

SUMMARY POLICY ISSUE PAPER – FOR DESIGN AUTHORITY DISCUSSION

Title of Paper	Switching Programme Post-Implementation Strategy		
Issue Ref		Date:	21 September 2016
Issue Owners / Author	David Liversidge (Author), James Crump		
Discussed at User Group	30 August 2016	Discussion at EDAG Group	15 September 2016
Issued to DA	21 September 2016	Discussion at DA	28 September 2016

Summary and questions for consideration at DA

1. Unlike in the case of the Testing Strategy, the need for a post-implementation process is not explicitly referred to in the TOM v2. However, we recommend that some sort of post-implementation period is required
2. It is not possible to yet define what an appropriate level of enhanced early life support should be as it is dependent on the likely residual risks that will be present at transition, which in turn will be based on the solution architecture, testing, transition strategy, data cleanse strategy and other aspects of the programme that are still developing and maturing.
3. Based on the initial assessment of shortlisted Solution Architectures and an assumption of a low appetite for any early life instability in the retail energy market, our recommended approach is to 'proactively monitor and resolve issues and transfer knowledge' in the post-implementation period. This requires resources, structures and processes to be carried over from the Design, Build and Test (DBT) phase of the programme into early life until service stability is verified.
4. Who provides this enhanced early life support, how it is provided, and how it will transition to the steady state arrangements, will depend on the steady state service management model and other operational requirements. To this end, this strategy should be reviewed when the early life risks are better understood, and should be regarded as an enduring document to be used by (and available to) all parties in the programme. The strategy should be updated again in Detailed Level Specification (DLS) phase and periodically thereafter to ensure continued relevance.
5. In addition, a Post-Implementation Management Plan should also be developed during DLS, which will define the detailed approach and scope for the post-implementation period, entry and exit criteria, roles and responsibilities, performance and benefits reporting, and other factors affecting the performance of the scheme after go-live as appropriate. This plan will also cover detailed hand-over arrangements from DBT to 'steady state' operation. Market participants should use

this programme-level plan as the 'head mark' to develop individual post-implementation plans aligned to this over-arching plan.

6. Each party will be expected to provide a period of enhanced early life support for their part of the new arrangements to align with the final post-implementation strategy. A central body should be nominated for managing and co-ordinating this support at the whole programme/whole solution level, including assuring party readiness, reporting progress and managing any central support carried over from the DBT phase. Criteria for the transition of governance and assurance from DBT to steady state arrangements must be clear to avoid confusion on where responsibilities lie.
7. We propose that DA considers the following questions:
 - Do you agree with our proposed approach to post-implementation?
 - Are there any aspects of this approach that we have missed?

Options Analysis

8. Version 2 of the TOM does not specifically address the need for a detailed post-implementation plan; although we regard it as an essential element of the Transition and Implementation Scheme (TIS) as detailed in paragraphs 12.34 to 12.38.¹ However, we have considered a 'do nothing' option as part of a spectrum of post-implementation (early life) levels of enhanced support over and above /normal business/ operations.
9. The table below (Table 5 in the main document) outlines some activities and roles and responsibilities applicable to three illustrative post-implementation options. These options reflect the degree of enhanced early life support that is provided over and above steady state levels.
10. The requisite resources and knowledge for early life support will exist throughout the DBT phase of the project, and the options below reflect the variance in extent to which these resources will be retained during early life.

	Option	Activities	Roles & Responsibilities
1	Do Nothing (no additional service stability phase)	Monitor service performance using existing mechanisms. Hold individual parties to account in terms of code compliance.	Each party addresses early life stability issues. Normal code governance for monitoring performance and holding parties to account.
2	Monitoring and Information Sharing	Proactively monitor early life performance and issues. Report and share service performance achieved. Identify stability issues and enable parties to agree appropriate responsibility.	Each party rapidly resolves issues clearly falling within their boundary, based on agreed priorities. Additional governance to share information to enable parties to gain consensus on way forward for cross-cutting issues.

¹ https://www.ofgem.gov.uk/sites/default/files/docs/2015/11/tom_v2_final_17112015_0.pdf, pp55-56

3	Proactive Management and Intervention	Monitor and report early life performance and issues. Assign responsibility to proactively and rapidly resolve issues which cross-party boundaries. Retain cross-party delivery capability (test environment, governance, design teams, etc.) until service stabilised.	Each party rapidly resolves issues clearly falling within their boundary, based on agreed priorities. Additional governance to assign responsibility for issue resolution. DBT roles carried forward for managing issues and problems experienced in early life. Additional support and resources provided on top of own parties' normal support arrangements.
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Post-implementation Options

