Switching Programme
Change Request Form

Ofgem use only:

Change request No.	CR-E04	**Current CR version:**	0.5
Change request status:	Submitted to DA	**Version date:**	27/07/18
Change Window:	Window 1		

Please submit this completed form to the Ofgem Switching Programme PMO Team (SwitchingPMO@ofgem.gov.uk)

Change Requestor's details – Change Requestor to complete

Organisation: DCC Switching Programme

Please note that by default we will include the name and organisation of the Change Requestor in Switching Programme's published Change Log. If you do not wish to be identified please tick this box ☐

Change Title – Change Requestor to complete

Widen Central Switching Service functionality to accommodate within-day switching.

Change summary – Change Requestor to complete

Background

This change has arisen out of discussions from within the Switching Programme concerning "future proofing and adaptability" of the Central Switching Service (CSS). One of the key objectives of the new CSS is that it should be easily apatable to future change and to support innovation. This CR supports the achievement of this important objective.

It is not intended that this change will be operationally activated by the receipt of within-day switch requests from Suppliers when CSS is first launched, because this would require changes to Central Service Providers' and market participants' systems which are not yet planned. It will however be fully tested within CSS in a standalone manner during the DBT phase. It has been conceived as a means of reducing future CSS changes that may become necessary to support within-day switching by the introduction of changes now that will lie dormant (until brought into action at a future juncture, which may be several years hence), thereby reducing the total cost of CSS ownership.The costs of this change will be much lower if conducted before ITT issue (and very much lower than before live operation).

The change will lay some foundation for support of coming energy market developments such as switching by devices, for example Internet of Things within the home, and Energy as a Service, for example energy use included in the purchase of an appliance.

Summary

Having considered various options, we have taken the view to making the change as generic as is possible, to reduce the risk of constraining ourselves to a solution that does not support within-day switching when the industry introduces it. The solution we propose is as follows.

A switch request will include a new data element to indicate whether it is to be:

1. Secured at a daily gate closure and completed at 00:00 the following day (currently the only possibility); or
2. Secured and completed during the day:
    - at a half-hour boundary; or

- immediately.

(1) Is likely to continue to be required for customer-initiated switches. (2) will be required in addition to (1) and will cater for automated switching.

Following switch request validation (where the RMP being switched must be capable of this type of switch), the switch will either progress with objection testing and gate closure or will skip objection testing and be secured/completed either on a half-hour boundary or immediately. Date and time of switch is already available on the switch request and this will not change.

When an RMP is initially created, an additional data element will be passed to CSS by MPRS/UK Link to indicate the valid type(s) of switching for that RMP.

Detailed Notes

Assumption: Under RP2a the same daily switch execution schedule is followed by all meter points starting with the <1700> gate closure time. We assume this will continue to be needed (except for meter points which fall under the arrangements described below).

Proposal: A new specialisation of RMP Event (mastered outside CSS), named "Within Day Compatible Event", will indicate whether a meter point is capable of supporting within-day switching. It will be passed to CSS over the SupplyMeterPointSync and MeteringPointSync interfaces from UK Link and MPAS respectively. It is assumed that this data element will not be supplied by UK Link/MPAS or will be set by them to a default value in the interface.

Assumption: Switch can occur on either a Settlement Day boundary (as currently), a Settlement Period Boundary (currently HH for electricity, daily for gas), or at a time that is unaligned to a boundary. A corresponding new data element "Switch time boundary alignment" (conceptual value domain: Settlement Day, Settlement Period or Unaligned) will be mastered by Suppliers and included in the Switch Request, whose value will be validated upon receipt by CSS.

Proposal: The time on a switch request is validated against the Switch Time Boundary Alignment to ensure no mis-match. Changes to end to end Design Repository:

- Introduce RMP Event named "Within Day Compatible Event" into the logical data model
- Include new data element "Switch time boundary alignment" in the Switch Request object class of the logical data model
- Include a new business rule to validate that a Switch Request with "Switch time boundary alignment" set to "Settlement Day" has a "Registration Effective From Date" with a time equal to 0000
- Include a new business rule to validate that a Switch Request with "Switch time boundary alignment" set to "Settlement Period" has a "Registration Effective From Date" with a time equal to 0030, 0100 …. (electricity only)
- Include a new business rule to validate that a Switch Request with "Switch time boundary alignment" set to "Settlement Period" or "Unaligned" can only apply to a meter point that has a current "Within Day Compatible Event"
- Include business rules to validate that no interventions are permitted for a Switch Request at a meter point that has a current "Within Day Compatible Event"

Note regarding E2E changes: Many changes will be required to other Central Data Services and Market Participant systems in order for this change to become operational. Examples of such emabling changes are:

- UK Link and MPAS would need to correctly populate the Within Day Compatible Event data element in their interfaces.
- Governance and process changes would have to made such that objection, withdrawal and annulment interventions are eliminated.
- Significant changes would have to be made to Smart Metering (including the capability of the smart metering devices).
- Governance processes surrounding agent changes etc may need to change substantially.

