Implementing the European Gas Regulation (EC) 715/2009 in Northern Ireland

Consultation Paper

21 December 2012
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## Acronyms and Glossary

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<tr>
<td>BGE(NI)</td>
<td>Bord Gais Eireann (Northern Ireland)</td>
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<td>BGN</td>
<td>Bord Gais Networks</td>
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<tr>
<td>BGTL</td>
<td>Belfast Gas Transmission Limited</td>
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<td>BTP</td>
<td>Ballylumford Torytown Pipeline</td>
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<td>CAG</td>
<td>Common Arrangements for Gas</td>
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<td>CAGSO</td>
<td>Common Arrangements for Gas System Operator</td>
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<tr>
<td>CAM</td>
<td>Capacity Allocation Mechanism</td>
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<tr>
<td>CBA</td>
<td>Cost Benefit Analysis</td>
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<tr>
<td>CER</td>
<td>Commission for Energy Regulation</td>
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<td>CJV</td>
<td>Contractual Joint Venture</td>
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<td>CMP</td>
<td>Congestion Management Procedures</td>
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<td>DETI</td>
<td>Department of Enterprise Trade and Investment</td>
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<td>DSOs</td>
<td>Distribution System Operators</td>
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<td>ENTSO-G</td>
<td>European Network of Transmission System Operators for Gas</td>
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<td>EU</td>
<td>European Union</td>
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<td>FG</td>
<td>Framework Guideline</td>
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<td>FOIA</td>
<td>Freedom of Information Act</td>
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<td>HSE(NI)</td>
<td>Health and Safety Executive for Northern Ireland</td>
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<td>MEL</td>
<td>Mutual Energy Limited</td>
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<tr>
<td>MO</td>
<td>Market Operation</td>
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<tr>
<td>NI</td>
<td>Northern Ireland</td>
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<tr>
<td>MEL</td>
<td>Northern Ireland Energy Holdings</td>
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<tr>
<td>NPV</td>
<td>Net Present Value</td>
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<tr>
<td>NWP</td>
<td>North West Pipeline</td>
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<td>PTL</td>
<td>Premier Transmission Limited</td>
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<tr>
<td>RAs</td>
<td>Regulatory Authorities</td>
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<td>SNIP</td>
<td>Scotland to Northern Ireland Pipeline</td>
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<td>SNP</td>
<td>South North Pipeline</td>
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<td>TSO</td>
<td>Transmission System Operator</td>
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<td>UR</td>
<td>The Utility Regulator</td>
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1. Introduction

Introduction

1.1. Northern Ireland (NI) is obliged to implement Gas Regulation (EC) 715/2009 which will require a number of significant changes to the gas industry and regulatory framework. The original intention was to deliver implementation through the Common Arrangements for Gas (CAG) project and a lot of good work and engagement with stakeholders has been delivered through this project.

1.2. Earlier in 2012 the regulatory authorities (the RAs), the Utility Regulator and the Commission for Energy Regulation (CER) issued an industry update on the CAG project. The RAs acknowledged that there are still substantive outstanding issues awaiting resolution such as the full implications for the project of evidence which had emerged on the physical capacities and limitations of the networks on the island and related to this the CER’s concern about how a single balancing zone should operate under CAG. In addition, the CER considered that there is a need to keep the original Cost Benefit Analysis for CAG under review. Consequently, the RAs commissioned a study on the balancing regime for CAG and the CER began its own more general cost benefit analysis (CBA) update study on CAG to ensure that the underlying goal of delivering mutual benefits to customers in the Republic of Ireland is likely to be met. At present this work is still ongoing.

1.3. The original CAG workplan was to have compliance delivered by October 2012. Given that this deadline has now passed and uncertainly remains over the project it is necessary for NI to ensure arrangements are in place to deliver compliance with the Gas Regulation.

1.4. These arrangements will build on all the work that has been delivered through CAG and if the CAG project regains momentum this NI compliance project can collapse into the new CAG workplan. Indeed the commonality between the two projects is significant as what we are considering in this paper could be described as common arrangements for gas in NI.

1.5. One of the main requirements of the regulation is to implement an entry exit system of tariffs. Northern Ireland currently has a point to point transportation system. By contrast in an entry exit model natural gas may enter the gas network at any entry point and leave it at any exit point at prices independent from the distance the gas has to travel.

