

Stage 04: Final Modification Report

0430:

Inclusion of data items relevant to smart metering into existing industry systems

At what stage is this document in the process?



This modification seeks to obligate shippers to provide information from their suppliers that will be required for the implementation of the DECC programme for Smart Metering.



Panel recommended implementation



High Impact: -



Medium Impact: Shippers and Transporters



Low Impact: -

0430

Final Modification Report

18 March 2013

Version 3.0

Page 1 of 15

© 2013 all rights reserved

Contents

1	Summary	3
2	Why Change?	4
3	Solution	5
4	Relevant Objectives	10
5	Implementation	11
6	Legal Text	11
7	Consultation Responses	14
8	Panel Discussions	15
9	Recommendation	15

About this document:

This Final Modification Report will be presented to the Panel on 21 February 2013.

The Authority will consider the Panel's recommendation and decide whether or not this change should be made.


Any questions?
Contact: Joint Office
 enquiries@gasgovernance.co.uk
 0121 623 2115
Proposer: Joanna Ferguson
 jferguson@northerngas.co.uk
 07883 099 616
Transporter: Northern Gas Networks
Systems Provider: Xoserve
 commercial.enquiries@xoserve.com

1 Summary

Is this a Self-Governance Modification?

The Modification Panel determined that this is not a self-governance modification.

Why Change?

The Department of Energy and Climate Change (DECC) is currently progressing the Smart Metering Implementation Programme (SMIP) with an aim to establishing a central smart metering Data Communications Company (DCC) in 2014 together with a Smart Energy Code (SEC) as a governance framework. To facilitate this DECC, through their working groups, have identified changes to existing industry codes that will be required to fully facilitate the SMIP. These changes include, but are not limited to, additional data items that will allow incoming suppliers to identify the existence of Smart Metering System (SMS) at a supply meter point.

The DECC programme will require information to be captured for all supply points, including those on iGT networks and relevant information provided to parties including shippers and the DCC when it is established. In order to meet the requirements at the start of mass roll-out it is expected that data capture will be required from Q2 2013.

Suppliers will have licence obligations to install SMS at domestic premises and the capture, storage and transfers of this data will facilitate compliance with these obligations and provide incoming suppliers relevant information about the presence of a SMS. These obligations together with the provision of smart metering information during a change of supplier event will be mandated from Q3 2013. This will also ensure that when the DCC goes live in 2014 there will be sufficient historic data available to ensure efficient operation of the smart metering market.

Solution

It is proposed that the Transporters, in their role of holding centralised gas industry databases, will amend the central systems, known as UK Link, to capture and store the new data items and facilitate the transfer of this data as appropriate. Shippers will be obligated to provide data items which they will obtain from their suppliers.

Relevant Objectives

This modification is likely to have a positive impacts on the following Relevant Objectives:

A11.1 (d) Securing of effective competition;

A11.1 (f) Efficiency in the implementation and administration of the network code,

and no impact on the remaining Relevant Objectives.

The ROM analysis indicates a cost of between £600k and £1m to implement this solution.

Implementation

No precise timescales for implementation are currently proposed.

2 Why Change?

Overview

In 2010 the government announced that it intended requiring that suppliers install smart metering for gas and electricity to all domestic consumers by 2020. In order to generate the benefits of additional information that smart metering will provide, the government will establish a licensed Data Communications Company (DCC) to manage the meter readings and other data transfers and act as a central hub. The DCC, suppliers and gas transporters will be party to a Smart Energy Code (SEC) that will govern the rights and obligations of the various parties in relation to the smart metering data.

The government timetable for the roll-out of smart metering has been established and communicated as: "The mass roll-out of smart meters is expected to start in 2014 and to be completed in 2019. The majority of consumers will receive their smart meters during the mass roll-out.¹"

DECC have established a smart metering implementation programme (SMIP) to consider all aspects of the creation of the DCC, the SEC and other related issues. Through SMIP various working groups have been considering how to integrate the DCC and SEC requirements into the existing industry frameworks where an interaction with those frameworks and systems is required at a future date. It is acknowledged that existing central industry systems are likely to require changes to facilitate this as well as UNC parties being obligated to provide data items that are not currently required for UNC purposes.