Justification for change – Change Requestor to complete
With the introduction of smart metering in the energy industry and increasing use of other digital technologies, variable switching timelines are possible. As part of long term flexibility, stability and future innovations in energy consumption the industry will need to be able to serve the increasing demand for the ability to switch energy suppliers within the same day. The following example helps to illustrate this: A customer may want to have electricity provided from a different supplier on the weekend to that from the supplier used during the working week. The reasoning behind this could be to manage different tariffs according to differing energy consumption rates between different parts of the week. Switching between renewable energy sources and traditional sources could also be a reasonable requirement.

Requested Decision Timing – Change Requestor to complete
Before issue of ITT to CSS bidders. This change proposal addresses the changing needs of consumers and the evolving infrastructure in the industry. There are likely to be further changes needed to central industry services that are beyond the scope of this CR and it is possible that eventual implementation across the end to end switching arrangements may result in additional CSS changes that could not be foreseen at this time.

Programme Products affected by proposed change – Change Requestor to complete
*<Please outline which product(s) are expected to be impacted by the proposed change. You **must** include the relevant product version number(s) and publication date(s) here>* D-4.1.2 E2E Detailed Design Models V2.0 22nd June 2018 D-4.1.3 E2E Data Architecture and Data Governance V2.0 22nd June 2018 D-4.1.6 E2E Operational Choreography V2.0 22nd June 2018

Change Advisory Team (CAT) Lead:	Jenny Boothe (Ofgem Design workstream lead)
Contact details:	Email address: Jenny.Boothe@ofgem.gov.uk
PMO Lead:	Joe Karmali - Ofgem
Contact details:	Email address: Joe.Karmali@ofgem.gov.uk

Change Assessment Team – Initial Assessment (Triage)
Please provide a summary of the initial assessment made by the Change Advisory Team (CAT) which includes Ofgem PMO, Design, Implementation, Alignment, Commercial, Regulatory and Security Workstream Leads and DCC.
Design Impact and resource input required for IA? Yes; Jenny B to lead, Andrew W and DCC will need to provide significant input. Other Ofgem teams' whose input is required – HHS, Innovation team
Implementation Impact (including impacts to industry readiness, procurement timelines and the Programme Plan) and resource input required for IA? Yes; could have an impact on the DBT plan and requirements/timing for testing. Nicola G to be involved/provide input
Alignment Impact and resource input required for IA? Yes; will need DIAT input to provide information from the overall Programme Impact Assessment included in the OBC.
Commercial/Procurement Impact and resource input required for IA?

Yes; Natasha S will need to provide input as, if approved, this change will need to be reflected into products in time for the tender packs to go out.
Regulatory Impact and resource input required for IA? None identified at triage stage
Security Impact and resource input required for IA? None identified at triage stage
Confirm Programme Products impacted by the change request? Yes

Major or Minor Change?	Major
Change Process Route	Full process, but needs to be included in the tender packs
Change Window	Window 1
To be submitted to the Design Forum on:	Paper Date: 16th July 2018 Date of Design Forum: 23rd July 2018
Approval Authority:	Chair – Design Authority
Target Change Decision Date:	Design Authority meeting: 31st July 2018

Checked for completeness by: (Name & Role)	**Date:**
Joe Karmali Switching PMO Manager, Ofgem	11/07/18

Impact Assessment – Overall

The benefit to consumers is that within-day switching will be more likely to be delivered by industry and to be delivered sooner than otherwise. In effect the risks to introducing within-day switching will be reduced.

Impact on DCC Design – ABACUS CSS model and D-4.2.1 CSS URS need to be updated as per the CR.

Impact on Programme – There will be negligible impact on existing Service Providers (SPs): MPAS and UK Link will need to include an extra data element (set to null) on an Initial Registration.

Impact on Programme if this change does not happen – Carrying out this change at a later point when CSS has already been built will involve a much greater cost, because changing a live system and rolling out that change involves a lot of additional overhead that would not be incurred if it were designed in from the start. The system will not be able to adapt as quickly and easily (there may be a long lead-time to fit in with release schedules) if this is implemented post-live.

Assessment completed By: (Name & Role)	**Date:**
Phil Bryan	*27/07/2018*

Impact Assessment – Resource Effort

Impact on DCC Design – ABACUS CSS model and D-4.2.1 CSS URS need to be updated as per the CR. The effort for this is estimated at 5 days (including QA) and this can be absorbed into the current program of design work without impacting the cost or the delivery date.

Impact on Programme – There will be negligible impact on existing Service Providers (SPs): MPAS and UK Link will need to include an extra data element (set to null) on an Initial Registration. The integration testing will need to test that this value is being correctly set by MPAS and UK Link and correctly interpreted by CSS. There will be a small addition to CSS development/testing effort but no additional integration effort (other than the setting/interpreting already mentioned). The CSS development/testing effort has been estimated by working out which functional requirements in the spreadsheet of FRs would be

affected by this change. Of a total of 145 requirements, 5 would change (3.4%). If we assume that the change would add 25% to the functionality of each of these, then the overall impact is an increase in CSS development and test effort of approx. 1%.

