

# Business Requirements Definition

for

## Project Nexus

submitted to

## Project Nexus Workgroup

## Retrospective Updates

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## 1. Glossary

Term / Acronym	Definition
Allocation Profiles	Annual demand algorithms used in determining NDM allocation
Asset	Meter, Corrector, or a device attached to the meter for recording gas consumption
CSEPs	Connected System Exit Points (iGT sites)
<a href="#">Confirming Shipper</a>	<a href="#">Shipper who's Confirmation for ownership of a Supply Point will become effective (currently this is known at D-7 days of the Confirmation effective date).</a>
Current Shipper	Registered User for an MPRN as per UNC
<a href="#">Cyclic Reading</a>	<a href="#">A valid meter reading submitted in line with the meter reading frequency which is not a transfer reading or a read obtained via a Must Read.</a>
<a href="#">DCC</a>	<a href="#">DataComms Co</a>
DECC	Department of Energy and Climate Change
DESC	Demand Estimation Sub Committee
Dumb Metered	Meter which does not have a facility to transmit reads remotely
GFD	Gas Flow Day
<a href="#">GT</a>	<a href="#">Gas Transporter</a>
<a href="#">LDZ</a>	<a href="#">Local Distribution Zone</a>
<a href="#">LSP</a>	<a href="#">Larger Supply Point</a>
<a href="#">NTS</a>	<a href="#">National Transmission System</a>
Previous Shipper	Any previous Registered Users for an MPRN
Proposing Shipper	Shipper requesting to take ownership of a Supply Point
Site	Supply Meter Point level
<a href="#">SMIP</a>	<a href="#">Smart Metering Implementation Programme</a>
<a href="#">SSP</a>	<a href="#">Smaller Supply Point</a>
Supply Point Register	A register of the large Gas Transporters meter points. The register includes <a href="#">s</a> address, asset and read history for the meter point.

## 2. Document Purpose

The purpose of this document is to ensure that the business [requirements](#) associated with the referenced change have been accurately captured and to clearly specify these requirements to the Project Nexus UNC Workgroup (PN UNC). Adequate information should be provided to enable the industry to approve the documented requirements for Cost benefit Analysis at a later stage.

The contents refer to the business scope of the change and provide descriptions of the business requirements and the relevant existing and future process maps.

Until the approved version, this document will contain draft business rules for the different options identified by PN UNC Workgroup regarding retrospective update processes. These options have been documented for further discussion and clarification at the Workgroup.

### 2.1 Intended Audience

- Gas Shippers/Suppliers
- Gas Transporters, large & iGTs
- Xserve
- Customer Representative

### 3. Executive Summary

#### 3.1 Introduction to the change

This document defines the timescales and processes associated with the retrospective updates to data held in the Supply Point Register [and the financial adjustment as a result of the update](#) for all directly connected gas meter points.

The document has been based on presentations and discussions at the Project Nexus UNC Workgroup and considering the high level principles agreed at the Retro Updates Principle Workgroup in June 2010. The options have been documented for further discussion and clarification. [Until the final workgroup approved version, all areas within the document are yet to be agreed and finalised.](#)

All square brackets [] indicates values that can be parameterised for the purposes of the BRD although will require confirming for system design or system design or system development. The **highlighted text** represents areas for clarification which must be resolved by the Workgroup prior to the business rules being finalised.

#### 3.2 Implementation Timescales

Implementation of the developed solution will be confirmed once all requirements are captured following the Project Nexus Requirements Definition Phase.

#### 3.3 Change Drivers and Business Goals

##### 3.3.1 Drivers

1. To improve the accuracy and quality of the data held on the Supply Point Register
2. To provide accurate data to an Enquiring, Proposing Shipper or a new Shipper on transfer of ownership
3. To enable the [processing and receipt](#) of any financial adjustments as a result of a data update
4. [Accurate energy allocation and transportation charging](#)

##### 3.3.2 Business Goals

1. To [develop a robust regime to allow](#) historical data to be accurately corrected on the Supply Point Register [to ensure the data held by the GTs reflects the actual position of a Supply Meter Point at any point in time.](#)

#### 3.4 Change Background

The changes have been identified as a result of Xoserve's Project Nexus consultation for the replacement of UKLink systems and following DECC's consultation on Smart metering and Supplier licence obligation for the installation of advanced meters.

