

# **Business Requirements Definition**

**for**

## **Project Nexus**

**submitted to**

### **Project Nexus Workgroup**

#### **Retrospective Updates**

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## 1. Glossary

Term / Acronym	Definition
Asset	Meter, Corrector, or a device attached to the meter for recording gas consumption
Current Shipper	Registered User for an MPRN as per UNC
Previous Shipper	Any previous Registered Users for an MPRN
Site	Supply Meter Point level

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## 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.

### Intended Audience

- Gas Shippers/Suppliers
- Gas Transporters
- Xserve
- Customer Representative

### 3. Executive Summary

#### 3.1 Introduction to the change

This document defines the timescales and processes associated with the updates to data held in the Supply Point Register 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. 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

##### 3.3.2 Business Goals

#### 3.4 Change Background

The changes have been identified as a result of Xserve'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
9.1	Shippers should be allowed to submit retrospective updates, in particular for the SSP market.
9.2	The ability to amend incorrect meter read data after the submission of a later meter read.
9.3	Allow for retrospective data to be updated.
9.4	Easier submission of data update requests.
9.5	More flexible processing of meter reads.
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.
13.3	Data updates from non registered shippers
13.10	A thorough review of data flows and data validation.
13.1	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.
13.2	Systemised data changes.
13.2	Direct amendment of data held in xoserve's database.
13.3	The ability to update inaccurate data items for all supply points, domestic and industrial/commercial should be enhanced.

3.4.2 Business process Issues raised during the Workgroups

3.4.3 UNC and Licence Impacts

3.4.4 UNC Process Impacts

3.4.5 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 will cover;

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

Shippers will 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 require further discussion or consideration before any conclusion can 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;

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## 5. **Change Scope**

### 5.1 In Scope

**Function:**

- Asset data
- Meter reads
- Address data
- Meter Point status

**Market Sector:**

- All directly connected gas meter points
- DM Mandatory CSEPs
- Who can update
- How the update is carried out
- Timeframe

### 5.2 Out of Scope

**Function:**

- Any data items derived by the GT
- 

**Market Sector:**

- NDM CSEPs (although aspiration for all sites to be treated the same)

See figure 1 under Appendices for further clarification on scope.

## 6. Assumptions and Concerns

### 6.1 Project Assumptions

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

### 6.2 Process Assumptions

- There will not be any retrospective adjustment to the Annual Quantity (AQ)
- A Shipper will submit a request to update data on the Supply Point Register.
- 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.
- All financial adjustments once confirmed and calculated will be billed on the next available invoice.
- The principle agreed by PN UNC is that the Supply Point Register should accurately reflect the current position and therefore all data updates are recorded correctly, where known and where feasible.

### 6.3 Dependencies

- The processes described within the Settlement Workgroup are unchanged.
- Approval of the requirements by PN UNC
- Approval by Ofgem following the appropriate UNC Modification process.

### 6.4 Risks / Issues

- 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**

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## 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 the estimate calculated by the GT.

### 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 the estimate calculated by the GT.

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

Figure 2: Summary of the 4 Settlement processes

<b>Product Description</b>	<b>Read Used for Allocation</b>	<b>Read used for Energy Balancing</b>	<b>Shipper Read Submission</b>	<b>Timing of AQ calculation</b>	<b>Reads used for AQ calculation</b>	<b>Reconciliation</b>
1: Daily Metered Time Critical Readings	Daily Read	Daily Read	Daily by 10 am on GFD+1	Monthly	Daily Reads (last 365)	Meter Point level following a re-synch or estimate
2: Daily Metered not Time Critical Readings	GT Estimate	Daily Read	Daily by end of GFD+1	Monthly	Daily Reads (last 365)	Meter Point level following a re-synch or estimate
3: Batched Daily Readings	GT Estimate	GT Estimate	Daily Reads in Batches	Monthly	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
4: Periodic Readings	GT Estimate	GT Estimate	Periodically	Monthly	2 reads a minimum of 9 months & max of 36 months apart	Meter Point level at receipt of a read

## 8.1 Data Items

### 8.1.1 Data amendments that may trigger a financial adjustment

The following table is a summary of the requirements for retrospectively updating data. It includes the data items that may trigger a financial adjustment following a retrospective update, potential of impacts to previous / current Shipper and whether a financial adjustment is automatically processed.

Data Item	Financial Adjustment Likely?	Can the Shipper Update?		Is a later or earlier Shipper affected by the update?	Financial Adjustment	
		Current Shipper	Previous Shipper		Auto Adjust. Current Shipper	Auto Adjust. Previous Shipper?
<b>Meter Asset:</b>						
- Metric/Imperial indicator	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Number of dials	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Date installed/removed	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Meter status	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Correction factor	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Read factor	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Read units	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
<b>Meter Reading:</b>						
- Transfer reading	Yes	Yes	No	Yes	Yes	No