1.6. A NI entry exit system will have only two entry points (Moffat and Gormanston) and the exit points will be those we currently have. The system will not therefore be very complex and we need to be mindful of this in designing an entry exit regime, particularly the tariff regime where we would wish to preserve the principle of postalised tariffs.

1.7. Work to implement entry exit in NI will require significant changes to the current licences, transmission network codes, and IT systems of the transmission system operators (TSOs). Much work has already been completed to implement entry exit as part of the CAG project which consulted extensively on entry exit tariffs, and codes changes. Therefore we very much intend to build on the CAG work and do not plan to duplicate the CAG efforts that have
already progressed these areas significantly. This paper should be read in conjunction with
the relevant CAG papers and we have linked to CAG papers where appropriate

1.8. In addition CAG consulted on various models to implement single system operation for the
island. This was included in the CAG work programme in order to generate benefits for
shippers and substantial financial benefits more generally. With three TSOs in NI – Premier
Transmission Ltd. (PTL), Belfast Gas Transmission Ltd. (BGTL), and Bord Gais Eireann
(Northern Ireland) (BGE(NI)), system operation is clearly the most fragmented. In the
absence of CAG we would also wish to capture the benefits from rationalising system
operation in NI. In doing so we intend to build on the analysis conducted for CAG.

1.9. Single system operations for NI would entail putting in place a single transmission code and
single IT system and changes to implement entry exit would be made only once rather than
to the three codes and two IT systems we have at present. However it makes sense to
rationalise system operation before making the changes to codes and IT systems necessary
to implement entry exit. Therefore this paper is focused on the options of how to deliver
single system operations in NI.

Purpose of the document
1.10. This document therefore sets out the Utility Regulator’s approach to implementing
those aspects of the third European Union (EU) Gas Regulation not currently applied in NI.
The work required to implement the Regulation mirrors that needed for CAG in NI, i.e.
moving from the current point to point regime to an entry exit system.

1.11. Given the scope of change needed to move to entry exit, it is important to decide how
system operation in NI is to be organised before any changes are made. Consequently, this
paper also considers the merits of single system operation in NI. This will require a single
code of operations and a single IT system.

1.12. We would welcome stakeholder views on the scope of work envisaged to implement
the Gas Regulation and how we intend to build on work in CAG to deliver single system
operation in an NI only context.

Structure of the Document
1.13. This document is organised into seven sections.
• Section one – introduction and background
• Section two – context for the work proposed
• Section three – contains an overview of work on single system operation in CAG
• Section four – sets out how why we wish to apply proposals for single system
  operation in CAG to the NI only context
• Section five - summarises the proposed scope of work for gas regulation
  compliance. The detail is set out in the compliance table published separately.
• Section six - sets out the consultation process, and considers the project
timetable and next steps
Background

Gas Regulation (EC) 715/2009

1.14. As part of the European Union (EU), Northern Ireland (NI) is committed to the development of a Single European Gas Market. To further this objective the EU adopted the third legislative package in July 2009. The key elements of the third package for gas include more enhanced consumer protection measures, further requirements for unbundling of network operations from other activities, more power and independence for national regulators, the development of European network codes covering areas such as tariffing, capacity allocation and interoperability, and the creation of entry exit tariff system(s) in each member state.


1.16. The individual member states are responsible for transposing the Gas Directive into national law. The Department of Enterprise Trade and Investment (DETI) has transposed the Directive requirements into the NI legislative framework for gas by means of Regulations made under Section 2(2) of the European Communities Act 1972.² Full implementation of the Directive requirements may require new or amended licence conditions, modifications to network codes pursuant to such licence conditions or other regulatory instruments.

1.17. The Utility Regulator has put in place the necessary licence conditions to implement the consumer protection and distribution requirements of the Gas Directive. The TSO licence requirements necessary to implement the requirements of the Directive, including those necessary to implement unbundling, will be published shortly for consultation once preliminary decisions are made in relation to the certification of the TSOs. This work is therefore not included within the scope of the Gas Regulation project identified in this paper.

1.18. The Gas Regulation is directly applicable, meaning it does not need to be transposed into national legislation. However, the Gas Regulation will require changes to licences and the network codes of the TSOs. The scope of these requirements and the measures needed to implement them are the subject of the current consultation. The Gas Regulation is applicable from March 2011.