### 3.4.1 Areas Identified in the Initial Requirements Register (IRR)

Ref	Requirement	Outcome
9.1	Shippers should be allowed to submit retrospective updates, in particular for the SSP market.	<a href="#">Included</a>
9.2	The ability to amend incorrect meter read data after the submission of a later meter read.	<a href="#">Included</a>
9.3	Allow for retrospective data to be updated.	<a href="#">Included</a>
9.4	Easier submission of data update requests.	
9.5	More flexible processing of meter reads.	<a href="#">Included</a>
9.6	Make validation rules fit business requirement.	
11.7	Review data updates and who is able to submit updates at any point in time.	<a href="#">Included</a>
13.3	Data updates from non registered shippers	<a href="#">Closed</a>
13.10	A thorough review of data flows and data validation.	<a href="#">Included in Non-functional</a>
<a href="#">13.12</a>	The process for shippers to revise standing data for sites on their portfolio should be streamlined and allow for the registered shipper to complete data changes quickly.	
<a href="#">13.18</a>	Systemised data changes.	
<a href="#">13.22</a>	Direct amendment of data held in xoserve's database.	
<a href="#">13.29</a>	The ability to update inaccurate data items for all supply points, domestic and industrial/commercial should be enhanced.	<a href="#">Included</a>

### 3.4.2 UNC and Licence Impacts

- UNC Section M3.7.3
- UNC Section S4.3 & 4.4

### 3.4.3 UNC Process Impacts

- Query process
- Invoicing process

### 3.4.4 Interaction with Project Nexus High Level Principles

In June 2010 the following high level principles were agreed at the Project Nexus Principle Workgroup. The principles covered;

- Standing data, relating to sites and to meters attached to sites
- Transactional data, such as consumptions

Shippers would have the ability to update/amend/correct both standing and transactional data, within a set time-frame. After expiry of that time limit, probably aligned to the Reconciliation cut-off date (which has not yet been set) no further amendments would be accepted.

The following aspects of retrospective updates were raised, but required further discussion or consideration before any conclusion could be reached.

- Any validation of data updates to prevent/detect errors
- Any direct linkage to financial adjustments or to other data items, such as AQ
- The ability of Shippers to amend data for periods outside of their ownership
- The ability of Gas Transporters to amend data
- Amendments by parties other than the incumbent (e.g. previous/subsequent Shippers or GTs) require further consideration, because of the impact on the incumbent's records, and the potential for those records to be out of line with the GTs.

## 3.5 Related Documents

Document Title	Location
Meter Read Submission and Processing and Settlement Arrangements BRD	Joint Office Website

## 4. Benefits

### 4.1 Industry Benefits

The following benefits will need to be aligned with the Transporter relevant objectives;

[4.1.1 Accurate data held on the Supply Point Register](#)

[4.1.2 Shippers would receive correct Supply Point data to provide end consumers with accurate quotes](#)

[4.1.3 Accurate data submitted to Shippers on transfer of ownership](#)

[4.1.4 Accurate energy allocation and transportation charges](#)

### 4.2 Dis-advantages

[4.2.1 The requirement to allow retrospective updates and financial adjustments may involve complex processes](#)

[4.2.2 Automated financial adjustments may discourage Shippers to submit an update which would result in a debit adjustment.](#)



## 5. Change Scope

### 5.1 In Scope

**Function:**

- Retrospective update of;
  - Asset data
  - Meter reads
  - Address data
  - Meter Point data
- Who can update
- How the update is carried out
- Timeframe
- Processing of financial adjustments

**Market Sector:**

- All directly connected gas meter points
- DM Mandatory CSEPs
- [NDM CSEPs \(aspiration for all sites to be treated the same\)](#)

### 5.2 Out of Scope

**Function:**

- Any data items derived by the GT
- Replacement of any daily read before end of GFD+5 (close out)

**Market Sector:**

- [None](#)

## 6. Assumptions and Concerns

### 6.1 Project Assumptions

- 6.1.1 The business rules will need to be appropriate for dumb metered sites as well as remotely read sites
- 6.1.2 The processes described in the Settlement Workgroups are approved
- 6.1.3 The proposed validations carried out by the GT at read receipt will ensure that any significant erroneous reads are rejected.