11. Options 2 and 3 above involve a continuation of some or all of the arrangements put in place for the DBT phase, and so would reflect a continuation of some of the roles and responsibilities of market participants established for DBT (e.g. issue and change management, testing, data cleansing, etc.). This enhanced support would be offered when the roles and responsibilities undertaken in the 'steady state' operation of the new switching arrangements was being established. How the enhanced support and ongoing 'steady state' responsibility would interact must be clearly delineated.
12. Participants in the new switching arrangements will be expected to provide adequate early life support for the roles that they cover within the new switching arrangements to ensure that they function properly in the immediate post-'go live' period. Co-ordination of the support and interaction of parties at whole programme level may be overseen by a central body. The potential roles and responsibilities of such a central body will be explored in later iterations of this strategy once the detailed post-implementation approach is finalised.
13. Our initial assessment of these options would indicate that to adopt a 'do nothing' option, particularly for solution architecture options that result in significant change to current switching arrangements, is high risk, may disrupt the effective operation of the energy retail market and may be inimical to the benefits of faster, reliable switching being realised.
14. Our view is that proactive management and intervention to resolve early life issues via a planned and well managed post-implementation support period best balances risk mitigation with our assessment of cost and meeting the Switching Programme Design Principles. A detailed plan address the early life risks must be developed once these are better understood.
15. A strategy for the post-implementation period should only be finalised when there is certainty around the solution architecture and transition arrangements, and the testing regime they will be subject to, as these will significantly impact the level of risk to early life stability and therefore the amount of support which will be necessary.

Related Issues

16. As already noted above, there are many interdependent areas with post-implementation strategy in the context of the programme. The key areas are:
17. **Choice and design of solution architecture.** The extent of change involved in the building the switching solution will affect the extent and type of support required after go-live. If a 'do nothing' or 'do minimum' solution is adopted, the support required might be less than for a more complex solution.
18. **Transition strategy.** Either approach to transition will present a risk of early life issues: a 'big bang' approach would be likely to produce a single high peak of early life issues, which would require an appropriate apportionment of resource to address, whereas a phased approach would produce multiple smaller peaks, requiring fewer resources, but for longer. A phased introduction of uses (i.e. by meter, fuel type or service type) could also prolong a period of instability.
19. **Testing strategy.** Fully resourced and well designed and managed test phases should reduce the risk of early life issues. A market trial, if adopted, could further reduce these issues. Conversely, if testing is curtailed due to time and resources, or issues identified in testing are not fixed prior to release, this risk will increase.
20. **Data Cleanse & Migration.** Many early life issues are likely to be associated with data integrity for the new arrangements which in turn will depend on how well data is cleansed and migrated from the current arrangements.
21. **Governance and Assurance in the Design, Build and Test phase and immediate post-implementation period.** Ideally, the Governance and Assurance arrangements for the DBT phase of the programme should be designed to be readily extensible into the early life period to enable enhanced support to be provided over and above 'steady state' Governance and Assurance arrangements until the service is sufficiently stable to allow handover to the 'steady state'.

Discussion at EDAG

22. No objections were made to the proposed post-implementation strategy at EDAG meeting 10 on 15 September. The group expressed a preference that options for the post-implementation period should not be closed down until the final proposed solution is determined. This is consistent with our intention.

POLICY ISSUES PAPER – CONTROL SHEET

Title of Paper	<i>Switching Programme Post-implementation Strategy</i>		
DA Issue Ref	xxx	Date:	23 August 2016
Issue Owner (Accountable)	<i>James Crump</i>		
Author of Paper (Responsible)	<i>David Liversidge</i>		
Status of Paper	5 – Final Recommendation to DA		
Timing	<i>None identified</i>		
Dependencies	<i>None – all dependencies are internal</i>		

Circulation	User Group / EDAG / DA Huddle / Website Green highlighting to indicate permitted circulation – red not permitted (at this stage)
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Issue	<i>The proposed Post-Implementation Strategy for the new Switching arrangements including associated options</i>		
Impacts Domestic?	Yes	Impacts Non-Dom?	Yes
Policy Objective (and reference to ToM v2)	<i>Paragraphs 12.34 to 12.38 of the TOM</i>		
Previous Positions on this/related Issues	<i>TOM suggests but does not describe a post-implementation period</i>		
Summary of Recommendations	<i>That some sort of post-implementation period should be assumed at this stage to achieve stability quicker (i.e. reject the 'do nothing' option). Based on analysis at this stage, a 'proactive management and intervention' approach is favoured (basically continuing with many of the arrangements from DBT for a period past 'go live') based on a low risk appetite and the need to minimise any disruption or instability in the retail energy market. However, this should be explored further as the Solution Architecture and its Transition strategy mature and the potential early life risks are better understood. In addition to revisiting this strategy in DLS, a detailed Post-implementation Management Plan should be developed for the programme in DLS documenting the detailed approach, roles and responsibilities and entry/exit criteria for this period. This can then be used by all parties to develop their specific post-implementation plans.</i>		

Internal and External Engagement	
Business Process Design	<i>Jenny Boothe</i>
Regulatory Design	<i>Jon Dixon</i>
Delivery Strategy	<i>James Crump</i>
Commercial Strategy	<i>Ditto</i>
DIAT	<i>Ditto</i>
Legal	<i>Ditto</i>
Other Ofgem Teams	<i>Ditto</i>
Meetings at which this paper has been discussed	
Workstream Leaders	<i>6th April 2016</i>
User Group	<i>12th April 2016</i>
EDAG	<i>15 September 2016</i>
Other External	<i>N/A</i>
Ofgem Design Authority	<i>28 September 2016</i>

