

Business Principles

For

Invoicing

Xoserve Project Nexus

Submitted to

Project Nexus Workgroup (PN UNC) Distribution Workgroup from September 2015

Author (for this version):	Xoserve
Version:	3.0
Date:	10 th March 2017

Copyright © 2011 Xoserve Ltd

V3.0 Page 1 of 19



Invoicing Business Principles

Contents

1.	Glossary	3
2.	Document Purpose	4
3.	Executive Summary	7
4.	Benefits	9
5.	Change Scope	10
6.	Assumptions and Concerns	11
7 .	Overview of Business Processes	12
8.	Business Principles	13
9.	Transitional Rules	16
10.	Non-Functional Business Requirements	17
11.	Document Control	18



1. Glossary

Term / Acronym	Definition	
AdHoc Invoicing	Use of the Adhoc invoice functionality as opposed to core transportation and energy invoices.	
CSEP	Connected System Exit Point; meter points on an iGT network.	
DCC	DataCommsCo	
DECC	Department Energy Climate Change	
LDZ	Local Distribution Zone	
MSF	Market Sector Flag	
NTS	National Grid Transmission	
SME	Small & Medium Sized Enterprises	
SMIP	Smart Metering Implementation Programme	
SSP	Smaller Supply 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).

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.

This document contains business principles for the different options identified by PN UNC around invoicing arrangements. These options have been documented following discussion and agreement at the Invoicing meetings of the PN UNC Workgroups.

This document builds upon the Business Requirements Definition document for Invoicing, version 2.0 dated 25/10/2013 published on the Joint Office website:

http://www.gasgovernance.co.uk/sites/default/files/Invoicing%20Bus%20Principles%20v2.0_0.pdf

Following the Nexus design within the UK Link Programme, further levels of detail have been identified that needed to be presented and agreed by the industry. If necessary supporting UNC modifications will be raised. The greater detail presented in this document does not change the UNC business rules defined in Modification 0432 - Project Nexus – Gas Demand Estimation, Allocation, Settlement and Reconciliation reform.

2.1 Updates since the approval of Modification 0432

The following provides a summary of the updates since the BRD was baselined following approval of Modification 0432.

The table will show;

- Updates that have been made to clarify the business requirement
- Updates to reflect Modification 0432 legal text
- New requirements or changes to requirements that have been agreed at PN UNC
- Requirements that will not be delivered for Go Live and will need to be delivered in a later release of UKLink Replacement



Updated Section in BRD	Summary of the Reason for the Update	Source	Date Presented at PN UNC	Date Agreed at PN UNC	Section of UNC that requires update	UNC Mod Required?	Version of BRD Updated	Date BRD Updated
8.4.2	Transportation charges on an Isolated meter point (REQ12)	PN UNC	15/04/2014	15/04/2014	Delivered as per UNC	N/A	2.1	13/01/2015

V3.0 Page 5 of 19



2.1.1 Intended Audience

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

V3.0 Page 6 of 19



3. Executive Summary

3.1 Introduction to the change

This document defines the principles for Invoicing of transportation charges for gas supply meter points.

The document has been based on presentations and discussions at the Project Nexus Invoicing Workgroup.

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

- The current invoices submitted by Xoserve do not have the same standards and formats
- 2. A large number of invoices are issued 'off-line'
- 3. Invoicing supporting data is issued via various means
- 4. The invoices are difficult to validate due to aggregation of charges

3.3.2 Business Goals

- 1. Invoices are issued to a standard format via a common interface
- 2. All invoices are at a level to enable Shippers to validate the charges

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)

IRR Ref.	Requirement	Outcome
8.1	Fewer Adhoc and Offline invoices and invoice items	Included in
0.1	r ewer Adrioc and Offline Invoices and invoice items	Principles
8.2	Introduce an invoice pre-validation process	No longer required,
0.2	introduce an invoice pre-validation process	Closed
8.3	Flexibility to invoice Suppliers across a range of portfolios	Included in
0.3	Flexibility to invoice Suppliers across a range of portionos	Principles

V3.0 Page 7 of 19



Invoicing Business Principles

8.4 Pricing module	Principles
8.5 Visibility of site consun	Included in
8.6 Improved User pays and Ad-Hoc in	voice backing data Included in
8.7 The cessation of transportation capac	Principles
actual meter removal of	
8.9 Greater level of granularity in the s invoices	upporting data for Included in Principles
8.10 Internet access to the supporting dat transportation invoice	- I

3.4.2 Business Issues Raised during the Invoicing Workgroups

Requirement	Outcome
Supporting data for the invoices does not always provide sufficient information, and at the appropriate level, to enable the charges to be validated	Included in Principles
Visibility of consumption data at Meter Point level for SSP is not	Included in
currently available	Principles

3.4.3 UNC Impacts

UNC Section S

3.4.4 Licence Impacts

None identified.

