ofgem

Title of Product/Paper	E2E Transition Plan – Inflight Switches Management Approach		
PBS Reference	D-4.3.4	Date:	30 July 2021
Version	2.0		

CONTENT

1. Product Summary

1.1. This paper is the updated version of D-4.3.4 E2E Transition – In Flights Switches Management Approach V1.0 brought about by the approval of CR-D071 (Change to Management of In-flight Switches Approach). Prior to the approval of CR-D071, the approach at the Cutover from the existing central systems to the new CSS, allowed Switch Requests which initiated under the old arrangements to become effective on a date after the Go-Live of the new arrangements. These Switch Requests are referred to as 'inflight switches'.

1.2. The approval of CR-D071 has removed the concept of inflight switches. Switch Requests that commence in legacy systems would all now complete in those systems thereby removing the potential for them to complete in CSS. The previous concept of holding switches ahead of Cutover though is retained. Therefore, any switches submitted after a fixed date (T1) will continue to be held by suppliers for submission, processing and execution after Go-Live.

1.3. In order to achieve this, CR-D071 moved the placement of the T1 date to 15 days before Go-Live, from 12 days as it was originally set in DB4. The removal of inflight switches also requires the introduction of T0 (see Table 2) dates which denotes the last date that a future dated switch for the respective fuels can be submitted so that it can be executed on or before Go-Live (without becoming an inflight switch and hence not being accepted).

1.4. One of the aims of CR-D071 was reduce complexity and cost for industry with regard to the design, build and test of temporary solutions required for the management of inflight switches when cutting over to CSS. The proposed mechanism as described in this paper will mean that switching for the two fuel types will remain largely unchanged in the lead up to the Cutover to CSS. This means that Objection Windows for the different fuels will no longer be harmonised will remain at seven (gas) and five (electricity) days respectively.

1.5. CR-D071 is a variation of the option 3 initially discounted in the original options development and analysis and summarised in v1.0 of the Inflight Switches Management Approach (detailed below):

- 'Option 3: Imposing a moratorium on switching for a fixed period in advance of Cutover, so that no inflight switches exist in the legacy systems. This would involve designating a range of dates before and after Go-Live as unavailable to be Supply Start Dates. *(Discounted)[1]*'

1.6. There may also be other 'Cutover' transactions, most likely initial registrations and disconnections, but potentially also meter details updates (e.g. change of MAP), change of shipper (without a change of supplier), address updates, and domestic premises indicator updates. This document will also outline the approach to these transactions.

1.7. This paper forms part of the DLS Phase E2E Transition product (D-4.3.4).

2. Essential Background

<u>Switching Processes</u>

2.1. Table 1 (below) sets out the existing process for Switch Requests for gas and electricity.

<u>Table 1: Existing switching processes</u>

Step	Electricity	Gas
1	A consumer agrees a contract with a new supplier, either directly with a gaining supplier or via a third party intermediary who will notify the gaining supplier.	
2	Gaining supplier notifies MPRS that they would like to gain responsibility for supply to a meter point.	Gaining supplier notifies their shipper that they would like to gain responsibility for supply to a meter point. The shipper sends a notification to UK Link.
3	MPRS notifies the losing supplier of the loss and invites them to object in accordance with their supply licence conditions. The losing supplier has 5 working days to raise an objection (known as the 'Objection Window').	UK Link notifies the losing shipper of the loss and invites them to object in accordance with the gas shipper licence conditions. The shipper passes this notification and invitation to the losing supplier. The losing supplier and shipper have 7 working days[2] to raise an objection (known as the 'Objection Window').

---

[1] The previously detailed options analysis for inflights approach has been removed from this document, please see version 1.0 for that detail which is available from Ofgem upon request.

[2] Note that the gas objections window is not *always* 7 working days. In some circumstances, such as bank holidays or periods of system maintenance, it flexes to allow a switch to take effect within 14 calendar days (usually made up of up to 7 working days of objections window, plus 3 days to execute the switch).