POLICY ISSUES PAPER – CONTENT

Issue

Purpose of this Post-implementation Strategy

1. This product describes the post-implementation strategy for the new Switching Arrangements which will enable gas and electricity consumers achieve faster, more reliable switching. This product has been produced to comply with the Product Description issued by Ofgem (Appendix 1).
2. The purpose of the post-implementation strategy is to define the overall approach to planning and organising a post-implementation period for the programme. It is important that an appropriate post-implementation strategy is established early in the programme to consider and define how to minimise disruption to users and consumers by identifying and resolving any early life issues quickly.
3. The main objectives for the post-implementation strategy are:
 - Defining the purpose, objectives, scope, and requirements for post-implementation within the Switching Programme
 - Identifying any options for the overall approach to post-implementation, taking in to account best practice and relevant risks that would be mitigated through post-implementation
 - Identifying key roles and responsibilities for post-implementation aligned to any options
 - Defining key relationships between post-implementation and other programme activities
 - Highlighting the need for clear entry and exit criteria post-implementation

Approach

4. We have taken the following steps to develop this post-implementation strategy:
 - a) Due diligence investigation of applicable best practice and lessons learned;
 - b) Tailoring of the best practice and lessons learned to the particular circumstances and predicted risks applicable to implementation of the new Switching arrangements;
 - c) Iterative development and evaluation of the post-implementation strategy in line with the programme Target Operating Model ensuring coherence with related work packages as they develop (e.g. Solution Architecture, Testing, Data Cleanse and Transition Strategy); and
 - d) Comprehensive consultation with stakeholders and subject matter experts, including formal review through the governance structure for the Blueprint Phase of the Switching Programme¹.

¹ Design Team, User Group, EDAG and Design Authority

Purpose, Aim and Objectives of Post-implementation

5. The purpose of post-implementation is to ensure that the performance and benefits of the new switching arrangements are achieved as soon as possible by stabilising the arrangements post go-live and ensure a managed hand over from Design, Build and Test (DBT) to steady state operations.
6. Given an assumed low risk appetite for any detrimental impacts on consumers and suppliers as a result of early life instability in the new switching arrangements, the aim of a well-defined and managed post-implementation strategy is the more rapid identification and resolution of issues impacting on early life stability together with an accelerated development of the knowledge base in the live environment.
7. The objectives of post-implementation are to:
 - Minimise disruption to the live environment and effective operation of the energy retail market and hence reduce impact on consumers and suppliers
 - Ensure business continuity is maintained throughout transition of the new arrangements
 - Resolve any integration or other early life issues quickly with clear roles and responsibilities defined, particularly for cross-party issues
 - Ensure a smooth handover from programme delivery to enduring operations including Governance and Incident Management
 - Ensure a rapid transfer of knowledge from delivery to live operations
 - Help achieve the required performance and benefits of switching more rapidly
8. The Design, Build and Test (DBT) phase of the programme will seek to ensure that the new switching arrangements are fit for purpose and free from and defects or non-conformances prior to launch. In reality, and irrespective of the degree of testing undertaken, there are likely to be issues that emerge in early life. These may be caused by design issues not picked up during testing, but are equally likely to be caused by other factors such as lack of familiarity by users and operators in the live environment, data quality and migration issues and incorrect assumptions. If these early life issues are not identified and resolved quickly, this can destabilise the effective operation of the new arrangements.
9. Typically, the structures and levels of support provided for normal business operations (e.g. governance, issue investigation and resolution, etc.) are not designed to deal with the volume and complexity of issues seen in early life and may not be capable of resolving these quickly and effectively to ensure rapid stability is achieved in the live environment. This may therefore require an enhanced level of support to be provided for a defined period via a post-implementation period.
10. The costs of a post-implementation period of support will not be insignificant as this generally involves a continuation of people, resources, governance, infrastructure, etc. from the DBT phase for a defined period. Noting these costs, there is a need to assess and justify the extent of any post-implementation phase so that it is seen to add value in the context of the programme.

Scope of Post-implementation

11. The scope of post-implementation would include:

- Prior to the post-implementation period:
 - Understanding where users and supporting resources may experience problems (e.g. based on previous experience or unresolved issues identified during DBT)
 - Setting clear entry criteria for 'go live' operation and exit criteria for end of post-implementation period (normal business operations)
 - Baseline performance and service levels from current arrangements
- During the post-implementation period:
 - Monitoring performance of switching against agreed requirements and report to governance (e.g. to enable review against defined parameters and obligations)
 - Work within an agreed governance structure for issue resolution in early life and transition from this structure to normal governance in line with an agreed plan once the exit criteria are met
 - Providing appropriate resources to resolve operational and support issues quickly
 - Implementing improvements and resolving problems to stabilise new arrangements, including issues carried over from DBT not critical enough to delay launch
 - Managing any changes required to stabilise the service against pre-defined priorities and categorisation (could be same or different to those used in DBT)
 - Stabilising the services for the target deployment group/environment as quickly and effectively as possible
 - Ensuring that documentation, training and knowledge base are updated; e.g. with diagnostics, known errors, work-arounds and FAQs

12. Currently outside of scope

- It is assumed that individual parties will be required to provide enhanced early life support to meet their obligations for their part of the new switching arrangements. This strategy looks 'top down' across the whole solution to determine what enhanced early life support should be provided at the whole solution level (including the CRS) and set minimum requirements on all other parties. Above this minimum level it will not dictate what additional post-implementation activity individual parties may wish to put in place.
- Any early life change or modification proposals raised that aren't to resolve issues – these should be managed under normal business change/modifications processes not as part of post-implementation for the new arrangements

Essential Background

13. This post-implementation strategy forms part of the Delivery Strategy workstream within the Blueprint phase of the Switching programme. Although not described specifically in the Target Operating Model (TOM) Version 2, it is considered an

essential element of the 'Transition and Implementation Scheme (TIS) covered in paragraphs 12.34 to 12.38 of the TOM. This product will be subject to a Request for Information (RfI) as part of Design Baseline 1 (DB1).

