlement Date Range and then add individual GSP Group Id’s, and Data Aggregator roles. Once a record is entered it may be mapped against one more Data Aggregator Market Participant Ids. The associations between GSP Groups and Data Aggregator Market Participants will

be created on saving the entered data and the same may be amended later using the edit facility.

When a new Final Dispute Expected Data Aggregation is defined it must not overlap and conflict with existing Final Dispute Expected Data Aggregation data (on a per GSP Group basis). The settlement date range is validated to ensure that this does not happen.

To change existing Final Dispute Expected Data Aggregation data, the user amends the selected GSP Groups for a given settlement date range and the Data Aggregator Market Participant details or Data Aggregator Role if required,

For deletion, the user deletes some/all the GSP Groups selected for a given settlement date range – this may only occur after de-selecting all associated Data Aggregator Market Participant mappings.

The system validates all data and the details entered may be rejected if necessary.

If validation is successful, the database is updated accordingly. The data is re-displayed to the user.

3.73.3 Processing Description

See Event Descriptions

3.73.4 Error Handling

See Event Descriptions

3.73.5 Common Processing

IC001 Update on-line Audit Log

IC006 Restrict Access

3.73.6 Volumes

Occasional

An indeterminate number of associations between GSP Groups and Market Participants may be browsed on an ad hoc basis.

3.73.7 Events

Final Dispute Expected Data Aggregation Entered, Final Dispute Expected Data Aggregation Updated, Final Dispute Expected Data Aggregation Deleted.

3.73.8 Event Frequency

The exact frequency cannot be determined.

3.73.9 Enquiries

None

3.73.10 Enquiry Frequency

N/A

3.73.11 Requirements Catalogue Ref.

Awaiting URS reference

3.73.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.73.13 I/O Structures

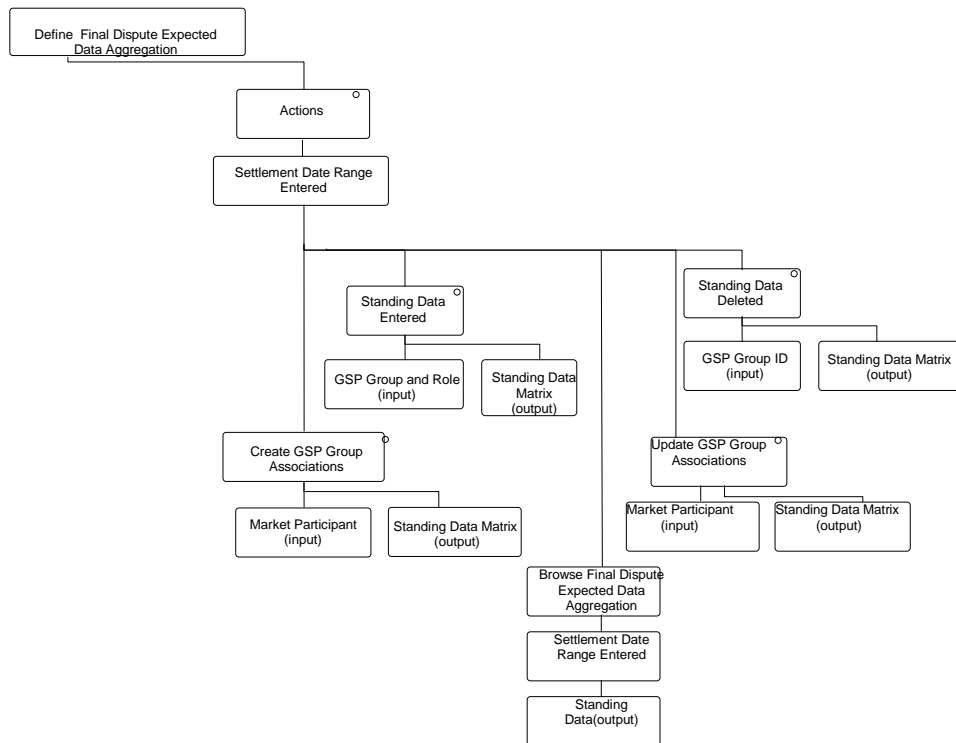


Figure 80: Define Final Dispute Expected Data Aggregation

I/O Structure Element	Data Items
Settlement Date Range	Effective From Settlement Date {FDEDA} Effective To Settlement Date {FDEDA}
GSP Group Id	GSP Group Id
Standing Data Matrix	Effective From Settlement Date {FDEDA} Effective To Settlement Date {FDEDA} GSP Group Id Data Aggregator Role Data Aggregator Market Participant Id
Market Participant	Data Aggregator Market Participant Id

Table 86: Define Final Dispute Expected Data Aggregation - I/O Structure Elements

3.74 I0051E Browse Final Dispute Expected Data Aggregation**3.74.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.74.2 Function Description

This function is invoked by an ISRA user to browse the Final Dispute Expected Data Aggregation.

The user enters the Settlement Date range (or selects from a list) to browse. Final Dispute Expected Data Aggregation details are displayed.

3.74.3 Processing Description

Browse the Final Dispute Expected Data Aggregation details e.g. GSP Groups, Data Aggregator Role and Data Aggregator Market Participant Id.

3.74.4 Error Handling

n/a

3.74.5 Common Processing

IC006 Restrict Access

3.74.6 Volumes

An indeterminate volume of data will be browsed on an ad hoc basis.

3.74.7 Events

None

3.74.8 Event Frequency

n/a

3.74.9 Enquiries

Browse Final Dispute Expected Data Aggregation

3.74.10 Enquiry Frequency

n/a

3.74.11 Requirements Catalogue Ref.

ISIS

3.74.12 User Roles

ISRA Operator, ISRA Operations Supervisor, ISRA Standing Data Manager

3.74.13 I/O Structures

No separate I/O Structure diagram exists for this function. Refer to I0051 Define Final Dispute Expected Data Aggregation I/O Structure branch 'Browse Final Dispute Expected Data Aggregation'.

3.75 I0052 Browse Missing Data Aggregator Files**3.75.1 Function Type**

On-line	Enquiry	User initiated
---------	---------	----------------

3.75.2 Function Description

This function is invoked by an ISRA user to browse Data Aggregator data – specifically an enquiry will retrieve, for the Settlements scheduled for a specified Run Date, files classified as either Missing or Unexpected. Additionally, for the same criteria, files where Supplier data is either missing or unexpected will be displayed.

Missing files are those files from Data Aggregator having Data Aggregator In GSP Group records without Supplier Data Aggregation records (and where files are for Final Dispute runs, they must have records in the Final Dispute Expected Data Aggregation (FDEDA) to be listed as missing).

Unexpected files are only listed for Final Dispute Settlements. They are those files from Data Aggregator having Supplier Data Aggregation records and no Final Dispute Expected Data Aggregation records for the same Settlement GSP Group.

Missing Supplier data is defined where Suppliers are missing from Data Aggregation in GSP Group but present in Supplier Data Aggregation for the same Settlement / GSP Group / Data Aggregator.

Unexpected Supplier data is defined where Suppliers are present in Supplier Data Aggregation but missing from Data Aggregation in GSP Group for the same Settlement / GSP Group / Data Aggregator.

The user must enter a valid Run Date and optionally criteria may be specified to filter retrieved data based on: HH files; NHH files; data for Final Dispute runs only; data for runs other than Final Dispute only. One or more filter criteria may be specified.

3.75.3 Processing Description

Awaiting URS EPD reference.

See Event Descriptions

3.75.4 Error Handling

See Event Descriptions

3.75.5 Common Processing

IC006 Restrict Access

3.75.6 Volumes

An indeterminate volume of data will be browsed on an ad hoc basis.

3.75.7 Events

None

3.75.8 Event Frequency

The exact frequency cannot be determined.

3.75.9 Enquiries

Browse Missing Data Aggregator Files Data

3.75.10 Enquiry Frequency

The exact frequency cannot be determined.

3.75.11 Requirements Catalogue Ref.

ISIS

3.75.12 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.75.13 I/O Structures

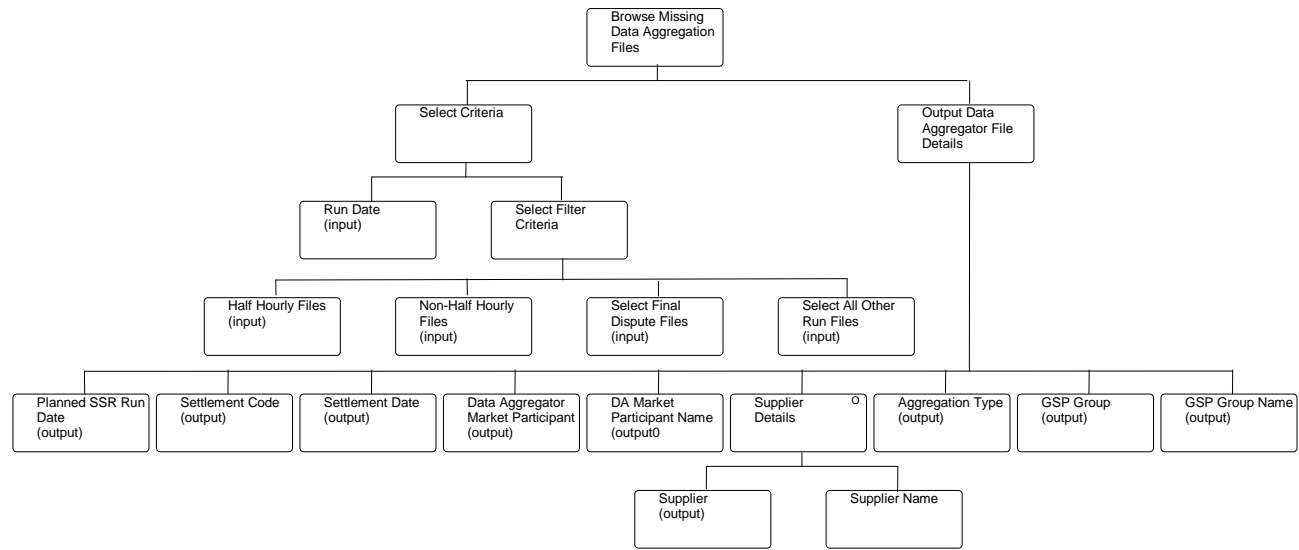


Figure 81: Browse Missing Data Aggregator Files

I/O Structure Element	Data Items
Output Data Aggregator File Details	Planned SSR Run Date Settlement Code Settlement Date Data Aggregator Market Participant Id Data Aggregator Name Data Aggregator Market Participant Role Code GSP Group Id GSP Group Name
Supplier Details	Supplier Id Supplier Name

