



**Report on UNC Modifications 0395 &
0398**

**A report for I&C Shippers & Suppliers
(ICoSS)**

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Ltd**

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1. Executive Summary

This report, commissioned by the I&C Shippers and Suppliers group (ICoSS), representing 75% of the non-domestic market, looks at the impact that UNC Modifications 0395¹ & 0398², will have on the gas retail market. Using information on 24,000 reconciliations provided by members³, the following points have been identified:

- There is no particular bias towards either the Shipper or the customer with regard the number and size of reconciliations, inferring that neither counterparty is exploiting a superior information or position.
- A Shipper can expect large scale reconciliations of a scale approximately 2% to their portfolio.
- 90% of reconciliations provided above 500,000 kWh have a materiality of less than £50,000, which is the current threshold limit for settlement claims process proposed in modification 0429 and could not be reconciled if that modification was put in place and the current reconciliation periods shortened.
- Though the number of reconciliations that would be excluded by either modification is relatively small (up to 12% by Modification 0395 and 6% by Modification 0398), these corrections have a proportionately larger impact, indicating that implying that the costs from large scale reconciliations are “backloaded” (that is a greater percentage of values sits in the 3-5 year age range, rather than 0-2 year age range).

86 detailed case studies on the largest reconciliations for each Shipper were also provided by the members and this indicates the following:

- The main causes of reconciliations are:
 - Mechanical failure of the meter or auxiliary equipment
 - Meter drift or incorrect correction factors.
 - Erroneous Asset Details (such as incorrect pulse multipliers)
 - Reconciliation of a prime/sub configuration
- If either modification was implemented there would be a roughly 1 in 80 chance for a Shipper with a 10 TWh portfolio that they be unable to undertake a reconciliation of a materiality greater than their expected annual profit. Given that the total LSP NDM and DM market size is ~240TWh, there is a 1 in 3 chance of such an occurrence taking place, in the market, each year. As there are currently 10-12 Shippers with a portfolio of over 10TWh, the odds are that 4-5 of these Shippers each year will encounter a very large irreconcilable charge that they will find difficult to accommodate. Smaller Shippers may not receive such a large reconciliation each year, but will any such irreconcilable adjustment will remove their profit for the year.

Using this information, this report has answered the five questions posed by Ofgem in a letter to the UNC panel in March 2012, detailed in the conclusions section.

¹ Limitation on Retrospective Invoicing and Invoice Correction

² Limitation on Retrospective Invoicing and Invoice Correction (3 to 4 year solution)

³ For a full breakdown on the data used in this report, please look at Appendix 1.

2. Background

Modification History

In August 2011, EDF Energy raised a UNC modification (UNC Mod 0395) which looked to shorten the current reconciliation backstop, which is the point up to which meter readings would be reconciled by Xoserve when submitted, from 4-5 years to 2-3 years⁴. The rationale given for this change was that it would protect Shippers from unexpected invoice adjustments.

Wales and West Utilities (WWU) subsequently raised UNC Mod 0398, which seeks to create a 3-4 year cut-off date. The rationale given for raising this subsequent change is that a 2-3 year cut-off would impact on other system processes run by the transporters, but that a 3-4 year cut-off could be accommodated without any major system changes being required.

These consultations were both submitted to Ofgem for decision in February 2012 (0395) and January 2012 (0398).

Ofgem decisions

UNC Modification 0395 was not recommended by the Panel, but UNC Modification 0398 was. Ofgem however did not reject or implement either modification, but has instead used its send back powers to request that further work is done to assess the impact of both modifications.

The additional analysis requested by Ofgem is set out below:

- *Quantify the benefits of the modification proposals in terms of the reduction in shippers' risk and credit exposure;*
- *Determine the causes of energy remaining un-reconciled after 3-5 years;*
- *Set out the typical lead times to resolve settlement disputes or adjustments, together with the estimated scale and age profile of such adjustments;*
- *Consider the financial implications of a shortened reconciliation window in terms of re-distribution between Small Supply Point (SSP) and Large Supply Point (LSP) sectors (or vice versa); and,*
- *Further consider the impact of these proposals upon UNC Parties non-code liabilities, their ability to mitigate any associated risk and the applicability of remedies outside of the normal settlement process.*

The UNC distribution workstream provided some additional comments in response to these questions, which were included in the consultation published by the Joint Office in June 2012.

