

## DLS PRODUCT

Title of Product/Paper	<b><i>E2E Data Migration Plan</i></b>		
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## CONTENT

### 1. Product Summary

- 1.1. The delivery of the new Switching arrangements (RP2a) will be conducted over several Transition Stages. Each Transition Stage will require the deployment of new capabilities to existing services within the GB energy retail market, such as those operated by the Central Data Service Provider (Xoserve), Meter Point Administration Service (MPAS) Providers, Shippers, Suppliers and Supplier Agents, so that they may interact with the Central Switching Service (CSS).
- 1.2. Within each Transition Stage, data migration activities will be required between those services to enable the operation of the new arrangements. The migration of data must be aligned to the development and implementation of new service functionality and interfaces. In most cases where the service mastering the data is not changed, the migration may be accomplished via the implementation of new production interfaces deployed to enable the RP2a E2E Switching Architecture.
- 1.3. Data for which the mastering service is to be changed (such as Registration data)<sup>1</sup> must be migrated utilising other methods requiring transformation of existing data structure or data types, and be conducted

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<sup>1</sup> Object Classes and their definitions are recorded within the Abacus design repository; <https://dcc2-pub.avolutionsoftware.com/Switchingbaseline/#Content/Catalogues/3989273.html>

in a manner to ensure ongoing alignment within the staged deployment of the new architecture.

- 1.4. In addition, the Logical E2E Switching Data Model has identified new data object classes required to support policy objectives which do not currently exist within industry systems and must be seeded with data by various market participants, either prior, during or following the transitional cut over to the new arrangements.
- 1.5. This paper sets out an initial view of data migration requirements to align with a Staged Transition approach which will be refined by Design Baseline 3. This analysis will be refined in future phases of the programme. In this product, we identify key data object classes which will require migration, an initial view of the Transition Stage that they will be migrated, and the roles of market participants in those migration activities. A full analysis of all object classes and data elements is contained within the spreadsheet provided in conjunction with this document.

## **2. Essential Background**

- 2.1. The Blueprint Phase data migration product set out our high-level expectations that substantial data migration would be necessary to create an operational CSS, and identified some characteristics that would be found in a successful data migration.
- 2.2. This DLS product sets out in detail our expected approach to data migration, data seeding and data transformation as part of the implementation of the CSS. This approach is informed by the following DLS Phase products:
  - D-4.1.3 E2E Data Architecture and Data Governance;
  - D-4.1.5 Solution Architecture;
  - D-4.3.4 Implementation Plan (including the proposed approach to management of 'in-flight switches'); and
  - D-6.1 Data Improvement Remedy 1: Address Database.
- 2.3. We have also considered the impacts on existing industry Data Catalogues, requirements for a new Retail Energy Code (REC) Data Catalogue and transitional governance arrangements required within

existing Codes (or the proposed REC) to support the staged transition to the RP2a architecture in developing this Data Migration approach.

### **3. Proposed Data Migration Approach**

3.1. In our DLS phase D-4.3.4 Implementation Plan product we identify five proposed Transition Stages. These are:

- A 'Preliminary Stage' (described as Stage 0 within this document) which will involve the creation of new capabilities within UK Link, MPRS and Supplier/Supplier Agent systems and related business processes.
- Transition Stage 1 establishes the CSS, interfaces to (and changes to) MPRS and UK Link and the Address Service.
- Transition Stage 2 creates interfaces between the CSS and DCC; and the CSS to Enquiry Service(s).
- Transition Stage 3 delivers the new arrangements in full, primarily the change of Registration mastering to the CSS and the establishment of Supplier interfaces to CSS.
- A final 'Post Implementation Stage', in which market participants and providers of cores services will be required to deliver an enhanced level of care to the new arrangements.

3.2. The Transition Plan will be developed further with a view to having all components and interfaces mapped for publication in Design Baseline 3. The analysis conducted within this product has resulted in the identification of several transition options which will enable different migration activities. Those options will be evaluated and decisions made as to the most optimal approach within future Delivery Strategy products.

#### **Data cleansing by stakeholders**

3.3. Where data mastery does not change between old and new switching arrangements, existing data masters will be responsible for ensuring that data is cleansed and/or transformed to the specification required by the data model. Our current assumption is that these transitional obligations will be included within version 1 of the Retail Energy Code (REC).

3.4. Where data mastery is expected to change under the new arrangements, the current data master will be responsible for the cleansing of data before migration.

- 3.5. Existing data masters identified with services which are changing mastery will need to create an identifier generation and maintenance scheme (for example using MPAN or MPRN) where this is not already in place, which will be defined under the relevant data governance for each service.
- 3.6. A CSS data migration product will determine the responsibility, process and approach for data transformation between parties for data which is being migrated into the CSS and will change mastering to the CSS, such as Registration data. This product will be produced in time for the Enactment Phase of the Switching programme.