Step	Electricity	Gas
4[3]	If the losing supplier has grounds to object to the switch, they will notify MPRS. If the underlying reason for the objection is resolved within the Objection Resolution Window[4], the objection can be withdrawn and the switch will proceed.	If the losing supplier or shipper has grounds to object to the switch the shipper will notify UK Link. If the underlying reason for the objection is resolved within the Objection Window, the objection can be withdrawn and the switch will proceed.
5	The electricity and gas supply licences require suppliers to complete a switch within 21 calendar days of the Relevant Date[5], unless the customer asks for a later date (subject to some exceptions). Suppliers can request a Supply Start Date of up to 28 days in the future in electricity, or 30 days in gas.	
6	The switch will take effect on that date so long as there are no unresolved objections. In a dual fuel switch, it is common for each fuel to have a different Supply Start Date.	
7	If a customer cools off, or if a Switch Request is identified as erroneous, the Switch Request may be withdrawn up to the end of the second working day before the Supply Start Date.	If a customer cools off, or if a Switch Request is identified as erroneous, the Switch Request may be cancelled up to the third working day before the Supply Start Date.

2.2. Under the new E2E Switching Arrangements, a switch will progress as follows:[6]

2.2.1. A consumer will agree a contract with a new supplier, either directly with a gaining supplier or via a third-party intermediary who will notify the gaining supplier.

2.2.2. The gaining supplier sends a Switch Request to the CSS to take over responsibility to supply gas and/or electricity to the consumer's premises. The gaining supplier will specify a Supply Start Date in the Switch Request. At Go-Live of the new CSS, a Switch Request is expected to switch in 5 working days unless the consumer has chosen a later switch date or the supplier has met certain criteria that demonstrate that it can switch consumers by the end of the next working day[7]. For suppliers that are switching consumers in 5 working days, this means that if a request is submitted to CSS on a Monday, that supplier can be the registered supplier by 00:00 on Saturday. The maximum lead time for a Switch Request will be 28 days.[8]

2.2.3. The CSS will process the request and create a 'pending registration' against the Registerable Measurement Point(s) (RMPs) contained in the Switch Request.

---

[3] For the purpose of this document, 'Objection Resolution Window' is used to refer to the objection resolution rules in both gas and electricity.

[4] The period from the time that the Objection is raised, up to but not including 18:00 hours on the first working day thereafter.

[5] The Relevant Date is: (a) the day on which a customer enters into a contract with the new supplier; or (b) if after entering into the Contract there is a period of time within which the Customer may decide not to proceed with the Contract (the "Cooling Off Period"), the earlier of : (i) the day on which any Cooling Off Period ends; (ii) the day on which the customer and supplier agree that the transfer may proceed during the Cooling Off period; or (iii) 14 days after the day on which the Customer entered into the Contract.

[6] Full details of the new E2E Switching Arrangements can be found in the Design Repository (ABACUS).

[7] See our consultation document, Switching Programme and Retail Code Consolidation: Proposed licence modifications (paragraphs 1.18 – 1.22) published on 12 November 2020. https://www.ofgem.gov.uk/sites/default/files/docs/2020/11/november_2020_licence_consultation_doc2.pdf. After an initial transitional period, all suppliers will be expected to offer consumers a next working day switch.

[8] See Reform Package Spreadsheet (published 21 September 2017).

2.2.4. The CSS will notify the losing supplier that a request has been received and invite them to object to the switch in accordance with their licence conditions. The losing supplier may raise an objection by sending a message to the CSS within the Objection Window. The Objection Windows will be 1 working day for domestic switches and 2 working days for non-domestic switches in both gas and electricity. If an objection is raised by the losing supplier, the Switch Request will be terminated. If and when the underlying reason behind the objection is resolved the gaining supplier must submit a new Switch Request.

2.2.5. A 'pending registration' may be withdrawn by the gaining supplier or annulled by the losing supplier (subject to regulation) until Gate Closure on the day before the Supply Start Date. These actions are given effect by either the gaining or losing supplier sending a request to the CSS to stop the Switch Request.

2.2.6. Provided that no objection, withdrawal or annulment has been sent to CSS, the switch will take effect at midnight on the Supply Start Date.

Cutover to the new Switching Arrangements

2.3. In the run up to Cutover to the new arrangements, registration data will form a key part of the migration of data from existing systems to the CSS. The majority of migrated registrations will be active registrations which will not change during the migration period (as most customers will not switch during the migration period). These active registrations will be migrated from the existing systems during the DBT phase and recorded in the CSS as 'active' registrations.