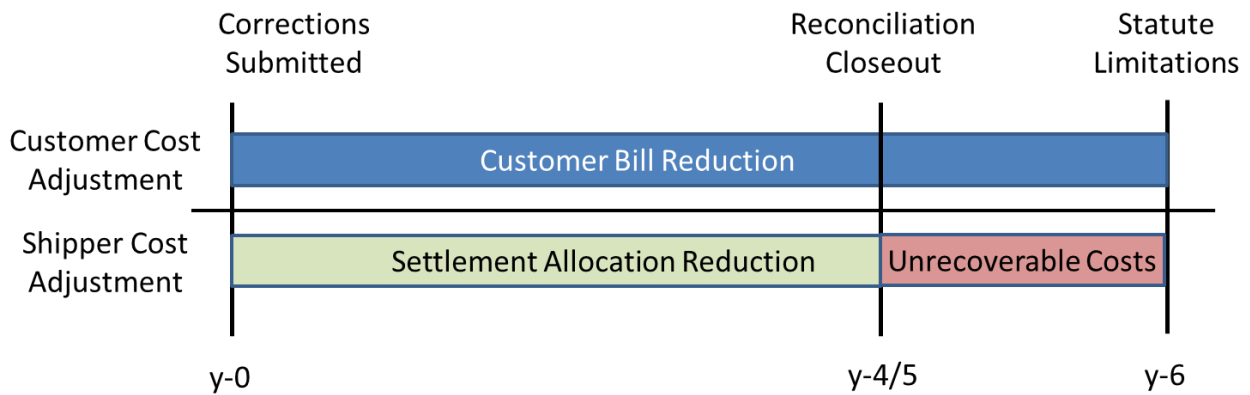
Impact on Industry processes of changes

General commercial and contractual law (The Statute of Limitations Act 1980) limits any pursuit of commercial debt to a period of six years. This means that an energy customer has the right to request a correction of an energy invoice up to six years. The energy

⁴the window is variable as the date to which reconciliation is currently set at 1 April y-4, so at present the back stop date is 1 April 2008. On 1 April 2013 this will be rest to 1 April 2009.

supplier also has the same right to disputes any inaccurate invoices it has received from the Transporters for energy allocation to the same period.

However system processes only allow the supplier to adjust their energy allocation for an individual site up to 4-5 years, as illustrated below:



This means that, at present, a supplier has little option but to pursue any monetary correction that cannot be reflected in the system through bilateral negotiation with the organisation that is responsible for energy balance.

Were the current timescales shortened then this discrepancy would increase. This will potentially expose shippers to more costs as the both the number and materiality of bill corrections that cannot be fully reflected in settlement will significantly increase.

3. Data Analysis

This report looks to answer the five questions asked by Ofgem to the industry. There are three clear scenarios to be examined:

- Current market situation, reconciliations allowed up to 1 April 2008 (status quo)
- Modification 0398, reconciliations allowed up to 1 April 2009
- Modification 0395, reconciliations allowed up to 1 April 2010

WWA has used data provided by ICoSS members (see Appendix 1 for details) to examine the following areas, taking into account the different impact the three scenarios identified above would have, if any:

- Frequency of large reconciliations (>500,000 kWh) in the industry;
- Scale and spread of reconciliations;
- Probability to large individual change appearing on a system process.
- Impact of large scale reconciliations;
- Determination of the risk that shortening of the reconciliation process will have on shippers, and
- Case Study analysis of large scale reconciliations, in particular the timescale and success of adjusting customer invoices.

Frequency of large scale adjustments

Information was provided on reconciliations above 500,000 kWh for a ten year period (2002-2011), classifying each reconciliation as either a positives (that is a cost to the Shipper) or a negative, (that is the cost to the consumer). Where incomplete datasets have existed, we have only used the information available for that year, and scaled as appropriate.

The total sums of the information are provided below:

Total Market size for the LSP NDM and DM market	~240 TWh
Average Market Volumes for market participants (per year)	81.6 TWh
Total number of reconciliations (at 40%market)	24,000
Number of positives (@40% market)	20.04TWh
Number of negative (@40% market)	-21.25TWh

Table 1: Scale of market reconciliations

From this information two conclusions can be drawn:

- The number of positives and negatives are approximately equal, which indicates that there is no particular bias towards either the Shipper or the customer. From this lack of bias towards one group it can be inferred that neither counterparty is exploiting a superior information or position.
- A Shipper can expect large scale reconciliations of a scale approximately 2% to their portfolio. Of course this may be either a large number of relatively small scale reconciliations or a few, very large, adjustments.