### Assumed Transition Stages

- 3.7. Transition Stages outlined within this product are based on those identified in the D-4.3.4 Transition Plan product. In developing this product we have aligned these stages to the data and interfaces referenced within the DLS E2E Logical Data Model and DLS Solution Architecture respectively. The Data Object Classes, Data Element Concepts and Interface Specifications are referenced within the "Switching Baseline Draft Final v2 architecture": <https://dcc2pub.avolutionsoftware.com/Switchingbaseline/#Content/Diagrams/4002318.svg>
- 3.8. Diagrams illustrating the interfaces and components required at each transition stage are included in Appendix 4. Table 1 below shows a summary of the key interfaces deployed and the data migration activity at each stage, which is explored in more detail below.

*Table 1 – Transition Stages*

Stage	Impacted Services within Transition Stage	Interfaces deployed within Transition Stage	Key Object Classes Migrated within Transition Stage
0	MPRS ECOES DES	Change to / or additional electricity Data Transfer Catalogue (DTC), SPAA and UK Link interfaces	See Table 6 (pre requisites for Transition Stage activity)

	UK Link Supplier and Shipper Supplier Agent Industry Governance	Establishing Data Governance and Data Catalogues (including MDD) for new and changed data.	
1	Address Service  CSS  MPRS  UK Link	MeteringPointSync  SupplyMeterPointSync  PremisesAddress  MEMAppointment  DCDAAppointment  MAPOwnership  <sup>2</sup> Migration of Registration Data (continues as delta until stage 3).	Registrable Measurement Point  Metering Point Location  Basic Land and Property Unit  Land and Property Identifier  RMP Event  RMP Association  Asset Deployment  Meter Asset Provider Ownership  Supplier Appointed Agent
2	CSS  ECOES  DES  DCC	GasRegistration  ElectricityRegistration  RetailEnergyLocation  <sup>3</sup> RMPRegApptSync  CommsHubDataLink	Registration  Land and Property Identifier  Retail Energy Location  Registrable Measurement Point  Supplier Appointment Agent  RMP Comms Hub Link
3	CSS  MPRS  UK Link  Energy Supplier and Shipper	Migration of Registration Requests (aka 'in flight switches')	Registration Management Request

### Principles for data population and migration:

3.9. The following principles governing the data migration approach have been developed from those established within the Blueprint Phase.

<sup>2</sup> The establishing of the transitional Registration interface for migration may occur at Stage 1, 2 or 3.

<sup>3</sup> The establishing of the RMPRegApptSync interface may occur at Stage Two or Three but is dependent on the CSS holding Registration and other data currently provided to DCC via the MPRS/UK Link RDP interface.

- 3.10. Principle 1 - Where possible, data should be transformed and cleansed within the source service and provided to the defined standard via the production interface. Options exist as to the utilisation of the interface within a full production or a pre-production environment. An example is the proposed approach to the initial population of Related MPANs and subsequent migration to CSS.
- 3.11. Principle 2 - Where a change of data mastering occurs so a production interface cannot be used (such as Registration or Registration Request), data transformation will be required and a temporary service to service interface established.
- 3.12. Principle 3 - Some object classes (such as Asset Deployment and Meter Asset Provider) will also require initial migration and population to occur within other central services prior to migration to CSS. For example:
- the identity of the Meter Asset Owner must be associated to each Metering Equipment Asset recorded within UK Link;
  - The Metering Equipment Asset and Meter Asset must be migrated from ECOES to MPRS; and
  - Both MPRS and the UK Link must then record a single Metering Equipment Asset as 'primary' per RMP as only one Meter Asset Owner per RMP may be migrated to the CSS.
- 3.13. Principle 4 - Where additional data is deployed to and mastered within UK Link or MPRS, such as MAP ID, the existing interface between those services and DES/ECOES will be changed and an additional migration carried out, so that new data may be enquired upon.

### **Data Migration by Transitional Stage Analysis**

- 3.14. In order to understand the data migration required to populate the CSS and enable the new switching, we have conducted a detailed analysis of data elements from the Data Model and identified whether there is a need to migrate this data. This analysis is captured in the companion spreadsheet 'Data Governance Transition and Migration Analysis v0.17' .
- 3.15. This paper provides a high-level outline of this analysis (i.e. referencing Object Classes in place of Data Elements), the key outputs of the analysis which define the approach for data migration, data seeding, functional

changes to existing services, implementation of new services and changes to existing interfaces or introduction of new interfaces.

- 3.16. Within this analysis, we have identified where data migration requirements may have an impact on industry code drafting (such as data definitions and data catalogues). We have aligned new logical data elements with transition stages, identifying when new governance or existing governance requires change or modification to facilitate the deployment of new services, process, interfaces and data. Changes required within Stage 0 (Pre-transition) have also been identified which could be initiated and delivered under existing Code governance (or REC) prior to the completion of the CSS Design, Build and Test Phase.
- 3.17. The migration approach occurs over a number of Transitional Stages, developed to enable to the population of the required Reference, Master and Transactional data, which are defined as:

**Reference data** - instances are usually identified by a Code (managed by a Code Administrator). Reference data sets are complete in that all instances of the Reference Data Set are defined, and they are defined with respect to each other.

**Master data** - instances are usually identified by an ID (managed by an individual or organisation acting as an Identification Scheme Agency). Master data sets are usually open – new instances can be added at any time. Individual instances are defined independently of each other, such as a Supply Meter Point or Market Participant.