### 6.2 Process Assumptions

- 6.2.1 There will not be any retrospective adjustment to the Annual Quantity (AQ)
- 6.2.2 A Shipper will submit a request to update data on the Supply Point Register.
- 6.2.3 All data updates will be subject to the relevant GT validations. Any failures will be rejected back to the Shipper requesting the update with the reason for rejection.
- 6.2.4 All financial adjustments, once confirmed and calculated, will be billed on the next available invoice.
- 6.2.5 The principle agreed by PN UNC is that the Supply Point Register should accurately reflect the [historical and current position of a Supply Meter Point](#) and therefore all data updates are recorded correctly, where known and where feasible.
- 6.2.6 The rules described in this document apply to all sites
- 6.2.7 Where an adjustment to energy is carried out the share of unallocated energy will need to be amended. The methodology for this share will be the same as the 'Reconciliation Scaling Adjustment' which is described in the 'Reconciliation BRD'.
- 6.2.8 [Any financial adjustments will follow the 'line in the sand' principles, i.e. adjustments will only be processed as far back as 'Line in the Sand'.](#)
- 6.2.9 [Before submitting an update to data Shippers will have an obligation in UNC to carry out sufficient investigations to confirm the details of the update, record the details and retain the evidence](#)
- 6.2.10 [If a previous Shipper subsequently re-confirms the site this does not change the requirements for processing a financial adjustment, i.e. the appropriate process will need to be followed for the update.](#)
- 6.2.11 [Existing processes for submitting updates will be used where possible, e.g. RGMA flows, Query process.](#)

### 6.3 Dependencies

- 6.3.1 The processes described within the Settlement Workgroup and Reconciliation [Workgroup](#) are unchanged.
- 6.3.2 Approval of the requirements by PN UNC
- 6.3.3 Approval by Ofgem following the appropriate UNC Modification process.

## **6.4 Risks / Issues**

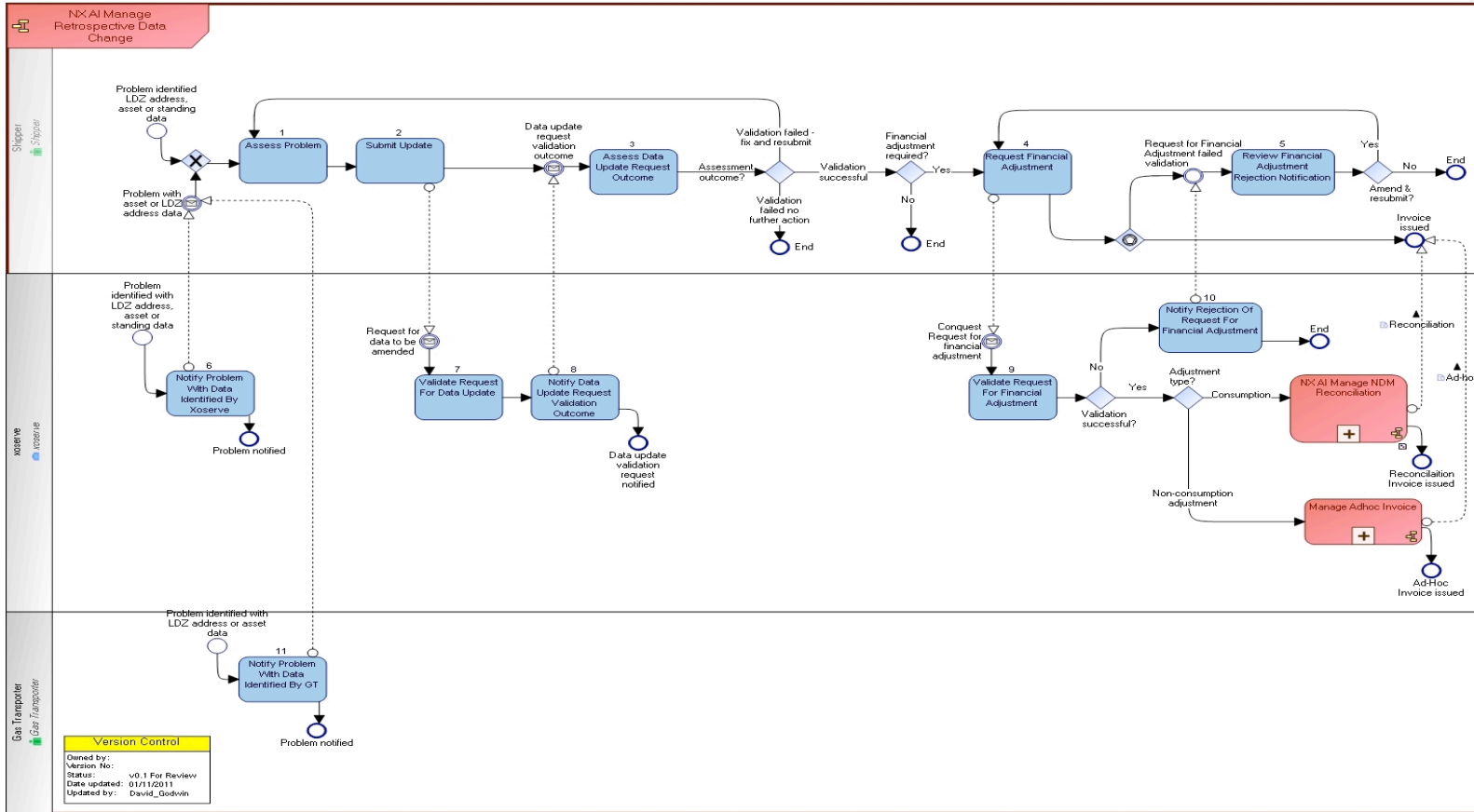
- 6.4.1 Complex processes introduced to provide the facility to retrospectively amend data and carry out financial adjustments