It would be expected that the reconciliation risk will cancel each other out with equal numbers of positives and negatives over time, but a single large adjustment, or a series of medium sized adjustments going one way or the other, may be outweigh the counterbalancing adjustments in a year and so impact profitability.

Scale and Spread of reconciliations.

In order to ascertain the likely frequency of large scale changes coming through, it was necessary to also look at the spread of changes being undertaken, again with negative being a cost to the customer, positive to the Shipper:

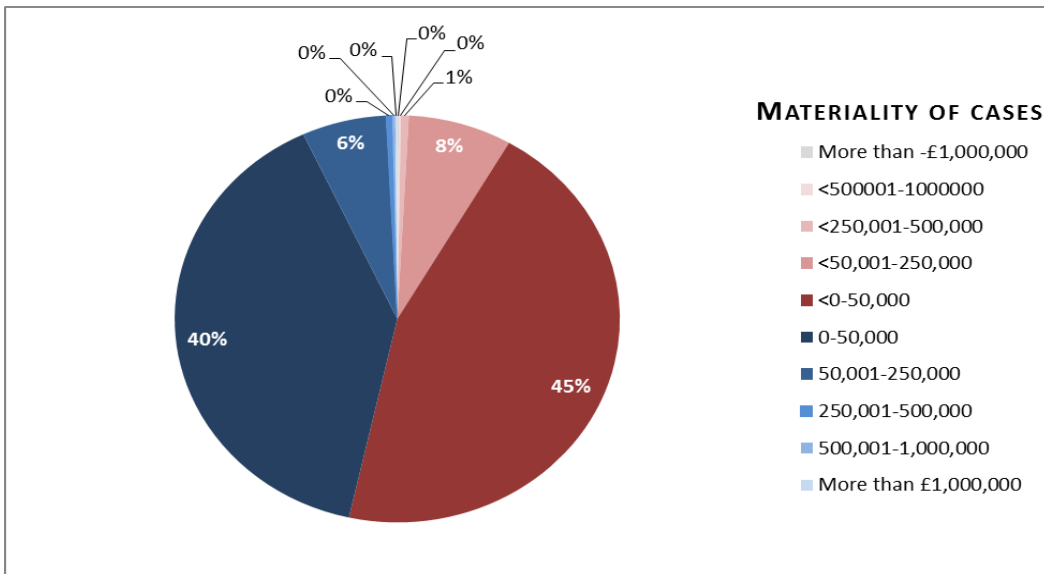


Chart 1: spread of reconciliation cases over last ten years.

The information provided indicates that approximately 90% of reconciliations are of a relatively small scale (<£50,000), with around 1% of reconciliations being greater than £250,000⁵. The largest scale corrections (greater than £1m) represent 0.3% of the total.

Age of reconciliations

The average age of these reconciliations can be shown below. In these cases the age of the reconciliation was calculated by subtracting the date the reconciliation was submitted to Xoserve from the start date of the period to be reconciled. Please note that the information used pre-dates the implementation of UNC Modification 0152V and so in some cases reconciliations have gone back more than the 4-5 year limit;