Table 87: Browse Missing Data Aggregator Files - I/O Structure Elements

3.76 I0053 Load LLF/SSC Mapping Data

3.76.1 Function Type

On-line Enquiry User initiated

3.76.2 Function Description

This function validates and loads Line Loss Factor Id, Distributor Id, Standard Settlement Configuration Details, Time Pattern Regime and Clock Intervals details received from the DSO, which is used in the loading of the

Aggregated Half Hourly Data and Duos report creation.

This function may be initiated as mentioned below:

1. Automatically by the presence of files to be loaded on the system.

3.76.3 Processing Description

See Event Descriptions

3.76.4 Error Handling

See Event Descriptions

3.76.5 Common Processing

IC006 Restrict Access

3.76.6 Volumes

Low

3.76.7 Events

None

3.76.8 Event Frequency

1

3.76.9 Enquiries

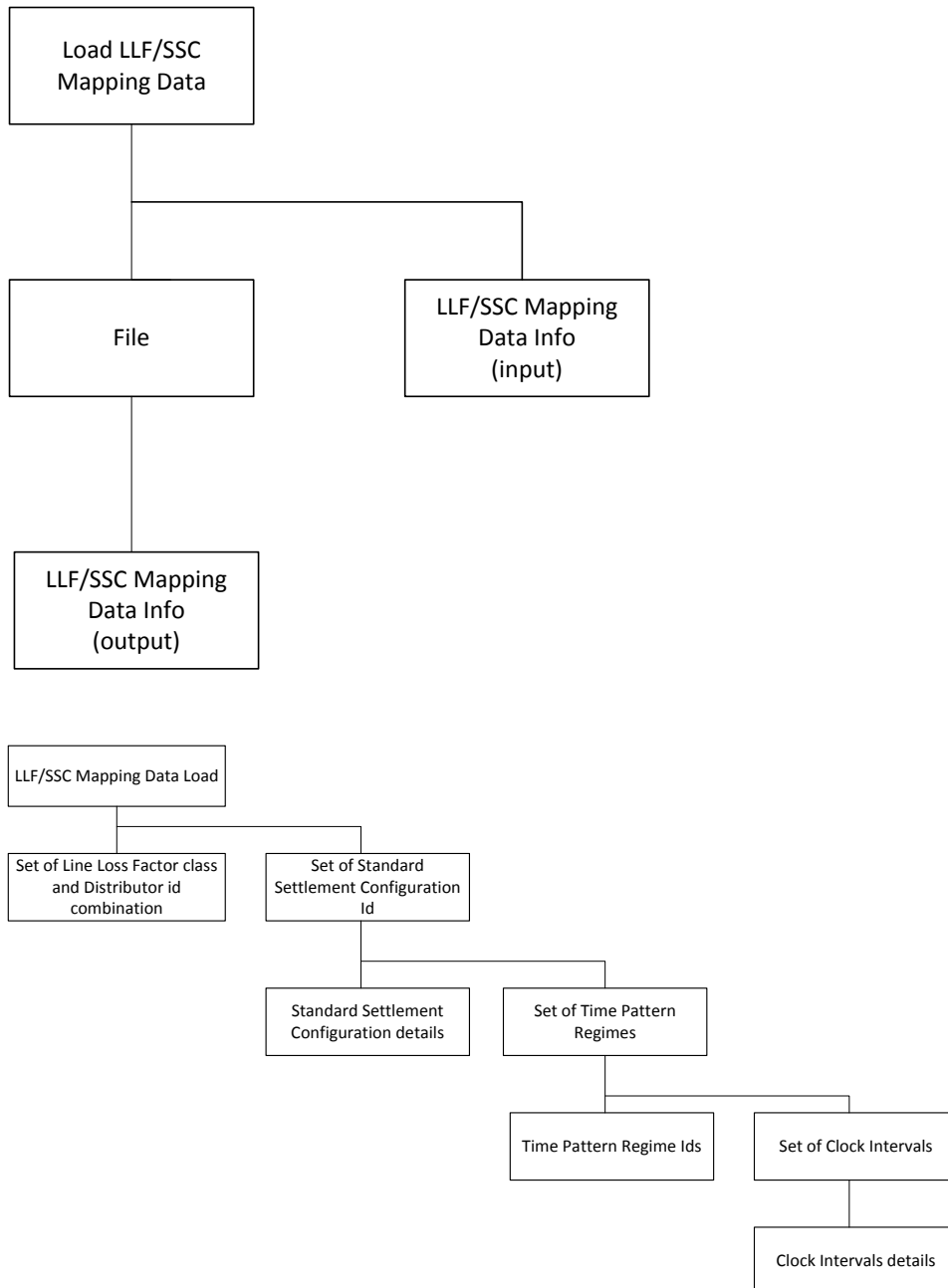
3.76.10 Enquiry Frequency

NA

3.76.11 User Roles

ISRA Operations Supervisor, ISRA Standing Data Manager

3.76.12 I/O Structures



I/O Structure Element

Line Loss Factor Details

Data Items

Distributor Id

Line Loss Factor Class ID

Standard Settlement Configuration Id

Effective From Settlement Date

I/O Structure Element	Data Items
	{LLFSSC}
Standard Settlement Configuration Details	Standard Settlement Configuration Id Standard Settlement Configuration Desc Effective from Settlement Date {SSC} Effective to Settlement Date {SSC} Standard Settlement Configuration Type
Time Pattern Details	Time Pattern Regime Id
Clock Interval Details	Day of the Week Id Start Day Start Month End Day End Month Start Time End Time

3.77 I0054 Load Supplier Purchase Matrix Data**3.77.1 Function Type**

Batch	Update	System initiated
-------	--------	------------------

3.77.2 Function Description

This function allows one or more files of Disconnection Purchase Matrix data for a Settlement Day for a Data Aggregator to be loaded into the ISRA system.

This function may be initiated automatically by the presence of files to be loaded on the system

3.77.3 Processing Description

Reference: Validate DPM Data

See Event Description

3.77.4 Error Handling

See Event Description

3.77.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.77.6 Volumes

One per active non-half hourly Data Aggregator to GSP Group relationship per Data Aggregation Run.

3.77.7 Events

DPM Data Available

3.77.8 Event Frequency

1

3.77.9 Enquiries

None

3.77.10 Enquiry Frequency

N/A

3.77.11 Requirements Catalogue Ref.

N/A

3.77.12 User Roles

None

3.77.13 I/O Structures

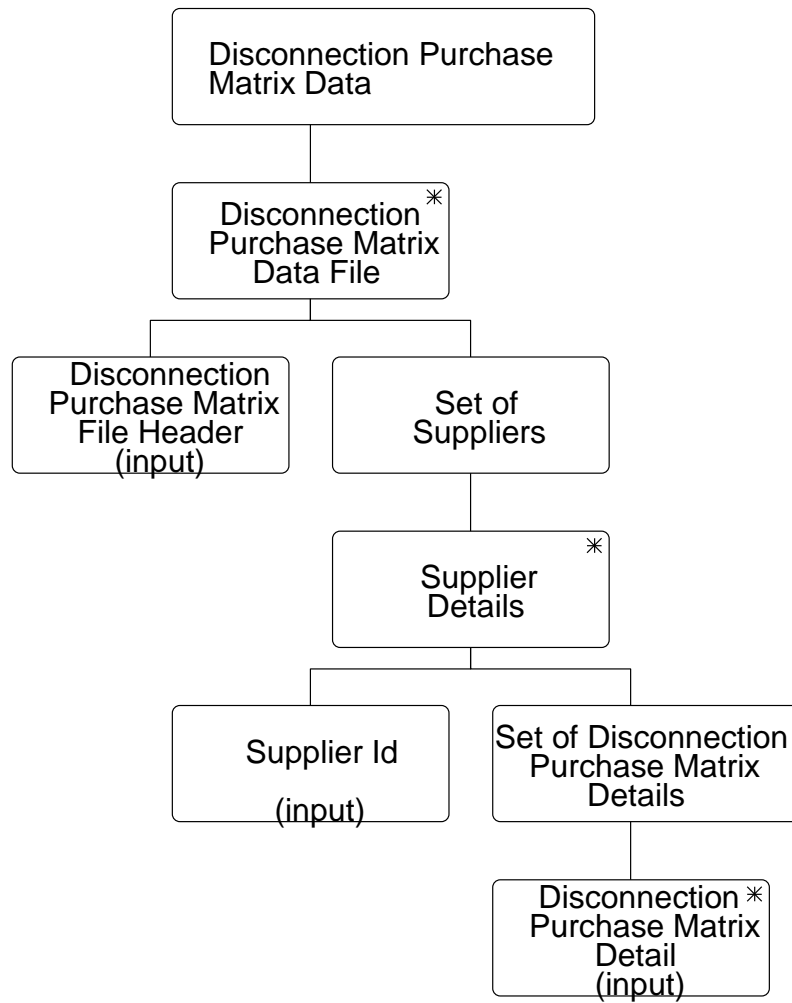


Figure 82: Load Disconnection Purchase Matrix Data

I/O Structure Element	Data Items
Supplier Id	Supplier Id
Disconnection Purchase Matrix Detail	Distributor Id Line Loss Factor Class Id Profile Class Id DPM Default EAC MSID Count DPM Default Unmetered MSID Count DPM Total AA MSID Count DPM Total Annualised Advance DPM Total EAC DPM Total EAC MSID Count DPM Total Unmetered Consumption DPM Total Unmetered MSID Count Standard Settlement Configuration Id Time Pattern Regime Id
Disconnection Purchase Matrix File Header	Data Aggregation Run Number Data Aggregation Type Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date

Table 39: Load Disconnection Purchase Matrix Data - I/O Structure Elements

3.78 I0055 Load Supplier's Demand Disconnection Volume Data**3.78.1 Function Type**

Batch	Update	System initiated
-------	--------	------------------

3.78.2 Function Description

This function validates and loads Supplier's Demand Disconnection Volume data received from the Data Aggregators, which is used in the main SSR calculations.