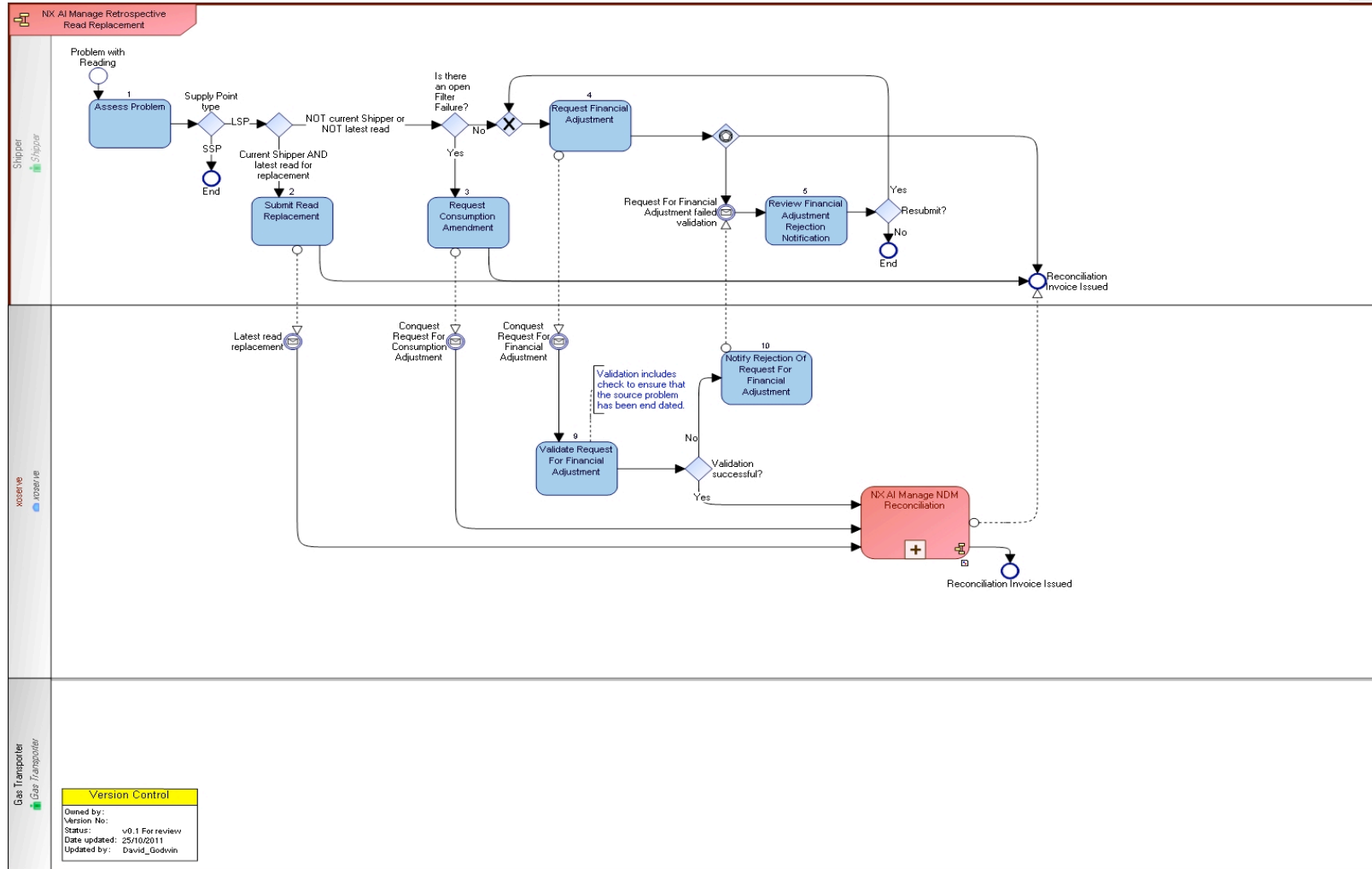
## **6.5 Constraints**

## **6.6 Design Considerations**

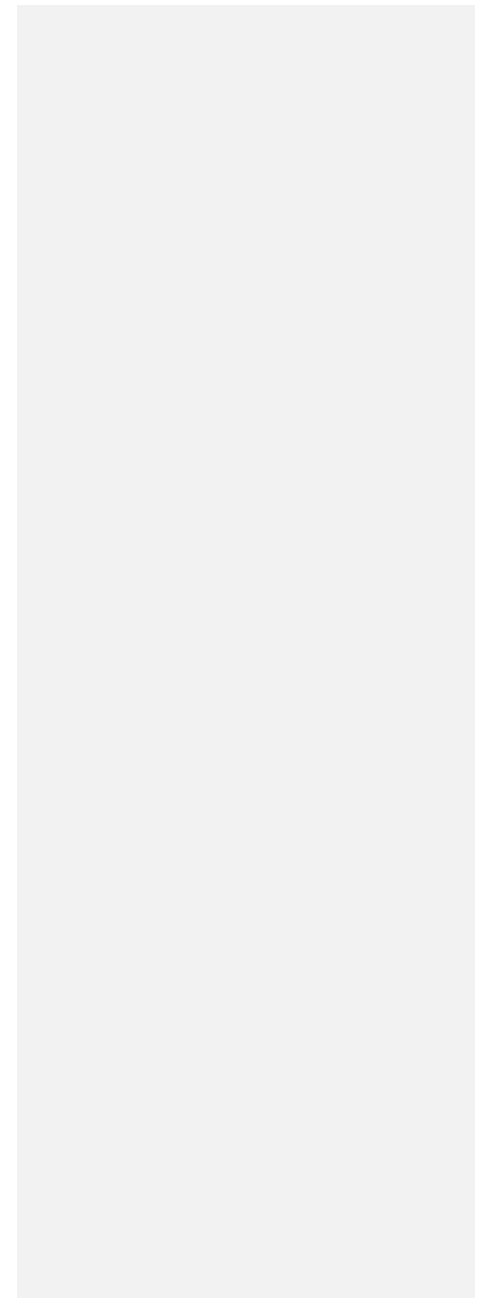
## 7. Overview of Business Processes

### 7.1 Current Processes and Process Maps





## 7.2 To-Be Processes and Process Maps



## 8. Business Requirements

Throughout this section reference is made to four new processes designed in the Project Nexus Settlement Workgroup for the submission and processing of meter readings and settlement arrangements. These four processes are summarised below;

### Product 1, 'Daily Metered Time Critical'

- Daily reads obtained and submitted to the GT daily before 10.00 am.
- Actual or estimated reads may be submitted by the Shipper
- The latest read loaded will be used for allocation and energy balancing purposes.

### Product 2, 'Daily Metered Not Time Critical'

- Daily reads obtained and submitted to the GT daily.
- If the reads are submitted before 10.00 am they will be used for allocation purposes otherwise a read must be received before end of the GFD+1.
- Actual or estimated reads may be submitted by the Shipper
- The latest read loaded will be used for final allocation and energy balancing purposes.

### Product 3, 'Batched Daily Readings'

- Daily readings are obtained for each day but are not submitted daily
- The daily reads are received in batches to a pre-notified frequency
- Actual or estimated reads may be submitted within the batch by the Shipper
- Reconciliation will be carried out based on the daily reads received
- Allocation and energy balancing is based on Allocation profiles and AQ.

### Product 4; 'Periodic Readings'

- An actual meter reading is submitted periodically.
- Reconciliation is carried out using the methodology determined within the Reconciliation Workgroup
- Allocation and energy balancing is based on Allocation profiles and AQ.

