

**Action: 0602: CDSP (DA) to undertake a case study into the Governance between DSC Change Management and DSC Contract Management Committee interactions using recent Hydrogen Change XRN5531 and report back.**

**Summary:**

**The DSC Change Management process allows flexibility for DSC customers to progress changes in advance of regulatory change. This remains a useful activity to retain and should not be constrained.**

**With such change there remains a risk that any future regulatory change is not approved, therefore in future it is recommended that any such risk discussions are highlighted and recorded in the minutes.**

**Detailed Review:**

The DSC Change Management process has been designed in such a way that DSC customers can draw down resources to be able to initiate analysis and, if appropriate, development of changes to UK Link systems and DSC processes.

Historically the CDSP received a Change Request in parallel with UNC Modifications, and the CDSP undertook detailed requirement definition and analysis (to the extent of placing work packs with Service Providers) in advance of UNC Modification Workgroups concluding. This was undertaken, in part, to ensure that any such findings could be considered in the business rules and the Workgroup reports. This approach meant that CDSP resources spent a lot of time developing detailed business change, but there was a high risk of wasted effort should a Modification be rejected.

In recognition of the above, now DSC Customers will raise Change Proposals at a later stage as they progress through the UNC Modification and REC Change process, depending on factors such as change complexity and expected delivery timescales and whether there is a defined delivery date that must be met (e.g. a broader specific regulatory implementation date or programme deadline). This has been achieved by the development of Regulatory Change teams and also the Rough Order of Magnitude (ROM) process, so that the proposer and Workgroups obtain detailed support for business rule development as the change progresses.

The CDSP tries to advise and support DSC parties when to raise Change Proposals, and the stages to progress the change. This might mean that the CDSP advises raising and progressing a DSC Change Proposal in advance of a regulatory change decision. Recent examples of this have included Central Switching System (CSS) implementation where the REC documentation and UNC Modification was developed in parallel (and slightly behind) the system development, and also the UNC Modifications associated with missing messages and the CSS P1 Incident.

In the CSS P1 Incident (XRN5675), the business rules for the change were defined for certain elements of the process and developed and implemented in August 2023, which was conducted in parallel with the consultation for UNC Modification 0836, whilst IGT UNC 170, UNC 0855 and IGT UNC 171 had not concluded the Workgroups.

The interactions between Change Proposals and the Contract is maintained by ensuring that where changes are required to the DSC that these are defined within the Change Pack (such as anticipated changes to the Service Description Table and associated Service Line drafting), ahead of change delivery and prior to formal agreement by the Committee – which are enacted via the acceptance of Service Description Table Amendment Change Packs at the necessary point in time (i.e. when a change has taken effect and become a recognised service). In some instances the

Change Packs do focus upon the system and process changes, and therefore a subsequent change is required to elements of the DSC – notably updates to the Service Description Table. Ideally the Change Packs should consider the changes to the Service Description Table, but this is often a very granular level of detail that is identified through the later stages of the project to ensure effective operation and oversight of the process.

The above, highlights that the DSC Change process allows the flexibility for the CDSP to progress changes, with the DSC Change Management Committee being able to support any necessary spend that is required to develop changes in a timely manner. **The key is ensuring that the DSC Change Management Committee understand the balance of risk regarding elements such as regret spend in the event that the regulatory change does not progress versus the advantage of initiating detailed analysis to ensure that such changes are progressing using feasible and achievable principles.**

In this instance, Change Pack 5531 was seeking to undertake detailed analysis of a potential Solution Option to support the Hydrogen Village Trial in approximately 2000 properties), and that this would be progressed in parallel with (and potentially, in advance of) regulatory changes – should a UNC Modification be required.

The Decarbonisation Programme is a key part of the UK Net Zero policy. In gas, specifically use of Hydrogen is being progressed as a replacement to natural gas. As part of the adoption of Hydrogen there are a number of small scale trials proposed. These will enable trialling of these arrangements to demonstrate the necessary processes and systems required to decarbonise the gas industry.

From a CDSP perspective the key challenge relates to the Settlement activities. Hydrogen, when compared to natural gas, has a reduced calorific value. Use of Hydrogen ranges from blending with natural gas to 100% hydrogen.

This impacts the calculation between volume to energy calculation.

Use of Calorific Value is the correct enduring solution, but the existing Settlement systems rely upon the Calorific Value being within a reasonably tightly defined range within the LDZ.

Amendment of these arrangements are complex and disproportionately expensive for the trials that involve a small number of premises.

As an alternative, the trials have looked at the volume to energy calculation which have a number of 'fixed' factors that can be used to meet the Ofgem directive that a consumer should be charged no more than if they were receiving natural gas.

**H100 (Fife).** This change delivery is being progressed through XRN5298. Physically this trial is being engineered by a parallel physical Network at each of the premises signed up for the trial, which is expected to be used for approximately 300 properties. This trial was dealt with via UNC Modification 0799. The use of the Multiplication Factor was explicit within the Modification. Multiplication Factor was proposed for a number of reasons.

- The engineering of the parallel Hydrogen Network meant that the use of a Hydrogen ready meter could be configured and recorded in UK Link systems with the appropriate fixed Hydrogen specific Multiplication Factor.
- Calorific Value was discounted due to the complexity set out above for a trial.

- Use of Conversion Factor as a Hydrogen specific fixed value was discounted as it was understood that the governance route to change the Thermal Energy Regulations would take too long.
- Multiplication Factor expected to have limited impacts to industry participant systems.

**Functional changes necessary for this trial have been implemented in CDSP systems. First use of this functionality is expected in Q3 2024.**

**Hydrogen Village.** This change is being progressed through XRN5531.

This change was assessing use of Conversion Factor rather than Multiplication Factor as a solution option, because use of Multiplication Factor had identified a couple of challenges:

- The planned engineering of the HVT was existing pipework would be converted to transport Hydrogen in the trial area. Hydrogen ready meters can flow both natural gas or hydrogen, but a configuration is required to ensure that the Meter is configured correctly. Multiplication Factor is a factor associated specifically with the Meter, therefore UK Link systems would also need to be updated to ensure that the Settlement remains aligned.
- Multiplication Factor has not been included within Smart Metering calculations (therefore will provide issues regarding matters such as Smart Pre-Pay and also the IHD Display)

In a recent open letter, [Hydrogen village trial: open letter to Gas Distribution Networks and further information - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/hydrogen-village-trial-open-letter-to-gas-distribution-networks-and-further-information), DESNZ concluded that:

“The proposed hydrogen heating village trial in Redcar, Teesside also cannot go ahead as designed, as the main source of hydrogen supply will not be available.”

Inevitably, there will continue to be a need to trial use of Hydrogen in small scale projects, so the solution option for XRN5311 may be considered for future trials.

The Change Pack did describe that a UNC Modification would be undertaken depending on the outcome of the detailed analysis. In the meeting minutes of the approval of the DSC Change Management Committee this is not recorded whether this was noted during the approval discussion, but **in future it is recommended that any such risk discussions are highlighted and recorded in the minutes.**

**We do not recommend that there is any constraint placed upon the DSC Change Management process to prevent the Committee approving changes in advance of regulatory changes being approved.**