Direct Dial: 020 7901 3907
Email: rachel.clark@ofgem.gov.uk

Date: 22 June 2018

Dear Colleagues

Switching Programme: Publication of Design Baseline 4 (DB4)

We have today published a suite of products, collectively known as DB4. The publication of DB4 marks the close of the Detailed Level Specification (DLS) phase of the Switching Programme. This is a major milestone in the delivery of the Switching Programme.

The suite of published products included within DB4 are described in appendices to this letter and are available on our website.[1] In summary, DB4 includes:

- Centralised Switching Service (CSS) Design and Delivery products: These products focus on how the CSS will operate, service management and plans for delivery. These products are described in Appendix 1.

- End to End (E2E) Design products: These products describe how the new switching arrangements will operate for all market participants once implemented. They are described in Appendix 2.

- E2E Delivery products: These products describe the delivery plans for the new arrangements and the roles and requirements of market participants. They are described in Appendix 3.

- E2E and CSS Security Products: These products describe the information security and data privacy measures of the new switching arrangements. We are not currently making these publically available. We will consider further whether publishing parts of these documents would be of value.

The purpose of the CSS Design and Delivery products is to support the Data Communications Company's (DCC's) procurement of the CSS, System Integrator and Core Systems Integrator services later this year. The E2E Design and E2E Delivery products provide information for market participants and their associated providers to help them develop their implementation plans and mobilise for delivery.

The E2E Design and the E2E Delivery products were first published in February 2018 as part of Design Baseline 3 (DB3). We have made some updates to some of these products, using a formal change control methodology, as part of this DB4 publication. Where changes

---

[1] The CSS Design and Delivery products are found here. The CSS Service Management products are found here. The E2E Design products are found here. The E2E Delivery products are found here.

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**
OFFICIAL

have been made, this is indicated by the version numbering and publication dates in Appendix 2 and 3. These changes are minor and we can provide redlined versions showing the updates on request. A summary of the change requests that have been agreed by the Switching Programme Technical Design Authority (TDA) is set out in Appendix 4.

We will maintain the DB4 product suite through the Switching Programme change control process. Following publication of DB4 and during the rest of the Enactment phase, we will be using an updated change control process that incorporates participation and transparency for industry. We have today published details for the new change control process on our website.[2] We expect to review and update the change control process ahead of the Design, Build and Test (DBT) phase of the programme.

Background

The objective of the Switching Programme is to improve consumers' experience of switching, leading to greater engagement in the retail energy market, by designing and implementing a new switching process that is reliable, fast and cost-effective. This will build consumer confidence and facilitate competition, delivering better outcomes for consumers.

In February we published our Outline Business Case (OBC) decision to implement changes to the switching arrangements that will enable consumers to switch their energy supplier reliably and quickly, including by the end of the next working day if they choose, by simplifying and harmonising the gas and electricity switching arrangements in a cost-effective manner.[3] Our decision will overhaul the switching arrangements by introducing a package of reforms known as RP2a. This will require DCC to procure a new CSS that will facilitate reliable and fast switching across gas and electricity markets.

The publication of the OBC and DB4 presents a step-change in the Switching Programme, as we transition out of the theoretical design phases, and begin the preparations for the delivery of the new systems. This transition will be accompanied by more detailed delivery engagement to assist industry in the mobilisation of their project teams. We anticipate that this engagement will focus on left to right planning and the transition of programme governance to support mobilisation.

Next steps

Our Enactment phase work, which began in February of this year, is continuing. During this phase we will draft and make the required changes to market participant licences and industry codes that will give effect to the new switching arrangements. These changes to codes and licences will reflect the requirements described in the products that we have published today as part of DB4, subject to any further amendments to the baseline.

During the Enactment phase, DCC will procure the CSS and the other services needed to secure the successful delivery of the CSS and other parties will be expected to mobilise in preparation for the DBT phase.