Figure 2 below provides a summary of the processes by Settlement Product;

Figure 2: Summary of the 4 Settlement processes

Product Description	Read Used for Allocation	Read used for Energy Balancing	Estimation Methodology	Shipper Read Submission	Timing of AQ calculation	Reads used for AQ calculation	Reconciliation
Product 1: Daily Metered Time Critical Readings	Daily Read	Daily Read	D-7	Daily by 10 am on GFD+1	Monthly	Optimum read: 2 reads a minimum of 9 months & max of 36 months apart	Meter Point level following a re-synch or estimate
Product 2: Daily Metered not Time Critical Readings	GT estimate (unless read rec'd before 10.00 am)	Daily Read	D-7	Daily by end of GFD+1	Monthly	Optimum read: 2 reads a minimum of 9 months & max of 36 months apart	Meter Point level following a re-synch or estimate
Product 3: Batched Daily Readings	Allocation profiles	Allocation profiles	Allocation profiles (methodology to be agreed by DESC)	Daily Reads in Batches	Monthly	Optimum read: 2 reads a minimum of 9 months & max of 36 months apart	Daily Rec at Meter Point level on receipt of a batch of daily reads
Product 4: Periodic Readings	Allocation profiles	Allocation profiles	Allocation profiles (methodology to be agreed by DESC)	Periodically	Monthly	Optimum read: 2 reads a minimum of 9 months & max of 36 months apart	Meter Point level at receipt of a read



## 8.1 Data Items

[The attached document is a summary of the requirements for retrospectively updating data.](#)

[The document is split into three categories \(shown as tabs on the spreadsheet\) as detailed below;](#)

[1. Data amendments that may trigger a financial adjustment \(under tab 'FA'\)](#)

[The spreadsheet summarises the data items that may trigger a financial adjustment, the potential impacts and whether a financial adjustment is automatically processed.](#)

[2. Data amendments that will not trigger a financial adjustment \(under tab 'No FA'\)](#)

[A summary of data items identified that do not affect transportation charges.](#)

[3. Data items where a retrospective update to the data is not permitted \(under tab 'No RU'\).](#)

[There are a number of data items which can not be amended retrospectively.](#)

[The data items listed on the spreadsheet for categories 2 & 3 may not be complete; more may be identified during the analysis stage. Although these are included on the spreadsheet the details are not described within this document as charges are not affected and so a financial adjustment is not applicable.](#)

[Attach spreadsheet once approved.](#)

## 8.2 Asset Updates

8.2.1 A facility to allow for retrospective updates to data held on the Supply Point Register relating to the asset.

Note:

- This section does not include [the set up and](#) meter fix of a new MPRN, this scenario is covered under section 8.6.
- The relevant data items [and scenarios](#) are defined in the document under [section 8.1](#).

8.2.2 Asset data includes:

- o Meter
- o Corrector
- o Datalogger
- o AMR equipment

8.2.3 [Scenarios for this section \(8.2\) include:](#)

- o [Asset exchange](#)

- o [Asset fix \(existing MPRN\)/re-established](#)
- o [Asset removal/isolation](#)
- o [Updates to the asset](#)

- 8.2.4 Only the current or Confirming Shipper can submit a request to update the data relating to the asset.
- 8.2.5 The update will be validated by the GT and a notification issued on whether the request was accepted or rejected.
- 8.2.6 The update will be carried out for the correct effective date, [where known](#), even if this is during a previous Shippers ownership. [Where the actual effective date is not known the Shipper will take a decision on the effective date of the update, based on their investigations and the data/reads held.](#)
- 8.2.7 Any financial adjustments will be [automatically processed for](#) the current Shipper.
- 8.2.8 [The adjustment will only cover the charges applicable for the period the Shipper was registered at the Meter Point.](#)
- 8.2.9 The charges will be processed on the next available invoice.
- 8.2.10 The GT will not notify [the](#) previous Shipper(s) of the update.
- 8.2.11 Any financial adjustments for [a](#) previous Shipper will need to be requested separately.
- 8.2.12 Where the GT identifies [the](#) asset data held on the Supply Point Register [is incorrect](#) a notification will be issued to the Shipper [providing the correct details](#). If an update is not received from the Shipper within [1] month the update will be processed, subject to validation [and the Shipper will be notified of the update](#).