14. Following the RfI, the programme will develop detailed design specifications for the chosen solution architecture and its operational requirements, and further develop commercial, regulatory and delivery proposals as part of the Detailed Level Specification (DLS) phase. Following the DLS phase, regulatory changes will be enacted and the Data Communications Company (DCC) will procure a provider of a Central Registration System (CRS) for the specified solution.

15. The programme contains other workstreams and activities which have strong interdependencies with the design of a post-implementation phase. These interdependencies are summarised in Table 1 below. Without proper understanding and management, these interdependencies represent a risk to the effectiveness and validity of the proposed post-implementation strategy and should continue to be monitored until a stable situation is reached.

16. Given that many of these interdependent areas have not been finalised at the time of writing this initial post-implementation strategy, this strategy will require further iteration to both reflect and inform these interdependent areas as the programme progresses towards delivery (see discussion of Next Steps below). Inbound dependencies will have a direct effect on the design of a post-implementation strategy, and in turn the output arising from this strategy will affect a number of other programme areas.

Work stream/ package	Type	What is affected	Impact and how it will be addressed
Delivery/ Transition	In	Length and peak resource required from the post-implementation (service stabilisation) period	A 'big bang' transition would mean a 'high peak' of early life issues and problems that would then die away as they are addressed and as experience grows. This would mean a large peak of additional resource required in early life then dying away. A phased transition would probably result in multiple peaks of issues at the start of each phase of transition but with a lower peak height and hence resource required (but required for longer)
Delivery/ Data Cleanse and Migration	In	The quality, completeness and integrity of data migrated from legacy systems will impact on early life issues.	If no data cleanse and migration is undertaken there will be a larger number of issues in early life relating to data rather than system functionality issues. If a risk based/ targeted data cleanse is undertaken then this is likely to significantly reduce early life data issues
Delivery/ Transition	In	Stability in early life will be affected by the number of Users continuing to join in	If a transition option involves phased introduction of users (e.g. roll-out by meter or fuel type) then this will mean that there will be a staggered introduction of service users which

		the early life period	could prolong instability. There will also be parallel running of DBT and normal business so clear delineation of responsibilities is required
Delivery/ Transition or Testing	In/ Out	A market trial and/or pilot will greatly reduce early life issues	If a market trial is undertaken either at the end of Testing and/or a Pilot phase/ controlled ramp-up at the start of Transition, this will significantly reduce the number of early life issues and hence scope of post-implementation. However, a pilot phase as part of Transition may overlap with the purpose of a post-implementation period so these will need to be aligned.
Delivery/ Governance & Assurance	In	An effective System Integration strategy and empowered, capable DA will minimise early life issues and improve their resolution	If an effective, cross-party System Integration strategy is developed with clear roles and responsibilities supported by an effective and capable DA to ensure and assure the design integrity then this will both reduce the likelihood of issues and aid their resolution before or during post-implementation
Business Process Design/ Service Model	In	The service model will affect how any early life support is designed & deployed	In a single E2E service management model performance will be monitored centrally. In a federated one, support may have to be targeted at areas/ parties where performance is poor
Delivery/ Testing	In	The coverage and effectiveness of Testing will impact the number and likelihood of issues in early life	If all phases of testing recommended are fully resourced and well managed, there should be less risk of early life issues. If testing is curtailed due to time and resources, or issues identified in testing are not fixed prior to release, there will be more early life issues
Delivery/ Governance & Assurance	In/ Out	Ability of G&A framework to be readily extended into early life (and potential costs of this)	Ideally, the DBT G&A arrangements should be designed to be readily extensible into the early life period to enable enhanced support to be provided over and above 'normal business' G&A arrangements until the service has stabilised and handover to normal G&A can happen. It is also vital to consider the transitional arrangements during post-implementation
Delivery/ Governance & Assurance?	In	The acceptance threshold for 'go live' will affect the risk and issues taken into live operations	If there are pressures to go live early, there may be a higher risk appetite to accept a released service with ongoing issues or unresolved problems which will be taken forward into the live environment
Regulatory Design	Out	Code modifications and licence changes arising from the Switching Programme	Regulatory architecture accompanying the switching programme must provide appropriate provision to ensure that parties allow for a period of enhanced early life support.
Commercial	Out	Procurement of post-implementation support for the CRS	Procurement and cost decisions relating to the CRS and related services will need to consider the requirement for post-implementation and that this is appropriately resourced.

Table 1 – Post-implementation dependencies within the Switching Programme

Analysis

Applicable Best Practice, Standards and Lessons Learned

17. In line with the approach defined above, due diligence of applicable best practice, standards and lessons learned was undertaken. This is summarised at Appendix 2 and has been used to develop this strategy. The areas of best practice, standards and guidance examined are summarised in Table 2 below.