### Retro Updates BRD

- Start/fix reading	Yes	Yes	Yes	Yes if the effective date is within their ownership	Yes	No
- Final/Removal reading	Yes	Yes	Yes	Yes if the effective date is within their ownership	Yes	No
- Cyclic reading	Yes	Yes	Yes	No	Yes	No
<b>Meter Point / Supply Point:</b>						
- Address - Postcode	Yes, if the amendment causes a change of LDZ or Exit Zone	Yes	Yes if current Shipper confirms	Yes	Yes	No
- Meter Point effective date	Yes if transportation charges have been issued	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No
- Confirmation effective date	Yes	Yes	Yes if current Shipper confirms	No	Yes	No
- Withdrawal date	Yes	Yes	Yes if current Shipper confirms	No	N/A	N/A
- Correction factor	Yes	Yes	Yes if current Shipper confirms	Yes if the effective date is within their ownership	Yes	No

#### 8.1.2 Data items that can be retrospectively updated but will not trigger a financial adjustment

Data Item	Current Shipper	Previous Shipper
- Asset Serial Number?		

- Meter mechanism?		
- Meter Point Address (not inc. Post Code)		

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## 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 updates to the meter fix of a new MPRN or where the meter was previously 'isolated', this scenario is covered under section 8.7.
- The relevant data items are defined in the table 8.1.1. and 8.1.2. Those defined in the table under section 8.1.1 may trigger a financial adjustment.

8.2.2 Scenario 1: Update effective during current Shipper ownership and affects current Shipper charges only;

- The update will be carried out and any financial adjustments will be automatically processed on the next available invoice.

8.2.3 Scenario 2: Update identified by current Shipper but also affects previous Shipper;

- Current Shipper: The asset update is carried out and any financial adjustment for the current Shippers ownership only will be automatically processed.
- Previous Shipper(s): A notification is issued to the previous Shipper(s) notifying them of the updates to the asset. Any financial adjustment will need to be requested separately.

8.2.4 Scenario 3: Update identified by previous Shipper and also affects current Shipper;

- Notification issued to current Shipper about the requested asset update. Where the current Shipper submits the update which affects both their ownership and any previous Shippers ownership:
  - Current Shipper: The asset update is carried out and any financial adjustment for the current Shippers ownership will be automatically processed.
  - Previous Shipper(s): The asset update is carried out and any financial adjustment will be automatically processed.

8.2.5 Scenario 4: Update effective during previous Shippers ownership and affects their charges only;

- The update will be carried out and any financial adjustments will be automatically processed on the next available invoice.

## 8.3 Replacement of Meter Readings

8.3.1 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 table 8.1.1. and 8.1.2. Those defined in the table under section 8.1.1 may trigger a financial adjustment.
- All replacement reads will be subject to GT validations as described in the Meter Reading Submission and Processing and Settlement BRD.

8.3.2 A Shipper can only replace reads they have submitted in their period of ownership i.e. not reads provided by the GT, e.g. Must Reads, or reads provided by another Shipper.

8.3.3 Where a Shipper replaces a periodic read for Product 4 sites this will trigger a re-reconciliation

8.3.4 Where a Shipper replaces a daily read(s) for Product 1, 2 and 3 sites, the consumption from the new read will be used to re-calculate the charges for the relevant days.

8.3.5 Where a Shipper replaces a re-synch read this will trigger a re-reconciliation.

8.3.6 Where a read has been replaced the old read will be flagged as 'invalid' and will not be used in any other process e.g. AQ calculation.

8.3.7 Scenario 1: Shipper replaces one or more reads within their ownership;

- Where a reconciliation has already been processed using the read including a re-synch: carry out re-reconciliations for all affected reconciliations periods.
- Where a reconciliation has not been carried out (e.g. daily read sites): replace the consumptions for the relevant day.

8.3.8 Scenario 2: Current Shipper replaces the opening/change of Shipper transfer reading;

- Notification of the replacement read is issued to the previous Shipper.
- If the previous Shipper confirms they agree to the change the read is replaced and a re-reconciliation is carried out for both Shippers for the relevant periods.
- If the previous Shipper does not confirm agreement to replacing the read, the read is not recorded and the request is rejected.

8.3.9 Scenario 3: Previous Shipper replaces one or more reads within their ownership.

- Re-reconciliations are processed for the relevant periods.
- The reconciliations must not affect the read or charges of the Current Shipper.

## 8.4 Address – Post Code Updates

8.4.1 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 table 8.1.1. and 8.1.2. Those defined in the table under section 8.1.1 may trigger a financial adjustment.

- 8.4.2 Where the update is performed by the GT the update will be carried out and a notification issued to the Registered Shipper of the MPRN advising them of the details.
- 8.4.3 Where the update to the Post Code results in a change to the LDZ or Exit Zone a notification will be issued to the current Shipper and a financial adjustment automatically processed for the current Shipper only
- 8.4.4 A notification will be issued to any previous Shippers but no financial adjustment will be carried out.

## 8.5 Late Recorded Meter

8.5.1 A facility to record the details of the asset and Meter Point details of a 'missing meter' by either the Shipper or the GT.

Note:

The relevant data items are defined in the table 8.1.1. and 8.1.2. Those defined in the table under section 8.1.1 may trigger a financial adjustment.