**Transaction data** - instances usually record an event (or planned event) that happens at a point in time, or over a period of time (such as a registration request).

- 3.18. We have considered the requirement for the migration and population of master and reference data required to enable the receipt and operation of transactional data at each transition stage.

### **Transition Stage 0 (Pre-transition)**

- 3.19. The E2E Design Model contains a number of new business processes and data elements that can be developed and operationalised without a dependency on the implementation of the CSS.
- 3.20. New or changed data elements which are mastered within existing services and will not change to be mastered within the CSS can be implemented with the supporting changes to business process within Stage 0.
- 3.21. Several of the new processes and data elements, which can be delivered within Stage 0 (identified within Table 1 and elaborated within section 3.24) will require data cleansing activities, such as the establishing of the new Related MPANs functionality and business processes.
- 3.22. The primary services impacted within Stage 0 will be Networks (including MPRS), CDSP, Energy Suppliers, Shippers, Supplier Agents and MAPs.
- 3.23. The establishing of REC MDD data will also need to occur within this stage, and supporting changes to existing Codes and their subsidiary technical specification documents (e.g. the DTC / UK Link Manual).

#### **3.24. Desired outcome following migration at Transition Stage 0:**

- 3.24.1. We have targeted the following outcomes from data migration in Transition Stage 0:
- REC MDD is established and business processes to maintain it are created, including Market Participant Identifiers and Shipper / Supplier Alliances.
  - Related MPAN business processes are operational and RMP Association data is maintained within MPRS.
  - MAP ID and Asset Deployment data is maintained within MPRS.
  - MAP ID data is maintained within UK Link.
  - New Meter Point (RMP) attributes are maintained within UK Link and MPRS.



### 3.25. Key Object Class Migrations

3.25.1. Table 2 below sets out the migrations of Key Object Classes that we expect to see during the preliminary Transition Stage 0. Table 3 shows the responsibilities of parties for those Data Migration, Transformation and Population activities in RACI format. <sup>4</sup>

Table 2: Key Object Class migrations during Transition Stage 0

Object Class (s)	Interface	Source	Target	Actors	Description
RMP Association	DTN	Suppliers	MPRS	DNOs Suppliers	"Related MPANs' cleansed within Supplier services, associations created and notified to MPRS.
Asset Deployment Meter Asset Provider Ownership	DTN	ECOES	MPRS	ECOES MEMs Suppliers	Migration of MAP ID and Meter Asset data from ECOES to MPRS.
Meter Asset Provider Ownership	IX	Shippers	UKLink	Shippers Suppliers CDSP MEMs	Migration of MAP ID from Shippers to UKLink.

Table 3: Data Migration, Transformation and Population Responsibilities during Transition Stage 0

<b>Migration, Transformation and Population</b>	<b>R</b>	<b>A</b>	<b>C</b>	<b>I</b>	<b>When</b>
Migration of MAP ID to UKLink and going business process to maintain.	CDSP Shippers Suppliers MEMs	UNC SPAA	DCC Ofgem	All parties and providers	Stage Zero
Migration of MAP ID and Meter Asset data from ECOES to MPRS	ECOES CP DNOs	MRA/REC	DCC BSC Ofgem	All parties and providers	Stage Zero
Ongoing business process to maintain MAP ID and Meter Asset data within MPRS	DNOs Suppliers MEMs	MRA/REC	DCC BSC Ofgem	All parties and providers	Stage Zero
Creation of new Supply Meter Point attributes (e.g. new RMP Status / Domestic Premises Ind)	CDSP	UNC	DCC Ofgem	All parties and providers	Stage Zero
Creation of new Metering Point attributes (e.g. RMP Status, Domestic Premises Ind, Related	DNOs Suppliers	MRA/REC	DCC Ofgem	All parties and providers	Stage Zero

<sup>4</sup> RACI terms are defined within Appendix of this document.

MPANs) and establishing supporting business processes.					
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## Transition Stage 1 Migration

### 3.26. Expected outcome following migration at Transition Stage 1

3.26.1. We have targeted the following outcomes from data migration in Transition Stage 1:

- Meter Point address data is migrated to the CSS. CSS address matching and creation of Retail Energy Location addresses can begin.
- CSS holds required RMP, Metering Point Location and Supplier Agent Appointment data and is receiving daily 'delta' updates to that data via the MeteringPointSync (MPRS) and SupplyMeterPointSync (UK Link) production interfaces.
- CSS holds Registration data, via a transitional interface, and receives 'delta' updates as Initial Registrations and Switches occur. Addition of Registration data at this Stage would benefit the creation of Retail Energy Location (REL) as data on supplier linked to meter points could be used as contextual data to inform data matching activity undertaken to populate the REL dataset.
- The CSS has no outbound interactions with other services and does not impact existing Switching related activities.

### 3.27. Key Object Class Migrations

3.27.1. Table 4 below sets out the migrations of Key Object Classes that we expect to see during Transition Stage 1. Table 5 shows the responsibilities of parties for those Data Migration, Transformation and Population activities in RACI format.

