

# Business Requirements Definition

for

## Project Nexus

submitted to

## Project Nexus Workgroup iGT Agency Services

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<b>Date:</b>	

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**Contents**

<b>1.</b>	<b>Glossary</b>	<b>3</b>
<b>2.</b>	<b>Document Purpose</b>	<b>5</b>
<b>3.</b>	<b>Executive Summary</b>	<b>6</b>
<b>4.</b>	<b>Benefits</b>	<b>9</b>
<b>5.</b>	<b>Change Scope</b>	<b>10</b>
<b>6.</b>	<b>Assumptions and Concerns</b>	<b>11</b>
<b>7.</b>	<b>Overview of Business Processes</b>	<b>13</b>
<b>8.</b>	<b>Business Requirements</b>	<b>14</b>
<b>9.</b>	<b>Transitional Rules</b>	<b>21</b>
<b>10.</b>	<b>Non-Functional Business Requirements</b>	<b>22</b>
<b>11.</b>	<b>Document Control</b>	<b>23</b>

## 1. Glossary

Term / Acronym	Definition
Annual Quantity (AQ)	Annual quantity of gas assumed to be offtaken over a period based on historical information
AQ Close-Out	The last Day on which Meter Readings or other information received by the Transporters will be considered for the purposes of the Monthly AQ Review.
AQ Effective Day	The Day on which the Notified AQ becomes effective.
BSSOQ	Bottom Stop SOQ
Calculated AQ	The AQ calculated as a result of a read being loaded
Consumption Period	The period in Days between the dates of the actual two Meter Readings available for use in the Monthly AQ Review calculations.
CSEP	Connected System Exit Point (iGT Supply Points)
Current AQ	The Annual Quantity registered at a Supply Meter Point prior to a change in the Annual Quantity made as a result of the Monthly AQ Review.
DECC	Department of Energy and Climate Change
DM	Daily Metered
End Meter Reading	The later Meter Reading, that is not more recent than the Information Close-Out Day, which determines the end of the Consumption Period.
EUC	End User Category
GFD	Gas Flow Day
GT	Gas Transporter
iGT	Independent Gas Transporter
iGT UNC	Independent Gas Transporters Unified Network Code
LSP	Larger Supply Points (AQ above 73,200 kWh)
MDD Code	Market Domain Data – a code relating to an industry participant allocated by ELEXON.
Monthly AQ Review	The process conducted by the Transporters whereby, as a result of Meter Readings, the Annual Quantity of a Supply Meter Point is recalculated.
NDM	Non Daily Metered
Notification Day	The Day on which the Transporters notify the Registered Users of changes in the Annual Quantity.

Notified AQ	The Annual Quantity notified by the Transporters when a change of Annual Quantity of a Supply Meter Point is notified to the Registered User as a result of the Monthly AQ Review.
NTS	National Transmission System
Optimum Read	An ideal read within the required period to calculate an AQ
Prime and Sub	Is a Sub-deduct Arrangement
RbD	Reconciliation by Difference
Read Validation Override Flag	The indicator set by the User on read submission to request that despite anticipating a Supply Meter Point would fail validation, the meter reading is correct.
Revised AQ	The new AQ calculated
SAP	System Average Price
SHQ	Supply Point Hourly Offtake
Site	Supply Meter Point level
SND date	Seasonal Normal Demand Review date (SND updates WAALP factors retrospectively for a 3 year period)
SOQ	Supply Point Daily Offtake
SSP	Smaller Supply Points (AQ less than 73,200 kWh)
Start Meter Reading	The earlier Meter Reading that determines the start of the Consumption Period.
Sub-deduct Arrangement	An arrangement of pipes and meters, by which a part of the gas which is conveyed by a System to premises for the purposes of supply to those premises, is further conveyed to other premises for the purposes of supply to those other premises.
Valid Read	A meter reading which has passed all GT read validations as described in the 'Meter Read Submission and Processing and Settlement Arrangements BRD'. For Product 1, 2 or 3, a valid read can be an actual or estimated read and for Product 4 a valid read can be the estimated transfer reading.
Validation Override Flag	Indicator set by the Shipper to request that despite anticipating a meter read would fail validation, the read is correct and should be accepted and used for other processes including to calculate the AQ.
WAALP factors	Winter Average Annual Load Profile
Winter Consumption	The consumption of a Supply Meter Point calculated from meter readings taken, over the period 01 December to 31 March,
Winter Annual Ratio (WAR)	The ratio of the Winter Consumption of a Supply Meter Point to its Annual Quantity.