- 8.5.2 Scenario 1: Meter installed during current Shipper ownership and affects current Shipper charges only;
  - The details are recorded and any financial adjustments will be automatically processed.
- 8.5.3 Scenario 2: Meter installed during multiple Shipper ownership;
  - Current Shipper: The details are recorded correctly and any financial adjustment for the current Shippers ownership will be automatically processed.
  - Previous Shipper(s): A notification is issued to the previous Shipper(s) notifying them of the details and any financial adjustment will be processed and issued.

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

8.6.1 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. The end date will be the same date as the MPRN effective date. They notification may be submitted by the Shipper or GT.

Note:

- The relevant data items are defined in the table 8.1.1 and 8.1.2. Those defined in the table under section 8.1.1 may trigger a financial adjustment.

8.6.2 Scenario 1: Meter Point set up during current Shipper ownership and affects current Shipper charges only;

- Any financial adjustments will be automatically processed.

8.6.3 Scenario 2: Meter installation during multiple Shipper ownership;

- Current Shipper: Any financial adjustment for the current Shippers ownership will be automatically processed.
- Previous Shipper(s): A notification is issued to the previous Shipper(s) notifying them of the details and any financial adjustment will be processed and issued.

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**9. Transitional Rules**

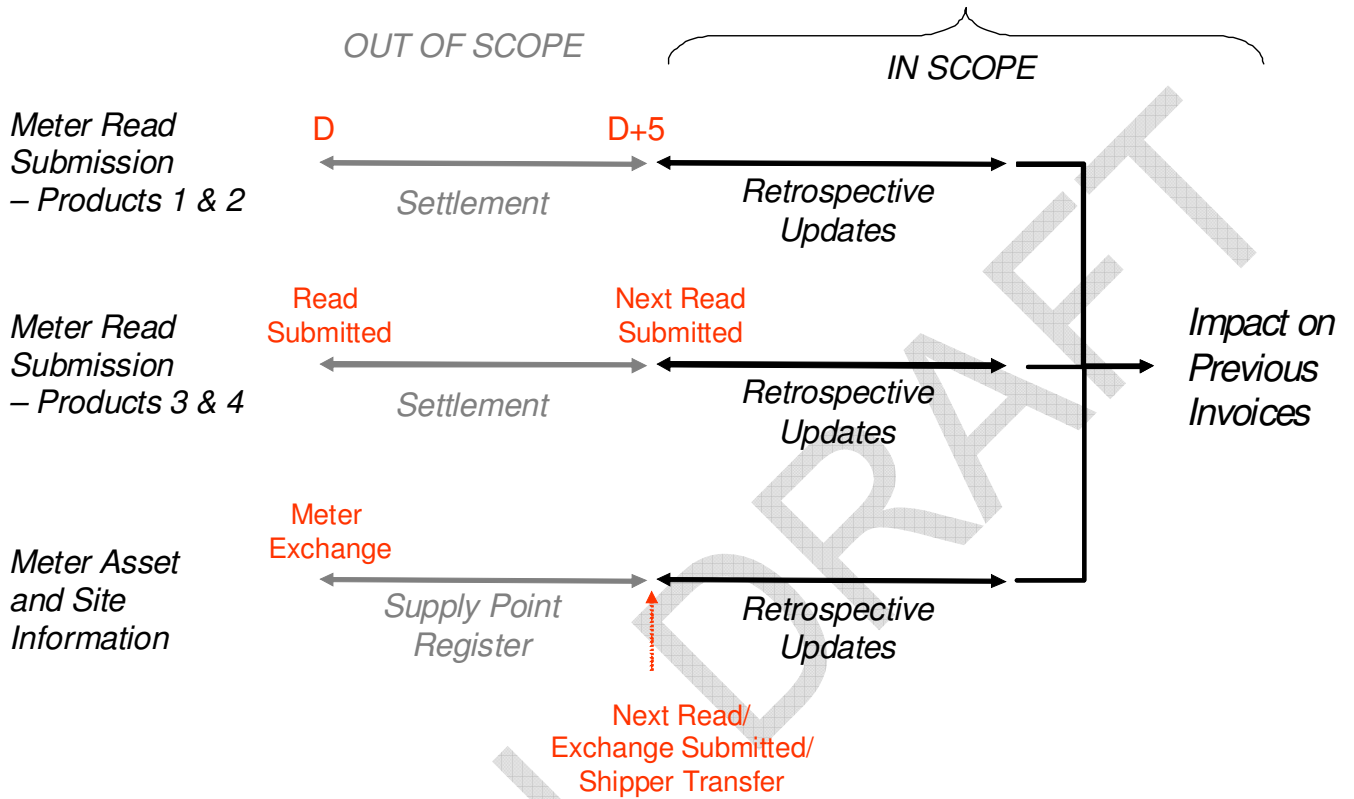
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**10. Non-Functional Business Requirements**

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**11. Appendices**

**Figure 1:**



## 12. Document Control

### Version History

Version	Status	Date	Author(s)	Summary of Changes
0.1	Initial Draft	18/10/2011	Xoserve	First draft

### Reviewers

Name	Version	Date
AMR Workgroup attendees		

### Approval

Name	Role	Date
AMR Workgroup		
PN UNC		