This function may be initiated automatically by the presence of files to be loaded on the system.

3.78.3 Processing Description

Reference: Validate Supplier's Demand Disconnection Volume Data

See Event Description.

3.78.4 Error Handling

See Event Description

3.78.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.78.6 Volumes

One per active half hourly Data Aggregator to GSP Group relationship per Data Aggregation Run.

3.78.7 Events

Aggregated Half Hour Data Available

3.78.8 Event Frequency

1

3.78.9 Enquiries

None

3.78.10 Enquiry Frequency

N/A

3.78.11 Requirements Catalogue Ref.

N/A

3.78.12 User Roles

None

3.78.13 I/O Structures

I0055_01 - File Format (valid for all Settlement Days)

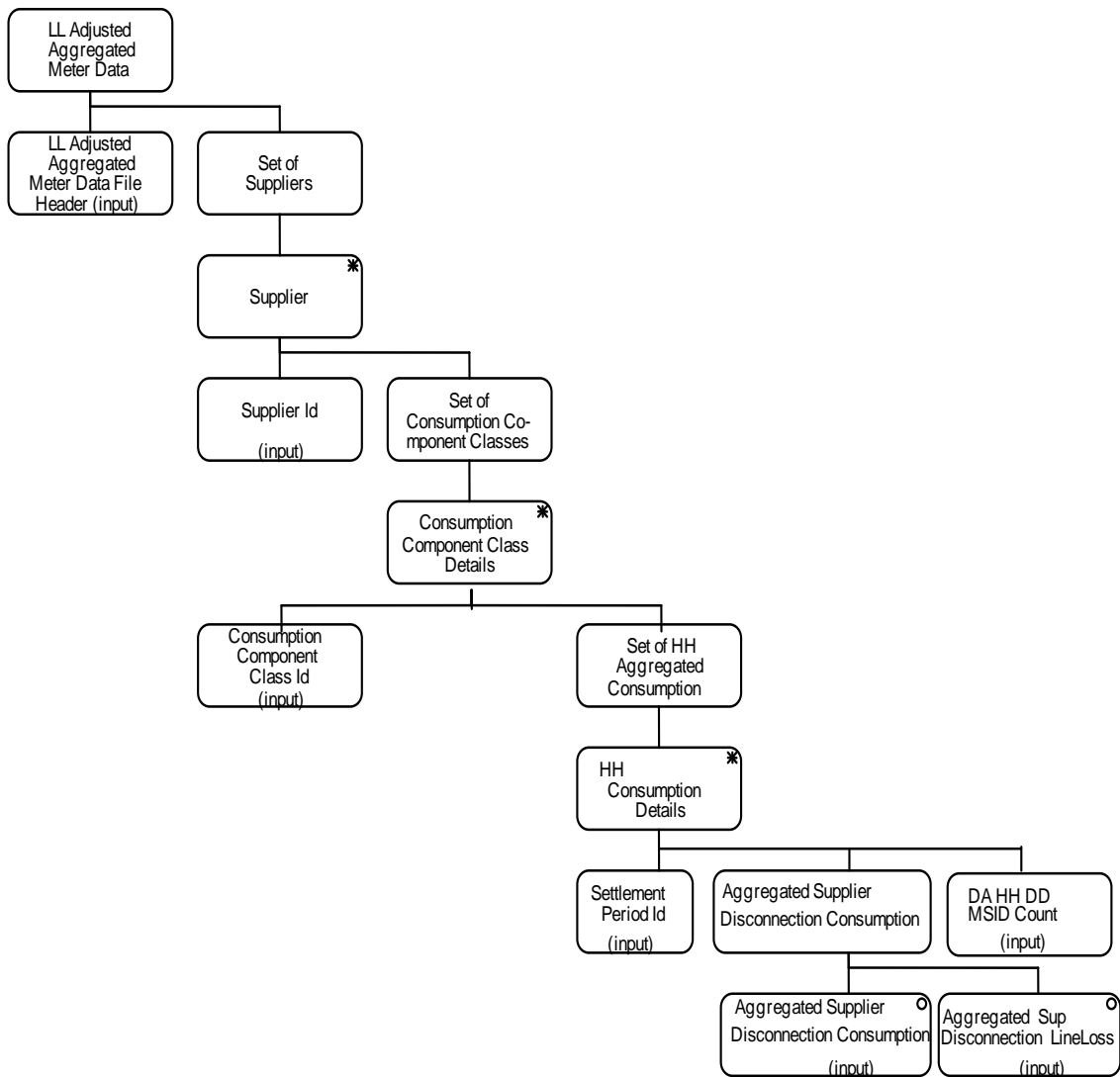


Figure 20: I0055_01 - File Format

I/O Structure Element	Data Items
Aggregated Supplier Disconnection Volume	Aggregated Supplier Disconnection Volume (Optional)
Aggregated Supplier Disconnection Line Loss	Aggregated Supplier Disconnection Line Loss (Optional)
Consumption Component Class Id	Consumption Component Class Id
Data Aggregator Disconnection HH MSID Count	Data Aggregator Disconnection HH MSID Count
LL Adjusted Aggregated Meter Data File Header	Data Aggregation Run Number Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date
Settlement Period Id	Settlement Period Id
Supplier Id	Supplier Id