Work during the Enactment phase or the later DBT phase of the programme may identify potential changes to the requirements set out in DB4. We will manage these through a defined and transparent change control process. Any updates to the DB4 documentation will be publicised to stakeholders and shown on our website. As noted above, we have today published an updated Switching Programme change control process on our website.

---

[2] https://www.ofgem.gov.uk/publications-and-updates/switching-programme-change-management
[3] https://www.ofgem.gov.uk/publications-and-updates/switching-programme-outline-business-case-and-blueprint-phase-decision

We want to be as clear and transparent as we can on the design and delivery arrangements for the Switching Programme. To this end, we will shortly publish a process on our website for stakeholders to raise queries.

We are working to put in place a detailed left to right plan for the DBT phase. We expect to publish this shortly.

The Switching Programme governance arrangements for the Enactment phase were set out in the OBC. We will shortly publish the terms of reference for the governance groups that will run during the Enactment phase and request nominations for attendees.

If you have any questions on this letter or the products that make up DB4, please contact switchingprogramme@ofgem.gov.uk.

Yours sincerely

Rachel Clark
Programme Director, Switching Programme

Appendix 1: DB4 – CSS Design and Delivery products

<u>Scope of the CSS Design and Delivery products</u>

This appendix describes a suite of products that have been developed to support procurement of the CSS. They will also support DCC's procurement of the Systems Integrator and Core Systems Assurance services.

These are CSS focused documents that set out the CSS functional and non-functional requirements, the service management requirements and the CSS delivery plan and data migration requirements.

<u>CSS Design and Delivery product summary</u>

The table below describes the DB4 CSS Design and Delivery products.

CSS Design and Delivery products – click here to view the CSS Design and Delivery products listed below				
Product ref	**Product name**	**Product description**	**Version number**	**Publication date**
D-4.2.1	*CSS User Requirements Specification*	This document describes the requirements for the CSS which underpins the new switching arrangements. It presents contextual information and a comprehensive view of the functional requirements, which are also described in context of the E2E arrangements in the D-4.1.2 Detailed Design Model held in ABACUS. An appendix to this document provides a complete list of CSS functional requirements. This document provides the functional basis for the CSS procurement activity, with the CSS solution being procured from one or more service providers.	V2.0	22 June 2018
D-4.2.2	*CSS Detailed Non-Functional Requirements*	This product sets out the detailed non-functional requirements for the CSS solution, which includes the Switching Network, Address Service and CSS Registration Service. The product describes non-functional requirements based on the International Standards Organisation (ISO) framework. It includes performance efficiency, throughput rates and capacities that the solution must be capable of delivering.	V2.0	22 June 2018
D-4.2.4	*CSS Delivery Plan*	This product defines the specific delivery requirements that the CSS Provider(s) responsible for implementation of each CSS component must satisfy as part of their commercial arrangements with DCC in its role as CSS Delivery Manager. These requirements will primarily be used to form the CSS Tender Pack(s) and, ultimately, the contractual requirements for the delivery aspects of the CSS component products and services as determined through the Procurement workstream.	V2.0	22 June 2018

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**
OFFICIAL

		The CSS Delivery Plan also provides an initial set of risks, issues, assumptions and dependencies relevant to CSS Delivery as a baseline for ongoing management and mitigation by DCC and the CSS Provider(s). The CSS Delivery Plan includes requirements identified as applicable to CSS from the E2E Switching Arrangements Delivery Plan products described in Appendix 3. These extracted E2E requirements have been modified where required to make them applicable to CSS.		
D-4.2.6	*CSS Data Migration Plan*	This product describes the data migration approach, strategy and high-level plan for the CSS, set within the broader context of the E2E data migration requirements (see Appendix 3). The approach to the CSS data migration follows the Transition stages as presented in the E2E Transition Plan and E2E Data Migration Plan (see Appendix 3), where CSS migration activity commences at stage one. This CSS Data Migration Plan provides further focus, strategy and detail to the CSS data migration aspects. The approach and strategy outlined in this version of the document provides sufficient detail at this stage in the programme to inform the development of CSS data migration requirements which can support the procurement of a Core Systems Integrator (SI) to plan, manage and execute CSS data migration activity as well as any supporting requirements falling to the CSS Provider(s) through procurement and existing system and service providers via transitional regulation.	V2.0	22 June 2018
D-4.2.8	*CSS Comms Network Requirements*	This product defines the functional, non-functional, security, delivery and service management requirements for the Communications Network services, along with contextual information about the new Switching Arrangements. These requirements will be used to assess the suitability of candidate network service offerings for the Switching Network, including IX and DTN. It is not anticipated that this document will be maintained as part of DB4. Instead, the requirements have been incorporated into, and will be maintained through, the constituent master documents: D-4.2.1, D-4.2.2, D-4.2.5 and D-4.1.5.	V1.0	22 June 2018
CSS Service Management products – click here to view the CSS Service Management products listed below				
D-4.2.3	*CSS Service Management and*	This product ensures that all parties have a common understanding of the service management approach for switching and which organisation has responsibility for each activity.	V1.0	28 March 2018