The DECC working group that was established to consider consequential changes to existing codes has carried out analysis of the initial requirements and considered these against the current UNC requirements and the central systems. The DECC requirement for data items is likely to result in changes to existing file flows to efficiently enable capture in the central systems of data items that will be required for the start of mass roll-out in 2014. In order to provide information to assess changes a paper was produced, Legacy System Changes (Enduring) dated 14 November Ver 2.02, detailing the work of the business process group which outlines these changes.

During further work by the DECC working groups addressing issues of data collection prior to the start of mass roll-out, known as Foundation, data items in addition to those required for the enduring model have been identified by the Foundation Interim Operating Model (FIOM). In order to also facilitate this, it would be more efficient to make all data items changes at one time and the requirements for this have been included in this modification.

Beyond the collection of the data items by the Transporters there will be a further requirement to make this information available to various parties. There will be an element of playback to shippers during the change of supplier process and there is likely to be a requirement for data to be sent to the DCC to enable access control once the DCC is established and the SEC in place. The DCC element of this is likely to also include the supply point data for iGT supply points and the obligation for shippers to provide this data to iGTs is expected to be progressed as a Modification to the iGT UNC in parallel to this Modification.

The Government has powers under section 88 of the Energy Act 2008 to make amendments to relevant industry codes to facilitate the changes necessary for smart metering. Use of these powers is currently under discussion and until such time as these are concluded the normal UNC change process is proposed for assessment and development of this aspect of the DECC programme.

¹ http://www.decc.gov.uk/en/content/cms/tackling/smart_meters/smart_meters.aspx

² <http://www.decc.gov.uk/publications/basket.aspx?filetype=4&filepath=11%2ftackling-climate-change%2fsmart-meters%2f3781-smart-metering-regulation-working-group-4--meetin.zip&minwidth=true#basket>

3 Solution

New Data Items

The DECC working groups and more detailed assessment groups have identified the data items that will be required to facilitate smart metering. During this development Xoserve, acting as the central system provider, have carried out analysis of the identified system changes and produced a Rough Order of Magnitude (ROM) based on the outputs from the Legacy System Changes (Enduring) paper.

The ROM produced aims to enable DCC data access and therefore facilitate competition where smart metering is in place. The scope of the ROM includes the provision of data extracts to the DCC including the provision of iGT data. These aspects are limited to the data transformation elements and do not include the gateway mechanism for transferring the data.

Changes proposed here relate to the provision of additional data items that will be required from suppliers to be held within the central systems. This data will need to be received, processed and responses to input files developed for suppliers (via shippers) to meet the obligations to provide this data. All new data items will be stored within the central systems with a history maintained where necessary. Data items will also be used to inform shippers of the presence of smart metering during the change of supplier process.

New data items are listed in the table below including the assumptions contained within the ROM about the data items:

Field	Description	Issue/Assumption/Comments
SMS Operating Entity ID	Identifier for the Smart Metering System (SMS) Operator (SMSO) – caters for operator other than DCC	Length of field assumed to be 3
SMS Operating Entity EFD	Effective From Date (EFD)	Date provided by shipper
DCC Service Flag	Identifies where the DCC is the SMSO	DCC service flag updated by the DCC only. Valid fields will be A=active, S=suspended, W=withdrawn, NULL=where MPRN has not had SMS installed yet
DCC Service Flag EFD	Effective From Date (EFD)	EFD provided by DCC
IHD Install Status	In Home Display (IHD). Asset details may be held by the DCC, but this will enable the incoming supplier to identify if an IHD has been declined	Will only hold status, not asset details. Valid fields will be I=install, E=existing, D=declined, NULL=where MPRN has not had SMS installed yet
IHD Install Status EFD	Effective From Date (EFD)	Date provided by shipper