## 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.

### 2.1. Intended Audience

- Gas Shippers/Suppliers
- Gas Transporters (Large and Small)
- Xserve
- Customer Representative

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### 3. Executive Summary

#### 3.1 Introduction to the change

This document defines the timescales and processes associated with the iGT Agency Services..

The document has been based on presentations and discussions at the Project Nexus Workgroup meetings (PNUNC).

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

- 3.3.1.1 To reduce industry costs in administrating iGT Supply Meter Points
- 3.3.1.2 Where possible to harmonise the administration of iGT Supply Meter Points with the GT administration of Supply Meter Points.

##### 3.3.2 Business Goals

- 3.3.2.1 To provide a single service provision to shippers for the operation of Supply Points on iGT networks.

#### 3.4 Change Background

The changes have been identified as a result of Xoserve’s Project Nexus consultation for the replacement of UK Link 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	Description
15.1	The adoption of a Single Service Provider to provide visibility within CSEP invoicing
15.2	A common interface for all GTs.
15.3	A single agency and single system for all gas transporters.



UK Link Manual	Joint Office Website
PN UNC Workgroups	Joint Office Website

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## 4. Benefits

### 4.1 Industry Benefits

- 4.1.1 Single service provision for the operation and administration of supply points on GT and iGT Networks
- 4.1.2 Simplification of shipper processes and systems for iGT supply points
- 4.1.3 Standardised interface files

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## 5. Change Scope

### 5.1 In Scope

#### 5.1.1 Supply Point Register

##### 5.1.1.1 CSEP Lifecycle

##### 5.1.1.2 MPRN creation and management

##### 5.1.1.3 Asset Data Management

##### 5.1.1.4 Read submission

##### 5.1.1.5 iGT Specific Data

#### 5.1.2 Shipper accession to iGT UNC

#### 5.1.3 iGT Sanctions

#### 5.1.4 Supply Point Administration

#### 5.1.5 Annual Quantity Review

#### 5.1.6 CSEP Gas Nominations and Allocations

#### 5.1.7 Invoicing

#### 5.1.8 Query Process and other services

#### 5.1.9 Data Migration and cleansing of iGT Supply Point information

### 5.2 Out of Scope

#### 5.2.1 Any process not described above as In Scope

## Detailed Requirements Analysis

### 6. Assumptions and Concerns

#### 6.1 Assumptions

- 6.1.1 The business rules will need to be appropriate for dumb metered sites as well as remotely read sites

#### 6.2 Dependencies

- 6.2.1 Approval of the requirements by PN UNC
- 6.2.2 Approval by Ofgem following the appropriate UNC Modification process.

#### 6.3 Risks & Issues

- 6.3.1 Not all Shippers/Suppliers attend the workgroups or are represented therefore there may be opposition to any potential Modifications raised.
- 6.3.2 At what point in its lifecycle should a new CSEP be added to UK-Link?
- 6.3.3 What should happen if a new MP being added to a CSEP exceeds the maximum CSEP AQ?
- 6.3.4 How should we deal with crossed MPRNs?
- 6.3.5 If a nested CSEP is adopted by a GT – what transportation pricing rules should be applied?
- 6.3.6 At the point of creating a CSEP will the Supply Meter Point AQ be provided by the iGT or will it need to be derived by Xoserve from the appropriate NEXA?
- 6.3.7 Does the iGT transportation offer have a validity period – or will it adopt the 6 month rule as detailed in the large GT UNC?
- 6.3.8 Once iGT Meter Points are on UK-Link will the MPs be aggregated within the CSEP for gas nomination purposes or will they be aggregated with the Meter points in the exit zone that feeds the CSEP?
- 6.3.9 Meter Point Reference Number Allocation (RGMA) impacts?
- 6.3.10 How do we change CSEP max AQ, who needs to agree the value?
- 6.3.11 How will we calculate the Large GT transportation charges for the iGT Supply Points?
- 6.3.12 How will iGT sanctions be applied?
- 6.3.13 How often will iGT transportation prices change?