	Operational Approach			
D-10.2	*CSS Service Management Requirements*	This product documents the Service Management requirements that are to be placed on both new CSS Service Providers and existing Central Data Services to meet the needs of the new Switching Arrangements. This document will be used to form part of the procurement tender pack that is to be provided to prospective CSS Service Providers who will be required to deliver a set of Service Management products and services as part of their contracted deliverables. It will also be used to define clear and unambiguous requirements that can be written into regulatory obligations for existing Central Data Services.	V1.0	22 June 2018
D-10.3	*CSS Operational Requirements*	This product documents the service management requirements that apply to the Switching Operator and Switching Service Desk. DCC expects to insource the provision of these services. Overall service management will be co-ordinated and managed by the Switching Operator. A Switching Service Desk will be provided and managed by the Switching Operator. This will provide a single point of contact for market participants. This Switching Service Desk will work with market participants, CSS Service Providers and existing Central Data Services to deliver all service management activities and to ensure that all requests and incidents are resolved effectively and within Service Level Agreements (SLAs).	V1.0	22 June 2018
D-10.4	*CSS Service Management Tools Requirements*	This product documents the requirements for the CSS Service Management System and the CSS Self Service Portal. It will be used to support the procurement of these tools. These tools provide key elements of the overall service management approach. The CSS Service Management System will be used to ensure that any incidents, requests and changes are managed effectively and that the required switching reports can be produced. The Switching Portal will be a single system that enables market participants to access all the systems and services for CSS.	V1.0	22 June 2018

Table 1: CSS Design and Delivery products

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London E14 4PU **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**
OFFICIAL

Appendix 2: DB4 – E2E Design products

Scope of the E2E Design products

The E2E Design includes all the processes, data, systems and services that are required to deliver the programme's objective of reliable, fast and cost effective switching. These products include an overview of the consequential changes required to existing E2E arrangements.

The E2E Design sets out the processes to be undertaken by all of the relevant actors, including the new CSS. The scope of the design covers all aspects of all possible switching journeys and as well as the associated activity that supports a dynamic energy retail market.

The design provides information to industry so that they can understand and plan for the changes that they will need to make to their systems and processes to enable the new switching arrangements.

Collectively, the products in the E2E Design also provide the basis for developing the content for the regulatory framework, the CSS detailed design and the procurement specification(s). In addition, these products will enable development of the design for the transition approach to the new arrangements.

E2E Switching Design product summary

The table below describes the DB4 E2E Design products.