UPRN	Unique Preference Property Number	Likely to be blank in initial phases – requirement has been identified but method of population remains outstanding and subject to a DECC policy decision
Smart Meter Installing supplier ID	To assist with foundation for assigning responsibility for the installing supplier	Use of existing Supplier Short Codes. May be derived from meter installation data flows
Meter Type ³	Used to specify the type of Smart Meter but within the Meter Mech field	List of possible variables: Non SMETS meter – NS SMETS1 – S1 SMETS2 – S2 SMETS3 – S3 Requirement to allow flexibility for new SMETS versions – <i>Sn</i>
Supplier Effective to Date (ETD)	DECC requirement based on their DSP Procurement document	Will be derived from existing data based on defined rules
Source Registration System ID	DECC requirement based on their DSP Procurement document	Xoserve to provide
Network Operator Effective From Date	DECC requirement based on their DSP Procurement document	Likely to remain static for large GTs, but may change for iGT sites which are transferred/sold

Table 1: Smart Meter Data items

For the avoidance of doubt, these definitions are intended to reflect the business requirements of the DECC documents. The design of the interface between the various parties will be subject to detailed analysis and the list of fields in the designated interface may look different to the list outlined above.

The work carried out by Xoserve to develop a ROM has also identified that there may be further fields that are required to ensure a fully efficient solution. This includes, but is not limited to Gas Transporter ID and the Market Sector Code to identify I&C sites.

It is proposed that the Transporters (via their Agent) will make amendments to the central systems to capture these data items and enable reporting through appropriate means, e.g. SPA files, RGMA flows, Data Enquiry Service, etc. Obligations will be placed on shippers to obtain this information from their supplier and provide it the Transporters in a timely manner. New data items will not be subject to validation by the Transporter Agency.

In order to fully facilitate the smart metering market it is required that the DCC can access appropriate data and that they have suitable permission through the UNC to do this. The DCC will be a licensed body and permission will be limited to the holder of the "smart meter communication licence" as defined in Statutory Instrument 2012 No.2400: The Electricity and Gas (Smart Meters Licensable Activity) Order 2012⁴. It is proposed that the data items that will be allowed through the UNC permissions are shown in table 2 below. The permission should include the data items in Table 2 below for all large GT meter points, including those which are "DEad" and "EXTinct". It will also allow the

³ The Meter Mechanism change may be facilitated by means of a SPAA MDD change; however, the changes required to the central systems for this are included in the overall Smart Metering data change.

⁴ <http://www.legislation.gov.uk/ukxi/2012/2400/made>

Transporters to pass through the same data as provided by the iGTs for all iGT meter points.

Provision of a UPRN field is intended to ensure that future requirements are implemented efficiently. This will not initially be populated and where populated, will not be validated. Subsequent IT developments may chose to deliver full functionality of UPRNs at a later date.

Playback of Data Items

As a result of the new data items there will be a requirement for these to be played back to various industry parties through appropriate file flows. The full list of relevant data items for the facilitation of smart metering that are likely to need playback to shippers and eventually the DCC are:

- Source Registration System ID
- MPRN
- Supplier ID
- Supplier EFD
- Supplier ETD
- MAM ID
- MAM EFD
- Meter Point Address
- Meter Point Post Code
- Meter Type (Meter Mechanism Code)
- SMS Operating Entity ID
- SMS Operating Entity EFD
- DCC Service Flag
- DCC Service Flag EFD
- IHD Install Status
- IHD Install Status EFD
- UPRN (where known)
- Smart Meter Installing supplier ID
- Network Owner ID
- Network Owner ID EFD
- Market Sector Flag (Premise/Customer type)

Rules for deriving Supplier Effective to Date:

- Start date of incoming/new Supplier, or
- Start date of "blank" where a meter point is isolated/withdrawn