Table 26: I0055_01 - File Format - I/O Structure Elements

I0055_02 - File format

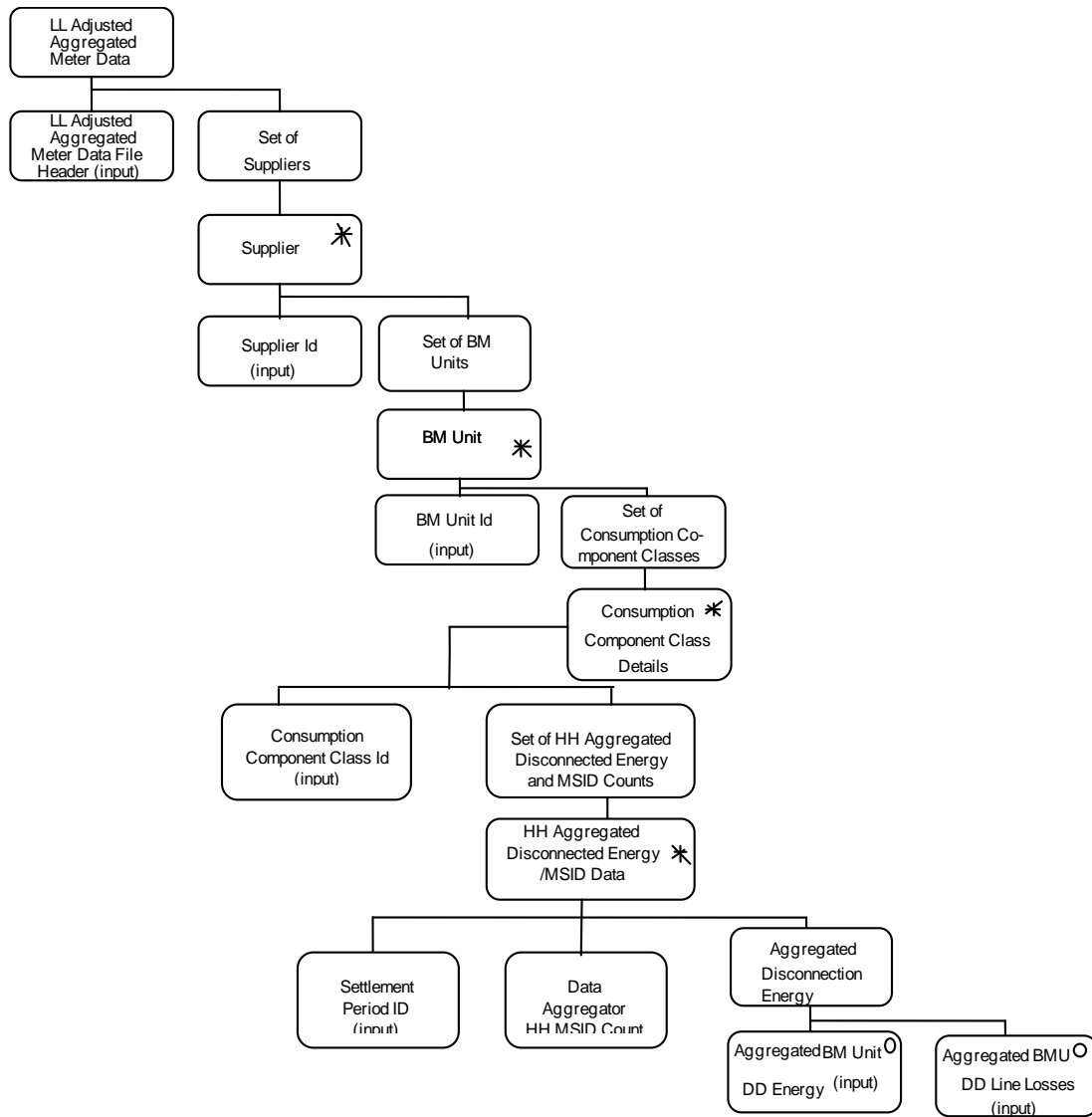


Figure 21: I0055_02 - File format

I/O Structure Element	Data Items
Aggregated BM Unit Disconnection Energy	Aggregated BM Unit Disconnection Energy (Optional)
Aggregated BM Unit Line Losses	Aggregated BM Unit Disconnection Line Losses (Optional)
BM Unit Id	BM Unit Id
Consumption Component Class Id	Consumption Component Class Id
LL Adjusted Aggregated Meter Data File Header	Data Aggregation Run Number Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date
Settlement Period Id	Settlement Period Id
Data Aggregator HH MSID Count	Data Aggregator HH MSID Count
Supplier Id	Supplier Id

Table 27: I0055_02 - File format

3.79 I0056 Load Demand Control Event Data**3.79.1 Function Type**

Batch	Update	System initiated
-------	--------	------------------

3.79.2 Function Description

This function allows one or more files of Demand Control Event data for a Settlement Day impacted by demand control event for a Data Aggregator to be loaded into the ISRA system.

This function may be initiated automatically by the presence of files to be loaded on the system

3.79.3 Processing Description

Reference: Validate Demand Control Event Data

See Event Description

3.79.4 Error Handling

See Event Description

3.79.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.79.6 Volumes

One per active non-half hourly Data Aggregator to GSP Group relationship per Data Aggregation Run.

3.79.7 Events

DCE Data Available

3.79.8 Event Frequency

1

3.79.9 Enquiries

None

3.79.10 Enquiry Frequency

N/A

3.79.11 Requirements Catalogue Ref.

N/A

3.79.12 User Roles

None

3.79.13 I/O Structures

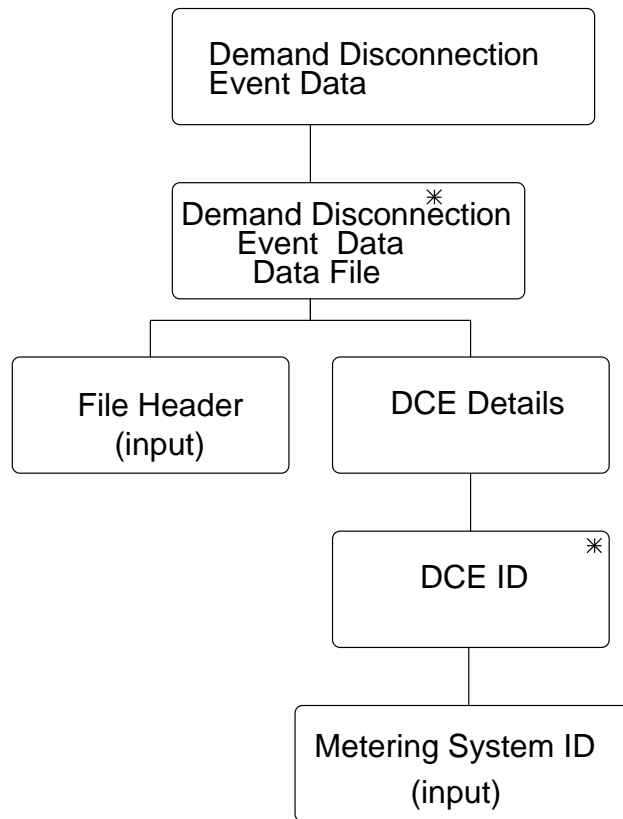


Figure 82: Load Demand Disconnection Event Data

I/O Structure Element	Data Items
Metering System Id	Metering System Id
Demand Disconnection Event Detail	Demand Disconnection Event ID Start Date and Time End Date and Time
Demand Disconnection Event File Header	Data Aggregation Run Number Data Aggregation Type Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date

Table 39: Load Demand Disconnection Event Data - I/O Structure Elements

3.80 I0057 Load Demand Control Instruction Data**3.80.1 Function Type**

Batch	Update	System initiated
-------	--------	------------------

3.80.2 Function Description

This function allows one or more files of Demand Control Instruction data for a Settlement Day impacted by demand control event to be loaded into the ISRA system.

This function may be initiated automatically by the presence of files to be loaded on the system

3.80.3 Processing Description

Reference: Validate Demand Control Instruction Data

See Event Description

3.80.4 Error Handling

See Event Description

3.80.5 Common Processing

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.80.6 Volumes

Low

3.80.7 Events

DCI Data Available

3.80.8 Event Frequency

1

3.80.9 Enquiries

None

3.80.10 Enquiry Frequency

N/A

3.80.11 Requirements Catalogue Ref.

N/A

3.80.12 User Roles

None

3.80.13 I/O Structures

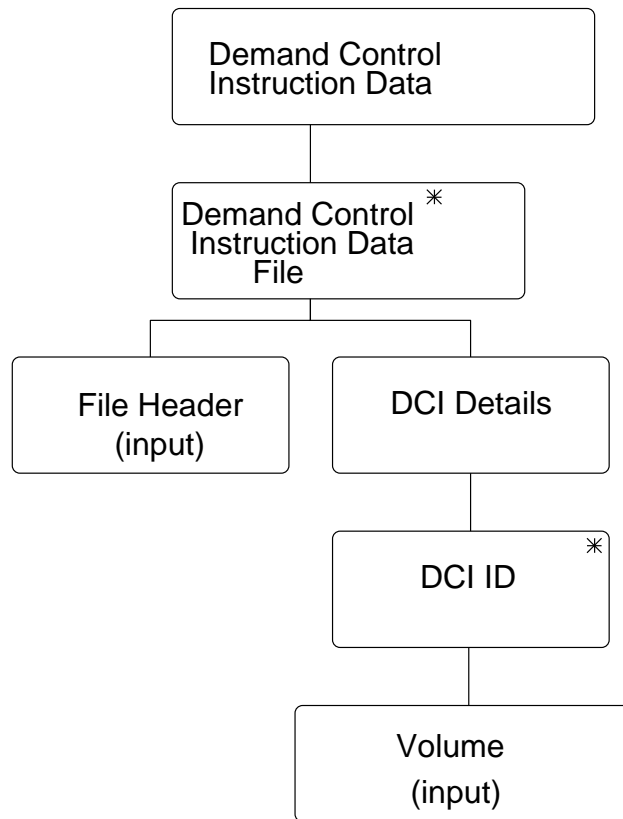


Figure 82: Load Demand Control Instruction Data

I/O Structure Element	Data Items
Demand Control Instruction Detail	Demand Control Instruction ID Instruction Sequence Number Demand Control Event Flag Time From Time To Volume SO Flag Amendment Flag
Demand Control Instruction File Header	Data Aggregation Run Number Data Aggregation Type Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date

Table 39: Load Demand Control Instruction Data - I/O Structure Elements

3.81 **I0058 Load Disconnected MSIDs and Estimated HH Demand Disconnection Volumes**

3.81.1 **Function Type**

Batch	Update	System initiated
-------	--------	------------------

3.81.2 **Function Description**

This function allows one or more files of Disconnected MSIDs and Estimated Half Hourly Demand Disconnection Volumes to be loaded into the ISRA system.

This function may be initiated automatically by the presence of files to be loaded on the system

3.81.3 **Processing Description**

Reference: Validate Disconnected MSIDs and Estimated HH Demand Disconnection Volume Data

See Event Description

3.81.4 **Error Handling**

See Event Description

3.81.5 **Common Processing**

IC002 Batch Audit

IC004 Check File Header

IC007 Update File Log

IC009 Report Exception

IC010 Log Data Load Standing Data Update

3.81.6 **Volumes**

Low

3.81.7 **Events**

Disconnected MSIDs and Estimated Half Hourly Demand Disconnection Volumes Data Available

