Switching Programme
Change Request Form

Ofgem use only:

Change request No.	CR-E05	**Date CR submitted**	19/07/18
Change request status:	Submitted to DF	**Current CR version:**	0.2
Change Window:	Window 1	**Version date:**	19/07/18

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

Future-proofing CSS data model and messaging

Change summary – Change Requestor to complete

Background

This change has arisen out of discussions within the Switching Programme concerning "future proofing and adaptability" of the Central Switching Service (CSS). Two CSS features considered likely to be needed in the future are:

- CSS holding information about smart devices (effectively holding "registration" of devices) and about their relationships with meter points; and
- CSS supporting multiple concurrent registrations for a meter point.

"Registration" of devices is likely to be needed to control the increasing use of smart devices in the Internet of Things (each assumed to have an internal meter) which will be used as demand points for energy, for example an electric vehicle which has energy demands. Multiple concurrent suppliers is likely to be needed as suppliers offer different tariffs for different responsibilities, for example one supplier for a base electricity load and another for top-up at peak usage.

The way in which these will be implemented in the industry as a whole is not yet known. Implementing these features in CSS without understanding which way industry will eventually move would be too risky, so there is no intention to develop full CSS support for these until industry thinking becomes clear. However, changes can be made to CSS now, which will be low-cost, have low risk of being nugatory and which would lay some foundation for support of these coming energy market developments. These changes are to the data model and to the messaging between CSS and other industry parties. Data elements would be added to the model and the messages, for example to identify a device. These would initially be unpopulated, but identifying them now and including them in the message structures would mean less change in the future. Adding them at this stage will not materially affect the implementation cost of CSS or of industry participants whereas adding them later would be potentially costly.

Summary of Change

The CSS data model should be expanded to cover:

- smart devices:
    - their relationship with meter points and suppliers
    - device Registration Requests (an initial registration or a switch)
- multiple concurrent suppliers:
    - ability for a meter point or smart device to be registered to more than one supplier at a given time
    - a new kind of Registration Event that may be submitted by a supplier to allow other additional suppliers to register the same RMP (in a secondary context)
    - identification in a Registration Request of whether an existing supplier is being switched or a new supplier added (to be registered concurrently).

This would be done in as generic a way as possible, in order not to constrain the eventual implementation. CSS would be developed accordingly to allow for these items in its message structures, but they would not be populated.

Industry parties with direct interfaces to CSS would be required to allow for these items in their message structures, but they would be left unpopulated.

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. Increasing use of electric vehicles is also a driver for these changes, being the first of many anticipated smart devices..

Requested Decision Timing – Change Requestor to complete

Before issue of ITT to CSS bidders. This change proposal addresses the the changing needs of consumers and the evolving infrastructure in the industry.

There will be further changes needed to central industry services that are beyond the scope of this CR and eventual implementation across the end to end switching arrangements may result in additional CSS changes that cannot 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-4.2.1 CSS User Requirements Specification (data model section) – V2.0 22nd June 2018
- D-4.1.3 E2E Data Architecture and Data Governance V2.0 22nd June 2018: CSS data model (Messaging) held in ABACUS (which will be made available to appropriate users for information purposes)

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. Kate G (DCC) to lead drafting of IA. Colin M needed to provide technical input.
Other Ofgem teams' whose input is required – Future Innovations team

Implementation Impact (including impacts to industry readiness, procurement timelines and the Programme Plan) and resource input required for IA?

At Triage: Assume minal impact on implementation as only small number of additional (blank) data items to be included for testing needed for go-live

Alignment Impact and resource input required for IA?

At Triage: On the assumption that this is low cost to implement, then little/no impact expected on Programme Impact Assessment

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

Security Impact and resource input required for IA?

None identified at triage

Confirm Programme Products impacted by the change request?

Yes

Major or Minor Change?	Major
Change Process Route	Urgent process to fit into procurement
Change Window	1
To be submitted to the Design Forum on:	Circualted to DF: 19th July 2018 Date of Design Forum: 23rdJuly 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	19/07/18

Impact Assessment – Overall

<Insert/embed a summary of overall impacts resulting from the change, for example industry/consumer costs and benefits etc.

Ensure coverage of Benefits - what will be achieved by making the change, who do those benefits accrue to; Costs - what sort of cost will be imposed as a result of the change, who will those costs fall to, what impact does that have on the business case, is there a clear cost benefit equation?>

Assessment completed By: (Name & Role)	Date:

Impact Assessment – Resource Effort

<Insert/embed the resource costs in £ or FTE required to enact the change e.g. update documents etc. Covering - Who will bear the costs of making the change? Is resource available to do the work on the required timescales? Does the change significantly divert resource in the programme or within industry away from established plans.>

Assessment completed By: (Name & Role)	Date:

Impact Assessment – Programme OBC

<Insert/embed the assessment of impacts against the Programme's Outline Business Case (OBC), especially taking account of any costs and/or benefits to external parties.>

Assessment completed By: (Name & Role)	Date:

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.	
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.	

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.	
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.	
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.	
6 Design – simplicity	The new supply point register and arrangements should be as simple as possible.	
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.	
8 Design – flexibility	The new arrangements should be capable of efficiently adapting to future requirements and accommodating the needs of new business models.	
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.	
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.	

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	
2 Future Proof Design	Common design approaches will better enable designs to support future developments e.g. A mechanism for achieving non-repudiation	
3 Standards Adoption	Adopt appropriate standards for products, services or processes. e.g. ISO/IEC 11179 for data definition	
4 One Architecture	One single definitive architecture prevails	
5 Data is an asset	Data is an asset that has value to the enterprise and is managed accordingly	
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.	

7 Common vocabulary & data definitions	Data is defined consistently throughout the enterprise, the definitions being understandable and available to all users.	
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.	
9 Quality Characteristics	Maintain a comprehensive set of quality characteristics by which to gauge the completeness of requirements for Applications and Services.	

Summary: -

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

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:**