#### 6.4 Constraints

**6.5 Design Considerations**

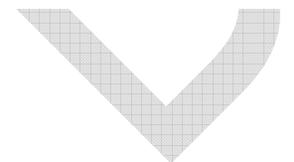
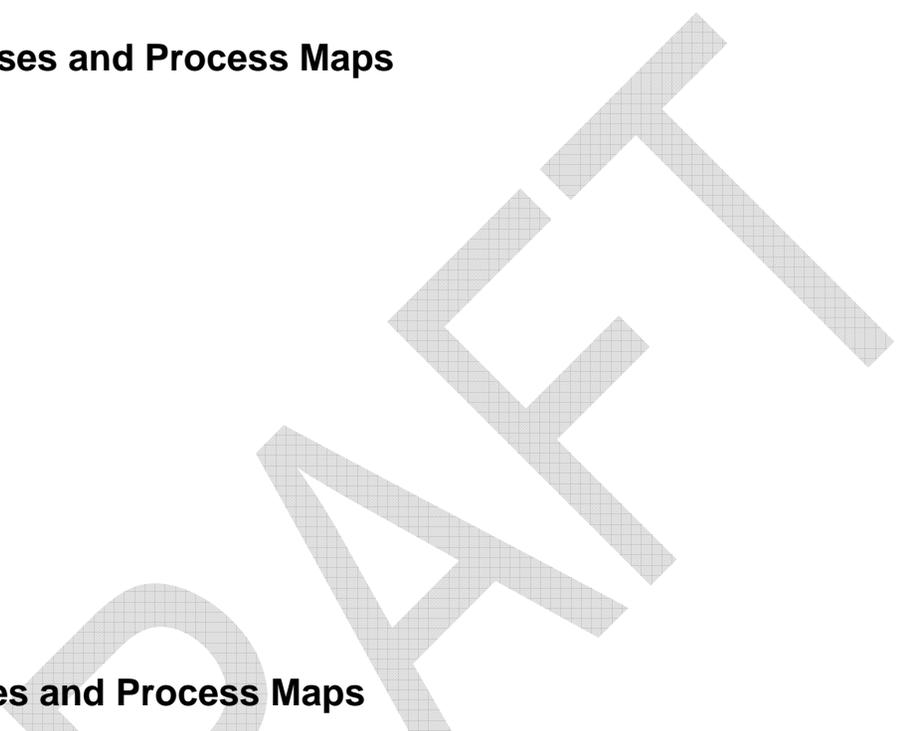
**6.6 Concerns**

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## 7. Overview of Business Processes

### 7.1 Current Processes and Process Maps

### 7.2 To-Be Processes and Process Maps



## 8. Business Requirements

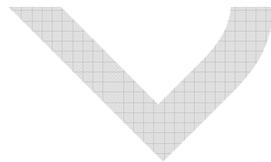
Throughout this section reference is made to four new processes designed in the Project Nexus Settlement Workgroup for the submission and processing of meter readings and settlement arrangements. These four future state processes are summarised below;

- **Product 1, 'Daily Metered Time Critical'**
  - Daily reads obtained and submitted to the GT daily before 10.00 am on GFD+1.
  - Actual or estimated reads may be submitted by the Shipper. Estimates to be provided in accordance with standard industry methodology.
  - The latest valid 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. Estimates to be provided in accordance with standard industry methodology.
  - The latest valid read loaded by GFD+5 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. Estimates to be provided in accordance with standard industry methodology.
  - Reconciliation will be carried out based on the valid 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.
  - Allocation and energy balancing is based on allocation profiles and AQ
  - Reconciliation is carried out using the methodology determined within the Reconciliation Workgroup

Figure 1 provides a summary of the AQ processes by Settlement Product;

**Figure 1: Summary of the 4 meter reading processes and related AQ processes**

Process Description	Read Used for Allocation	Read used for Energy Balancing	Shipper Read Submission	Timing of AQ calculation	Reads used for AQ calculation	Read Type used for the AQ calculation	SOQ Calculation	Reconciliation
Product 1: Daily Metered Time Critical Readings	Daily Read	Daily Read	Daily by 10 am on GFD+1	Monthly	2 reads a minimum of 9 months & max of 36 months apart	Actual Read	Shipper Nominates	Meter Point level following a re-synch or estimate
Product 2: Daily Metered not Time Critical Readings	GT Estimate	Daily Read	Daily by end of GFD+1	Monthly	2 reads a minimum of 9 months & max of 36 months apart	Actual Read	Shipper Nominates	Meter Point level following a re-synch or estimate
Product 3: Batched Daily Readings	Allocation Profiles	Allocation Profiles	Daily Reads in Batches	Monthly	2 reads a minimum of 9 months & max of 36 months apart	Actual Read	GT Derives	Daily Rec at Meter Point level on receipt of a batch of reads
Product 4: Periodic Readings	Allocation Profiles	Allocation Profiles	Periodically	Monthly	2 reads a minimum of 9 months & max of 36 months apart	Actual Read	GT Derives	Meter Point level at receipt of read



## 8.1 General Requirements

- 8.1.1 Unless otherwise explicitly stated the terms and conditions detailed in the Large GT UNC will prevail.
- 8.1.2 At the time of implementation of the administration of iGT supply points on Xoserve Systems the iGT UNC will be changed to reflect the relevant sections of the GT UNC.
- 8.1.3 Transportation charges will commence for new IGT Supply Meter Point from the date of meter installation.