E2E Design products – click here to view the E2E Design products listed below				
Product ref	**Product name**	**Product description**	**Version number**	**Publication date**
D-4.1.2.	*E2E Detailed Design Models**	A representation of the E2E switching design depicting the processes, the actors and the data model of the switching arrangement. The design covers all the activities in relation to a switch from the customer's initial engagement with either the energy supplier or a PCW through to the switch request being executed and completed. The design also sets out process for the creation and demise of a meter point and the procedure for an initial supplier registration of a meter point.	V2.0	22 June 2018
D-4.1.3.	*E2E Data Architecture and Data Governance**	A key objective of the programme is to make the switching process more reliable for consumers. Maintaining and processing accurate data in a timely manner is fundamental in achieving this aim. The data architecture and data governance model sets out where data will be 'mastered' and referenced, and also sets out the arrangements for the management of the Retail Energy Location (REL) Address.	V2.0	22 June 2018
D-4.1.4.	*E2E Non-Functional Requirements*	The non-functional requirements (NFRs) set out the required behaviour and attributes of the systems involved in the new E2E arrangements. The NFRs underpin the performance attributes of the various systems including (but not limited to) their respective capacity (volumetrics) availability (downtime)	V2.0	22 June 2018

		responsiveness (turnaround time) and adaptability (flexibility). The NFRs are based on the ISO-25010-2011.		
D-4.1.5.	*E2E Solution Architecture*	This product sets out the constituent elements of the E2E switching arrangements in terms of IT systems, services and interfaces to ensure the business processes can be delivered as specified in the Detailed Design Models (D-4.1.2). It will describe these IT systems, services and interfaces at a high level and demonstrate how they will deliver the functional, security and non-functional requirements that will be defined in other E2E Design products.	V2.0	22 June 2018
D-4.1.6.	*E2E Operational Choreography*	This document sets out the processing time periods for key events (system transactions) for the CSS and supporting systems required to support our preferred 'to be' arrangements. The product identifies those transactions where a prescribed timeframe will be necessary, including those that must be undertaken in real-time.	V2.0	22 June 2018
D-4.1.9.	*E2E Switching Service Management Strategy*	This product describes the requirements and design for service management across the E2E switching arrangements based on current ITIL standards.	V3.0	22 June 2018

Table 2: E2E Design products
*These products are delivered via ABACUS

Appendix 3: DB4 - E2E Delivery products

Scope of the E2E Delivery products

The E2E Delivery products set out the plan for activity to be undertaken in the DBT phase of the programme, including choreography around go-live of the new switching arrangements and activity in the period following go-live leading up to transition to Business as Usual. The products aim to provide an appropriate level of certainty for all market participants about the activity that they will need to plan for the DBT phase of the programme.

In developing the E2E Delivery products we have sought to give due regard to implementation and delivery risks. Our aim is to provide the highest likelihood of the E2E solution being successfully brought to market, within the parameters of cost and efficiency, time and quality set by the programme governance mechanism.

We intend to continue to develop the E2E Delivery products as we move closer to the DBT phase.

These products sit above, and are complementary to, the CSS Delivery products that are described in Appendix 1.

E2E Switching Delivery product summary

The table below describes the DB4 E2E Delivery products.

E2E Delivery products – click here to view the E2E Delivery products listed below				
Product ref	**Product name**	**Product description**	**Version number**	**Publication date**
D-4.3.1	*E2E Design and Build Plan*	The E2E Design and Build Plan defines the roles of differing market participants and the design and build activity that we expect them to fulfil in the DBT phase. All parties and service providers affected by the new switching arrangements will have a varying scale and complexity of change to implement; spanning both technical and business change aspects. The product provides guidance and direction to enable all industry parties to plan their design and build activities, within the context of the wider DBT phase, and to ensure that the physical realisation of the switching arrangements meets the requirements and specifications of the programme as defined in the DLS phase.	V2.0	12 February 2018
D-4.3.2	*E2E Integration Plan*	An integration function was identified in our Blueprint phase work as necessary to ensure the coherent integration of the component of the Switching Programme. Experience from other projects, such as Nexus, has shown that poor preparation by individual contributors for the end solution can cause additional cost and delay to delivery of large, multi-party projects. Integration roles go further than just providing assurance. They proactively intervene to ensure	V2.0	12 February 2018