3.81.8 **Event Frequency**

Low

3.81.9 **Enquiries**

None

3.81.10 **Enquiry Frequency**

N/A

3.81.11 **Requirements Catalogue Ref.**

N/A

3.81.12 **User Roles**

None

3.81.13 I/O Structures

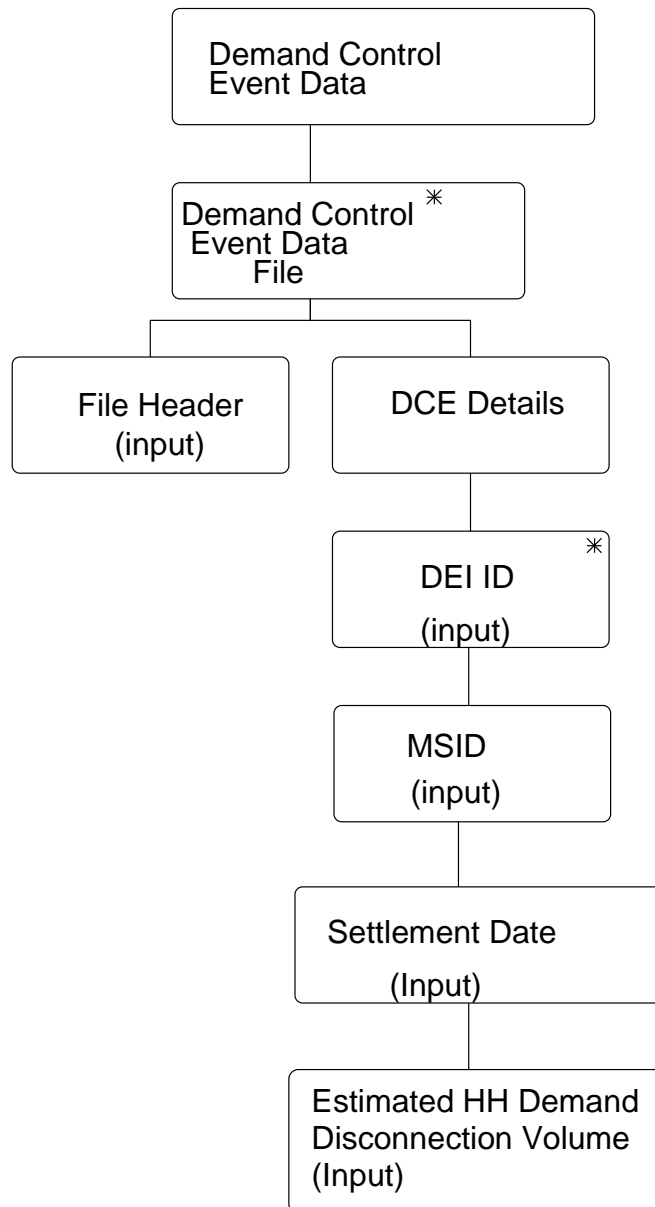


Figure 82: Load Disconnected MSIDs and Estimated Half Hourly Demand Disconnection Volumes

I/O Structure Element	Data Items
Metering System ID	Metering System ID
Settlement Date	Settlement Date
Estimated HH Demand Disconnection Volume	Estimated HH Demand Disconnection Volume
Demand Control Instruction Detail	Demand Control Instruction ID Instruction Sequence Number Demand Control Event Flag Time From Time To Volume SO Flag Amendment Flag
Demand Control Instruction File Header	Data Aggregation Run Number Data Aggregation Type Data Aggregator Id File Creation Timestamp GSP Group Id Settlement Code Settlement Date

Table 39: Load Disconnected MSIDs and Estimated Half Hourly Demand Disconnection Volumes - I/O Structure Elements

4 Common Processes

4.1 IC001 Update On-Line Audit Log

4.1.1 Processing Description

All data changes made on line are logged using an audit entity (not shown on the LDM). Each on-line audit entity has the same attributes as the main entity (to hold the after image) and additional attributes to hold: the action (create, update, delete); the updating function; the user id of the user causing the change; and the time stamp (including date) of the change. On deletion, there is no after image, but the key is stored, together with the additional attributes listed above.

Entities with associated audit entities are:

- Average Fraction of Yearly Consumption
- Average Fraction of Yearly Consumption Set
- BM Units For Supplier In GSP Group
- Clock Interval
- Clock Time Change
- Clock Time Pattern Regime
- Daily Profile Parameters
- Data Aggregator
- Data Aggregator in GSP Group
- Data Collector
- Data Collector in GSP Group
- Date Block
- Distributor
- GSP Group
- GSP Group Average EACs
- GSP Group Correction Scaling Factor
- GSP Group Distributor
- Line Loss Factor Class
- Market Participant
- Market Participant Role
- Measurement Requirement
- Non-Half Hourly BM Unit Allocation
- Profile
- Profile Class
- Profile Set

- Settlement
- Standard Settlement Configuration
- Supplier
- Supplier in GSP Group
- SSR Run
- Tele-Switch Contact
- Tele-switch Contact Interval
- Tele-Switch Register Rule
- Tele-Switch Contact Rule
- Tele-switch Time Pattern Regime
- Time Block
- Time Pattern Regime
- Valid Measurement Requirement Profile Class
- Valid Settlement Configuration Profile Class

This process is automatically invoked whenever an on-line update function changes any system data.

4.1.2 Error Handling

See Processing Description

4.1.3 Other Common Processing

No other common processes invoked.

4.1.4 Functions

I0001	Define Line Loss Factor Classes
I0002	Define GSP Group
I0003	Define Calendar
I0004	Define GSP Correction Scaling Factors
I0005	Specify Supplier in GSP Group
I0006	Specify Distributor(s) for GSP Group
I0007	Define Profiles
I0009	Specify Data Collector for GSP Group
I0010	Specify Aggregator for GSP Group
I0011	Enter Temperature
I0012	Enter Tele-switch Intervals
I0030	Define Settlement Calendar
I0031	Define Standard Settlement Configurations and Assign Time Patterns

I0032	Specify Profile Class and Configuration Combinations
I0033	Define Average Fractions of Yearly Consumption
I0035	Maintain System Configuration Data
I0040	Define Time Pattern Regime
I0046	Define BM Units For Supplier In GSP Group
I0047	Specify Non-Half Hourly BM Unit Allocation
IC002	Batch Audit

4.1.5 Requirements Catalogue Ref.

6.12, 7.8, 7.10

4.1.6 I/O Structures

Not applicable

4.2 IC002 Batch Audit

4.2.1 Processing Description

This process is invoked by functions which cause data to be loaded or modified by batch processes. This covers everything that is not interactively entered by the user.

All data files received are recorded using function IC007 - Update File Log. In addition the files themselves are retained until they are archived. This provides a complete record of all data entering the system.

Depending on the nature of the data, additional actions are also performed:

a) Mixed Source Market Domain Data / Profile Data

This is Market Domain data which can be entered either interactively (online) or in batch (offline). Specifically it represents the following entities:

- Average Fraction of Yearly Consumption
- Average Fraction of Yearly Consumption Set
- BM Unit for Supplier in GSP Group
- Clock Interval
- Clock Time Change
- Clock Time Pattern Regime
- Line Loss Factor Class
- Measurement Requirement
- Profile
- Profile Class
- Settlement Day
- Settlement

- Standard Settlement Configuration
- Tele-Switch Contact
- Tele-Switch Contact Interval
- Tele-Switch Contact Rule
- Tele-Switch Register Rule
- Tele-switch Time Pattern Regime
- Time Pattern Regime
- Valid Measurement Requirement Profile Class
- Valid Settlement Configuration Profile Class

All batch changes to these entities are recorded together with the online changes in the online audit log. This is done by invoking function IC001 - Update Online Audit Log for each such change. For file loads the user id in the Audit Log is set to the id of the batch user.

b) Settlement Data

Most of the input data to the settlement process is created at the time of file load. Once created this data cannot be modified, either on-line or in batch. The data used as input to a run is recorded as part of the run processing. This information along with the base entities themselves provide a complete record. This approach covers the following entities:

- Aggregated Supplier DA Period Consumption
- GSP Group Take
- Supplier Purchase Matrix
- Settlement Period Prices
- Supplier Data Aggregation
- SSA Settlement Run
- SSA Settlement GSP Group

Period Profile Class Coefficients are also read as part of the SSR Run but as these cannot be changed once a Final Initial Settlement Run has been done, the entity alone is sufficient for auditing.

c) Settlement Period Line Loss Factors / GSP Correction Scaling Factors

Ideally these should be handled in the same way as settlement data in (b) above, however the set effective for an SSR run can be altered by the reload of a new set of Line Loss Factor Class data or in the case of GSP Correction Scaling Factor by on-line changes.

To ensure an accurate audit trail for the SSR runs, each run takes a snap-shot of the data at the start of the run. This is held in the Settlement Period LLF Used In SSR Run, GSP Correction Scaling Factor used in SSR Run and LLF File Ids used in SSR Run entities and provides a full audit record for that run.

In the case of Settlement Period Line Loss Factors this snapshot combined with retaining the input file means there is no need to record changes to the entity and it is over-written when data is replaced.

d) Daily Profile Production Data

Data used for Profile Production which can only be modified through the loading of data files is audited by recording the delivery and processing of every file in the file log (see above). The database holds the latest version of the data received.

To provide a full record of the data used in a Profile Production Run, the following reports are produced for every run:

- Standing Profile Data Report
- Standard Settlement Configuration Report
- Tele-switch Contact Interval Data Report
- Daily Profile Data Report

These reports are retained for audit purposes.

e) SSR and Profile Runs

Every time an SSR or Profile Production Run is invoked, a record(s) are created in the SSR Run and SSR Run GSP Group or Profile Production Run entities. The creation of these records generates an entry in the online audit log through invoking the common function IC001 Update On-line Audit Log. Other process specific audit information is also generated, as described in the functions themselves, for example the creation of '...used in SSR Run' entities.

4.2.2 Error Handling

See Processing Description

4.2.3 Other Common Processing

IC001 Update Online Audit Log

IC007 Update File Log

4.2.4 Functions

The following functions invoke this function. Each function is categorised:

I0013B	Load GSP Group Take	(b)
I0014	Load Line Loss Factor Data	(c)
I0016	Calculate Daily Profiles	(e)
I0017B	Load Aggregated Half Hour Data	(b)
I0018	Load Tele-switch Pool Market Domain Data	(a)
I0019	Load Regression Equations	(d)
I0020B	Load Settlement Price Data	(b)
I0021	Load Sunset data	(d)
I0022B	Load Supplier Purchase Matrix Data	(b)
I0028B	Load Tele-Switch Contact Switching Times	(a)

I0029	Run SSR	(e)
I0041	Load Profile Data	(a)
I0043	Load Market Domain Data Complete Set	(a)
I0044	Load Settlement Calendar Data	(a)
I0048	Load BM Unit Registration Data	(a)

4.2.5 Requirements Catalogue Ref.

6.12, 7.10

4.2.6 I/O Structures

Not applicable

4.3 IC003 Authorise & Produce Standing Data Audit Report

4.3.1 Processing Description

This common process is invoked whenever standing data is changed, both by on-line and batch functions, that could potentially impact a Settlement Run.