		Domain/Discipline				
		Systems Engineering	Software Engineering	IT Service Management	Project Management	Programme Management
Best Practice	Lead professional bodies	INCOSE	BCS (Chartered Institute for IT) Axelos (formerly OGC)		APM & PMI, Axelos, DSDM (for Agile)	
	Best Practice Guidance / Frameworks	INCOSE Body of Knowledge	ITIL (+ SIAM)		Prince 2 & APM BoK	MSP APM Body of Knowledge
	Aspects applicable to post Implementation		Agile		Closing a project (Prince 2)	Transition & Benefits Realisation
Standards	Higher level standards that mandate	ISO15288, ISO9000 and ISO9001. IEEE730		ISO20000	None?	Management of Portfolios
	Life Cycle Delivery Models	ISO12207 (System & Software Lifecycle Processes) – ‘V model’		Service Life Cycle	Waterfall, Agile, V model, Prince 2 Processes	Transformational Flow
	Post Implementation Specific Standards	None	None	None	None	None

Table 2 – Best Practice, Standards and Guidance Relevant to Post-implementation

18. It can be seen from Table 2 that there are limited if any Standards directly applicable to post-implementation, although ISO20000 does cover this area in some detail. In terms of best practice and guidance, ITIL Service Transition provides the most comprehensive framework for providing post-implementation as part of what ITIL terms Release and Deployment. This best practice has been reflected in this strategy wherever possible, tailored to the specific situation pertaining to Switching.

19. In addition to examination of best practice and guidance, which is itself drawn from multiple lessons learned across many programmes, a number of relevant recent projects were examined for Lessons Learned, including the on-going Smart Metering Implementation Programme (SMIP) and Nexus. These are summarised in Appendix 2.

Key Risks

20. As mentioned above, this post-implementation strategy has been tailored from applicable best practice and lessons learned to suit the particular circumstances and perceived risks for the programme that can be mitigated through an effective post-implementation. The perceived risks are defined in Table 3 below together with the proposed mitigations where post-implementation forms part of those mitigations.

Risk	Mitigation Approaches
Operation of new, unfamiliar switching arrangements within a multi-party environment gives rise to a higher rate of early life issues	Effective testing of Operational/Service Management requirements and non-functional requirements prior to release Market Trial and/or Pilot phase (controlled ramp-up) Retain knowledge, resources and infrastructure from DBT phase to provide enhanced level of early life support to steady state operations
Potential need for a Big Bang' release so as not disadvantage any parties means a large user base will have to get to grips with the new arrangements all at once	Effective testing plus potential use of a Trial and/or Pilot Consider progressive, modular functional releases to all parties Effective System Integration and strong DA Provide enhanced early life support utilising DBT structures and resources extended into early life operations with a managed and extended handover period
Challenging requirement (faster, reliable switching) with challenging timelines leads to a risk that unresolved issues will be carried into live operations	Effective, risk-based testing regime, that is protected through the programme governance Resolution of all but minor issues identified prior to release Effective knowledge transfer of known issues to live environment with ongoing resolution plans Retention of DBT knowledge and capability into early life
The effective operation of the energy retail market and competition could be disrupted if new switching arrangements are not stabilised rapidly	Provide progressive assurance through a phased testing approach with independent assurance commissioned for higher risk/ higher criticality areas Provide enhanced early life support to get rapid stability Clear entry/exit criteria agreed for post-implementation period with regular progress monitoring and reporting
Normal business governance & resource may not be able to deal with volume and complexity of early life issues leading to lengthy resolution	Carry forward governance and related support structures for issues resolution and change management from DBT until 'steady state' achieved then handover to incident management arrangements in live environment Ensure managed transition from DBT arrangements to normal governance and processes
Data integrity and availability could lead to a source of early life issues which are exacerbated due to faster switching process	Agreed Data Cleanse & Migration strategy Knowledge of known/typical data issues/errors available Retention of knowledge from DBT phase Monitoring and progress reporting in early life

Table 3 – Programme Risks Relevant to Post-implementation Strategy

Management of External Change in Early Life

21. It will be vital to limit any external change that may affect early life stability during this period. One source of external change could be suppliers (who were not ready

at go live) and new market participants entering early in the life of the new arrangements. Parties may also wish to leave during this period.

- New market entrants will be allowed to join during early life (i.e. while service is still stabilising) as this will be a ‘success measure’ for the new arrangements, and not to do so could disrupt effective competition in energy markets.
- Consideration should be given to existing market participants which are not ready at ‘go live’ – for example should they be prevented joining for a period while service is still stabilising (this could act as an incentive for them to achieve readiness at the required time)?
- Consideration should also be given to whether there should be a ‘lock out’ period where no functional (system) change is allowed to be implemented to the new switching arrangements unless it is critical to fix an early life issue? If there is a phased release of functionality, this problem is partly mitigated as change requests can be fed into later planned releases.

Post-implementation Deliverables and Documentation

22. A range of deliverables and documentation will need to be developed both leading up to and during the post-implementation period. The key deliverables and documents are described in Appendix 3 and discussed below.