## 8.2 iGT Specific Data

- 8.2.1 iGT Licence information including the following must be maintained in a timely manner
  - 8.2.1.1 iGT Licence full name
  - 8.2.1.2 iGT Licence short code
  - 8.2.1.3 iGT Licence start date
  - 8.2.1.4 iGT Licence end date
  - 8.2.1.5 iGT Licence User Name
  - 8.2.1.6 iGT Licence User Name start date
  - 8.2.1.7 iGT User Name end date
- 8.2.2 An iGT Licence can transfer between iGTs (mergers, de-mergers, acquisitions etc).
- 8.2.3 The iGT Licence full name and short code, unless raised in error, should never change.

## 8.3 Supply Point Register

- 8.3.1 CSEPs must be uniquely identifiable
- 8.3.2 The date on which the CSEP was created will be recorded? (Is this date of registration on the system or contractual date?)
- 8.3.3 The geographical location of the CSEP must be captured; this could be a Grid Reference or Post Code? (Could there be more than one set of references?)
- 8.3.4 The LDZ in which the CSEP is to be established must be provided by the iGT
- 8.3.5 The Exit Zones from which the CSEP is to be fed must be provided by the iGT

- 8.3.6 Each CSEP will be subject to a maximum off-take AQ which must not be breached. (What should we do if the Max AQ is breached by – annual AQ review or the addition of new meter points?)
- 8.3.7 The CSEP maximum off-take AQ may change from time to time.
- 8.3.8 The ability is required to prospectively set the maximum off-take AQ.
- 8.3.8.1 CSEP maximum off-take AQ start date
- 8.3.8.2 CSEP maximum off-take AQ end date
- 8.3.9 The agreed source pressure delivered at the CSEP as defined in the NEXA should be captured.
- 8.3.10 The ability is required to prospectively set the agreed source pressure delivered at the CSEP.
- 8.3.10.1 Source Pressure Start Date
- 8.3.10.2 Source Pressure End Date
- 8.3.11 The Source Pressure delivered at the CSEP may change from time to time?
- 8.3.12 A CSEP may be created within or as an extension to an existing CSEP (this is called a nested CSEP.)
- 8.3.13 Where a nested CSEP arrangement is in place it is necessary to be able to identify the lead CSEP, i.e the first CSEP arrangement connected to the DN, to support the calculation of transportation charges and to ensure the CSEP Max AQ is not breached.
- 8.3.14 Multiple nesting within a CSEP may exist; the relationship between CSEPS must be maintained. (Do we need to calculate/detail transportation charges accrued through each CSEP until the CSEP in question is reached?)
- 8.3.15 CSEP created correctly and in a timely manner and the relevant Shipper informed
- 8.3.16 Meter Point Reference Numbers must be created in a timely manner.
- 8.3.17 A Meter Point Reference created in a CSEP must be associated with that CSEP.
- 8.3.18 The AQ for new Supply Meter Points is derived from a published table that details AQ by Property type by Region as detailed in the NEXA. (Will the meter point AQ be provided by the iGT or will we need to derive it?)
- 8.3.19 Supply Point confirmed accurately and in a timely manner
- 8.3.20 Supply Point data to be recorded accurately & in a timely manner.
- 8.3.21 Supply Point events to be recorded accurately & in a timely manner.
- 8.3.22 New smaller Supply Meter Points may be confirmed in “Bulk” as per iGT UNC (CI - 13.7/13.8/13.9) (need to understand the detail of this)

## 8.4 Asset Details

- 8.4.1 Meter asset details to be recorded accurately & in a timely manner
- 8.4.2 Meter asset exchange details to be recorded accurately & in a timely manner
- 8.4.3 Meter asset removal details to be recorded accurately & in a timely manner
- 8.4.4 Meter reads processed, recorded accurately & in a timely manner.

