Modification Report
Extension of DM service to enable Consumer Demand Side Management
Modification Reference Number 0088

Version 3.0

This Modification Report is made pursuant to Rule 9.3.1 of the Modification Rules and follows the format required under Rule 9.4

1. The Modification Proposal

Over the last twelve months prospective and current Meter Asset Managers (MAMs) have started to offer Automated Meter Reading Services (AMRS) to Industrial and Commercial Suppliers. One of the perceived advantages of AMR Meters is that it enables Industrial and Commercial Customers to actively manage their gas consumption in response to market signals, particularly in times of system stress.

At present we believe that the current market structure, in particular system limitations, inhibits the development of consumer driven demand management and hence reduces the benefits of smart metering.

At present any Large Supply Point can become a DM site, subject to Transporter approval. In the ten years in which this has been possible few, if any, sites have taken advantage of this facility. We conclude this is due to the fact that the costs and complexity of moving to such a regime outweigh the contractual and commercial benefits of such of a reclassification.

We are proposing that the UNC, with supporting systems, are modified to enable Shippers to manage DM(AMR) Supply Points directly. Any systems changes should be undertaken to allow Shippers to collect and submit daily meter readings to the Transporter's Agent (xoserve). In order to ensure that customers are attracted to such a change the regime for DM(AMR) sites must be proportionate. Transporters and Shippers have been comfortable with such sites being subject to the NDM process since the inception of the Gas Code. It does not seem appropriate that such sites should be subject to an onerous regime akin to the DM process.

We do not anticipate removing any obligations from Transporters in maintaining and operating the current DM portfolio at present.

Consequence of non-implementation

If the modification is not implemented, the advantages which can conferred by AMR technology, such as facilitating demand side response from mid-sized I&C sites and improving energy efficiency will be not be realised and the market will not as readily adopt this technology.

Appendix 1: Business Rules

1.0 SPA Process

1.1. When the User makes a Supply Point Nomination, the User must specify an effective Supply Point Registration Date at least 8 Business Days after acceptance of the Supply Point Offer.

1.2. At the Supply Point Registration Date, the site is designated as a DM(AMR) site within Sites and Meters.

1.3. Shippers will be responsible for the nomination/confirmation and maintenance of any DM(AMR) sites that it chooses to designate as such.

1.4. Site must have DM(AMR) equipment installed. This is defined as any site that has Remote Metering Reading Equipment, and is a Larger Supply Point.

1.5. Shippers will be not required to install dataloggers (though the Remote Metering Reading Equipment may be capable of acting as a datalogger) or telephone lines.

1.6. The Transporter's agent will assign a unique reference number to each set of DM(AMR) Remote Meter Reading Equipment installed. The Shipper will provide any information deemed necessary to facilitate this process.

1.7. If the Site has previously not been registered, then the Shipper will supply the AQ for that site as well as an SOQ.

1.8. Transporters shall not verify applications outside of the normal process.

1.9. No meters placed on a prime or sub-deduct network will be eligible to become DM(AMR), unless the site has a Primary DM Meter, or all sub-deduct meters are reclassified as DM(AMR) meters with the same Supply Point Registration Date.

2.0 Demand Forecast Process

2.1. Shippers will submit the forecasted gas requirements for each DM(AMR) site. The nomination timescales will be aligned with current DM sites.

2.2. Shippers will submit nominations for DM(AMR) sites with DM sites.

2.3. Energy balancing charges will be calculated in accordance with the current DM regime.

2.4. Sites may be re-nominated in accordance with the DM timescales.

3.0 Submission of Meter Readings

3.1. Reads can be submitted by Shippers or individuals designated by the Shipper as acting on behalf of that site. The Shipper may only submit one set of meter reading files per day for DM(AMR) sites.