Post-implementation Entry and Exit Criteria

23. Clear entry and exit criteria should be defined for a post-implementation period as for any other programme stage. These will be agreed by the Programme Board prior to the Enactment phase. This will enable quality control of readiness to undertake post-implementation, progress reporting and monitoring during, and acceptance that post-implementation can close and steady state operations can take over.

24. At this stage it is not possible to define these in detail; they will be defined and documented as part of the Post-implementation Management Plan listed in Appendix 3. However, it is possible to define some generic principles in terms of what these entry and exit criteria should cover. These are shown in Table 4 below.

Entry Criteria	Exit Criteria²
The switching service, service assets and resources are in place.	Users and consumers can use the switching service effectively and efficiently.
Updates to documentation and information are completed and in force; e.g. Licence Conditions, Codes, contracts, Service Level Agreements.	Consistent and demonstrable progress is being made towards delivering the expected switching benefits to consumers and other parties.
Communications and learning materials are ready to distribute to stakeholders, service operations functions and users	Service and process owners are committed to manage and operate the service in accordance with the service model & performance standards

² Note, the eventual criteria chosen will all need to be measurable

All business as usual roles and any enhanced transitional/post-implementation role are assigned to individuals and organisations	Service delivery is managed and controlled across the service provider interfaces
People and other resources are prepared to operate and use the switching service in normal, emergency and disaster situations	Service levels and service performance standards are being consistently achieved without unexpected variations
People have access to the information necessary to use, operate and support the switching service	Codes, SLAs and contracts are finalised and signed-off by customers and all parties
	Training & Knowledge has been transferred
Measurement and reporting systems are established to assess the performance of the switching service	Unexpected variations in service performance are monitored, reported and managed
	Service & contractual deliverables are signed off and any residual issues have agreed resolution plan or have been conceded/waived

Table 4 – Indicative Entry and Exit Criteria for a Post-implementation Period for Switching

Next Steps – Requirements for the DLS and Enactment Phases

- 25. As mentioned previously, there are many interdependencies between post-implementation and other areas of the programme, notably Testing, Data Cleanse & Migration, Transition Strategy and Governance & Assurance.
- 26. This version of the post-implementation strategy has been drafted to reflect optionality and residual uncertainty in those areas going into the RfI. This post-implementation strategy will be revisited during the DLS phase as certainty increases in these related areas going forward.
- 27. A strategy also needs a clear and detailed management plan to allow that strategy to be effectively enacted by all the parties involved in a controlled and consistent way. It is therefore recommended that an overall (programme level) Post-Implementation Management Plan be developed during the DLS phase. This will ensure that all individual parties involved in implementation of the new switching arrangements develop their (organisation) specific Post-Implementation plans in a way that responds to the overall programme level management Plan.

Options

- 28. Table 5 below outlines some activities and roles and responsibilities applicable to the 3 illustrative post-implementation options. These options reflect the degree of enhanced early life support that is provided over and above steady state levels. As the Target Operating Model version 2 did not specifically specify the requirement for a post-implementation phase, the options include a ‘do nothing’ or counter-factual option which serves to justify the need for some form of post-implementation period.

29. In reality, there is a spectrum of enhanced early life support over and above the 'do nothing' option right up to retaining the full resources, knowledge, facilities and capabilities built up during DBT for a defined period of time until stability is achieved. Table 5 below defines three options that are representative of this wide spectrum.

	Option	Activities	Roles & Responsibilities
1	Do Nothing (no additional service stability phase)	Monitor service performance using existing mechanisms. Hold individual parties to account in terms of code compliance.	Each party addresses early life stability issues. Normal code governance for monitoring performance and holding parties to account.
2	Monitoring and Information Sharing	Proactively monitor early life performance and issues. Report and share service performance achieved. Identify stability issues and enable parties to agree appropriate responsibility.	Each party rapidly resolves issues clearly falling within their boundary, based on agreed priorities. Additional governance to share information to enable parties to gain consensus on way forward for cross-cutting issues.
3	Proactive Management and Intervention	Monitor and report early life performance and issues. Assign responsibility to proactively and rapidly resolve issues which cross-party boundaries. Retain cross-party delivery capability (test environment, governance, design teams, etc.) until service stabilised.	Each party rapidly resolves issues clearly falling within their boundary, based on agreed priorities. Additional governance to assign responsibility for issue resolution. DBT roles carried forward for managing issues and problems experienced in early life. Additional support and resources provided on top of own parties' normal support arrangements.

Table 5 – Post-implementation Options

30. Options 2 and 3 above would involve a continuation of some or all of the arrangements put in place for the DBT phase, and so would be a natural continuation of some of the roles and responsibilities established for DBT (e.g. issue and change management, testing, data cleanse, etc.).

31. The enhanced support offered in Options 2 and 3 would occur when roles and responsibilities for ongoing 'steady state' operation of the new switching arrangements were being established, and as such the interaction between support services for these activities and ongoing 'steady state' activity must be clearly delineated. ³ Whilst the steady state roles and responsibilities for operation and support will be clarified in line with definition of the steady state service management model, they are likely to follow closely those for operation and support

³ Section X of the SEC sets out transitional elements for SMIP and there are opportunities to learn lessons

of the current switching arrangements, albeit potentially considering new aspects such as a central help desk and a cross-party Incident Management process.