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London E14 4PU **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**
OFFICIAL

		that contributors are ready for each stage of implementation, and provide tools such as test environments to enhance participants' design and build activity. The E2E Integration Plan outlines the role for integration functions within the programme and how they fit within overall programme governance. In particular, two key functions are identified: a core and CSS System Integration function, and an E2E Programme Co-ordinator function. The interaction of the integration function and other programme assurance functions will be confirmed within the D-8.2 Governance and Assurance Plan for DBT, which will be published separately from this document.		
D-4.3.3	*E2E Testing Plan*	The E2E Testing Plan product sets out a proposed approach for this testing framework, identifying the test phases that we expect market participants to undertake and how responsibilities for testing and oversight of testing will be realised leading up to, and during, the DBT phase. This builds on our Blueprint phase testing plan, which detailed the need for an overall strategy for testing for all market participants to be established well in advance of the design and build stage. The product identifies the necessary test phases leading up to go-live, identifying responsibilities during these test phases and parties that will be responsible for producing test environments and test simulations. Market participants should be able to identify their responsibilities for testing during the DBT phase and to develop their own individual testing plans for activity in the DBT phase using this product.	V2.0	12 February 2018
D-4.3.4	*E2E Transition Plan*	The E2E Transition Plan sets out a staged approach to managing transition to the new switching arrangements. Delivery of the new switching arrangements will be conducted over five transition stages (including a preliminary stage for improvement of existing data systems and a post-implementation stage after go-live) throughout the DBT phase of the programme, moving to the next transition stage once they have met a defined exit criteria (which will be developed and communicated to stakeholders in advance of DBT phase, but may be modified during and up-to go-live). The transition stages (with the exception of the post-implementation stage) will require either the deployment of new infrastructure or interfaces between the CSS and existing data services (such as those operated by Xoserve or MPAS providers), or the creation of infrastructure enabling market participants such as shippers, suppliers and supplier agents to interact with the CSS.	V1.0	12 February 2018

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London E14 4PU **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**
OFFICIAL

		This product also sets out in more detail our proposed approach to dealing with in-flight switches. Our current intention is to require suppliers to capture and hold switches at a certain date before go-live. This will require gaining suppliers to develop a mechanism of business processes to hold switches which have not been objected to by the losing supplier and to feed these switches into the new switching arrangements after go-live in a fashion that does not endanger the new switching processes.		
D-4.3.5	*E2E Post-Implementation Plan*	The E2E Post-Implementation Plan is intended to provide sufficient guidance to enable market participants to plan their post-implementation activities to ensure that the E2E switching arrangements achieve the required performance and stability as early as possible after go-live and that transition to steady state service management and governance is effective and seamless. To achieve this, the product sets out the minimum requirements and expectations on all parties (including DCC) for the period following go-live and the 'chain of command' for resolving issues in this period. We expect that all parties should plan for the post-implementation period and ensure that resources (likely to be drawn from teams formed to undertake DBT activity) are retained for an appropriate period after go-live. This product also establishes how criteria to move from go-live to a steady state will be determined (noting that these criteria will only be fully established in the DBT phase).	V2.0	12 February 2018
D-4.3.6	*E2E Data Migration Plan*	Each of the transitional stages outlined above will require data migration activities between existing services and the CSS 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. The E2E Data Migration Plan outlines the data migration activities that will take place at each of the transitional stages identified in the E2E Transition Plan. To achieve this we have conducted a full analysis of the E2E logical data model, identifying whether migration is required for each data element, and if so where the data will be migrated to and from. Where data is migrated into the CSS, the detailed approach to migration will be covered by the CSS Data Migration Plan product, which will be developed ahead of DB4. A detailed approach to migration of data that is migrated to sources other than the CSS under the aegis of the Switching Programme, including governance of the migration, will be developed during the Enactment phase.	V1.0	12 February 2018

| D-6.1 | *Data Improvement – Address Database Remedy 1* | Poor quality address data is a major cause of failed and delayed switches. To reduce this risk, the CSS will contain an externally procured source of high-quality address data.