### **8.3 Meter Point/Supply Point Updates**

8.3.1 [A facility to allow for retrospective updates to data held on the Supply Point Register relating to the Meter Point/Supply Point.](#)

Note:

- [This section does not include updates to address data which is covered under section 8.5.](#)
- [The relevant data items are defined in the document under section 8.1.](#)

8.3.2 Meter Point/Supply Point data for this section (8.3) includes:

- o [Conversion factor](#)
- o [Meter Point status \(live/dead\)](#)

8.3.3 [Only the current or Confirming Shipper can submit a request to update the data.](#)

8.3.4 [The update will be validated by the GT and a notification issued on whether the request was accepted or rejected.](#)

8.3.5 The update will be carried out for the correct effective date, which will generally be the MPRN creation date, even if this is during a previous Shippers ownership. Where the actual effective date is not known the Shipper will take a decision on the effective date of the update, based on their investigations.

8.3.6 Any financial adjustments will be automatically processed for the current Shipper.

8.3.7 The adjustment will only cover the charges applicable for the period the Shipper was registered at the Meter Point.

8.3.8 The charges will be processed on the next available invoice.

8.3.9 The GT will not notify the previous Shipper(s) of the update.

8.3.10 Any financial adjustments for a previous Shipper will need to be requested separately.

## **8.4 Replacement of Meter Readings**

8.4.1 A facility to replace one or more meter readings requested after GFD+5 regardless of whether any subsequent reads have been loaded.

Note:

- The relevant data items are defined in the document under [section 8.1](#).
  - All replacement reads will be subject to GT validations as described in the Meter Reading Submission and Processing and Settlement BRD.
  - Reads that can be replaced are;
    - o Daily meter reads
    - o Periodic meter reads
    - o Opening transfer meter reads
    - o Meter fix reading
    - o Meter removal reading
- 8.4.2 A Shipper can only replace reads they have been submitted in their period of ownership i.e. not reads provided by the GT, e.g. Must Reads, or reads provided by another Shipper.
- 8.4.3 A notification will be issued to the Shipper advising if the read has been accepted or rejected.
- 8.4.4 Product 4 sites: Where a Shipper replaces a periodic read this will trigger a re-reconciliation
- 8.4.5 Product 1, 2 or 3 sites: Where a Shipper replaces a daily read(s) the consumption from the new read will be used to re-calculate the charges for the relevant days, subject to [8.3.7](#).
- 8.4.6 Where a Shipper replaces a re-synch read this will trigger a re-reconciliation.
- 8.4.7 Where the Shipper replaces one or more reads within their ownership;

8.4.7.1 Where a reconciliation has already been processed using the read, including a re-synch: carry out re-reconciliations for all affected reconciliation periods.

8.4.7.2 Where a reconciliation has not been carried out (e.g. daily read sites): replace the consumptions for the relevant day.

8.4.8 [The financial adjustment will only affect the charges for the requesting Shippers period of ownership.](#)

8.4.9 Where a read has been replaced the old read will be flagged as 'invalid' and will not be used in any other process [from the date it was processed](#) e.g. AQ calculation.

[8.4.10 Current Shipper replaces the opening/change of Shipper transfer reading \(as per the existing Shipper Agreed Reads \(SAR\) process\);](#)

[8.4.10.1 A re-reconciliation is automatically processed for both Shippers for the relevant periods.](#)

## 8.5 Address – Post Code Updates

8.5.1 A facility to enable the Shipper or the GT to update address details including the post code for an MPR.

Note:

The relevant data items are defined in the document under [section 8.1](#).

8.5.2 Where the address update is requested by the GT the update will be carried out, subject to validation. For accepted requests a notification will be issued to the current Shipper advising them of the update.

8.5.3 Where an update is requested by the Shipper the details will be validated and a notification issued on whether the request was accepted or rejected. [For accepted requests the update will be processed.](#)

8.5.4 Where an update to the Post Code results in a change to the LDZ or Exit Zone this may affect the transportation charges applied. The financial adjustment [will be automatically processed for the current Shipper.](#)

8.5.5 Any adjustment will be processed for the current Shippers period of ownership only and issued on the next available invoice.

8.5.6 A notification will not be issued to any previous Shippers of the update.

8.5.7 Any financial adjustment for previous Shippers(s) will need to be requested separately.

## 8.6 Late Recorded Meter

8.6.1 A facility to accurately record the details of the asset and Meter Point [following a request by the Shipper or the GT. This scenario only relates to new Meter Points where there has been no previous history of the MPRN.](#)

Note:

A summary of the relevant data items are defined in the document under [section 8.1](#).

8.6.2 Shipper will notify the GT of the MPRN and relevant address and asset details including the correct date when the meter was installed and the [meter reading when installed](#).