3.5 Related Documents

Document Title Location

All Baselined BRD's produced by PN UNC
Joint Office Website Woprkgroup



4. Benefits

These will need to be aligned with the Transporters relevant objectives.

4.1 Industry Benefits

- 4.1.1 All supporting documentation issued via electronic transfer enables easier uploading of the data to Shippers' systems.
- 4.1.2 Uniform standards set for all large GT invoices enables ease of understanding of the invoice.
- 4.1.3 The ability for Shippers to segment their invoices will aid their internal business processes for analysing the data.
- 4.1.4 Easier validation of charges
- 4.1.5 Easier reporting

4.2 Disadvantages

- 4.2.1 Invoicing at supply point/meter point level will significantly increase the volume of data issued to Shippers.
- 4.2.2 Inclusion of additional/different items on the invoice may change the file formats



5. Change Scope

5.1 In Scope

Function:

- 1. Transportation Invoices
- 2. UNC User Pays invoices
- 3. Level of detail contained in the invoice
- 4. Mechanism for the issue and delivery of invoices
- 5. Security
- 6. Invoice content

Market Sector:

- 1. All directly connected supply points including CSEPs
- 2. Daily Metered CSEPs (iGT sites above the DM Mandatory threshold)
- 3. NTS Sites

5.2 Out of Scope

Function:

- 1. Date of issue of invoices
- 2. Credit terms
- 3. Energy balancing invoices
- 4. Incentives and Liabilities
- 5. Financial adjustment principles
- 6. Charge types

Market Sector:

None identified.



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
- 6.1.2 Continual monitoring to take place of SMIP developments to ensure alignment with parties obligations and DCC services

6.2 Process Assumptions

6.2.1 These invoicing processes will follow the prevailing Line-in-the-Sand arrangements, which may be amended in future by Modification 0395 and/or 0398.

6.3 Dependencies

- 6.3.1 Approval of the requirements by PN UNC
- 6.3.2 Approval by Ofgem following the appropriate UNC Modification process
- 6.3.3 Outcome of proposals raised by Wales & West Utilities to align all Supply Points to a single Meter Point

6.4 Risks/Issues

- 6.4.1 There may be opposition to any potential Modifications raised, particularly because not all Shippers/Suppliers/Transporters attend the Workgroups or are represented.
- 6.4.2 Introduction of fully detailed supporting information for all Meter Points will significantly increase the volumes of data being transferred between Xoserve and Shippers, and may increase the validation workload and processing/storage requirements in Shippers' organisations.

6.5 Constraints



7. Overview of Business Processes

Not applicable.

7.1 Current Processes and Process Maps

Not applicable.

7.2 To-Be Processes and Process Maps

Not applicable.



8. Business Principles

The business principles below have been derived from the Initial Requirements Register and subsequent discussions at the Project Nexus UNC Workgroup.

8.1 Standardisation of Invoices

- 8.1.1 All invoice documents and supporting information documents to be sent by a consistent means of electronic transfer.
- 8.1.2 All supporting information for Adhoc invoice documents will adhere to a standard file format.
- 8.1.3 All invoice supporting information to detail the charges at meter point level or, at a sufficient level to enable the Shipper to validate the charges.
- 8.1.4 Standard, user friendly, invoice naming to be applied across all invoices e.g. an invoice is not named after a Modification number.

8.2 Invoice Document

- 8.2.1 No change to current arrangements for Invoice Documents: for each invoice, a set of invoice summary documents (specific to Network) detailing aggregated charges and a separate supporting document detailing charges at meter point level (see 8.1.3 above).or otherwise at the lowest level of detail available.
- 8.2.2 More predictability and more standardisation of Adhoc invoices, wherever feasible.

8.3 Invoice Segmentation

- 8.3.1 Shippers may wish to sort or segment their invoices based on data in the supporting information or held in their databases.
- 8.3.2 There may be a requirement to add additional items to the supporting information files, to support Shippers in sorting their invoice data. Any changes to invoice file formats would be managed by UKLink Committee.

At present all the possible additional items already exist on the Supply Point Register. Any new data items or changes to existing data items would need to be included in the Supply Point Register BRD.

8.4 Invoice Charges

- 8.4.1 Removal of current scenarios where adjustments to invoice charges are calculated and sent separately due to timing or systems constraints.
- 8.4.2 On acceptance of a valid notification of an isolation of an asset, allocation of energy will cease from D+1 of receipt of the notification and a reconciliation will be carried out using the isolated reading.



8.5 Pricing Module

- 8.5.1 Flexibility within the system for future pricing and charging structures
- 8.5.2 Ability for GTs to have different pricing formulas for their Distribution Networks

8.6 Invoicing Structure

Following a proposal presented at PN UNC on 20th May 2013 and further discussed on 17th June 2013, the following future structure of transportation invoices was agreed.