Rules for deriving Smart Meter Installing Supplier ID

- Registered supplier at date of installation of first smart meter – based on meter asset update flows or future installed smart meter

For clarity the data items will be transferred in the following directions:

Data Item	Status	Shipper to GT	DCC to GT*	iGT to GT	GT to Shipper	GT to DCC**
Source Registration System ID	New			x		x
MPRN	Existing	x	x	x	x	x
Supplier ID	Existing	x		x	x	x

0430

Final Modification Report

18 March 2013

Version 3.0

Page 7 of 15

© 2013 all rights reserved

Supplier EFD	Existing	x		x	x	x
Supplier ETD	New/Derived			x		x
MAM ID	Existing	x		x	x	x
MAM EFD	Existing	x		x	x	x
Meter Point Address	Existing	x		x	x	x
Meter Point Postcode	Existing	x		x	x	x
Meter Mechanism Code	Modified	x			x	
SMS Operating Entity ID	New	x			x	
SMS Operating Entity EFD	New	x			x	
DCC Service Flag	New		x		x	
DCC Service Flag EFD	New		x		x	
IHD Install Status	New	x			x	
IHD Install Status EFD	New	x			x	
UPRN (where known)	New	x		x	x	x
Smart Meter Installing Supplier ID	Derived	x			x	
Network Owner ID	Existing			x	x	x
Network Owner EFD	New			x		x
Market Sector Flag	Existing	x		x	x	x

Table 2: Data permissions and flows

*Outside scope of UNC Modification 0430. Likely to be an obligation on the DCC under the SEC to pass to the relevant Transporters.

**Permission to release data to the Licensed DCC

It should be noted that iGT UNC Modification 047⁵ has been raised by ES Pipelines to include the same data requirements. This will ensure that consistency is achieved across the gas industry for the enablement of the DCC and the smart metering regime.

For clarity, this solution will create the following changes to the UNC:

- New obligation for shippers to provide data items as listed in table where a Smart Metering System is installed
- Provide permission for the GTs to release data items as listed in the table to the holder of the "smart meter communication licence" as defined in Statutory Instrument 2012 No.2400: The Electricity and Gas (Smart Meters Licensable Activity) Order 2012, including data relating to iGT Supply Meter Points

Timing of the changes may be phased to ensure that the existing Supplier Effective Switching obligations can be fulfilled at the earliest opportunity. A SPAA change has been raised to allow the new Allowable Values to the Meter Mechanism Code and a further SPAA change to Schedule 23 is intended to permit the publication of this and the installing supplier on the existing Data Enquiry Service.

⁵ <http://igt-unc.co.uk/Modifications/Open+Modifications/IGT047>

User Pays

Classification of the modification as User Pays, or not, and the justification for such classification.

This modification will be funded by User Pays arrangements as it will be facilitating the smart metering requirements of the supplier licence, making them the beneficiaries of the change.

Identification of Users of the service, the proposed split of the recovery between Gas Transporters and Users for User Pays costs and the justification for such view.

It is proposed that costs for implementation of the change be borne 100% by shippers. As the result of workgroup discussions it is proposed that two options for funding are considered for this change:

- 100% ALL shippers split by registered meter point count
- 100% mandated shippers by registered mandated meter point count (Domestic or <11 cubic meters per hour)

Ofgem is asked to consider this and approve the basis they believe is appropriate.

Proposed charge(s) for application of User Pays charges to Shippers.

No additional charges are currently anticipated for the enduring capture of the data.

The ROM analysis indicates a cost of between £600k and £1m to implement this solution.

Proposed charge for inclusion in the Agency Charging Statement (ACS) – to be completed upon receipt of a cost estimate from Xoserve.

To be provided.