The Address Database Remedy product sets out the criteria for the procurement of this address data source, which will be utilised with the CSS to derive an improved REL address data item for registered gas and electricity meter points. It also sets out the criteria for the data cleansing and migration mechanism which will improve address data prior to the launch of the CSS and as an ongoing steady state service. | V1.0 | 12 February 2018 |

Table 3: E2E Delivery products

Appendix 4: Summary of changes made from DB3

TDA has delegated decision making authority to approve (and therefore baseline) the products referenced in this letter. When a product has been baselined, it can only be amended through a formal change control process. This change control process requires TDA to approve a Change Request.

TDA has approved Change Requests that have amended several of the E2E Delivery and E2E Design documents that were published as part of DB3 in February. The Change Requests have also amended several of the CSS Design products after they were initially baselined by TDA.

Table 4 below describes the Change Requests that have been approved by TDA and the products that have been impacted. We expect Change Requests to continue to be made to the baseline and these will be managed through the change control process that we have today published on our website.

Reference	Description of change request and products impacted
CR001-006	These Change Requests were either incorporated into DB3 or are otherwise not relevant to the publication of DB4.
CR007	This Change Request places a requirement on DCC to develop a new product "D-4.2.8 CSS Comms Network Requirements". This pulls together the comms network requirements in one place. The Change Request also proposes consequential changes to update the constituent products from which the requirements have been drawn. The products impacted are: • D-4.1.5 E2E Solution Architecture • D-4.2.1 CSS User Requirements Specification • D-4.2.2 CSS Non-Functional Requirements • D-4.2.5 CSS Security Approach and Requirements[4] The Change Request was agreed. D-4.2.8 has been published today and consequential changes have been incorporated into the other published products noted above. Note that it is not intended that D-4.2.8 will be maintained through the Switching Programme change control arrangements. Changes to these requirements will be managed through amendments to the constituent master products from which they have been drawn.
CR008	This Change Request covers the addition of Welsh Addresses to the existing baseline. In practice it requires CSS to support a second REL Address stored in an officially-recognised regional language. The Change Request principally affects D-4.2.1 User Requirements Specification. It also has consequential impacts on: • D-4.1.2 E2E Detailed Design Model • D-4.1.3 E2E Data Architecture and Data Governance • D-4.1.5 E2E Solution Architecture • D-4.2.2 CSS Non-Functional Requirements

---

[4] This product has not been published. As noted above, we will consider further whether publishing parts of the E2E and CSS Security products would be of value.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London E14 4PU **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**
OFFICIAL

	This Change Request has been approved and text added to the products noted above.
CR009	This Change Request proposes a series of minor amendments to products. These include correction of typos, adding clarifications and improving alignment between products. The Change Request was agreed and changes have been made to: • D-4.1.2 E2E Detailed Design Model • D-4.1.4 E2E Non-Functional Requirements • D-4.1.5 E2E Solution Architecture • D-4.1.9 E2E Switching Arrangements Service Management Strategy • D-4.2.1 CSS User Requirements Specification
CR010	This Change Request confirms that CSS will provide all necessary data to RECCo to facilitate the construction of invoices to switching participants. It does not at this stage confirm what data is required or how it will be transferred. The Change Request was agreed and changes have been made to D-4.2.1 User Requirements Specification.
CR011	This Change Request is not relevant for DB4.
CR012	This Change Request proposed to add a paragraph to several products to clarify that, as they contain illustrative information on how central systems will operate, the requirements may be updated as the design progresses from the logical to the physical level. In particular, updates may be required as a result of procurement of the CSS as well as development of the changes needed to other central data services, such as UK Link and MPAS, which are being progressed under the UNC and MRA. The additional text was proposed to be added to: • D-4.1.2 E2E Detailed Design Model • D-4.1.3 Data Architecture and Data Governance • D-4.1.4 E2E Non-Functional Requirements • D-4.1.5 E2E Solution Architecture • D-4.1.6 E2E Operational Choreography • D-4.2.1 CSS User Requirements Specification • D-4.2.2 CSS Detailed Non-Functional Requirements This Change Request has been approved and text added to the products noted above.

Table 4: Change Requests relevant to the publication of DB4