2.4. Some registration data will change during the migration period. This will be captured by delta migrations in the run up to Cutover. Further detail on the data migration can be found in the DLS phase product D-4.3.6 (E2E Data Migration) and NC-0079 Overall CSS Data Migration Solution (ETL).

2.5. The previous DB4 approach allowed for a small subset of registrations (inflight switches) that would have not have fully progressed to being an active registration at Cutover. This has now been removed and the data migration process for delta migrations will capture those newly completed Switch Requests prior to the Cutover and Go-Live of CSS.

Table 2: Events in the management of in-flight switches

Event	Description	How to set	Impact
T0 Electricity	The last date for the submission of an electricity switch with a Supply Start Date of 28 calendar days in the future.	Set to be 28 calendar days before Go-Live +1	These Switch Requests can have any switch effective date on or before Go-Live (0), so long as it complies with the existing industry regulations (e.g. 12 calendar days for electricity).
T0 Gas	The last date for the submission of a gas switch with a Supply Start Date	Set to be 30 working days before Go-Live +1	These Switch Requests can have any switch effective date before on or before Go-Live (0), so long as it complies with the existing

	of 30 working days in the future.		industry regulations (e.g. 14 calendar day lead time in gas).
T1	The last date on which suppliers can submit a switch request to MPRS or UK Link. Switch Requests submitted up to this date can have a Supply Start Date on or before Go-Live (0) The time between T1 and Go-Live is referred to as the 'Inflight switch management period' for the purpose of this document.	Following CR-D071 this is to be 15 calendar days before Go-Live. It is set such that all switches entered on this date will complete their Objection Window on or before T2 (see below).	These Switch Requests can have any switch effective date on or before Go-Live (0), so long as it complies with the existing industry regulations (e.g. 14 calendar day lead time in gas and 12 calendar days for electricity). Switch requests received by suppliers after this date, or with an effective date later than 28 (electricity) or 30 (gas) days in the future from T1, would be queued in suppliers' own systems, for entry into the CSS after Go-Live.
T2	The last date on which a Switch Request can be cancelled, withdrawn or objected to (gas only) prior to Cutover. Also, the last date that an initial registration can be entered into MPRS or UK Link.	Set as close as possible to Go-Live, allowing sufficient time for the final delta migration of registration data. This is assumed to be 4 days prior to Go-Live, to allow time to bring the new system and interfaces online, and to ensure a stable dataset for the final migrations.	Switches with a Supply Start Date between T2 and Go-Live would definitely be executed after T2. Following CR-D071, an electricity switch request submitted at T1 would complete its objection window before T2 due to the shorter Objection Window.
Cutover	A weekend period immediately prior to Go-Live where existing systems' switching components will be disabled and the new CSS will be in the process of being brought online.		
Go-Live	Commencement date for the new switching arrangements for all suppliers.	For the purposes of this paper, we have assumed this to be the Monday following the Cutover weekend.	

T3	The earliest Supply Start Date available for a 5WD Switch Request that has been entered exclusively in the new CSS.	For the purposes of this paper, this date will be the Saturday following a Monday Go-Live[9].	This will be the first available Supply Start Date for consumers whose suppliers miss T1 for raising a Switch Request.

Objection Windows

2.6. Prior to the approval of CR-D071, the In-Flight Switches Management approach had been to harmonise the Objection Windows for the fuel types. The CR looked to avoid this additional work and the Objection Windows would remain 7 working days for gas and five working days for electricity and extending the days between T1 and Go-Live to 15 days rather than the previous devised approach of 12 days. This extension to the T1 period, removes the need for the harmonisation of Objection Windows and additional work for the existing central system providers, suppliers and shippers.

3. Our amended option for managing switches

3.1. Under our amended option:

- o Gaining suppliers and shippers would process all switches received up to and including T1. The change making T1 to be 15 days before the Go-Live day would mean that all switches complete and become effective in existing systems.

- o Any Switch Request received by the gaining supplier before T1 that requests a Supply Start Date in the future and on or beyond Go-Live +1 is to be held by the supplier and processed in CSS. This would apply to any switch raised after either T0 date that seeks to utilise the maximum advanced registration period available to that fuel.