Table 4: Key Object Class migrations during Transition Stage 1

Object Class (s)	Interface	Source	Target	Actors	Description
Registrable Measurement Point RMP Event RMP Association	MeterPointSync (elec), SupplyMeterPointSync (gas)	UKLink MPRS	CSS	CDSP DNOs CSS	The "MPAN and MPRN" and other attributes such as Lifecycle Status, Green Deal and 'Related MPAN', Domestic Premises Ind, migrated from MPRS and UK Link to CSS but will continue to be mastered within those services.

Meter Point Location	MeterPointSync (elec), SupplyMeterPointSync (gas)	UKLink MPRS	CSS	CDSP DNOs CSS	The address created by the DNO and GT, for each RMP, migrated from MPRS and UK Link to CSS but will continue to be mastered within those services.
Supplier Appointed Agent	MEMAppointment (gas and elec), DCDAAppointment (elec)	UKLink MPRS	CSS	CDSP DNOs CSS	The gas MAM and electricity MOP, DC and DA appointed to each RMP by the Energy Supplier, migrated from MPRS and UK Link to CSS but will continue to be mastered within those services.
Meter Asset Provider Ownership, Asset Deployment	MAPOwnership (gas and elec)	UKLink MPRS	CSS	CDSP DNOs CSS	The 'MAP Id' associated to an installed meter at each RMP by the MEM, migrated from MPRS and UK Link to CSS but will continue to be mastered by the MEM.
Land and Property Identifier	PremisesAddress	<sup>5</sup> PAP	CSS	PAP CSS	The 'GB Address list', migrated (initial data load) from the Address Provider to CSS. The type of media to be utilised will be determined by the solution provider, e.g. an API or other media such as DVD.
Registration	Transitional interface build required	UKLink MPRS	CSS	CDSP DNOs CSS	The mastering of Registration data will ultimately change from MPRS and UK Link to CSS at Transition Stage 3. It is optional that Registration data will require migration from Stage One with ongoing daily deltas via a method which will become redundant following Stage 3 cut over; unlike other object classes with which the initial migration and subsequent CRUD to records can be maintained (i.e. data created, updated and deleted) via the new service to service production interfaces.

Table 5: Data Migration, Transformation and Population Responsibilities during Transition Stage 1

<b>Migration, Transformation and Population</b>	<b>R</b>	<b>A</b>	<b>C</b>	<b>I</b>	<b>When</b>
Migration of gas Registration, RMP, Address, MAP and MEM Appointments from UKLink to CSS.	CDSP DCC	Ofgem UNC REC	Suppliers Shippers	All parties and providers	Stage One
Migration of elec Registration, RMP, Address, MAP and Supplier Agent Appointments from MPRS to CSS.	DNOs DCC	Ofgem MRA/REC	Suppliers	All parties and providers	Stage One

<sup>5</sup> Premises Address Provider

### 3.28. Data Migration pre-requisites for Transition Stage 1

3.28.1. Table 6 below identifies the activity which must take place before commencement of Transition Stage 1.

Table 6: Prerequisites for Transition Stage 1 activity

Prerequisite	Activity Required
Registrable Measurement Point	MPRS and UK Link (and DNOs/GTs) must have deployed the required data architecture and operational processes to support the required RMP attributes and RMP Life Cycle Status. This exercise is assumed to have been delivered within 'Stage Zero'.
RMP Association	MPRS and Energy Suppliers must have deployed the required data architecture and operational processes to support Related MPANs. The utilisation of Meter Time Switch Code to identify Related MPANs will be redundant. Energy Suppliers will be required to evaluate all Related MPANs within their portfolio and make an explicit association within MPRS. This exercise is assumed to have been delivered within 'Stage Zero'. Under existing MRA or REC Code instruction a change will be required to Energy Supplier services, MPRS and the interface between those services (i.e. additional data items within the D0205 or a new specific 'D Flow'.
Meter Asset Provider Ownership and Asset Deployment	A migration will be required between ECOES and MPRS as MPRS will become the 'Authorised Provider'. The interface between the MOP and ECOES, the D0312, will also become obsolete. The MRA and/or REC will need to consider the new interface between Supplier (or MOP) to MPRS to enable the transfer of this data. The interface between MPRS and ECOES will also

	require change to enable ECOES to continue to hold those object classes.
Market Participant Role, Market Participant Role Event, Retail Energy Company and Retail Energy Company Group	All participants within the market, such as Energy Suppliers, Gas Shippers, Networks and Supplier Agents must be created within the REC Market Domain Data and seeded within the CSS prior to the migration of RMP and Registration related data. The REC MDD must align to the MDD currently operated by the BSC, SPAA and UNC Codes.
Meter Point Location	The addresses currently held within MPRS and the UK Link are maintained by the DNO/GT. This address will need to be provided in order to allow the CSS Service Provider to populate the Retail Energy Location. The delivery product, D-6.1 details the proposed approach to deliver address data quality.

