RETAIL ENERGY CODE

TECHNICAL DESIGN AND DIA APPROACH

TEP

30 JULY 2024

TECHNICAL DETAILED IMPACT ASSESSMENT PROCESS

RETAIL ENERGY CODE

Background

- Our first complex technical change R0067 (Introduction of CSS Refresh Functionality) encountered a number of challenges within the design and implementation process, the change was scheduled for implementation on the 6th December 2023, however, the change was deployed with defects and was not fully operational until February 2024.
- Following that session, the Code Manager held discussions and a formal Lessons Learned session with all Service Providers and identified a number of challenges with the technical change process.

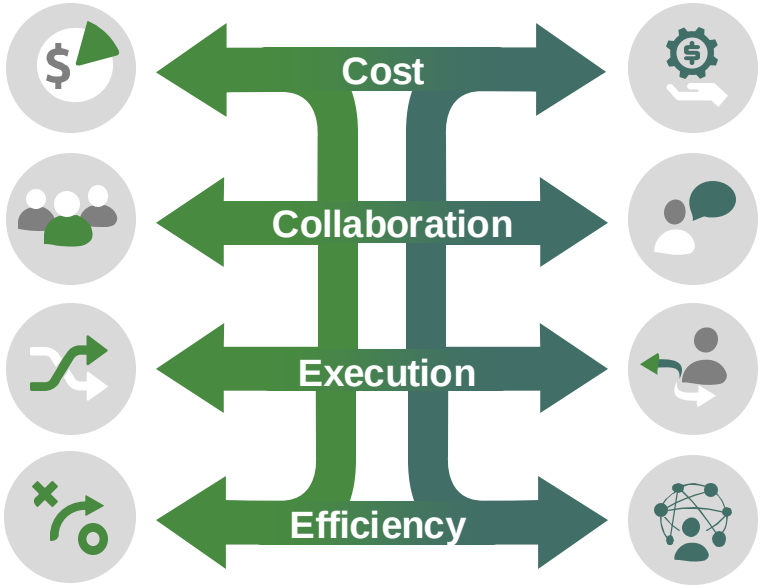
Service Provider Challenges

High Contingency Costs
Where there is uncertainty over design, Service Providers built in a high degree of contingency costs to ensure they have sufficient commercial coverage

Lack of Stakeholder Input
Following approval there is no current official mechanism for impacted stakeholders to input into the design

Inaccurate timelines
Completing an E2E implementation timeline without having certainty on design can result in longer timelines being provided

Risk of Rework
Assumptions on design can be made but without a Proof of Concept, there is a risk that once development begins the design changes



Impacted Party Challenges

Lack of Clarity
Where Service Providers are dependent on each other, it's is difficult to properly impact assess a change when there is no clarity on the design

Limited Feedback
There is no formal opportunity for impacted stakeholders to provide feedback and amends for the design

Misalignment
Assumptions can be made by all impacted parties and where designs are not shared early, this can be discovered late in the development phase

Delivery Challenges
Dependencies on other Service Providers can lead to delays and rework if both designs are developing at the same time and are not aligned

DESIGN AS PART OF THE DIA

Revised Approach

- Following our lessons learned discussions from R0067, we proposed a new approach with the lead Service Provider completing design up front as part of the DIA.
- The decision is based on the level of complexity of the change and the strength of the business case.
- The changes will be assessed on a case-by-case basis and views of the relevant committee will be considered
- If the change is a suitable candidate for design as part of DIA, a TDA Recommendation will be created and RECCo will approve the release of funds where appropriate.
- This approach has been mapped in the updated Change Process following the approval of R0167.

R0080 Trial

- This approach was initially trialled with R0080.
- The detailed design documents were shared with industry at the Party Impact Assessment stage and highlighted a number of clarifications required within the design. This enabled the documents to be updated in advance of approval and ensure that the design was fit for purpose across the industry.

Benefits

Accurate Costs

Service Providers do not need to build in as much contingency in their costs, reducing the overall implementation costs.

Stakeholder Input

The detailed design and any supporting documents (e.g. PhID, BDVR) will be provided to parties during the Party Impact Assessment, updated (if required) based on industry feedback. The same information will also be issued as part of the consultation to allow another feedback loop.

Robust Timelines

If all parties have clarity on the design, this will lead to more accurate timelines being provided and less contingency added in, leading to quicker delivery of change.

Accurate Party Assessments

Impacted parties will have a greater clarity of understanding of the impacts to their system and the technical updates that they need to make well in advance of the change being approved and implementation starting.

Proof of Concept

For complex changes, there is a need to test the theory, providing a proof of concept validates the solution and development.

R0096 CONTEXT

Overview

Change Proposal R0096 has been raised to explore the introduction of new functionality which will allow CSS to identify and re-generate messages which have failed initial generation

Impact Assessment Review

R0096 has been developed through a number of Technical Change Workshops during 2023, however, during the development the CSS incurred a P1 Major Switching Incident which resulted in secured active and inactive messages not being generated.

The requirements of this change directly link to mitigating this type of incident reoccurring. The change will introduce additional monitoring and self-healing of the CSS system to enable messages to be generated and issued within their original timeframes where they would otherwise have stalled.

Design and Detailed Impact Assessment (DIA)

Completing the design for R0096 in advance of the DIA will provide the following benefits:

- **Enable a Proof of Concept:** For a high complexity change such as this Landmark will look to produce a proof of concept to ensure that the design is robust and meets the requirements.
- **Detailed Design Feedback:** Completing detailed design up front allows for this to be shared with industry at the point of consultation, enabling feedback into the design before the build stage, providing greater transparency for end users.
- **Accurate Costs with Low Built in Contingency:** CSS Service Providers build contingency into their pricing where they do not have clarity on the design, completing design before we commit them to costs means that costs will be more accurate and need to include less contingency, ultimately saving industry money.

Recommendation

The Code Manager recommends proceeded to Detailed Design and DIA

Impacted Parties

CSS Provider
All CSS Users (Indirectly)

Risks

There is a risk that the relevant change committee does not approve the change and RECCo have already committee funds to pay for the design phase.

This is understood to be a low risk due to the direct mitigation that this change provides to another Major Incident occurring and the widescale impact that incident had on the industry and is being validated in today's session.