- o Any Switch Request received by gaining supplier after T1 (or received before that date and not submitted by T1) would need to be held by the gaining supplier for entry into CSS following Go-Live and managed as per the choreography for processing these held switches as defined by the NC-103 Transition Plan/Runbook and End to End Cutover Plan (ECAP).

- o There will be a short period after Go-Live where no switch requests can be executed due to timing required to process Switch Requests raised on Go-Live day. The earliest a switch request could be completed for a domestic customer if a supplier can enable and can adequately support next day switching would be +2 (+3 for a non-domestic customer).

- o The REC Transition Schedule has been amended via CR-D085 to provide additional protections for consumers who could be disadvantaged by the change of approach to remove in-flight switches and the introduction of a brief period where no new switches can become effective.

---

[9] In the transitional period immediately following Go-Live suppliers will be expected to offer to switch customers within 5 working days. Suppliers will be able to switch faster than 5 working days, and up to the next working day, during the transitional period if they can do so without harming consumers. Further details of this were published within our consultation document, Switching Programme and Retail Code Consolidation: Proposed licence modifications (paragraphs 1.18 – 1.22) published on 12 November 2020. https://www.ofgem.gov.uk/sites/default/files/docs/2020/11/november_2020_licence_consultation_doc2.pdf. Therefore for those suppliers who wish to execute switches faster, T3 will be closer to Go-Live.

3.2. Some example scenarios are shown in Table 3:

Table 3: Example scenarios for progressing switches under our chosen option

Calendar Days Before Go-Live	T1 -15	-14	-13	-12	-11	-10	-9	-8	-7	-6	T2 -5	-4	-3	CO -2	CO -1	GO 0	+1	+2	+3	+4	T3 +5
Fastest Switch executed by T1 (gas)	SR	O	O	O	O	O			O	O	CR	NC	NC	NC	EX						
Fastest Switch executed by T1 (Electricity)	SR	O	O	O	O	O			CR	CR	CR	NC	EX								
Held Switch – submitted after T1 (domestic)		SH	SH	SH	SH	SH			SH	SH	SH	SH	SH	SH	SH	SR	O	CR	CR	SE	EX
Held switch – submitted after T1 (non-domestic)		SH	SH	SH	SH	SH			SH	SH	SH	SH	SH	SH	SH	SR	O	O	CR	SE	EX
Switch – unresolved objection (Gas domestic)	SR	O	O	O	O	O			O	O	SH	SH	SH	SH	SH	SR	O	CR	CR	SE	EX

Code	Description
SR	Registration (switch) request submitted to central system.
O	Objection Window.
CR	Confirmed registration – registration is past the objections window, and can be withdrawn or annulled, subject to business rules of the system the registration is in.
SE	Secured switch – after gate closure on this day, the switch cannot be withdrawn or annulled and will definitely go ahead.
EX	Switch executed – the gaining supplier will be responsible for the RMP from midnight at the start of this day.
SH	Supplier held registration – switches queued in the suppliers' systems for entry directly into the CSS.
NC	No changes – denotes days on which no changes can be made to a pending registration as systems are in Cutover.
Shading	Denotes a non-business day.
CO	Cutover
GO	Go-Live of the CSS – First day of live operation

3.3. Table 3 shows that:

- A Switch Request entered into the current arrangements can have a Supply Start Date of up to Go-Live (0). Switch Request received after T1 will be held by the gaining supplier for processing in CSS at or after Go-Live.

- The selection of a Supply Start Date will be subject to the business rules of whichever system the Switch Request is initially entered into.

- No future dated switches of either fuel type can have a Supply Start Date greater than Go-Live. Switch Requests can be entered into the current arrangements until T0 can be future dated up to 28 days for electricity or 30 working days for gas.

- o If a Switch Request entered into the current arrangements is objected to by the losing supplier, and that objection is not resolved before the end of the Objection Resolution Window (and before T1), the supplier must re-enter the switch request into the new arrangements at Go-Live. The earliest that the switch can become effective is day +5, or day +2 (+3 for non-domestic customers) if the gaining supplier can demonstrate ability to do so within the new arrangements.

- o After T1, switch requests received by gaining suppliers (or that were received before T1 and not submitted) must be queued in their own systems until Go-Live of the new arrangements. Suppliers must release these held switches as per the choreography defined within the NC-103 Transition Plan/Runbook and End to End Cutover Plan (ECAP).