## Transition Stage 2 Migration

### 3.29. Expected outcome following migration at Transition Stage 2

3.29.1. The following outcomes from data migration are expected by the end of Transition Stage 1:

- Retail Energy Location addresses are provided to ECOES and DES via CSS interface ElectricityRegistration and GasRegistration, and can be used by Energy Suppliers and other parties such as TPIs.
- RDP feed from UK Link and MPRS to DCC is replaced by RMPRegApptSync interface between CSS and DCC. This outcome must be in place by Stage 3 but may occur during Stage 1 or Stage 2, depending on the preferred implementation approach.<sup>6</sup>

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<sup>6</sup> The proposed timing of replacement of the existing RMP feed with the RMPRegApptSync interface between CSS and DCC is covered in more detail in the product D-4.3.4 E2E Transition Plan.

- Updates to Registration are provided to ECOES and DES via CSS interface ElectricityRegistration and GasRegistration. This activity must be in place by no later than the end of Transition Stage 3.

### 3.30. Key Object Class Migrations

3.30.1. Table 7 below sets out the migrations of Key Object Classes that we expect to see during Transition Stage 2. Table 8 shows the responsibilities of parties for those Data Migration, Transformation and Population activities in RACI format.

Table 7: Key Object Class migrations during Transition Stage 2

Object Class (s)	Interface	Source	Target	Actors	Description
Registration	GasRegistration ElectricityRegistration	CSS	ECOES DES	CSS ECOES <sup>7</sup> SP CDSP	As ECOES and DES already hold Registrations a migration of all Registrations will not be required. The introduction of the production or pre-production interfaces between CSS and ECOES/DES will enable the creation, update and deletion of data between services.
Retail Energy Location	RetailEnergyLocation	CSS	ECOES DES	CSS ECOES SP CDSP	Within Stage One the CSS will create these objects for each RMP following a 'address matching' exercise. A migration for each RMP will be required.
Registration, Registrable Measurement Point, Supplier Appointed Agent	RMPRegApptSync	CSS	DSP	CSS DCC	If the RDP feed from UK Link and MPRS to the DCC is to be replaced at Transition Stage 2, the migration assumptions made in relation to Stage 1 within this document must have been implanted (i.e. Registrations deltas, other interfaces are in place).
Comms Hub Data Link	CommsHubDataLink	DSP	CSS	CSS DCC	The establishing of the CommsHubDataLink interface between the DCC and CSS and initial migration of all Comms Hub data will enable the CSS to perform an additional level of Meter Point Location / RMP address matching and validation of previously created Retail Energy Location addresses

Table 8: Data Migration, Transformation and Population Responsibilities during Transition Stage 2

Migration, Transformation and Population	R	A	C	I	When
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<sup>7</sup> C+C and Xoserve are the service providers of ECOES and DES respectively.

Migration of Comms Hub data from DSP to CSS, Migration of RDP data from CSS to DSP.	DCC	REC SEC Ofgem	DNOs CDSP	All parties and providers	Stage Two
Migration of Registration and Retail Energy Location from CSS to ECOES and DES	DCC ECOES SP CDSP	REC/MRA Ofgem UNC SPAA	Suppliers	All parties and providers	Stage Two

### 3.31. Data Migration pre-requisites for Transition Stage 2

- 3.31.1. All migration activity identified as required within Transition Stage One must have been completed and validated by programme assurance and the core Systems Integration function to enable Transition Stage 2 to proceed.
- 3.31.2. Implementation of Stage 2 CSS to DCC RMPRegApptSync will be dependent on Registration Migration within Stage One (with ongoing daily deltas) and implementation of MeteringPointSync and MEMAppointment interfaces between MPRS and CSS and implementation of SupplyMeterPointSync and MEMAppointment interfaces between UK Link and CSS. If the RMPRegApptSync is to entirely replace the current RDP interfaces between the multiple MPRS services, UK Link and DCC at this transition stage, this interface will be critical to Smart Metering operations. The Registration migration and on-going deltas must be of production grade and operated to high service level standards. This option (and an alternative measure whereby RMP feeds are replicated in existing RMP systems and the CSS until 'go-live' and the end of Transition Stage 3) are discussed further in the D-4.3.4 E2E Transition Plan product.

### Transition Stage 3 Migration

#### 3.32. Expected outcome following migration at Transition Stage 3

- 3.32.1. The following outcomes from data migration are expected by the end of Transition Stage 3:
- RegistrationManagementRequestSubmission interface is established from Energy Supplier to CSS;

- RegistrationManagementRequestNotification interface is established from CSS to Energy Supplier, Gas Shipper and Supplier Agents (MOPs, MAMs, DCs, DA's and MAPs);
- Mastering of Registration moved to CSS;
- 'In-flight Switches' which were submitted to UK Link and MPRS are transformed and migrated to CSS as 'confirmed' Registration Requests;
- 'In-flight Switches' which were held by Energy Suppliers are submitted to CSS via the 'RegistrationManagementRequestSubmission' interface following cut over; and
- All relevant data is in place in the CSS and other industry systems to enable 'go-live' for all consumers.

### 3.33. Key Object Class Migrations

3.33.1. Table 9 below sets out the migrations of Key Object Classes that we expect to see during Transition Stage 3. Table 10 shows the responsibilities of parties for those Data Migration, Transformation and Population activities in RACI format.