3.2. As the majority of these sites are currently monthly read NDM sites it seems appropriate that Shippers are required to submit two consecutive reads at least once every 4 calendar months, and must submit at least two consecutive reads every calendar month for at least 90% of the DM(AMR) meters for which it is responsible. (This is identical to the current must read rules for such sites who are monthly read sites).

3.3. Shippers will use Best Endeavours to procure daily reads for each DM(AMR) sites.

3.4. Xoserve will publish a monthly report (with Shipper anonymity) detailing the number and percentage of DM(AMR) meter reads what were submitted on a daily basis.

3.5. If a User fails to satisfy these requirements then the Transporter will procure a meter reading and the User will pay the costs incurred for procuring that read.

3.6. If a Supply Point exceeds it maximum Supply Point Capacity it will be subject to ratchet and overrun charges.

3.7. When a Shipper submits an SOQ to xoserve as part of the confirmation process, it shall be liable for ratchet charges only if the SOQ submitted is less than the SOQ of that site, prior to it being becoming a DM (AMR). This exemption will only be in place for the period where the site has not been classified as a DM(AMR) for a full Gas Year.

3.8. Once the provisional period has expired, then the site will be liable for Supply Point Ratchet Charges.

3.9. A site will have its AQ derived from two meter readings 12 calendar months separate. If no meter reading is available for the applicable days, then the Transporter's agent may use any two meter readings no more than 13 and no less then 11 months separate. If still no suitable meter reading are available the previous AQ will be used.

3.10. The usual start point for AQ derivation will be the Supply Point Registration Date.

4.0 Demand Derivation Process

4.1. Shippers will be able to submit one set of metered readings per MPRN registered as a DM(AMR) each Gas Day.

4.2. The allocation timescales will be aligned with that of DM sites.

4.3. Shippers will be able to adjust erroneous or derived meter readings up to D+5 as under the existing UNC.

4.4. If there are insufficient meter readings supplied for a DM(AMR) site, xoserve will calculate a default value for that site.

4.5. This default value will be the values used for deriving the metered volume for that site at D-7.

4.6. If no Meter Reading is available for derivation, then the metered consumption will be 1/365th of the submitted AQ.

5.0 Reconciliation Process

5.1. The reconciliation process will act in the same manner as the Daily Meter reconciliation (EBAs) process.

5.2. When a meter reading is submitted to the Transporter agent, meter point reconciliation will be undertaken if insufficient meter readings were submitted the previous day.

5.3. When a Shipper submits a read to xoserve that can be verified as a Meter Reading derived from visual inspection and the variance between this meter reading and the system meter reading exceeds 50,000 kWh then a resynchronization reconciliation will be undertaken.

5.4. The Shipper may request a resynchronization reconciliation if it has evidence from visual inspection of a misallocation of energy.

5.5. Any invoices that are created as a result of this reconciliation will be settled by the incumbent User at the time of the reconciliation.

5.6. A resynchronization reconciliation will cover the period between the date of the new meter reading submission and the date of the last resynchronization reconciliation, or if this is unavailable the date of the submission of the opening meter read.

2. Extent to which implementation of the proposed modification would better facilitate the relevant objectives

Allowing Consumers the ability to actively manage their gas consumption, thereby aiding Transporters in their management of the pipeline network on peak demand days, allows this modification to facilitate the achievement of the relevant objectives:

A11(a) the efficient and economic operation of the pipe-line system;

Implementation of the Proposal would provide Shippers with an opportunity to provide the Transporters with additional meter readings. This enhanced information will help inform the Transporters about system demand, facilitating efficient and economic operation of both the NTS and DN pipe-line systems. Transporters were concerned, however, that there would be an impact on demand modelling for the remaining NDM population which could offset any benefit.

Furthermore, implementation of the Proposal would enable DM(AMR) customers to undertake demand-side reduction as actual consumption could be recorded on days when flow is curtailed, so reducing demand upon the system at times of stress. This should aid efficient and economic operation of the pipe-line system, potentially reducing the role of the residual balancer.