4 Relevant Objectives

Impact of the modification on the **Relevant Objectives:**

Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	Positive
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	Positive
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None

A11.1 (d) Securing of effective competition – gas suppliers will have licence obligations to install Smart Metering Systems (SMS) (from a date to be specified in the licence) and to use the central Data Communications Company (DCC) for carrying out smart metering activity. In order to ensure that an incoming supplier is aware of the presence of a SMS at a property so that they can offer appropriate terms to new customers, it is essential that the information proposed in this modification is captured, stored and issued appropriately to ensure the efficient operation of the market and therefore further competition.

A11.1 (f) Efficiency in the implementation and administration of the network code – making the changes to data fields for both the enduring and foundation stage of the SMART metering programme at the same time will require fewer UNC changes and therefore further this relevant objective. In addition, the work required to amend the central systems will be carried out in a more efficient manner. However, some participants considered that further efficiencies would be gained if single service provision for iGT services were implemented at the same time.

5 Implementation

No implementation timescales are currently proposed.

Please note that it is likely that these changes will be required prior to the start of mass roll-out of smart metering in Q1 2014, with Q3 2013 currently being the expected requirement. Implementation timescales will be included in ROM analysis.

British Gas considers that as the implementation of the modification is proposed in two stages, they would expect the initial stage (supporting foundation) to be implemented as soon as possible, in line with the suggested timescales and the enduring requirements would require at least 9 months notice.

E.ON UK would need at least 90 days notice to implement this modification.

RWE npower would prefer a 12 month lead time for implementation to ensure effective system development.

ScottishPower notes that the modification does not specify an implementation date but in an effort to be consistent with the electricity change, they consider this date should be set around the same time (November 2013).

SSE would prefer implementation to be no earlier than the beginning of mass roll-out for smart meters scheduled for quarter 1, 2014. They recognise that the implementation date is to be designated by Ofgem as indicated in the legal text.

6 Legal Text

Text

TRANSPORTATION PRINCIPAL DOCUMENT

SECTION M – SUPPLY POINT METERING

Add new paragraph M.1.2.2.(c)

M.1.2.2.(c) “A Smart Meter means:

- (i) An energy meter that can both send and receive information using an external electronic communications network; or
- (ii) An energy meter and a device which is associated with or ancillary to that meter and which enables information to be sent to and received by the meter using an external electronic communications network.

and the expression “Smart Metering” is to be read accordingly”

Add new paragraph M.2.1.13.

“M.2.1.13 Where, following such date as designated by the UK Link Committee and notified to Users for the purposes of this paragraph, a Smart Meter is installed at a Supply Meter Point, the User shall within 4

0430

Final Modification Report

18 March 2013

Version 3.0

Page 11 of 15

© 2013 all rights reserved

Days provide such data relating to the Supply Meter Point Reference Number of that Smart Meter as shown in Annex M-1. When added, such details will form part of the Supply Point register details for that Supply Meter Point”

Add new Annex M1

Annex M-1

Data Item	
Supply Meter Point Reference Number	
supplier	
supplier effective from date	
supplier effective to date	
Registered Metering Applicant	
Registered Metering Applicant effective from date	
supply point address	
Meter Post Code	
meter mechanism code	
Smart Meter system operator	
Smart Meter system operator effective from date	
in home display status	
in home display status effective from date	
UPRN	
Smart Meter installing supplier	
Market Sector Code	

SECTION V – GENERAL

Add new paragraph V.5.16

“V.5.16 The Transporters are authorised to disclose such data as is set out within Annex V-9 to the holder of the “smart meter communications licence” as defined by Statutory Instrument 2012 No.2400: The Electricity and Gas (Smart Meters Licensable Activity) Order 2012. Such data may relate to all Supply Meter Points regardless of status and includes Supply Meter Points which are located on the network of an Independent Gas Transporter where provided to the Transporters.”

Add new Annex V-9

“V-9 Annex V-9

Data Item	
source registration system ID	
Supply Meter Point Reference Number	
supplier	
supplier effective from date	
supplier effective to date	
network operator	
network operator effective from date	
Registered Metering Applicant	
Registered Metering Applicant effective from date	
supply point address	
Meter Post Code	
UPRN	
Market Sector Code	

SSE notes that the legal text 'suggests' that shippers should provide the relevant data items within 4 Days. This conflicts with other UNC obligations, for example to provide Meter Information (within which the meter mechanism is included) within 6 Business Days.