The earliest Settlement Date impacted by the data being inserted / updated or deleted is checked using the logic indicated below. This date could be either from the existing data being changed or from the new data depending on which has an earlier associated date. If this date or any subsequent date has had a Settlement Run with Settlement Code Final Initial then the change must be authorised.

IF the 'effective from settlement date' date is BEFORE the most recent final initial settlement

THEN

IF change only affects the 'effective to settlement date' date

THEN

IF (the old 'effective to sett. date' is BEFORE the most recent final initial settlement)

OR (the new 'effective to sett. date' is BEFORE the most recent final initial settlement)

THEN

Stop the edit or generate IC003 report

ELSE

Let the change go ahead

ENDIF

ELSE

Stop the edit or generate IC003 report

ELSE

Let the change go ahead

ENDIF

The ISRA Standing Data Manager is the only user role authorised to make changes to data that require authorisation. For online functions a warning displayed and the user must confirm they wish to proceed with the change. For batch functions it is assumed that as the ISRA Standing Data Manager would not in normal circumstances be performing loads (normally the ISRA Operator will initiate loads and runs) then this is sufficient authorisation.

If a Final Initial Settlement Run has been affected by the change an Audit Report will be produced. The Audit Report contains the information held in the online audit log entry, as specified in IC001. Additionally for batch functions an exception will be recorded.

4.3.2 Error Handling

See Processing Description

4.3.3 Other Common Processing

IC009 Report Exception

4.3.4 Functions

In general the set of functions invoking IC003 are those that alter standing data entities where the change can be identified as being changed after the Final Initial Settlement Run i.e. those functions which alter, either directly or indirectly e.g. via cascade deletes, entities containing settlement date related attributes. Some functions that would initially appear to be included under this criteria are not due to the specific tighter requirements preventing deletion e.g. I0002 Define GSP Group or where the entity being maintained can only be deleted when the associated links have been removed using a different function e.g. I0031 Define Standard Settlement Configurations & Assign to Time Patterns.

I0001	Define Line Loss Factor Classes
I0003	Define Calendar
I0004	Define GSP Correction Scaling Factors
I0005	Specify Supplier in GSP Group
I0006	Specify Distributor(s) for GSP Group
I0007	Define Profiles
I0010	Specify Aggregator for GSP Group
I0011	Enter Temperature
I0012	Enter Tele-switch Contact Intervals
I0014	Load Line Loss Factor Data
I0018	Load Tele-switch Pool Market Domain Data
I0019	Load Regression Equations
I0019B	Load Scottish Regression Equations ²⁴
I0021	Load Sunset Data
I0028A	Initiate Load Tele-Switch Contact Switching Times
I0028B	Load Tele-Switch Contact Switching Times

- I0031 Define Standard Settlement Configurations and Assign Time Patterns
- I0032 Specify Profile Class and Configuration Combinations
- I0033 Define Average Fractions of Yearly Consumption
- I0040 Define Time Pattern Regime
- I0041 Load Profile Data
- I0046 Define BM Units For Supplier In GSP Group
- I0043 Load Market Domain Data Complete Set
- I0047 Specify Non-Half Hourly BM Unit Allocation
- I0048 Load BM Unit Registration Data

4.3.5 Requirements Catalogue Ref.

6.22, 6.23

4.3.6 I/O Structures

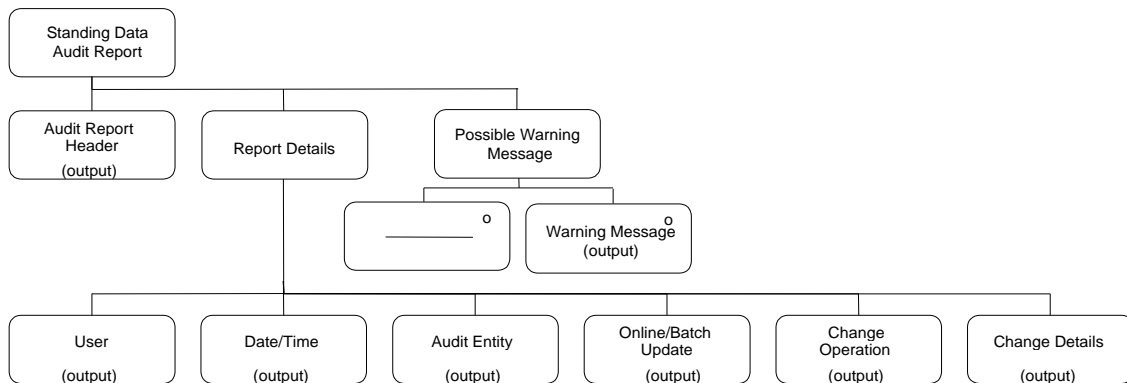


Figure 82: Authorise & Produce Standing Data Audit Report

Please note that the data items listed below have not been included in the Logical Data Model.

I/O Structure Element	Data Items
Audit Report Header	User Name - Name of user being reported on. Audit Entity - Name of entity being reported on. Date Range - Date range being reported on.
User	User Name - Name of user making the change.
Date/Time	Date And Time - The data and time the change was made.
Audit Entity	Audit Entity - The name of the entity affected.
Online/Batch Update	Batch/Online Indicator - Whether update was performed online or by a batch process.
Change Operation	Operation Type - One of create, update or delete.
Change Details	Attribute Values - Details of the after image of the entity.
Warning Message	Warning - Indicates that the change may invalidate one or more sets of Period Profile Class Coefficients or Daily Profile Coefficients.

Table 88: Authorise & Produce Standing Data Audit Report - I/O Structure Elements

4.4 IC004 Check File Header

4.4.1 Processing Description

All files received by ISRA are data files. These have a standard header which is checked as follows:

The File Format Code must identify the file as a data file.

File Content Code identifies the file as containing one of the following:

- Standing Data; (Tele-switch Pool Market Domain Data, Market Domain Data Complete Set, Settlement Calendar Data, BM Unit Registration Data);
- Profile (Regression) Equations;
- Settlement Price Data;
- GSP Group Take;
- LL Adjusted Aggregated Meter Data;(half hourly);
- General Line Loss Factors;
- Supplier Purchase Matrix data;
- Time of Sunset;
- Tele-switch Data.

The Source Address must be a valid Market Participant with the correct role. The roles for each type of file are defined in the Technical Specification [ITSPEC].

The Target Address must be the ISRA Agent operating the ISRA System.

The remaining header fields are validated according to the following table:

Interface	Settleme nt Date	Settleme nt Code	Run Number	Run Type Code	GSP Group
Standing Data					
Profile Equations					
Settlement Price Data	√		√	√	
GSP Group Take	√		√	√	
LL Adjusted Aggregated Meter Data	√	√	√	√	√
General Line Loss Factors					
Supplier Purchase Matrix data	√	√	√	√	√
Time of Sunset					
Tele-switch	√	√			

Table 89: Check File Header–Header Fields

A √ indicates the field must be present and have a valid value. A blank indicates the field should be empty.

For the files from Data Aggregators, a Run Number must be higher than any previous Run Numbers for the same data flow from the same Market Participant for the Settlement Date, Settlement Code and GSP Group contained in the file.

For Settlement Price Data and GSP Group Take the Run Number must be higher than any previous Run Number for the Settlement Date and GSP Group (an SSA Run may be associated with multiple GSP Groups and the GSP Group Takes for each these will arrive as separate files).

File Creation Timestamp must be present and in the past.

4.4.2 Error Handling

Any file whose header fails validation is not processed any further. A log is written recording the reason for failure. The file is stored.

4.4.3 Other Common Processing

IC007 Update File Log.

4.4.4 Functions

I0013B	Load GSP Group Take
I0014	Load Line Loss Factor Data
I0017B	Load Aggregated Half Hour Data
I0018	Load Tele-switch Pool Market Domain Data
I0019	Load Regression Equations
I0020B	Load Settlement Price Data

- I0021 Load Sunset data
- I0022B Load Supplier Purchase Matrix Data
- I0028B Load Tele-Switch Contact Switching Times
- I0041 Load Profile Data
- I0043 Load Market Domain Data Complete Set
- I0044 Load Settlement Calendar Data
- I0048 Load BM Unit Registration Data

4.4.5 Requirements Catalogue Ref.

6.1, 6.3, 6.5, Data Interfaces (Pool Reference: 005PAT)