32. As above, it is assumed that each party will be expected to provide a period of enhanced early life support for their part of the new arrangements to align with the final post-implementation strategy. There may be a role for a central body to manage and co-ordinate this support at the whole programme/whole solution level, to monitor and report progress, and to manage any central support carried over from DBT until its removal or handover to steady state. This body could be one of those established in DBT, such as the PM/PMO or a System Integrator.

Options assessment

33. The options for the scope of a post-implementation period of support should be assessed in light of the dependencies identified in Table 1 and the risks identified in Table 3. However, at the time of writing there remains a degree of uncertainty, in particular surrounding the final solution architecture and transition to the new switching arrangements, which will significantly impact the level of risk to early life stability and hence a large bearing on the scope of any potential enhanced early life support. Without certainty in these areas, it is not possible to perform a full and definitive assessment of the options.
34. Appendix 4 summarises an initial option assessment for the options in Table 5 using a range of applicable factors, including: Delivery (Cost, Time and Quality); the ability to mitigate/address the risks and dependencies identified in Tables 1 and 3; and alignment with relevant Design Principles (particularly, Reliability, Competition, Robustness, Cost/Benefit and Implementation).
35. Despite the remaining uncertainties, our early assessment of these options would indicate that the 'do nothing' option is high risk, may disrupt the effective operation of the energy retail market and could delay the benefits of faster, reliable switching being realised. The assessment also indicates that proactive management and intervention to resolve early life issues via a planned and well managed post-implementation period of support best balances risk mitigation with assessment of cost and meeting the Design Principles. This option will need to be developed into a detailed plan to better suit the likely risks in early life once better understood.

Recommendations

36. A post-implementation period should be included in the programme.

37. There is a low appetite for risk in introducing the new switching arrangements, and therefore we recommend a 'proactive management and intervention' approach (Option 3) to resolve early life issues via a planned and well managed post-implementation period of support, as set out above. This would need to be tailored in scope and duration to suit the likely risks in early life once better understood.
38. A detailed approach for post-implementation will be determined during DLS once the solution design and its Testing and Transition Strategies are finalised together with the final approach for Data Cleanse and Migration. This detailed approach will be documented in the Programme Level Post-implementation Management Plan as set out in Appendix 3. In addition to the development of this detailed approach and plan in DLS, this post-implementation strategy may need to be further developed and refined during the DLS phase to reflect the specifics of the final solution in terms of functional and non-functional requirements, and in terms of the finalised Transition and Testing Strategies. The identified dependencies in particular should continue to be monitored and reflected into this strategy until an overall stable situation is achieved; likely to be at Design Baseline 4 (DB4).
39. The programme level Post-implementation Management Plan should be used to set the head mark for all parties involved to develop their individual post-implementation plans (via Enactment) aligned to this over-arching plan. Further work needs to be undertaken to define the relationship between any post-implementation period and any proposed 'Pilot' or controlled/limited/interim release determined as part of the Transition strategy.
40. Each party will be expected to provide a period of enhanced early life support for their part of the new arrangements to align with the final post-implementation strategy and plan agreed. A central body should be nominated for managing and co-ordinating this support at the whole programme/whole solution level, including assuring party readiness, reporting progress and managing any central support carried over from DBT. This would ideally align to the proposed service management model for the new switching arrangements as determined through Business Process Design. This body could be one of those established in DBT, such as the PM/PMO or a System Integrator, and ownership of this role should be set out in the detailed Post-implementation Management Plan developed during DLS.
41. Detailed hand-over arrangements from DBT to steady state operation and support (e.g. knowledge bases, documentation, test environments, scripts, etc.) and to who and when this should be handed over should also be covered in the Post-implementation Management Plan developed during DLS.
42. Depending on the final scope of any post-implementation period, there will need to be clear arrangements for the transition of Governance & Assurance from DBT to steady state so as to avoid confusion and conflict on roles and responsibilities.

Appendices

Appendix 1 – Product Description

Product title	Post-implementation strategy
Format / Presentation	Document/slides
Deliverable Purpose	To ensure arrangements are put in place for any ongoing upgrade and maintenance of the new switching arrangements (including the CRS) post-go-live
Composition	<p>Paper(s) and/or slides covering:</p> <ul style="list-style-type: none"> • The problem to be addressed and what we are aiming to achieve • Previous post-implementation plans that have been used in other major cross-industry programmes, to include what worked well/not so well • High-level options for post-implementation, to include roles and responsibilities post-go-live, and some consideration of parties' ability to raise, consider and decide issues as they arise • High-level analysis of the options and an assessment of these against the Design Principles • A recommendation and justification • Links and dependencies with other workstreams
Inbound Dependencies	<p>Soft rather than hard dependencies:</p> <ul style="list-style-type: none"> • Implementation governance strategy • Assurance strategy • Testing strategy • BPD solution architecture shortlisted options
Outbound Dependencies	<ul style="list-style-type: none"> • Reg Design and Commercial for DLS • Baseline 1 • Impact assessment RFI

Resources

Product Approver (Accountable):	Design Authority		
Product Owner (Responsible):	David Liversidge		
Supported By:	Graeme Barton, Barry Coughlan		
Delivery from:	Jan 2016	Due date:	Oct 2016