Assessment completed By: (Name & Role)	**Date:**
Phil Bryan	*27/07/2018*

Impact Assessment – Programme OBC

Overall increase in CSS development and test effort of approx. 1%.

Assessment completed By: (Name & Role)	**Date:**
Phil Bryan	*27/07/2018*

Impact Assessment –Programme Design & Architectural Principles

Design Principle	**Description**	**RAG Status & Summary**
Impact on Consumers		
1 Reliability for customers	All switches should occur at the time agreed between the customer and their new supplier. The new arrangements should facilitate complete and accurate communication and billing with customers. Any errors in the switching process should be minimised and where they do occur, the issue should be resolved quickly and with the minimum of effort from the customer. The customer should be alerted in a timely manner if any issues arise that will impact on their switching experience.	No impact
2 Speed for customers	Customers should be able to choose when they switch. The arrangements should enable fast switching, consistent with protecting and empowering customers currently and as their expectations evolve.	Beneficial impact as Customers are more likely in-future to be able to choose to switch within-day
3 Customer Coverage	Any differences in customer access to a quick, easy and reliable switching process should be minimised and justified against the other Design Principles.	No impact
4 Switching Experience	Customers should be able to have confidence in the switching process. The process should meet or exceed expectations, be simple and intuitive for customers and encourage engagement in the market. Once a customer has chosen a new supplier, the switching process should require the minimum of effort from the customer. The customer should be informed of the progress of the switch in a timely manner.	No impact
Impact on Market Participants		
5 Competition	The new supply point register and switching arrangements should support and promote effective competition between market participants. Where possible, processes should be harmonised between the gas and electricity markets and the success of the switching process should not be dependent on the incumbent supplier or its agents.	No impact

6 Design – simplicity	The new supply point register and arrangements should be as simple as possible.	No impact
7 Design – robustness	The end-to-end solution should be technically robust and integrate efficiently with other related systems. It should be clearly documented, with effective governance. The new arrangements should proactively identify and resolve impediments to meeting consumers' and industry requirements. These arrangements should be secure and protect the privacy of personal data.	No impact
8 Design – flexibility	The new arrangements should be capable of efficiently adapting to future requirements and accommodating the needs of new business models.	Beneficial impact as costs and risks to the introduction of within-day switching are reduced
Impact on Delivery, Costs and Risks		
9 Solution cost/benefit	The new arrangements should be designed and implemented so as to maximise the net benefits for customers.	No impact
10 Implementation	The plan for delivery should be robust, and provide a high degree of confidence, taking into account risks and issues. It should have clear and appropriate allocation of roles and responsibilities and effective governance.	No impact

Architectural Principle	**Description**	**RAG Status & Summary**
1 Secure by default & design	All risks documented & managed to within the tolerance defined by the organisation or accepted by the Senior Risk Owner	No impact
2 Future Proof Design	Common design approaches will better enable designs to support future developments e.g. A mechanism for achieving non-repudiation	Beneficial impact as change pre-empts the introduction of within-day switching
3 Standards Adoption	Adopt appropriate standards for products, services or processes. e.g. ISO/IEC 11179 for data definition	No impact
4 One Architecture	One single definitive architecture prevails	No impact
5 Data is an asset	Data is an asset that has value to the enterprise and is managed accordingly	No impact
6 Data is shared & accessible	Users have access to the data necessary to perform their duties; therefore, data is shared across enterprise functions and departments.	No impact
7 Common vocabulary & data definitions	Data is defined consistently throughout the enterprise, the definitions being understandable and available to all users.	No impact
8 Requirements-based change	Only in response to business needs are changes to applications and technology made. E.g. only industry arrangements affecting switching will be impacted.	No impact
9 Quality Characteristics	Maintain a comprehensive set of quality characteristics by which to gauge the completeness of requirements for Applications and Services.	No impact

Summary: - Net benefical impact

Assessment completed By: (Name & Role)	**Date:**
Phil Bryan	*27/07/2018*

Impact Assessment –Programme Plan

<Insert/embed the assessment of impacts against the Programme Plan. Ensure coverage of what the change does to programme timelines, taking into account impact on the procurement process, parties' implementation activities or diversion of programme resources?>

Assessment completed By: (Name & Role)	**Date:**

Impact Assessment – Security

<Insert/embed the assessment of impacts against the Programme's Security Strategy and baselined security products.>

Assessment completed By: (Name & Role)	**Date:**

Programme Recommendation

<Insert the Programme's recommendation for decision, note this could be a minded to decision in advance of Design Forum>

Assessment completed By: (Name & Role)	**Date:**

Next Steps

<If the change is approved, insert a summary of next steps including which products are to be updated as a result of this CR and details of any stakeholder engagement required>

Change Request Decision

<Insert the decision of the Approval Authority together with any conditions of the approval>

Change Approved:	**Yes/No**
Decision maker: (Name & Role)	**Date:**