## 8.5 Pricing

- 8.5.1 Transportation charges updated accurately & in a timely manner and reflected in transportation charges.
- 8.5.2 Transportation charges shall be set prospectively. (How far in advance off them becoming effective?)
- 8.5.3 A history of transportation charge rates shall be maintained.
- 8.5.4 IGT Transportation Charging methodology is determined by Licence and CSEP and is fixed for the length of the agreement? (With whom?)
- 8.5.5 Two iGT pricing methodologies exist for Large Supply Points (what about SSPs?)  
Need to obtain a copy of the algorithms. What about legacy sites – Pre RPC?
  - 8.5.5.1 Based on Asset Value (Fixed Rate)
  - 8.5.5.2 Based on Monthly AQ (Check this?) (Commodity)
- 8.5.6 Transportation charging formula. Need to consider how price changes are managed, need to keep history of price changes for audit purposes
- 8.5.7 Where a CSEP is extended, the transportation charge for the additional meter points will be different to those for meter points in the originally defined CSEP. (How are these handled?)

## 8.6 CSEP Lifecycle

- 8.6.1 A request to create a CSEP will only be accepted from an iGT party to Xoserve Services.
- 8.6.2 The iGT making such request must warrant that they have a valid IGT Licence for the new CSEP
- 8.6.3 On creation a CSEP must be associated with the relevant iGT Licence.
- 8.6.4 On creation of a new CSEP it must be possible to associate one or more Shippers with the CSEP based at meter point level.
- 8.6.5 The ownership of a CSEP may be transferred in whole or part to another iGT within an agreed timescale.

- 8.6.6 If a partial transfer of ownership is required, this will be detailed at meter point level. (If a partial transfer is required – will this result in new Licences?)
- 8.6.7 The ownership of a CSEP may be transferred in whole or part to a GT within an agreed timescales.
- 8.6.8 A history of the ownership of all CSEPS must be maintained.
- 8.6.9 A CSEP may be adopted (owned ) by a major GT. (does this mean that standard GT transportation charges would apply? What if it is a nested CSEP?)
- 8.6.10 It must be possible for CSEPS recorded in error to be removed.
- 8.6.11 A prospective date may be set to indicate the last effective date of a CSEP. (Required for when a CSEP reaches the end of its life.)
- 8.6.12 The CSEP end date may, from time to time, be changed.
- 8.6.13 New meter points may not be associated with a CSEP once its end date has been reached.
- 8.6.14 A history should be maintained of the industry participant name associated with the MDD (Market Domain Data) Code.
- 8.6.15 The iGT Transportation offer does not have a validity period.?

## **8.7 Queries**

- 8.7.1 Queries processed in a timely manner

## **8.8 CSEP Gas Nominations and Allocations**

## **8.9 Annual AQ Review**

- 8.9.1 The Large Transporter AQ Review regime, as detailed in the Large GT UNC, prevailing at the time of migration of iGT Meter Points to UK-Link will be applied to iGT Meter Points and the iGT UNC/ and individual iGT Network Codes will be amended to reflect this.

## **8.10 EUC's**

## **8.11 Invoicing**

- 8.11.1 Invoice documents will be produced in respect of each Billing Period.

8.11.2 A Billing period is a calendar month,, unless it is a reconciliation invoice in which case the Billing Period is the reconciliation billing period.

8.11.3 Will the Invoice include Credits or will this be handled by the iGT's separately?

8.11.4 The Invoice structure and content will be as that defined in the iGT UNC *Appendix G-1 RPC Invoice Template*.

8.11.5 Will the invoice be approved by the iGT prior to issue to the shipper?

## **8.12 Payments**

8.12.1 Payments will be managed under current iGT arrangements. Xoserve will not at this point provide any payment collection service for transportation or any other charges associated with iGT supply meter points.

## **8.13 Termination and Insolvency (re Invoicing)**

8.13.1 ???

## **8.14 Portfolio Information**

8.14.1 Portfolio extract information is to comply with the iGT UNC *Appendix G-2 Portfolio Extract file format*.

## **9. Transitional Rules**

Transitional rules are required to deal with the period immediately prior to and following the implementation of these rules.

Any transitional requirements/issues will be identified during the analysis stage and discussed at the Workgroup.

### **9.1 Implementation Date**

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**10. Non-Functional Business Requirements**

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## 11. Document Control

### Version History

Version	Status	Date	Author(s)	Summary of Changes
0.1	Initial Draft	13/03/2012	Xoserve	First draft
0.2	Initial Draft	21/03/2012	Xoserve	

### Reviewers

Name	Version	Date

### Approval

Name	Role	Date
PN UNC		