A11(c), the efficient discharge of the licensee's obligations under this licence;

The Transporters are required to develop their systems in order to ensure that all firm customers are supplied except in a situation where demand is greater than that expected in 1 year in 20. Implementation of the Proposal would facilitate an increase in the number of daily meter readings submitted and potentially promote a higher level of demand-side response when required to balance the system.

It was argued in the Development Work Group that this may lead to a reduced peak demand forecast which could facilitate efficient investment by the Transporters. However, Transporters did not believe it would be reasonable to anticipate a reliable short term impact on 1 in 20 peak demand on their networks as a result of implementing this Proposal and hence did not believe implementation would better facilitate this objective in this respect.

A11(d) the 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;

The Development Work Group believed that Suppliers do not currently allow potential DM(AMR) customers' variation in demand to be reflected in their supply contract because the benefits of variations in daily consumption cannot be taken into account without becoming an elective DM site. Implementing the

Proposal would allow DM(AMR) sites to have such flexibility and benefit from demand variation without the cost and complexity of being classified as a DM site. This would enhance the market, release gas to the market at an earlier stage than otherwise, encourage Shippers to self balance rather than rely on the residual balancer and improve cost reflectivity for sites electing DM(AMR) status, thereby promoting competition.

The Development Work Group agreed that implementation of this Proposal would, by increasing the number of meter readings provided to the Transporters, result in improved data quality. However, it was pointed out that in statistical terms the NDM EUC profiles for the largest supply points are established on the basis of relatively small samples. This is notwithstanding the fact that daily read data is already collected for the majority of the underlying population. Increasing the number of daily read sites would further reduce NDM sample sizes and would not yield any additional reads which relate to the remaining NDM load. It would be inappropriate, for example, to assume that consumption patterns for the DM(AMR) sites would reflect that of the NDM sites as a result of heterogeneity and selection bias. Hence no increase in accuracy for the remaining NDM population could be anticipated and, indeed, some degradation might be anticipated. There may also be a loss of ability to profile by LDZ, further reducing accuracy, if significant numbers elect for DM(AMR) status.

A11(f) so far as is consistent with sub-paragraphs (a) to (e), the promotion of efficiency in the implementation and administration of…the uniform network code.

Transporters and Shippers would be likely to incur additional costs in order to implement this Proposal. Neither systems nor operating costs have been established at this stage, although Transporters believe development costs would be substantial, and would need to be considered in order to conclude whether implementation of this Proposal would be consistent with facilitating this relevant objective. The Proposer believes, however, that the Proposal has been developed in light of comments and points raised with a view to containing the likely level of costs which would be incurred. The Work Group agreed that there could be merits in Ofgem undertaking an Impact Assessment which looks at the full range of costs and benefits, beyond the confines of the UNC, associated with implementation of this Proposal.

3. The implications of implementing the Modification Proposal on security of supply, operation of the Total System and industry fragmentation

The Development Work Group believed that implementation of the Modification Proposal should improve the Transporters' ability to manage the network as customers would be more likely to curtail consumption in response to market signals.

Increasing the level of demand side response that Shippers can access from their customers would be expected to improve their ability to balance their own portfolios while continuing to meet the demands of domestic customers. Implementation of this Proposal would give Shippers additional tools to assist

with reducing their own customers' demands, therefore reducing the likelihood that a gas deficit emergency will occur and improving security of supply.

By improving Shippers' ability to balance, a reduction in the role of the residual balancer could be expected. This may provide benefits for operation of the total System.

There should be no adverse impact on industry fragmentation as a result of implementing this Modification Proposal.