Table 9: Key Object Class migrations during Transition Stage 3

Object Class (s)	Interface	Source	Target	Actors	Description
Registration Requests	Temporary 'In flight Switch' migration Interface.	UKLink MPRS	CSS	CSS CDSP DNO's	'In flight' switches migrated from MPRS and UK Link to CSS. All Registration Requests to be migrated must have a status of 'Confirmed'.

Table 10: Data Migration, Transformation and Population Responsibilities during Transition Stage 3

Migration, Transformation and Population	R	A	C	I	When
Migration of gas "in-flight switches"	DCC CDSP	UNC REC Ofgem	Shippers Suppliers	All parties and providers	Stage Three
Migration of electricity "in-flight switches"	DCC DNOs	REC/MRA Ofgem	Suppliers	All parties and providers	Stage Three



### 3.34. Data Migration pre-requisites for Transition Stage 3

- 3.34.1. Hiatus of Switch request submissions, switch withdrawal and objection window end at defined point prior to cut over. (As per 'In-Flight Switch Approach').

## 4. Detailed Logical Data Element Analysis Approach

- 4.1. To inform the approach set out above, we have conducted analysis of the data elements identified within the data model, considering the following factors associated to data migration, data transformation and data governance. This section outlines the analysis undertaken to inform these suggested migration approach.
- **Data Mastership** – Validation of the service responsible for the 'to be' data Mastership documented within the Switching Baseline. Identifying where the service responsible has changed compared to the existing data governance defined within existing Codes. Data Mastership recorded within Switching Baseline catalogue:  
<https://dcc2-pub.avolutionsoftware.com/Switchingbaseline/#Content/Catalogues/3989276.html>
  - **Data Governance** – Identification of the current governance control of the data element (or existing analogous data item) and "to be" governance of the data element (i.e. MRA Data Transfer Catalogue or UNC UKLink Manual).
  - **Mapping of new data elements to existing (or analogous) data items** – Recording the MRA DTC, SPAA RGMA DFC or UNC data item (or combination of data items) that can be mapped to the Logical data element. E.g. 'Switch Request Change Of Occupier Indicator' is mapped to MRA data item 'J0215: Change of Tenancy Indicator' and UNC data item 'CHANGE\_OF\_TENANCY\_IND'.
  - **New industry data item / CSS dependency** – Identifies if the logical data element will require the creation of a new industry data item or if an existing data item can continue to be utilised. Also provides context of when the data item can be deployed. i.e. certain changes could be implemented prior to CSS deployment, such as the data to support 'Related MPANs'.

- **Migration required** – Analysis of the requirement for data migration for each data element, constraints that may exist regarding the Transitional Stage.
- **Earliest / Latest Transition Stage** – Identifies the earliest or latest point within the Transitional Staged Approach that the data item can be deployed and migrated.
- **Primary Migration Source and Target** – Identifies the services which each data element will require migration from and to.
- **Governance changes to support** – Identifies changes to existing Codes or requirements for the REC to support over the Transitional Stages.
- **Interface** – References the CSS interfaces established within the Transition Stage and required for migration and ongoing 'delta' migration following implementation.
- **Non-CSS production interface / other migration required** – Identifies migration required between services outside of the CSS scope – e.g. utilisation or changes to existing industry interfaces or requirements to establish temporary interfaces to support migration between the Stages.

## 5. Options

- 5.1. We will develop our proposed approach to data migration further as we build our analysis of activity required at each transition stages as part of Design Baseline 3. This work will be informed by the analysis in this paper and other relevant DLS phase products, including D-4.3.4 E2E Transition Plan and D-4.1.5 E2E Solution Architecture. Using the analysis in these finalised products, we will produce a detailed map of activity required during DBT, which will include the timing of data migrations.
- 5.2. Some data migration activity may take place in more than one transition stage. Our Transition approach has generally been structured in order to spread implementation risks

## **Registration data from UK Link and MPRS to CSS and DCC**

- 5.3. Data mastery of Registration data will be changed at the end of Transition Stage 3 (at go-live). However, data migration may theoretically take place in either Transition Stage 1 or Transition Stage 2. Our current preference is for Registration data to be migrated from UK Link and MPRS to CSS at Stage 1. This would allow the data to provide context to the address matching exercise used to populate the Retail Energy Location dataset and as a pre-requisite for migration of Registration data from CSS to DCC and ECOES/DES in Transition Stage 2. Our preferred approach to Transition, including whether this interface will operate in a production or non-production environment, will be further developed as part of our detailed Transition Planning to be delivered at Design Baseline 3.

## **Pre-transition Stage change**

- 5.4. Creation of the CSS will require significant changes may be made to existing industry services and service interfaces prior to Stage 1. These changes are set out in the Preliminary Transition stage, above.
- 5.5. The changes proposed in Transition Stage 0 will shape the progress of data migrations associated with the later Transition Stages. For this reason we have recommended that wherever practically possible these activities occur prior to Transition Stage 1. These activities could theoretically take place immediately as they do not require implementation of the CSS to take place. However, our current expectation is that they will require code changes in order to direct owners of existing data sets to undertake the appropriate transformation and migration activity.
- 5.6. A proposed approach to the implementation of these measures spanning existing Codes and the REC (within the context of the SCR) will be developed by the Switching Programme during its Enactment Phase.