7 Consultation Responses

Representations were received from the following parties:

Company/Organisation Name	Support Implementation or not?
British Gas	Support
E.ON UK	Support
National Grid Distribution	Support
RWE npower	Support
Scotia Gas Networks	Support
ScottishPower	Qualified Support
SSE	Support

Of the seven representations received six supported implementation and one offered qualified support.

Summary Comments

E.ON UK considers these are key items necessary to support the introduction of smart metering and ensure interoperability.

National Grid Distribution supports implementation of this proposal since the changes are required to support the implementation of the SMART meter roll-out program. Therefore, it is appropriate for the UNC, and the supporting systems, to be modified to store and transmit the new data to the relevant parties.

RWE npower are fully supportive of the government's Smart Metering Implementation Programme. A fundamental element to this programme is the implementation of the DCC. The DCC will form a pivotal role in the energy industry going forward and Modification 0430 is a key enabler to DCC operation, and therefore RWE npower are fully supportive of Modification 0430.

Scotia Gas Networks supports this modification as it is key to providing the DCC with the appropriate data items to allow them to fully facilitate their activities in the smart metering market. SGN believe that making the changes to the existing file flows at the same time as introducing new requirements is an efficient route to implementing the required process changes.

SSE is supportive of this modification as it enables transporters to collect and pass data to the DCC, thereby facilitating the rollout of smart metering.

Additional Issues Identified in Responses

ScottishPower notes that this modification is similar in nature to the equivalent proposed data items for electricity (DTC CP 3362), which Scottish Power did not originally support on the basis that the security model for the programme had not been finalised. With no defined baseline for security, there is the possibility that the proposed models would impact the DCC's requirements for registration data.

ScottishPower understands that further discussions were to be had with DECC with a view to confirming that the data items proposed matched the underlying security model. As they are unable to confirm that these have been concluded and a baseline for the security model has been achieved, ScottishPower is only able to provide qualified support on the condition that this is resolved as a matter of urgency.

ScottishPower notes that this modification assumes that the SMSO Entity ID will have a field length of 3. They also note that in the corresponding electricity change this is 4 -

0430
Final Modification Report
18 March 2013

Version 3.0

Page 14 of 15

© 2013 all rights reserved

if registration were to be centralised at a future date (as was the original intention for the DCC), it may be prudent to ensure these are aligned from the beginning.

SSE notes that for the roll-out of Smart metering, the timescales for passing meter information and these relevant smart data items to the transporter may need to be altered, but this needs to be fully considered along with the implications to systems and service providers.

8 Panel Discussions

The Panel Chair summarised that some key data items had been identified as being required to support Smart Metering and help deliver interoperability, with the data able to flow between parties and so provide a consistent view of the arrangements at relevant Meter Points. This modification seeks to ensure the identified data is held within Transporter systems in order to meet the identified requirements from a single central source.

Members recognised that establishing a central and consistent dataset would help to ensure that an incoming supplier is aware of the presence of a smart meter at a property so that they can offer appropriate terms to new customers, and hence implementation would be expected to facilitate the securing of effective competition by delivering a level playing field with consistent information available to potential competitors.

Members recognised that the modification was expected to deliver changes to data fields to support both the enduring and foundation stage of the SMART metering programme. Implementing all the anticipated changes simultaneously is expected to minimise the number of UNC changes required, and allow central systems to be modified at a lower cost than would be expected if piecemeal changes were made as and when necessary. Implementation of the modification would therefore be consistent with facilitating efficiency in the implementation and administration of the UNC.

Members then unanimously determined to recommend that Modification 0430 be implemented.

9 Recommendation

Panel Recommendation

Having considered the Modification Report, the Panel recommends:

- that proposed Modification 0430 should be made.