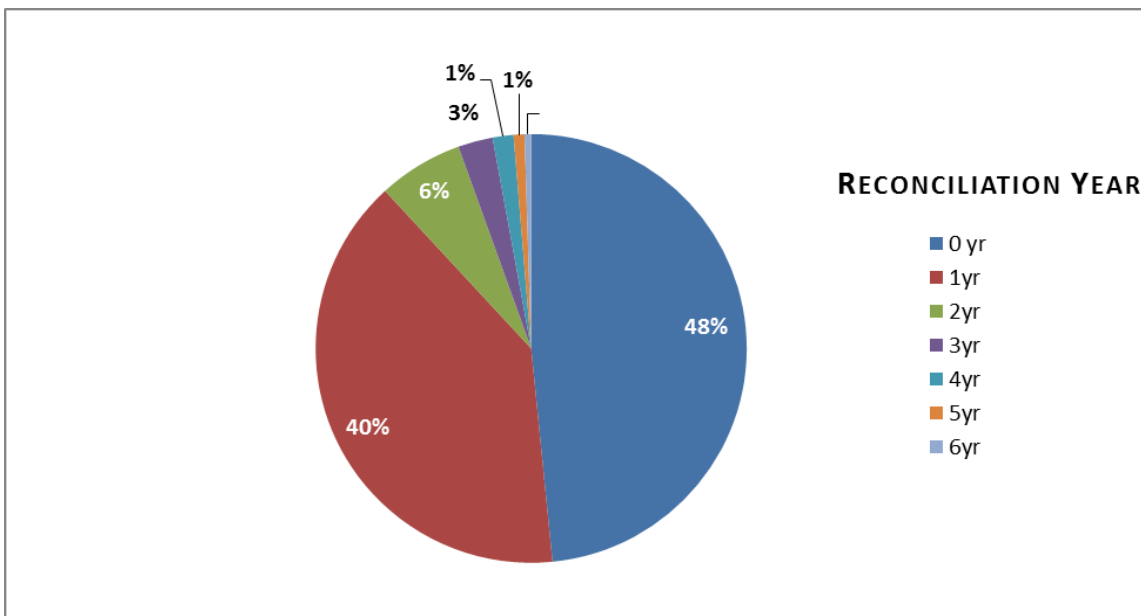


Chart 2: Spread of reconciliations with regard to age of reconciliation⁶.

⁵ We have assumed a SAP of 2.5 p/kWh in all calculations when converting energy to monetary values

As can be seen that there a large number of reconciliations occur in the period 0-2 years after the dates being corrected, but 12% of reconciliations that occur in the 2-4 years category and so would be partially or completely excluded where the reconciliation timescale to shorten.

The number and scale of changes that could not be reconciled would be the following:

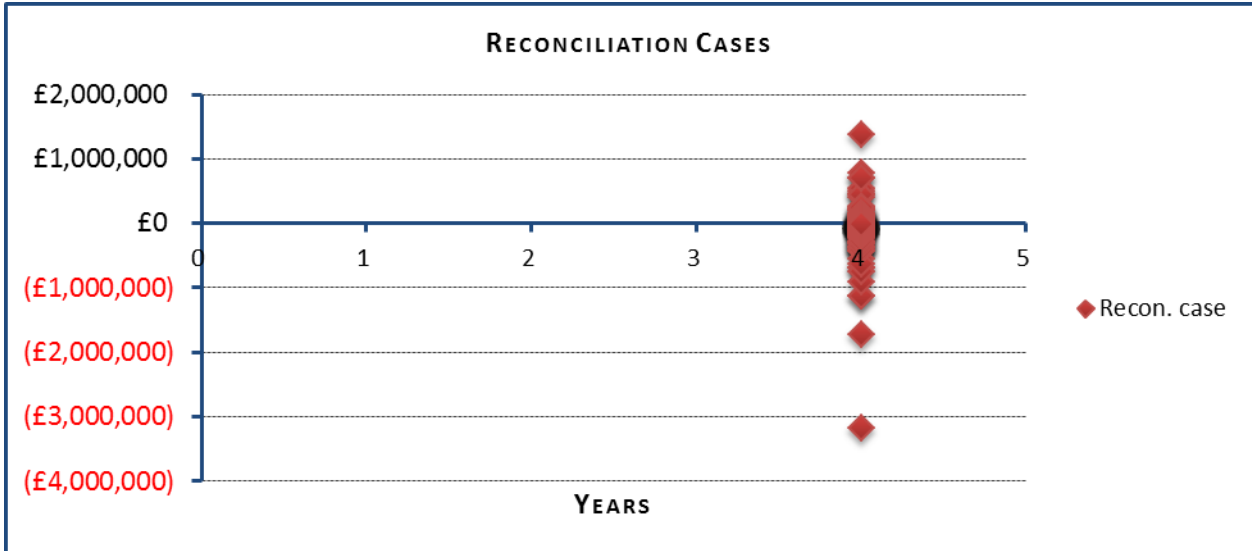


Chart 3: spread of reconciliations that would be excluded from the reconciliation process by Modification 0398.