8.6.3 [The details will be accurately recorded on the Supply Point Register, where known.](#)

8.6.4 [Transportation charges will be automatically calculated and invoiced to the Shipper based on the meter reading \(actual or estimated\) and effective date of the Shippers ownership.](#)

8.6.5 [For clarification, where the actual effective date is earlier than the registration effective date, the transportation charges will not be calculated for the pre-registration period and the energy will be included in un-allocated energy.](#)

8.6.6 [Where the GT or a third party identifies the 'missing meter', the details will be recorded and the MPRN will follow the relevant 'un-registered/shipperless sites process'](#)

## 8.7 Meter Point does not Exist/Duplicate Meter Point

8.7.1 Facility to end date an MPRN which has been set up in error, either it does not exist, premise exists but there is not a gas connection, it is an iGT meter point or it has been identified as a duplicate. .

8.7.2 The notification may be submitted by the Shipper or the GT and will be subject to validation.

8.7.3 [Where the GT has submitted the request and there is no Registered Shipper the request will be processed, subject to validation. Where a Shipper is registered at the Meter Point the Shipper will be notified of the details by the GT and no further action taken by the GT.](#)

8.7.4 A notification will be issued to the requester advising if the request was accepted or rejected.

8.7.5 The end date of the Meter Point will be the same date as the MPRN start date.

8.7.6 [Any financial adjustments to transportation charges will be automatically processed to the current Shipper.](#)

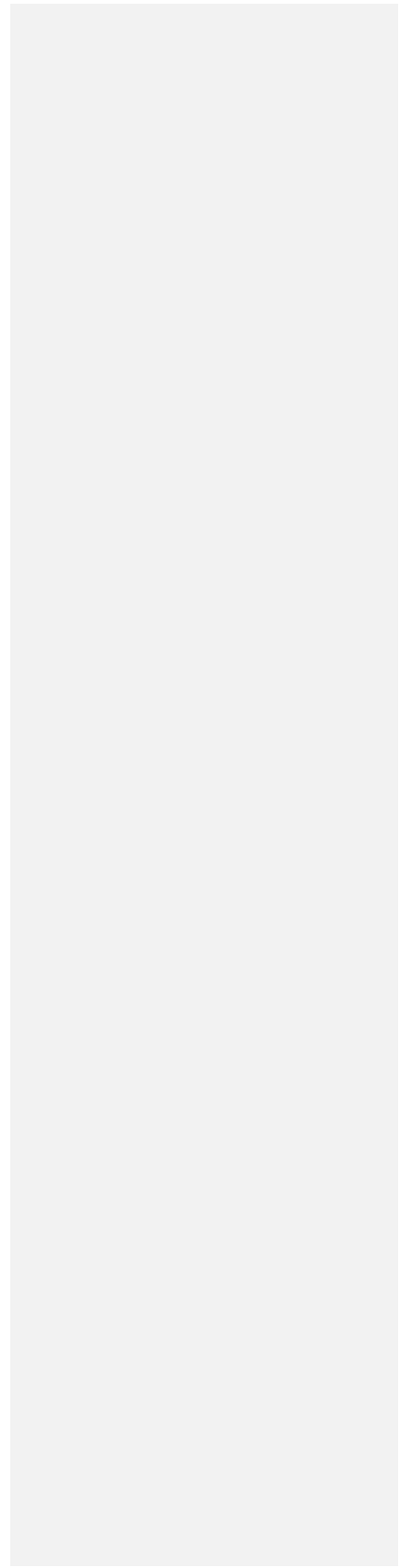
8.7.7 [Transportation charges for a previous Shipper will be processed following a request.](#)

## 9. Transitional Rules

Transitional rules may be required to deal with the period immediately before and after the implementation of these rules. If any are identified during the analysis stage they will be raised and discussed at PN UNC.

**10. Appendices**

**Figure 1:**



## 11. Document Control

### Version History

Version	Status	Date	Author(s)	Summary of Changes
0.1	Initial Draft	18/10/2011	Xoserve	First draft
0.2	Draft	20/11/2011	Xoserve	Amendments following PN UNC on 01/11/2011
<a href="#">0.3</a>	<a href="#">Draft</a>	<a href="#">07/12/11</a>	<a href="#">Xoserve</a>	<a href="#">Amendments following PN UNC on 06/12/2011</a>

### Reviewers

Name	Version	Date
AMR Workgroup attendees		

### Approval

Name	Role	Date
AMR Workgroup		
PN UNC		