4. The implications for Transporters and each Transporter of implementing the Modification Proposal, including

a) implications for operation of the System:

Transporters could have access to greater levels of daily consumption information, which may assist with efficient operation of the system. Shippers would be better able to balance their own portfolios through accessing demand reduction from a greater number of customers, thereby reducing the role of the residual balancer.

b) development and capital cost and operating cost implications:

Transporters believe that detailed cost estimates cannot be provided until detailed requirements have been finalised. However, the following has been provided by the Transporters:

"Following a high level impact assessment undertaken by xoserve, Transporters have identified that a systems development cost in the range of £240,000 - £400,000 would be incurred. However, this value reflects externally commissioned development costs only and does not include internal costs which would be accrued as a consequence of changes to systems and processes operated by xoserve. Such additional costs could be expected to range from £50,000 to £100,000. Furthermore, the above costs are based on current UK-Link volume capacity not being exceeded. Given that no information is available regarding the likelihood of utilisation of the new regime, no account has been taken of 'scaling' impacts which may arise should participation be extensive. In this event further systems costs would be incurred. In addition since the analysis was conducted based upon the explicit Modification Proposal business rules only, the impacts for the following systems; ConQuest, IAD, ODS, B2K and DN Link are not included in the high level impact assessment."

c) extent to which it is appropriate to recover the costs, and proposal for the most appropriate way to recover the costs:

The method of recovery is partially dependent on the level of costs and the exact method of implementation, which are unknown. However, it is proposed that any costs should aim to be recovered through the established price control review or Class 3 UK Link change processes.

d) analysis of the consequences (if any) this proposal would have on price regulation:

Should the Proposal be implemented, the Transporters would expect to consider whether it would be appropriate to modify their Charging Methodologies in order to better reflect costs incurred. Shippers do not believe it is possible to judge this at this stage, when costs are unknown, whether or not implementation would have consequences for price regulation.

5. The consequence of implementing the Modification Proposal on the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal

It is unlikely that there would be any significant increase in the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal. However, any consequent reduction in the number of supply points in particular EUC bands would increase the risk that the Transporters may be unable to fully meet their obligations with respect to the production of NDM profiles for the remaining NDM population as specified in Section H of the UNC (TPD).

The Transporters believe that, without Shipper obligations to provide a regular Meter read, they would face increased contractual risk with respect to Must Reads.

6. The high level indication of the areas of the UK Link System likely to be affected, together with the development implications and other implications for the UK Link Systems and related computer systems of each Transporter and Users

The whole UK Link suite would potentially be impacted to a greater or lesser extent, for example (but not exhaustively):

- SPA (Nomination, confirmation, reconfirmation, AQ process)
- Sites & Meters (recognising site type)
- Invoicing
- Reconciliation

All Users would need to manage any revised file formats, and those availing themselves of the service the increased interfaces and be in a position to manage their customer portfolio more actively.

7. The implications of implementing the Modification Proposal for Users, including administrative and operational costs and level of contractual risk

If revised file formats are involved as part of the solution, all Users may incur additional administrative and operational costs. However, there may be no significant increase if a Shipper decides not to take advantage of the options which would be presented by this Modification Proposal. Shippers may incur significant additional costs if they choose to utilise the ability to submit daily

reads on behalf of their customers, but would only be expected to do this if they believed the benefits to themselves would exceed the costs.

Transporters were concerned that implementation of the Proposal could be expected to increase contractual risk for Users to the extent that the additional processes may provide an opportunity for some Users to be selective about the Meter Reads they submit. This is mitigated by the level of transparency provided by the proposed monthly reporting. Users believed that the risk of inappropriate behaviour was low, and the proposed processes would reduce contractual risk relative to the existing position.

8. The implications of implementing the Modification Proposal for Terminal Operators, Consumers, Connected System Operators, Suppliers, producers and, any Non Code Party

If the Proposal were implemented, Suppliers may be in a better position to sell flexible contracts to customers based on daily metering. Additional consumers, especially those with contracts related to the daily gas price, would be able to be incentivised to respond to market signals. Some consumers may also wish to use AMR technology to deliver other benefits, for example demonstrating relative gas consumption between sites on a daily basis, and the benefits flowing from the Proposal may increase the number of customers for whom AMR is cost effective.

9. Consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal

No consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal have been identified.

10. Analysis of any advantages or disadvantages of implementation of the Modification Proposal

Advantages:

- Improves Shippers' ability to balance their positions, potentially reducing the role of the residual balancer
- Potentially increases the volume and flexibility of demand side response, and so to this extent would enhance security of supply
- Increases the consumption information Shippers are able to submit to Transporters, supporting processes such as AQ derivation and reconciliation
- Facilitates the introduction of more flexible contracts into the competitive supply market
- Facilitates the introduction of new approaches to collecting meter reads

Disadvantages:

- Significant system development would be required

- System Development Costs would be incurred
- Some of the benefits could be introduced outside the UNC should Shippers and Suppliers wish to offer such services
- Demand for the service, providing a signal that investment may be justified, has not yet been demonstrated
- Existing NDM processes may be adversely impacted, having a deleterious impact on all NDM loads, e.g. RbD Reconciliation, EUC profiles and Load factors

11. Summary of representations received (to the extent that the import of those representations are not reflected elsewhere in the Modification Report)

Representations were received from the following parties:

Organisation	Position
Scotia Gas Networks	Not in Support
British Gas Trading	Qualified Support
EdF energy	Qualified Support
Gaz de France	Supports
National Grid Distribution	Qualified Support
National Grid Transmission	Comments
Corona Energy	Supports
RWE npower	Qualified Support
Total Gas and Power	Supports
Wales & West Utilities	Comments
energywatch	Supports

No new issues have been identified in the representations received.

The Development Work Group believes that further consideration would be needed to develop detailed business rules, legal text and an associated implementation plan. In light of the uncertainties around the value of both the costs and benefits of implementing the Proposal, they also believe that it would be appropriate for a cost benefit analysis to be undertaken such that all parties would be able to contribute to a full assessment of the merits of the Proposal. This may be best conducted by Ofgem in the form of a Regulatory Impact Assessment. This view is supported by the majority of respondents.

Other matters which the Development Work Group considered still needed to be addressed are:

Recommend that Ofgem consider undertaking an IA.

System impact assessment required.

Legal Text required.

12. The extent to which the implementation is required to enable each Transporter to facilitate compliance with safety or other legislation

Implementation is not required to enable each Transporter to facilitate compliance with safety or other legislation.

13. The extent to which the implementation is required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence

Implementation is not required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence.

14. Programme for works required as a consequence of implementing the Modification Proposal

To be developed.

15. Proposed implementation timetable (including timetable for any necessary information systems changes)

The Modification Proposal still requires a detailed system impact assessment, therefore it is difficult to assess what is an appropriate implementation timetable, which in any regard would need to be discussed at the UK Link Committee. However, the following has been provided by the Transporters:

"It is envisaged that given the scale of systems changes required, implementation of this Modification Proposal prior to April 2008 would be unlikely. It is expected that this matter would require consideration within the UK-Link Committee."

16. Implications of implementing this Modification Proposal upon existing Code Standards of Service

No implications of implementing this Modification Proposal upon existing Code Standards of Service have been identified.

17. Recommendation regarding implementation of this Modification Proposal and the number of votes of the Modification Panel

At the Modification Panel meeting held on 21 June 2007, of the 8 Voting Members present, capable of casting 9 votes, 2 votes were cast in favour of implementing this Modification Proposal. Therefore, the Panel did not recommend implementation of this Proposal.

18. Transporter's Proposal

This Modification Report contains the Transporter's proposal not to modify the Code and the Transporter now seeks direction from the Gas & Electricity Markets Authority in accordance with this report.

19. Text

At the request of Ofgem, legal text has been provided and forms part of this Final Modification Report. However, in view of the size of documents associated with this Modification Proposal, the text has been published separately alongside this Report.

For and on behalf of Relevant Gas Transporters:

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