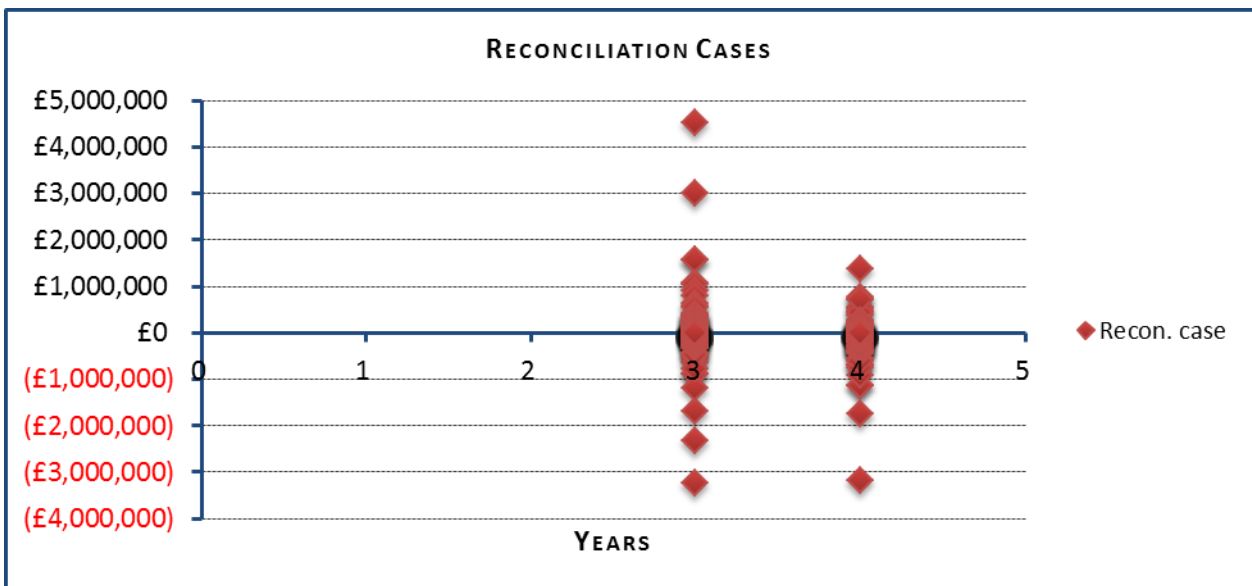


Chart 4: spread of reconciliations that would be excluded from the reconciliation process by Modification 0395.

As can be seen from these charts, both modifications would exclude some significant reconciliations being undertaken to their full extent including, in the case of Modification 0395 individual reconciliations worth up to £4.5m to the Shipper.

⁶ We have looked at the age of reconciliations in whole years only, ignoring any remainder, owing to the variable reconciliation date

Increase of risk on parties

Below is a table showing the total monetary impact of reconciliations that could not be reconciled by the shortening of the process. It should be noted that the materiality of customer underpayments is based on the timescale by which reconciliations can be undertaken (so up to 1 April 2008 for current market timescales, 1 April 2009 for Modification 0398 and 1 April 2010 for Modification 0395).

Conversely, the value of customer overpayments reflect the total materiality at risk to Shippers who are required to pay back amounts to customers which cannot be reflected in settlement, which would lengthen if either modification is implemented (so this would mean for bill corrections going back 6 years, any time period prior to 1 April 2008 at present, 1 April 2009 for Modification 0398 and 1 April 2010 for Modification 0395).

Reconciliation Time Period	Value Customer Underpayments ⁷	Value Customer Overpayments	Lost Revenues	Increased Costs	Total
Current	-£272,616,678	£19,900,821			
Mod 398	-£249,920,041	£30,209,419	£22,696,637	£10,308,599	£33,005,236
Mod 395	-£223,649,635	£55,638,023	£48,967,043	£35,737,203	£84,704,246

Table 2: Impact on risk of parties.

These increase costs should be considered against the value placed on Shell Gas Direct by DONG Energy for a significant market player, where DONG Energy UK purchased Shell Gas Direct for £30m. Shell Gas Direct has a market share of circa 11% at the time of purchase. Assuming that an even share of the risk exists across the market, an 11% share would mean the following impacts⁸

Reconciliation Time Period	Lost Revenues	Increased Costs	@11 % Market Share Lost Revenue	@11 % Market Share Increased costs
Current				
Mod 398	£22,696,637	£10,308,599	£2,496,630.07	£1,133,945.89
Mod 395	£48,967,043	£35,737,203	£5,3836,374.73	£3,931,092.33

Table 3: Impact on risk of party with 11% market share

As can be seen both modifications 0395 & 0398 would result in less energy being correctly allocated to the customer and instead the value of the lost underpayments would instead be recovered from other non-domestic customers. Though the number of reconciliations that would be excluded is relatively small (up to 12% by Modification 0395 and 6% by Modification 0398), it should be noted that there is a greater percentage of energy that cannot be correctly allocated than would be expected, implying that the costs from large scale reconciliations are “backloaded” (that is a greater percentage of values sits in the 3-5 year age range, rather than 0-2 year age range).