Key aspects of the change are:

- one invoice for all Supply Point initial Capacity charges,
- one invoice for all Supply Meter Point Commodity charges and
- an invoice for all Reconciliation and adjustment charges.
- Ratchet charges to be issued on the Capacity invoice. Due to timing of the Capacity invoice this will mean that the Ratchet charge will be issued on Month +2 after the Ratchet was incurred.

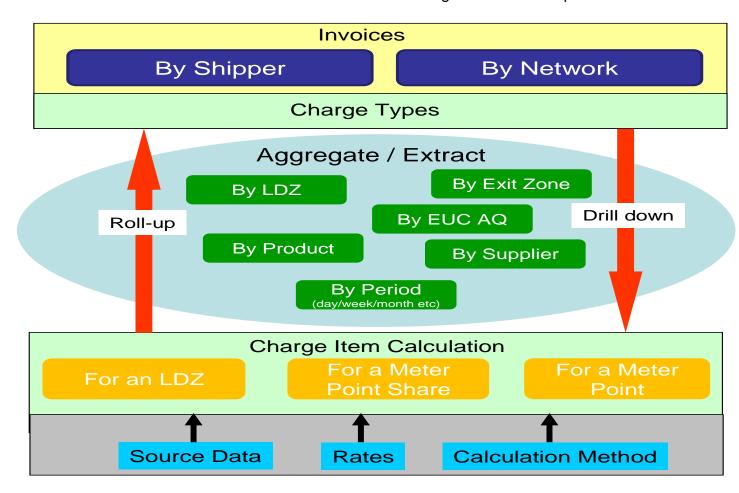
8.6.1 Three core invoices;

- Capacity invoice contains all initial Capacity charges and Ratchet charges.
- Commodity invoice contains all initial Commodity charges
- Amendment invoice contains charges for Reconciliation and adjustments to energy, Capacity and Commodity.

8.6.2 Ancillary invoices;

- Miscellaneous invoice (scheduled invoices)
- Ancillary invoice (non-scheduled invoices)
- 8.6.3 Each Invoice Type (e.g. Capacity invoice) may have a sub-type that is defined by a specific set of Charge Types (i.e. LDZ Commodity, NTS Commodity)
- 8.6.4 Where applicable, invoices issued at an aggregate level but the lowest level of detail to be available as supporting documentation, e.g charges at Meter Point level. The following diagram shows the potential for charge aggregations and charge extract;





Note: For clarification these changes do not affect the Energy Balancing invoice.



9. Transitional Rules

Transitional rules may be required to deal with the period immediately before and after the implementation of these rules.



10. Non-Functional Business Requirements



11. Document Control

Version History

Version	Status	Date	Author(s)	Summary of Changes
0.1	Draft	12/10/2011	Xoserve	First draft
0.2	Draft	31/10/2011	Xoserve	Updated as agreed at the PN UNC Workgroup (Invoicing) on 24/10/11
0.3	Draft	23/11/2011	Xoserve	Updated as agreed at the PN UNC Workgroup (Invoicing) on 22/11/11
0.4	Draft for industry review	13/12/2011	Xoserve	Updated as agreed at the PN UNC Workgroup (Invoicing) on 07/12/11.
0.5	Final	13/01/2012	Xoserve	Updated following final review at PN UNC on 10/01/2012. This version will be baslined for publication as v1.0.
1.0	Final	13/01/2012	Xoserve	Clean version of 0.5 which was 'approved at PN UNC on 10/01/2012
1.1	For Approval	17/06/2013	Xoserve	Updated following agreement at PN UNC to proposed Invoicing structure Section 8.6
2.0	Baselined	30/07/2013	Xoserve	Baselined version of 1.1 which was agreed at PN UNC on 30/07/13
2.1	Updated for approval	13/01/2015	Xoserve	Updated to reflect UNC legal text for Modification 0432 and changes as agreed at PN UNC.
2.2	Updated for approval	26/01/2015	Xoserve	Updated following PN UNC on 20/01/2015
2.3	Updated for approval	20/02/2015	Xoserve	Updated following PN UNC on 18/02/2015. Additional clarifications to the table under section 2.1
2.4	Updated for approval	20/03/2015	Xoserve	Updated table under section 2.1
3.0	Approved	10/03/2017	Xoserve	Approved as part of Mod 0610 at Distribution Workgroup on 10/03/2017

Reviewers



Invoicing Business Principles

Name	Version	Date
Workgroup attendees	All versions	

Approval

Name	Version	Date
PN UNC	1.0	10/01/2012
PN UNC	2.0	30/07/2013
Distribution Workgroup (Mod 0610)	3.0	10/03/2017