3.4. Switch requests held by the gaining supplier and entered into CSS after Go-Live will become subject to the business rules of the CSS, meaning that they can be withdrawn or annulled by the gaining and losing suppliers until gate closure.

3.5. Where a losing supplier objects to a switch after T1 the gaining and losing suppliers and the customer will have the remainder of the Objection Resolution Window (see table 1) to resolve the objection. Failure to resolve the objection will mean that the switch must be resubmitted following Go-Live (up to 15 days later, if the Objection Resolution Window closed on T1). Following resubmission after Go-Live, the switch could be effective in a maximum of 5 working days. This may mean that a customer's switch becomes effective up to 26 days after the customer first engaged with their new prospective supplier. However, as this would result from an objection raised by the losing supplier, this would not necessarily represent a breach of the supplier licence provided the gaining supplier had taken all reasonably practicable steps to resolve the objection.

3.6. We have proposed that electricity switches that are objected to on the 5th day of the Objection Window, are not granted an additional day for resolution to minimise the number of switch requests being held longer that the 5 day objection window.

Processing queued switch requests

3.7. When the CSS is live it would be unwise to attempt to process 15 days' of switch requests within the first day, as this would put the new system under an abnormal load. Therefore a 'catch up' period would be required. During this period suppliers would be subject to additional requirements and regulation via Switching Programme artefacts and the Retail Energy Code to smooth the level of demand on the system.

3.8. These requirements will be managed through the NC-103 Transition Plan/Runbook which will describe the activities to deliver the technical Cutover to CSS including the choreography to release all held switch requests. The approach will utilise an approach to allow all suppliers to efficiently burn down their backlogs of held switch requests in a timely manner without compromising CSS during the first few days after Go-Live.

3.9. The End-to-End Cutover Approach and Plan (ECAP) will be designed by the Licensed Party Co-ordinator to support Licensed parties during Cutover and a companion document to the Transition Plan/Runbook and will provide a comprehensive plan throughout the various phases during the technical Cutover to CSS.

3.10. The CSS runs validation checks on switch requests, including checking that there is not already a pending registration held against an RMP. During the 15 days between

T1 and Go-Live, a customer may approach 'supplier B' to switch, and then approach 'supplier C' without informing supplier B of their wish to cancel. If the switch requests are processed in a random order, the CSS may receive supplier C's switch request before supplier B's. An approach to the management of this risk is to be developed and is planned to be included within ECAP.

3.11. CR-D085 which amended the REC Transition and Interpretation Schedules to account for the changes made by CR-D071 makes specific reference to NC-103 Transition Plan/Runbook and the End-to-End Cutover Approach and Plan (ECAP) as documents that articulate the implementation of this document including the release of held switches. <u>Consequently, these must be followed by REC parties</u>.

<u>Other inflight transactions</u>

3.12. Initial registrations can be completed through existing systems until T2, as there is no Objection Window for an initial registration. After T2, initial registrations must be queued in the suppliers' systems until Go-Live. Initial registrations can be future-dated to Go-Live (0), so if suppliers are expecting customers to move into new properties during the time between T2 and Go-Live they can enter initial registration transactions with the appropriate effective date.

3.13. Other transactions such as change of Meter Asset Provider (MAP), change of domestic indicator, address updates, and change of shipper (outside of a change of supply) also need to be managed during the Cutover period. As a principle, any data item that will be mastered in an *existing* central system in the New Switching Arrangements may be updated in that system until any scheduled downtime prior to Go-Live[10]. This would apply for change of MAP, as that data is simply synced to CSS, so changes could be applied in CSS very shortly after Go-Live. However, any data items mastered in CSS, such as shipper or domestic indicator, would need to be submitted to the existing systems by T2 in order to be migrated into CSS. Any transactions raised after T2 would need to be queued in the supplier's system and submitted to CSS after Go-Live. There is no impact to consumers or material impact to other industry processes if these transactions are delayed by a few days.

3.14. The full approach to other data transactions will be detailed in NC103-Transition Plan/Runbook and ECAP.

<u>Scope of the Cutover arrangements</u>

3.15. These Cutover arrangements apply to both domestic and non-domestic switch requests in the Cutover switch management period. For this reason, it is suggested that peak days for non-domestic switches are avoided for Cutover and Go-live. These have been captured in the Go-Live Date Principles in order to provide some direction and thought prior to when decision is taken at the RA-110 milestone to set the Go-Live date.