Probability of large individual reconciliation

⁷ We have assumed a SAP of 2.5 p/kWh in all calculations when converting energy to monetary values

⁸ (Source: Financial Times, Reuters)

A total of 76 very large reconciliations (>£1m) were present in the data set (covering a ten year period), over a market size of 80 TWh. We would assume therefore that approximately 1 very large reconciliation will occur for a 10 TWh business every year.

If a margin of 1% margin is assumed, then £1m would represent the profit on 4 TWh of throughput for large non-domestic sites. Therefore, a 10TWh business could be assumed to have a profit of £2.5m/yr.

The age of such reconciliations is shown below:

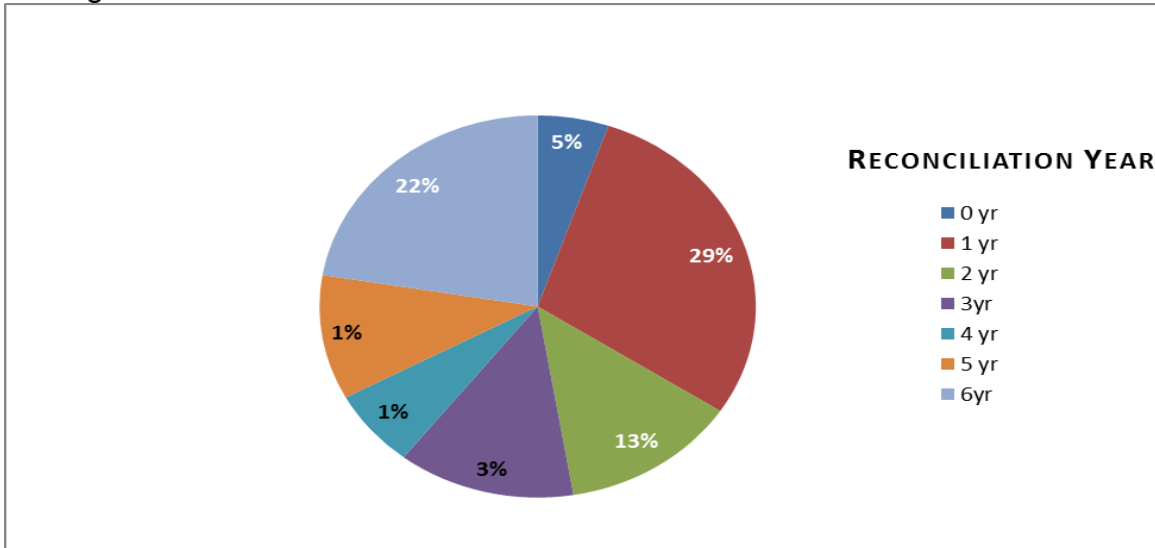


Chart 5: Age of energy reconciliation cases.

The spread of these large scale reconciliations is shown below:

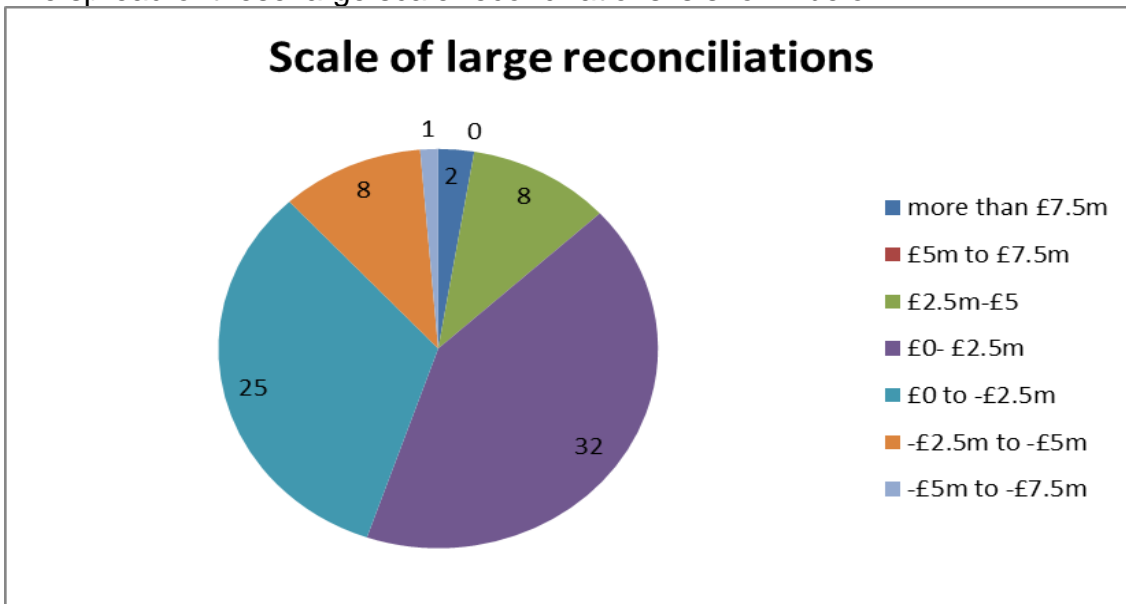


Chart 6: Size of large scale reconciliations

Using the £2.5m profit of a large organisation as a benchmark, we have looked at the number of large reconciliations that would be impacted by a shortened reconciliation timescale.

Number of reconciliations that	Number greater than £2.5m	Largest
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	cannot be fully or partially reconciled.		
Current	12	0	£1.0m
Modification 0395	40	1	£5.5m
Modification 0398	30	1	£4.0m

Table 4: Impact of shortening of reconciliation period

As can be seen from the information above, both UNC Modifications 0395 & 0398 will exclude significant numbers of large scale reconciliations being under taken. In both cases the modifications will prevent a reconciliation of more than £2.5m being undertaken, which would effectively wipe out the profit of a 10 TWh for a year. There is roughly a 1 in 80 chance of this occurring to such an organisation each year. Given that the total LSP NDM and DM market size is ~240TWh, there is a 1 in 3 chance of such an occurrence taking place, in the market, each year. As there are currently 10-12 Shippers with a portfolio of over 10TWh, the odds are that 4-5 of these Shippers each year will encounter a very large irreconcilable charge that they will find difficult to accommodate. Smaller Shippers may not receive such a large reconciliation each year, but will any such irreconcilable adjustment will remove their profit for the year.

Case Study analysis of large scale Reconciliations

Further to the analysis undertaken above, ICoSS members provided detailed information on 86 reconciliations, being taken from the largest reconciliations undertaken by each member.

Causes of reconciliations

From this pool of 86 of the largest reconciliation, information was provided on the known causes of 73 reconciliations of the largest undertaken by each Shipper (13 reconciliations were unable to provide details). There were four causes identified:

- Mechanical failure of the meter or auxiliary equipment
- Meter drift or Incorrect correction factors.
- Erroneous Asset Details (such as incorrect pulse multipliers)
- Reconciliation of a prime/sub configuration

The split between these sites is shown below:

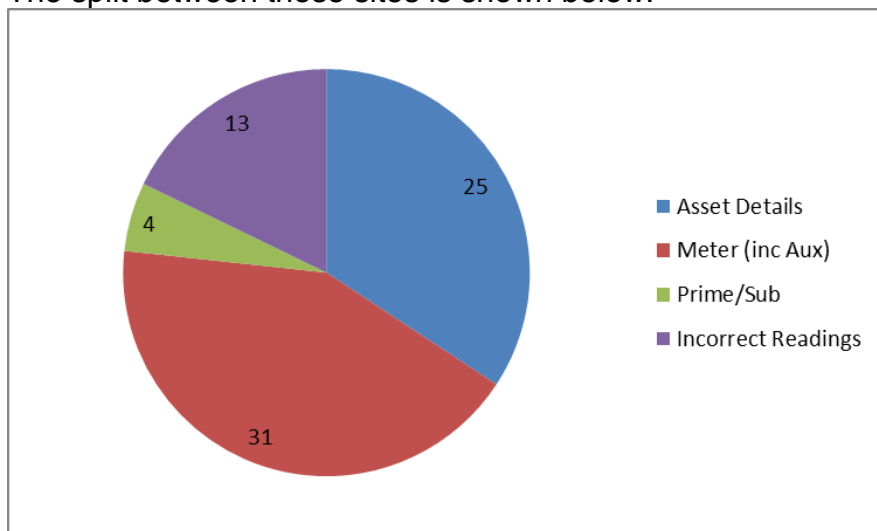


Chart 7: Cause of large scale reconciliations

Outstanding reconciliations

Of the detail information given regarding around the largest reconciliations under taken, approximately 16 reconciliations were yet to be resolved. The age of these reconciliations was determined by subtracting the start year of the reconciliation period identified from the current year (2012). The average age of the reconciliations still being investigated is detailed below.