## **6. Data Migration Governance**

- 6.1. Governance of the data migration process will be incorporated within governance of transition activity within the DBT phase. Each transition stage (including the preliminary and Post-Implementation stages) will

have defined Entry and Exit Criteria which must be monitored and met before proceeding to the next transition stage. Successful completion of data migration activity will form part of these criteria as appropriate. Assessment of the readiness of market participants and 'Go/No-Go' (GONG) decisions will be informed through various programme governance resources, such as programme assurance, Systems Integrator (including assessment against the SI's Operational Readiness gate function) and end-to-end co-ordination functions.

- 6.2. Governance of data migrations taking place in the preliminary transition phase (Stage 0) will be managed through the appropriate code governance process, as identified in the relevant section above.

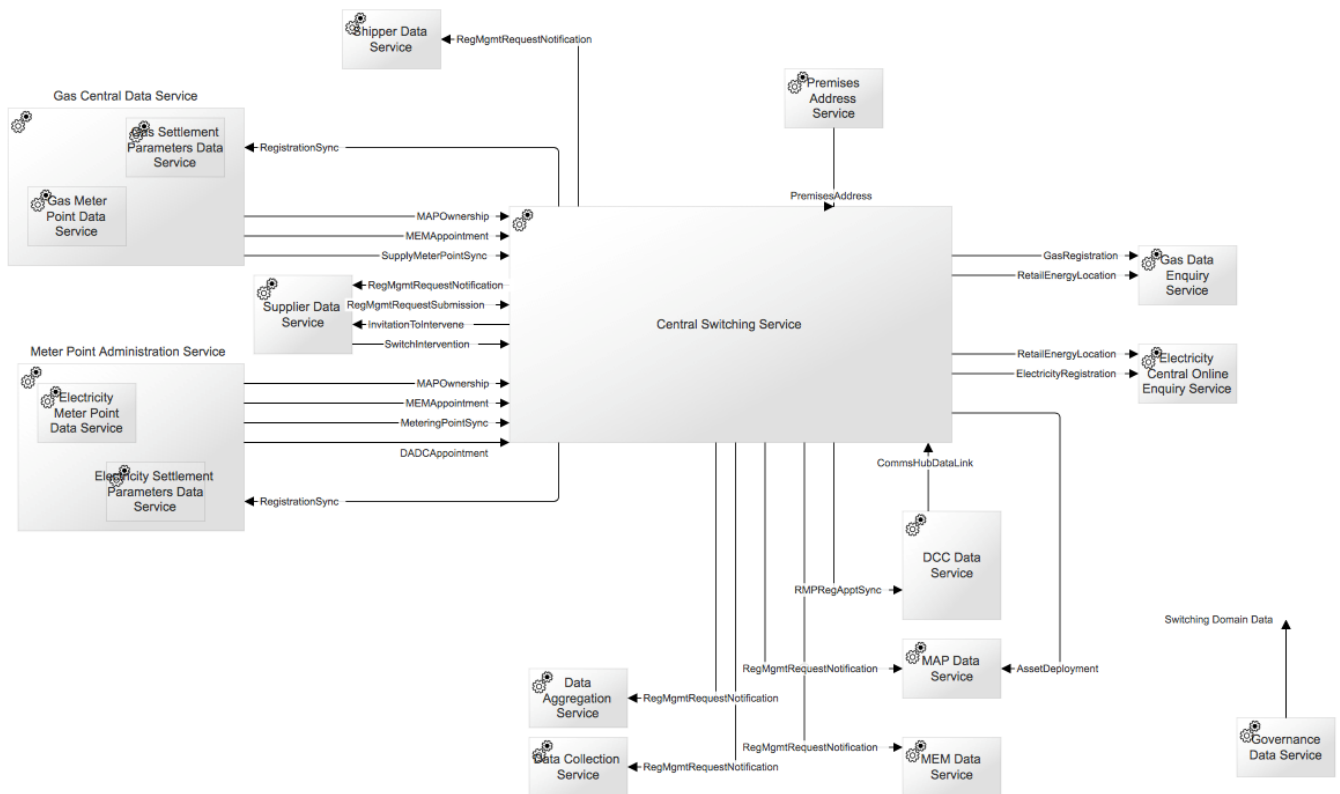
## 7. Next steps

- 7.1. We will further develop our Transition Approach in step with requirements on data migration, transformation and seeding, and our DLS Testing and Design and Build products ahead of Design Baseline 3.
- 7.2. A more detailed plan for CSS Data Migration activity will be contained in the D-4.2.6 CSS Data Migration product, for publication in Spring 2018. Data migration activity which does not impact the CSS (for example that set out in Transition Stage 0) will be developed during the Enactment phase.

# Appendices

## Appendix 1: Data Services Context Diagram

<https://dcc2-pub.avolutionsoftware.com/Switchingbaseline/#Content/Diagrams/4001855.svg>



## **Appendix 2: Link to E2E Logical Data Model**

The E2E Logical Data model may be accessed by following the link to the Switching Baseline page, provided below.