Reviews

Reviewers (Consult/inform):	Design Team, User Group, EDAG, Workstream leads	Design team:	Feb – Oct 2016
		User Group:	Apr 2016, Aug/Sep 2016
		EDAG:	Sep 2016
		Design Authority:	Sep 2016
Acceptance criteria:	Range of options assessed, thorough analysis against Design Principles, and a clear recommendation. Where a recommendation is not possible, options shortlisted for consultation.		
Date of final version:	Oct 2016		

Appendix 2 – Summary of Best Practice, Standards and Lessons Learned

[see separate document]

Appendix 3 – Post-implementation Deliverables and Documentation

The key deliverables and documentation that would be expected during the life of the programme are summarised in the table below.

Document/Deliverable	Purpose/Scope	Who Produces	When
Post-implementation Strategy	To define the overall objectives and roles and responsibilities	Ofgem (accountable) supported by DCC (responsible)	By end of Blueprint, but refined during DLS
Programme Level Post-implementation Management Plan (detailed Approach)	To define the detailed approach to be adopted for the Post-implementation period, including detailed roles and responsibilities, entry/exit criteria, performance monitoring and reporting, deliverables, issue resolution, detailed handover arrangements, etc.	Ofgem (accountable) supported by DCC (responsible)	By end of DLS
SEC Input	May be new sections of the SEC and/or License Conditions required to put obligations on Industry party (and readiness testing as part of entry criteria)	Ofgem?	During Enactment phase
Individual Post-implementation Plans	These cover how each party will respond to the overall Post-implementation Management Plan and Approach	All parties involved in the new switching arrangements	A minimum time (to be specified) prior to post-implementation phase
Post-implementation Reports (Readiness, Progress and Completion)	Required to authorise start of a post-implementation (against entry criteria), monitoring of progress in line with plan, and to accept completion (against exit criteria)	Responsible party (with appropriate assurance)	Prior to, during and at completion of post-implementation phase – submitted to relevant decision-making authority

Appendix 4 – Options Assessment

The following matrix has been used to assess the options based on a Red (R), Amber (A), Yellow (Y), and Green (G) scoring against each of the factors relevant to the particular option being evaluated.

Evaluation Category	Cost (Net)	Time (Net)	Quality (of Test outcomes)	Risk Reduction potential	Alignment with Design Principles
Key to scoring (Red, Amber, Yellow, Green)	G = Likely to provide an overall cost-benefit Y – Likely to be cost neutral or costs are not significant A – Significant costs with benefits uncertain R – Not cost-effective; net cost overall	G = Likely to provide an overall time benefit Y – Likely to be neutral on time or schedule increases are not significant A – Significant time penalty with benefits uncertain R – Not time-effective; net delay overall	G – makes a significant positive contribution to achievement of outcomes Y – Makes a positive contribution to outcomes but with uncertainty A – May impact negatively on required outcomes R – likely to undermine required outcomes	G – significantly mitigates one or more of the key risks identified Y – May mitigate one or more risks but contribution uncertain A – Unlikely to mitigate any of the key risks identified R – may increase the level or risk exposure	G – significantly supports one or more design principles Y – Significantly supports one or more design principles but may have some small negative impacts A – May support one or more design principles but negatively affects others R – Potentially at odds with one or more design principles

Options Assessment Matrix for Post-implementation Options

Option	Cost (Net)	Time (Net)	Quality (of early life outcomes)	Risk Reduction potential	Alignment with Design Principles
Do Nothing	No additional cost over and above steady state operational costs	Will take time for steady state support to get up to speed – will take longer without enhanced, knowledgeable support	Does not apply best practice and lessons learned. New arrangements likely to experience early life instability which will take	Based on lessons learned, there are likely to be early life issues and so this is a high risk strategy	Likely to impact reliability and robustness, may affect proper operation of retail market and could significantly

		available	longer to resolve		delay benefits of faster, reliable switching
Monitoring and Information Sharing	Would need some additional costs	Will enable sharing of lessons and knowledge to enable more rapid learning curve across the community. Issues may be identified quickly but still may be lengthy to resolve	Good visibility of early life issues across all parties, but resolution may be slow without enhanced support and well-practiced DBT governance available	Would help partially mitigate early life risks and may be sufficient if residual risk after testing and trialling is low. However, this could be a risky strategy	Cost/benefit would need further analysis when further detail is available. This would support rather than supplant steady state governance so roles and responsibilities should be clearer. May however take longer to resolve early life issues
Proactive Management and Intervention	May be seen as significant additional cost to Users but will prevent costs and dis-benefits of instable early life service	Will enable steady state arrangements to get up to speed rapidly, but time may be uncertain as to when post-implementation period will end	Fully applies Lessons Learned and Best Practice. Early life stability should be achieved rapidly. May be seen as interfering with individual parties own obligations unless made clear	Is likely to lead to more rapid stability of the solution with issues and risks identified and addressed quickly. Will still need to be tailored in scope/ duration or could be seen as 'overkill'	Costs may increase, but stability and benefits could be realised more rapidly. Could blur roles and responsibilities with steady state governance (e.g. Code bodies) if not clearly defined as part of transitional arrangements