4.4.6 I/O Structures

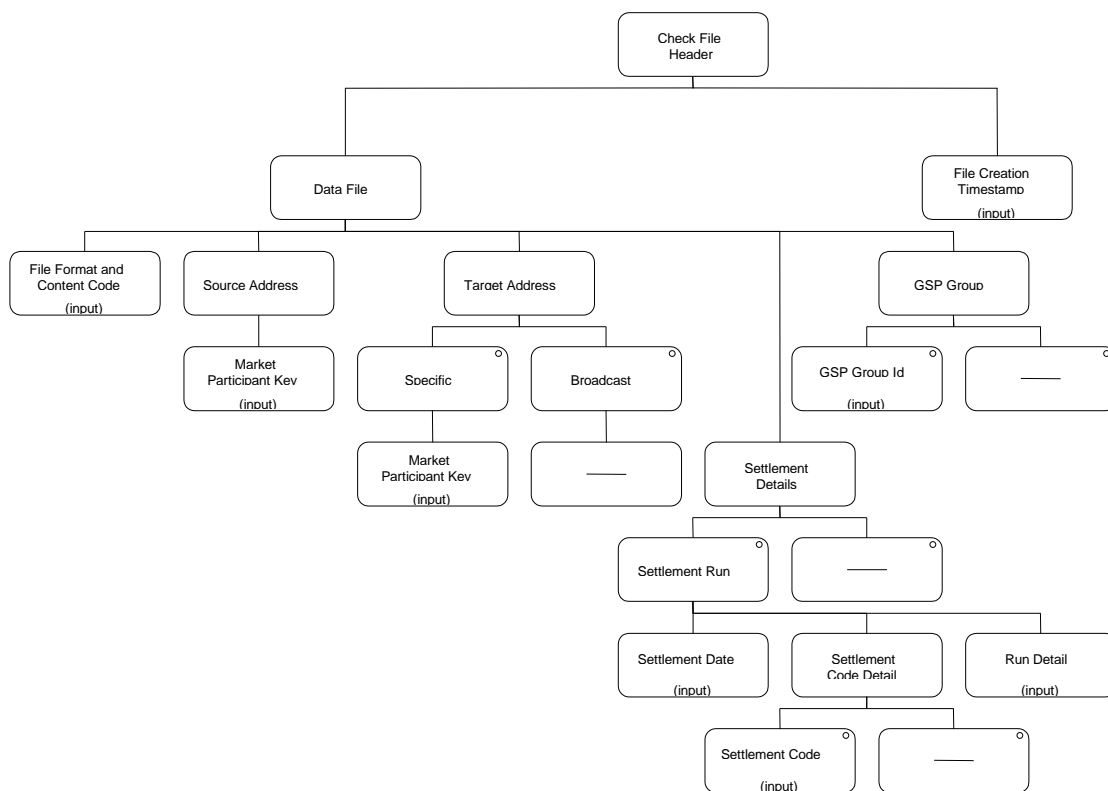


Figure 83: Check File Header

I/O Structure Element	Data Items
File Format and Content Code	File Content Code File Format Code
Market Participant Key	Market Participant Id Market Participant Role Code
Settlement Date	Settlement Date
Settlement Code	Settlement Code
Run Detail	Run Number Run Type Code
GSP Group Id	GSP Group Id

Table 90: Check File Header - I/O Structure Elements

4.5 IC005 Create File Header

4.5.1 Processing Description

This process creates a standard file header. The File Format Code is set to indicate if the file is a data file. All file outputs and standard reports (the electronic version) from ISRA are covered by this function. Ad-hoc reports do not use this function as their format is under user control.

The File Content Code is set to the appropriate code indicating the content of file being created. The codes will be defined during physical design.

The source address is set to the identity of the sending ISR Agent.

The target address is set to the recipient Market Participant Role Code and Id.

The Settlement Date is set for reports specific to a settlement day. Where this field is set it is included in the header section of the reports IO Structure.

The Settlement Code and SSR Run Number are set for reports specific to a SSR run. Where this field is set it is included in the header section of the reports IO Structure.

Reports which are specific to a Profile Production Run have the Profile Production Run Number written to the Run Number field of the header. Where this field is set it is included in the header section of the reports IO Structure.

The GSP Group Id is set to the GSP Group for which the report types which are always specific to one GSP Group. Where this field is set it is included in the header section of the reports IO Structure.

The File Creation Timestamp is set to the current date and time.

4.5.2 Error Handling

See Processing Description

4.5.3 Other Common Processing

No other common processes invoked.

4.5.4 Functions

- I0008B Automatic Daily Profile Coefficient File Extraction
- I0023 Produce Audit Reports
- I0025B Produce Profile Reports
- I0026B Produce Supplier Settlement Reports
- I0027B Produce SSR Reports (TUoS, DUoS, BUSTEV,BUSGDD)
- I0039 Extract Selected EAC Data
- I0045 Produce AFYC Recalculation Report

4.5.5 Requirements Catalogue Ref.

6.4, Data Interfaces (Pool Reference: 005PAT)

4.5.6 I/O Structures

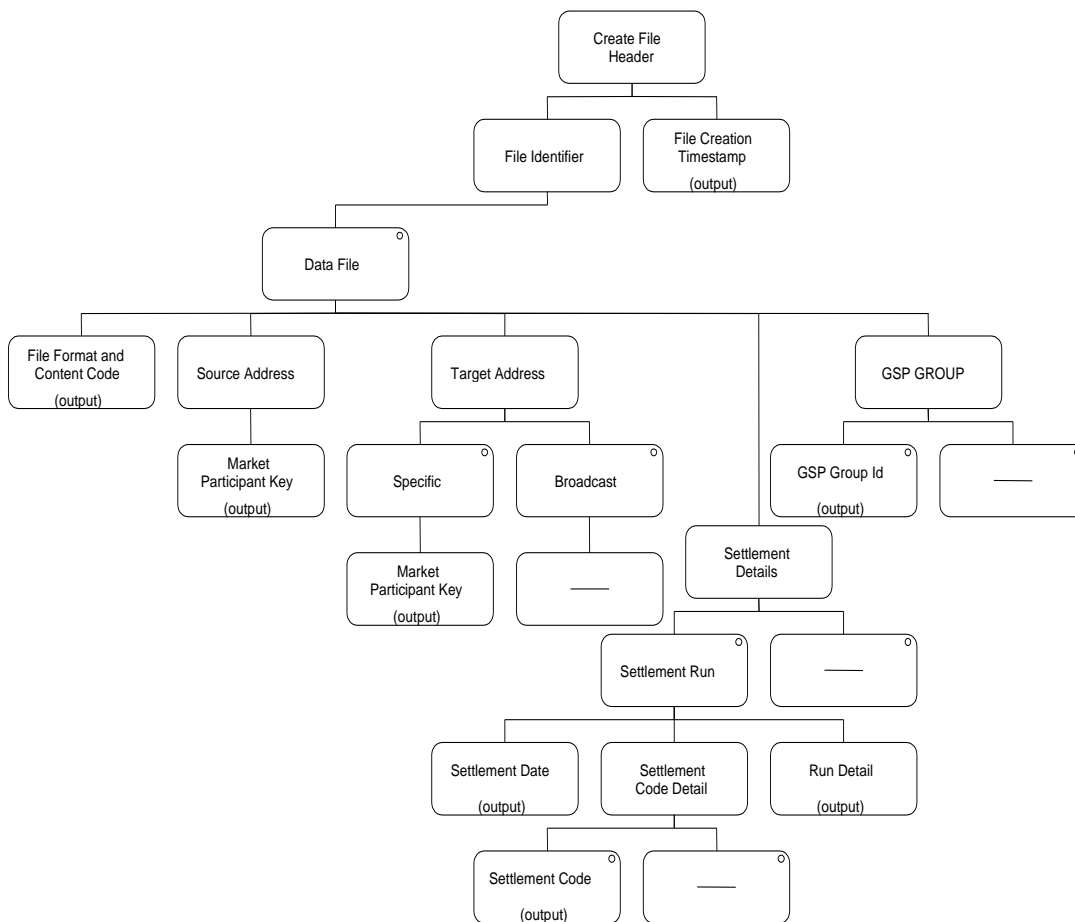


Figure 84: Create File Header

I/O Structure Element	Data Items
File Format and Content Code	File Content Code File Format Code
Market Participant Key	Market Participant Id Market Participant Role Code
Settlement Date	Settlement Date
Settlement Code	Settlement Code
Run Detail	Run Number Run Type Code
GSP Group Id	GSP Group Id
File Sequence Number	File Sequence Number

Table 91:Create File Header - I/O Structure Elements**4.6 IC006 Restrict Access****4.6.1 Processing Description**

From the User Id of the user attempting to access a function determine their user role. If this is a valid user role for the function allow access; otherwise do not allow access and log the attempted breach of access rights.

The User Id and function data is not defined in the Logical Data Model, but they will be addressed in the Physical Design.

4.6.2 Error Handling

See Processing Description

4.6.3 Other Common Processing

No other common processes invoked.