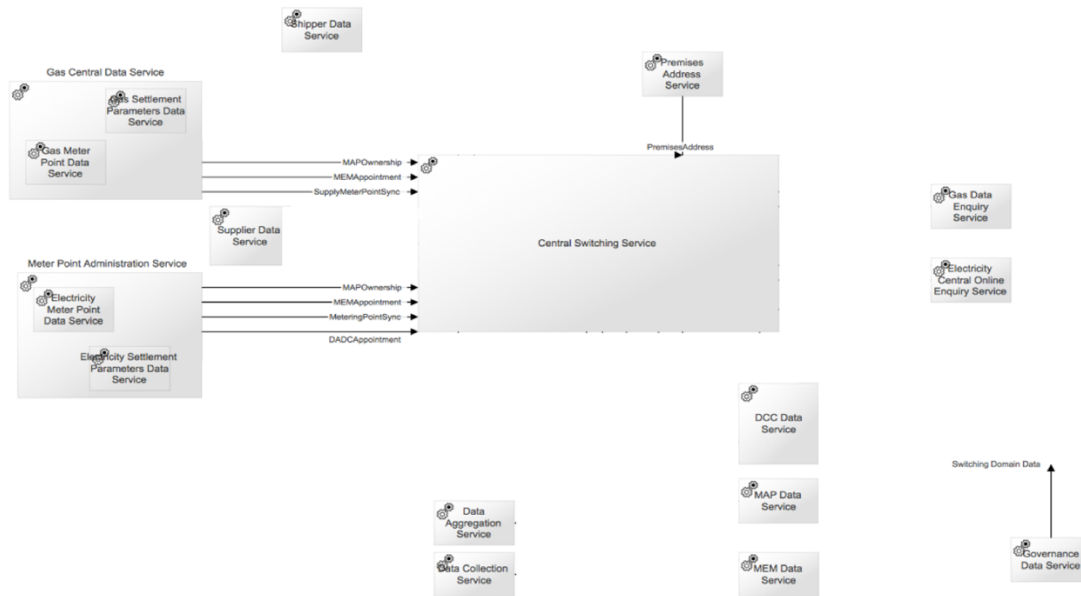
<https://dcc2-pub.avolutionsoftware.com/Switchingbaseline/#Content/Diagrams/4000437.svg>

## Appendix 3–RACI definitions

<b>RACI Legend</b>	
<b>Responsible</b>	Those who do the work to achieve the task or activity, according to agreed quality and schedule, up to and including acquiring the approvals of relevant parties. There must be at least one <b>R</b> specified for each task or activity.
<b>Accountable</b>	The accountable party has full ownership. The resource ultimately accountable for the completion and “output / results” of the task or activity, there must be exactly one <b>A</b> specified for each task. The Accountable party will be the escalation point for the Responsible party.
	Regarding signing off deliverables: <b>Accountable</b> will approve / sign off deliverables from <b>Responsible(s)</b> , in case more than one party is involved.
<b>Consulted</b>	Those whose opinion is sought. Two-way communication where the opinion provided must be reasonably acted on.
<b>Informed</b>	Those that are kept up-to-date on progress. One way communication.

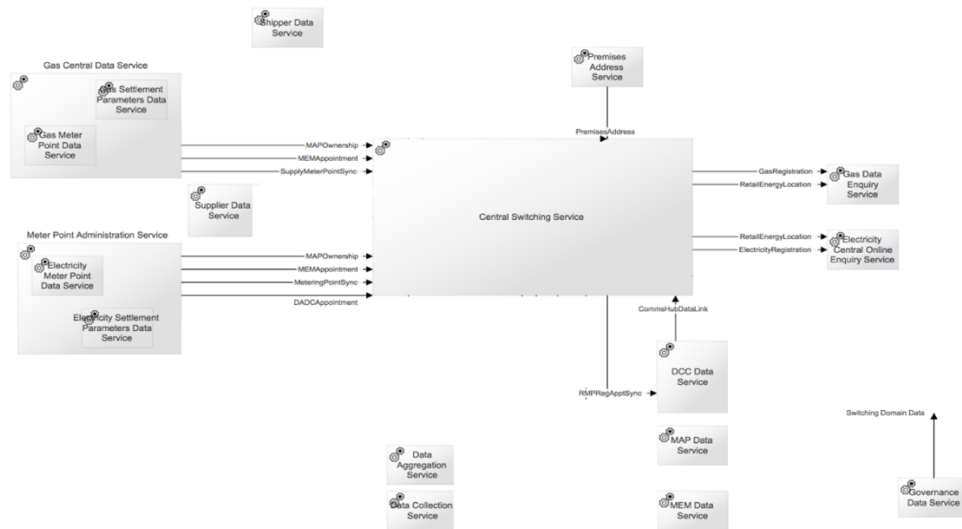
## Appendix 4: Transition stage interface and component maps

*Fig.1 – Transition Stage 1: CSS deployed and interfaces established between CSS and UK Link / MPRS and CSS to Address Service.*





*Fig.2 – Transition Stage 2: Interfaces between CSS and DCC, CSS and ECOES/DES established.*



*Fig.3 – Transition Stage 3: Interfaces to/from CSS and Supplier established, interfaces from CSS to Shipper and Supplier Agents established.*