3.16. Unique sites in gas are expected to be phased out by the time the CSS is live. If this is not the case, we recommend that unique sites are not permitted as Cutover switches.

---

[10] This may be later than T2, as the existing systems may not turn off all of their functionality for the whole cutover period. For example, MPAS systems may continue to process meter point location updates beyond T2. The System Integrator and E2E Coordinator function will have responsibility for overseeing the deadlines for processing these transactions, and ensuring they are communicated to the relevant industry parties.

4. Required actions

4.1. Various industry participants must take action in order to give effect to the preferred Cutover switch management approach, proposed above. Table 5 below summarises these actions.

Table 5: Actions required by industry participants

Affected party	Activity	Requirement/type of requirement
CSSP(s)	Develop smoothing mechanism for addressing Cutover switches.	Contractual relationship with DCC (Role of procuring CSS Providers)
Suppliers	Business process change to stop sending switch requests to the existing registration services after T1. Create mechanism to queue switches where necessary at T0 and between T1 and Go-Live, with switch requests timestamped (if required) to facilitate chronological entry into the CSS. Manage entry of queued switches into CSS, smoothing the flow into the system.	Transitional requirements in REC
Shippers	Prevent files from being sent to UK Link in relation to switching after T1 or T2 in the case of initial registrations.	Creation of transitional requirement in UNC
Xoserve/MPRS	Stop accepting some future dated requests after T0, new switch requests after T1, files in relation to switches after T2.	Transitional requirements in REC /UNC

4.2. The CSS and Core Systems Integrator function will have responsibility for overseeing the detailed development of the Cutover switch management regulations and technical solutions through the Transition Plan/Runbook.

4.3. Suppliers will be responsible for changes to their systems to record and hold switches. However, they may be expected to demonstrate the ability to chronologically queue switches received between T1 and Go-Live or those held as necessary following T0.

4.4. The ECAP will support the Transition Plan/Runbook and Licensed Parties during the Technical Transition

4.5. The Development of Go-Live Date Principles to support and inform the setting of the final Go-Live date through milestone RA-110 (currently due to be decided January 2022).

5. Assumptions

5.1. This solution rests on a number of assumptions that may require further validation or incorporation into requirements:

    5.1.1. Assumes that UK Link and MPAS systems hold switch requests between the completion of the objections window and the date they become effective in a format that can be identified and translated into the new CSS.

    5.1.2. Assumes that the data migration allows for confirmed switches to enter CSS, without having previously gone through the other stages in a registration lifecycle and can become subject to the usual system logic for confirmed switches.

    5.1.3. Assumes that the validation rules in MPAS/UK Link are sufficiently similar to those in CSS such that no switch request that passes validation in MPAS/UK Link would fail validation or be rejected by the CSS for any other reason.

    5.1.4. Assumes that unique sites in gas have been eliminated prior to Go-Live of the CSS. If this is not the case, it is recommended that unique sites are not permitted to be Cutover switches (i.e. such switches must be executed in the system they are initiated in). This can be handled through code modifications or transitional requirements.

    5.1.5. Assumes that it is possible to do the final migration and Cutover in 2-4 days.

6. Definition of Terms

- o CR-D071 - A change request brought by the Large Suppliers Constituency to simplify the requirement and effort made by suppliers during the technical Cutover transition to CSS. The CR looked to remove both concept of inflight switches by extending the number of days between T1 and Go-Live to 15 days and the harmonisation of objection windows for the two fuel types. The intention was to avoid the risk that was posed by migrating inflight switches over to CSS during the Cutover weekend and reduce complexity and cost.

- o Held switch (request) – A switch that is received after T1 (and where necessary T0) and will be held by the gaining supplier for entry into CSS after Go-Live

- o Transition Plan/Runbook – NC-103 Transition Plan/Runbook authored by the SI that will provide the choreography for all three stages of Transition for Parties Under Integration (PUIs) and Market Participants/Licensed Parties, including the ingestion of held switches following CSS Go-Live.

- o The End-to-End Cutover Approach and Plan (ECAP) – Artefact created by Licensed Party Coordinator to accompany the Transition Plan/Runbook and provide participants guidance.