MCCP095 - Trade Effluent Volumes – Benefits Analysis

1. Introduction

MCCP095 addresses formalisation of current manual processes for calculating Trade Effluent volumes, proposing that in future these calculations take place within the Central Systems. The change proposal is currently being progressed through impact assessment for inclusion in the March 2013 release.

The Technical Panel has requested a benefits analysis against which the cost of the development can be assessed.

2. Background and scope of MCCP095

Trade Effluent volumes are currently calculated independently by Licensed Providers and sent to the CMA for use in charge calculations. In some cases this is on the basis of readings from the customer’s own effluent meter but for the majority of sites it is based on an agreed methodology taking account of the volume of water supplied to the site, sewerage from domestic facilities and allowances for production and evaporation.

By comparison, water and sewerage volumes are calculated from water meter readings by the CMA systems based on the algorithms published in the Market Code CSDs. The CMA systems are subject to external audit and change control of the algorithms is governed by the Technical Panel.

MCCP095 proposes that the calculation of Trade Effluent volumes is undertaken by the Central Systems. The site allowances would be stored in the Central Systems in the same way as other market data.

In addition, the behaviour of Trade Effluent calculations in relation to the suspension of charges during vacancy and the calculation of charges at sites with partial treatment will also be improved.

3. Issues to be addressed by MCCP095 and associated benefits

3.1 Lack of Transparency

One of the issues with the current arrangements is a lack of visibility within the market of the data and methodology being used to calculate Trade Effluent volumes. This increases the risk of misaligned data or inconsistent assumptions between Scottish Water and the registered Licensed Provider. It also means that where such inconsistencies do exist, they are difficult to identify and address.

The proof-of-concept exercise in connection with the Data Improvement Project involved the review of data at a random sample of 1,000 sites. For the Trade Effluent workstream of this exercise, any of those 1,000 sites which had a Trade Effluent consent were subject to a desk analysis by both Scottish Water and the registered LP to verify the Trade Effluent volumes and a reconciliation of the supporting data. A site visit was also undertaken to reconcile the data at the CMA against the physical configuration of the site. Of the random sample of 1,000 sites, 9 had a Trade Effluent consent and were included in this exercise.

Issues were identified at 6 of the 9 sites reviewed:

- At 2 sites, allowance data was out of date or omitted in the registered LP’s calculations of Trade Effluent volumes, leading to inaccuracies.
- At 2 sites, effluent meter details were correctly held by the registered LP were not recorded by Scottish Water, leaving it unable to reconcile Trade Effluent volumes used for settlement
• At 1 site, there was a significant error in the calculated Trade Effluent volumes which were more than double the correct level for the period reviewed
• At 1 site, wider issues with the configuration of the meters and Supply Points at the site had resulted in incorrect Trade Effluent volumes

The changes proposed in MCCP095 would address all but the final issue. All Trade Effluent allowances and effluent meter details would be stored in the Central Systems and subject to the same controls as other market data. The calculation of Trade Effluent volumes would be carried out within the Central Systems based on market data and subject to the same levels of audit as settlement calculations for water and sewerage.

If extrapolated across the entire Trade Effluent base, the results of the proof-of-concept exercise suggest that there is scope for significant inaccuracy in calculated Trade Effluent volumes with the current arrangements. The changes proposed in MCCP095 will effectively mitigate against the majority of the risks identified.

3.2 Reliability and volatility of calculations

As highlighted by the proof-of-concept exercise, an issue with the current manual method of calculation is the risk of error in either the assumptions, input data or actual calculations. A symptom of the lack of reliability with these manual calculations is the high level of volatility observed in Trade Effluent charges relative to overall charges.

The table in Annex 1 shows the average % movement in charges between settlement runs for each month since April 2011 (i.e. the average of the P1 vs. R1 movement, R1 vs. R2 movement and R2 vs. R3 movement) for overall charges and for Trade Effluent only. When expressed in absolute terms (to remove the effect of variances in opposite directions cancelling each other out), the Trade Effluent variance has been higher in 18 of the 19 months and the overall average variance over the period is 2.7% for Trade Effluent compared with 0.6% for total charges. Over the period range of variance is up to 18.8% for Trade Effluent charges compared with variances of up to 4.1% for overall charges.

This volatility results in increased uncertainty for market participants regarding the stability of Trade Effluent charges in any given month. It also has a cashflow impact for market participants to the extent that Trade Effluent charges are under or over-stated between settlement runs to a far greater extent than other charges. It is assumed that this level of volatility will also be reflected through to retail billing with a corresponding impact on customers.

Because the level of volatility also makes it difficult to identify reliably whether a site is exceeding the limits of its Trade Effluent consent, it also hinders Scottish Water’s ability to discharge its duties in respect of managing Trade Effluent compliance.

There is also a resource impact for market participants as large unexplained variances result in investigative analysis to attempt to identify the cause and liaison between market participants to address issues. We estimate the overhead of this work to be in the region of 1-2 FTE across all market participants.

4. Conclusions

The cost of MCCP has been estimated by the CMA to be £178K. Total Trade Effluent charges across all market participants equate to in excess of £20m per annum as detailed in the SR10 final determination.

The nature and scale of issues identified by the data improvement project proof-of-concept and the consistently high level of volatility of Trade Effluent charges demonstrate the need for a more robust and auditable method of calculation. Whilst the costs of MCCP095 represent a significant proportion of the March 2013 release, it is suggested that the cost is proportionate for the scale of wholesale charges affected by the changes.
## Annex 1 - Variance in charges between settlement runs

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