4.6.4 Functions

I0001	Define Line Loss Factor Classes
I0001E	Browse Line Loss Factor Classes
I0002	Define GSP Group
I0002E	Browse GSP Group
I0003	Define Calendar
I0003E	Browse Calendar
I0004	Define GSP Correction Scaling Factors
I0004E	Browse GSP Correction Scaling Factors
I0005	Specify Supplier in GSP Group
I0005E	Browse GSP Groups associated with Supplier
I0006	Specify Distributor(s) for GSP Group
I0006E	Browse GSP Groups associated with Distributor

I0007	Define Profiles
I0007E	Browse Profile Classes
I0008A	Initiate Daily Profile Coefficient File Extraction
I0009	Specify Data Collector for GSP Group
I0009E	Browse GSP Groups for Data Collector
I0010	Specify Aggregator for GSP Group
I0010E	Browse Data Aggregator
I0011	Enter Temperature
I0012	Enter Tele-switch Contact Intervals
I0013A	Initiate Load GSP Group Take
I0014	Load Line Loss Factor Data
I0015	Archive ISRA Data
I0016	Calculate Daily Profiles
I0017A	Initiate Load Aggregated Half Hour Data
I0018	Load Tele-switch Pool Market Domain Data
I0019	Load Regression Equations
I0020A	Initiate Load Settlement Price Data
I0021	Load Sunset data
I0022A	Initiate Load Supplier Purchase Matrix Data
I0023	Produce Audit Reports
I0025A	Initiate Profile Reports
I0026A	Initiate Produce Supplier Settlement Reports
I0027A	Initiate Produce SSR Reports
I0028A	Initiate Load Tele-Switch Contact Switching Times
I0029	Run SSR
I0030	Define Settlement Calendar
I0030E	Browse Settlement Calendar
I0031	Define Standard Settlement Configurations and AssignTime Patterns
I0032	Specify Profile Class and Configuration Combinations
I0032E	Browse Profile Class& Configuration Combinations
I0033	Define Average Fractions of Yearly Consumption
I0033E	Browse Average Fractions of Yearly Consumption
I0034	View SSR Run Status
I0035	Maintain System Configuration Data
I0037	Restore Archived Data

I0038	Ad hoc Audit Reporting
I0039	Extract Selected EAC Data
I0040	Define Time Pattern Regime
I0041	Load Profile Data
I0043	Load Market Domain Data Complete Set
I0044	Load Settlement Calendar Data
I0045	Produce AFYC Recalculation Report
I0046	Define BM Units For Supplier In GSP Group
I0046E	Browse BM Units For Supplier In GSP Group
I0047	Specify Non-Half Hourly BM Unit Allocation
I0047E	Browse Non-Half Hourly BM Unit Allocation
I0048	Load BM Unit Registration Data

4.6.5 **I0053 Load LLF/SSC Mapping Data Requirements Catalogue Ref.**

7.7, 7.9, 7.15, 7.16

4.6.6 **I/O Structures**

Not applicable.

4.7 **IC007 Update File Log**

4.7.1 **Processing Description**

This function is called for any file sent from or received by ISRA.

For all files sent from the system, store in the File entity:

- The direction (i.e. out from the system);
- The recipient;
- The filename;
- The file type;
- The file creation timestamp;
- The date and time the file was sent.

For all files received by the system, store in the File entity:

- The direction (i.e. into the system);
- The source;
- The filename;
- The file type;
- The file creation timestamp;
- The date and time the file was received.

4.7.2 Error Handling

See Processing Description

4.7.3 Other Common Processing

No other common processes invoked.

4.7.4 Functions

- I0008B Automatic Daily Profile Coefficient File Extraction
- I0013B Load GSP Group Take
- I0014 Load Line Loss Factor Data
- I0017B Load Aggregated Half Hour Data
- I0018 Load Tele-switch Pool Market Domain Data
- I0019 Load Regression Equations
- I0020B Load Settlement Price Data
- I0021 Load Sunset data
- I0022B Load Supplier Purchase Matrix Data
- I0023 Produce Audit Reports
- I0025B Produce Profile Reports
- I0026B Produce Supplier Settlement Reports
- I0027B Produce SSR Reports (TUoS, DUoS)
- I0028B Load Tele-Switch Contact Switching Times
- I0039 Extract Selected EAC Data
- I0041 Load Profile Data
- I0043 Load Market Domain Data Complete Set
- I0044 Load Settlement Calendar Data
- I0045 Produce AFYC Recalculation Report
- I0048 Load BM Unit Registration Data
- IC002 Batch Audit

4.7.5 Requirements Catalogue Ref.

6.1, 6.2, 6.3, 6.12

4.7.6 I/O Structures

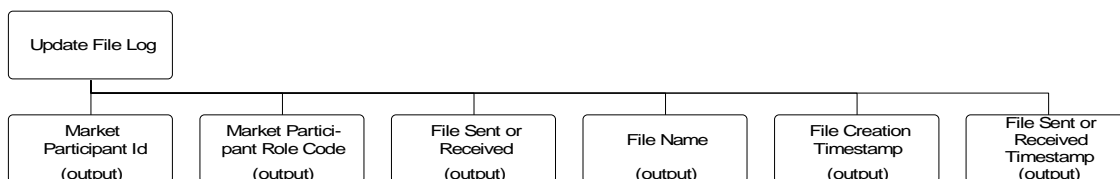


Figure 85: Update File Log

I/O Structure Element	Data Items
Market Participant Key Id	Market Participant Id
Market Participant Role Code	Market Participant Role Code
File Sent or Received	File Sent or Received
File Name	File Name
File Creation Timestamp	File Creation Timestamp
File Sent or received Timestamp	File Sent or received Timestamp

Table 92: Update File Log - I/O Structure Elements**4.8 IC008 Create Report Header****4.8.1 Processing Description**

Receive the three letter abbreviation of the report to be produced, and the User Id of the user requesting it. Create a report giving the full title of the report, the name of the user and the date and time of production.

The layout of the header will be determined during Physical Design.

4.8.2 Error Handling

See Processing Description

4.8.3 Other Common Processing

No other common processes invoked.

4.8.4 Functions

I0023 Produce Audit Reports
I0025B Produce Profile Reports
I0026B Produce Supplier Settlement Reports
I0027B Produce SSR Reports (TUoS, DUoS, BUSTEV, BUSGDD)
I0045 Produce AFYC Recalculation Report

4.8.5 Requirements Catalogue Ref.

6.4, 6.9.

4.8.6 I/O Structures

Not applicable.

4.9 IC009 Report Exception**4.9.1 Processing Description**

Records exceptions that have occurred during the processing of a batch function in a file where they can be viewed by a user. The file contains a header consisting of Date & Time, User Id, the Function being attempted, all information from the File Header (in the case of the load file functions), Settlement Date and Run Number (SSR Run, DPP Run). The header is followed by a list of exceptions.

Exceptions are categorised into Errors (which prevent the batch process completing) and Warnings (which allow the run to complete). The information in the report will be sufficient to enable the user to take corrective action e.g. by identifying the Prime Key of the record in error. In the case of the load functions the file will be automatically sent to the source of the file.

The layout of the report will be determined during Physical Design.

4.9.2 Error Handling

See Processing Description

4.9.3 Other Common Processing

No other common processes invoked.

4.9.4 Functions

I0013B	Load GSP Group Take
I0014	Load Line Loss Factor Data
I0016	Calculate Daily Profiles
I0017B	Load Aggregated Half Hour Data
I0018	Load Tele-switch Pool Market Domain Data
I0020B	Load Settlement Price Data
I0021	Load Sunset data
I0022B	Load Supplier Purchase Matrix Data
I0028B	Load Tele-Switch Contact Switching Times
I0029	Run SSR
I0041	Load Profile Data
I0042B	Load Revised GSP Group Take
I0043	Load Market Domain Data Complete Set
I0044	Load Settlement Calendar Data
I0045	Produce AFYC Recalculation Report
I0048	Load BM Unit Registration Data
IC003	Authorise & Produce Standing Data Audit Report

4.9.5 Requirements Catalogue Ref.

1.3, 5.3, 6.5

4.9.6 I/O Structures

Not applicable.

4.10 IC010 Log Data Load Standing Data Update

4.10.1 Processing Description

All Standing Data updates that are applied during specific data load processes (see Functions listed below) are logged using an audit entity (not shown on the LDM).

This process is automatically invoked whenever the data loader functions for BM Unit Aggregated Half Hour Data (D0298), Aggregated Half Hour Data (D0040) or Supplier Purchase Matrix Data (D0041) find inadequacies in the Standing Data that require the Standing Data to be updated.

4.10.2 Error Handling

See Processing Description

4.10.3 Other Common Processing

No other common processes invoked.

4.10.4 Functions

I0017B Load Aggregated Half Hour Data

I0022B Load Supplier Purchase Matrix Data

4.10.5 Requirements Catalogue Ref.

Not applicable.

4.10.6 I/O Structures

Not applicable.

Appendix A Format of a Function Definition

A Function Definition comprises the components described below.

Function Id and Function Name

The paragraph heading for each function shows a unique identifier for the function and a descriptive name.

Function Type

A combination of the three following types of function:

- User-initiated/system-initiated;
- Update/enquiry;
- On-line/batch.

Function Description

A description of the function, particularly the user interface aspects, including the circumstances in which it is invoked. For complex on-line functions with multiple windows, a windows navigation description will be included to show navigation between windows within a function.

Processing Description

A description of the processing required for the function, including any algorithms.

Error Handling

A description of error handling not already described within the Logical Data Model and Data Catalogue. It may cross-refer to error-handling described within the Processing Description.

Common Processing

A list of common processes used by the function.

Volumes

Estimated frequency of use of the function.

Events

A list of events which trigger the function.

Event Frequency

The frequency of an event for each occurrence of the function.

Enquiries

A list of enquiries implemented by the function.

Enquiry Frequency

For functions containing an enquiry this will describe the frequency of the enquiry or enquiries.

Requirements Catalogue Ref.

The identifier of the Requirements Catalogue entry (or entries) which the function satisfies, either in full or in part.

User Roles

For user-initiated functions, a list of User Roles who will access the function.

I/O Structures

The I/O Structure diagrams which show the data items input to and output from a function. The data items are structured into Jackson-like diagrams showing a sequence, selection and iteration of grouping of data items. For on-line functions which will be implemented using the Graphical User Interface (GUI), the sequences may not be strictly enforced unless there is a valid reason for doing so, as the GUI style generally allows the user more freedom in the sequence of user interface interactions.

Top level iterations have been omitted from the I/O Structures. However, a single invocation of a function may be able to process many files or data records.

In on-line functions where items can be selected, e.g. standing data for update, deletion or viewing or files for loading, the use of a “pick list” on a screen is assumed from which the user can select the item in question. These, however, are not shown in the function’s associated I/O Structures.

For functions which contain I/O Structures for files where the sequence of data is already determined, the I/O Structures are annotated with a note that the order of data items shown is to be preserved in the file.