Reason	Age of Reconciliation						
Awaiting Reconciliation	4	5	5	5	8		
Still investigating	2	2	4	5	5	5	5
Query with MAM	6	6					
Query With Xoserve	4	6					

Table 5: Reasons for not resolving large scale reconciliations

This provides a mean average of 4.8 years, with a mode and median average of both 5 years.

Though this is a small sample it is indicative of the timescale that reconciliations can taken from an error being identified to it being resolved

4. Conclusions

We have framed our conclusions in response to Ofgem’s questions posed to the industry in their letter of March 2012.

Ofgem question

quantify the benefits of the modification proposals in terms of the reduction in shippers’ risk and credit exposure;

For the LSP NDM and DM non-domestic sector, if either modification comes into effect, there is an approximately 1 in 80 chance of a Shipper being exposed to a cost which will exceed £2.5m. Given that the total LSP NDM and DM market size is ~240TWh, there is a 1 in 3 chance of such an occurrence taking place, in the market, each year. As there are currently 10-12 Shippers with a portfolio of over 10TWh, the odds are that 4-5 of these Shippers each year will encounter a very large irreconcilable charge that they will find difficult to accommodate. Smaller Shippers may not receive such a large reconciliation each year, but will any such irreconcilable adjustment will remove their profit for the year.

determine the causes of energy remaining un-reconciled after 3-5 years;

Four main causes of reconciliation identified:

- Mechanical failure of the meter or auxiliary equipment
- Meter drift or incorrect correction factors.
- Erroneous Asset Details (such as incorrect pulse multipliers)
- Reconciliation of a prime/sub configuration

These sources of reconciliation are mainly asset based. .

set out the typical lead times to resolve settlement disputes or adjustments, together with the estimated scale and age profile of such adjustments;

12% of reconciliations will be raised more than 3 years after the date of the error.

From the case study information provided, it can take significant timescales for a reconciliation to be completed (4-5 years), in particular if it is a larger scale reconciliation.

consider the financial implications of a shortened reconciliation window in terms of re-distribution between Small Supply Point (SSP) and Large Supply Point (LSP) sectors (or vice versa);

To compensate for costs not recovered from customers, UNC Modification 0398 would increase costs over the whole non-domestic market of £30m. UNC Modification 0395 would increase costs by £85m. This is due to the disproportionate impact longer dated reconciliations have on the market.

Further consider the impact of these proposals upon UNC Parties non-code liabilities, their ability to mitigate any associated risk and the

Both modifications will exacerbate the current discrepancy by increasing the number of reconciliations that will not be reconciled. For modification 0395 12% of reconciliations, 6% for UNC modification 0398 will be completely excluded.

applicability of remedies outside of the normal settlement process.

There are significant numbers of smaller reconciliations. 90% of reconciliations provided have a materiality of less than £50,000, which would be uneconomic to pursue on an individual bilateral basis.

Appendix 1 – Data Collation process

ICoSS represents the major independent industrial and commercial (I&C) suppliers in the GB energy market, supplying 75% of the gas needs of the non-domestic sector.

The information was provided on a standardised questionnaire which was completed and submitted by some members of the group. The questionnaire asked for the following information:

- Market Volumes (split by market sector, that is SSP NDM, LSP NDM, DM)
- Details of all Reconciliations submitted by the shipper above 500,000 kWh in value.
- Start and end dates of reconciliation
- Reasons for reconciliations where identifiable.

A total of 24,000 reconciliations were received from industry members cover a variable period of 5-10 years from present. In addition a total of 86 detailed scenarios responses were received.

In addition we were provided details by members of the current composition of their costs, namely what proportion on any invoice would typically be made up of wholesale costs (which the information provided related to) and would be a typical margin for any contract.