1.19. On 1st October 2012 DETI designated certain provisions of Regulation EC No.715/2009 as ‘relevant requirements’ under Article 41B of the Energy (Northern Ireland) Order 2003. This brings the designated provisions within the enforcement regime under the Energy Order, meaning that the Utility Regulator can enforce these requirements.³ At present the Utility Regulator wishes to proceed by means of an agreed compliance plan with the

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¹ The package included a separate Regulation establishing the Agency for the Cooperation of European Regulators (ACER) but this is not considered here.
² Insert link to DETI decision document
TSOs. We will monitor the steps being taken to secure compliance with those aspects of the Gas Regulation with which the TSOs in NI are not currently compliant.

**System operation in Northern Ireland**

1.20. The ownership and operation of the Northern Ireland Gas Transmission Network is currently split between three TSOs who are licensed to both own and operate their networks, i.e. to convey gas within the meaning of Article 8(1) of the Gas (Northern Ireland) Order 1996. The TSOs are:

- Premier Transmission Limited (a wholly owned subsidiary of Mutual Energy Ltd (MEL)) who own the Scotland to Northern Ireland Pipeline (SNIP) which links Twynholm in Scotland with the Ballylumford power station in Co. Antrim.
- Belfast Gas Transmission Ltd. (a wholly owned subsidiary of MEL) who own the Ballylumford Torytown Pipeline (‘BTP’) which runs from Ballylumford power station to the Belfast distribution network. BGTL and PTL will have the same management team but are legally separate companies. The pipeline will continue to have its own Network Code.
- BGE (Northern Ireland) who own the North West Pipeline (NWP) which links the Ballylumford Torytown Pipeline (BTP) at Carrickfergus to the Coolkeeragh power station in Co. Derry and the South North Pipeline (SNP) which runs from Gormanstown in Co Meath to connect with the North West pipeline at Ballyalbanagh in Co Antrim.

1.21. Northern Ireland also has two distribution system operators (DSOs) - Phoenix Natural Gas Limited and Firmus Energy Distribution Ltd. 4 The proposal for single system operation at transmission level does not affect the DSOs except to the extent that new interface arrangements may be necessary between transmission and distribution. The need for these will be considered further.

1.22. All gas consumed in NI comes from the UK via the Moffat exit point in Scotland. The pipeline from Moffat to Twynholm is owned by BGE(UK) but PTL has rights to 8.08mscm of capacity in that pipeline via its Transportation Agreement with BGE(UK). In return NI paid a significant proportion of the capital costs of the pipeline and continues to pay a significant proportion of Beattock compressor costs and all costs associated with the infrastructure at Twynholm where the BGE(UK) pipeline splits. From Twynholm all gas going to NI flows through the SNIP pipeline. Suppliers in NI contract directly with PTL for capacity from Moffat to NI with the gas being moved to exit points on the PTL network according to the PTL network code. Suppliers serving either Coolkeeragh power station or the towns off the North West and South North pipelines must also sign up to the BGE(NI) code. No matter where the gas exits the NI system a single postlaised tariff is paid for capacity and commodity respectively.

1.23. The rules for transportation are contained in the network codes of which there are three in NI, each TSO has their own code. In order to simplify arrangements for shippers we

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4 Phoenix Natural Gas Limited operate the distribution network in the Greater Belfast and Larne areas and Firmus Energy Distribution Ltd who are licensed for the conveyance of gas within the towns along the route of North West and South North Pipelines including Ballymena, Ballymoney, Coleraine, Londonderry, Limavady, Antrim, Armagh, Banbridge, Craigavon and Newry.
have put in place a single balancing zone in Northern Ireland and have ensured that the three transmission codes of operations are streamlined where possible.

2. **Context**

2.1. The work currently envisaged to implement the remaining aspects of the Gas Regulation and to put in place single system operation in NI have all previously been taken forward as part of the CAG project and we have consulted extensively, for example on a regulation compliant code of operations, an entry exit tariff regime\(^5\) and single system operation. We intend to build on this work and will assess the extent to which previous CAG work may be applicable in a NI only context.

**Previous CAG work to implement the Gas Regulation**

2.2. We had intended to implement all the remaining aspects of the Gas Regulation, including entry exit, as part of the Common Arrangements for Gas (CAG) project by 1 October 2012.

2.3. In the absence of progress on CAG, the Utility Regulator implemented a number of new products during the summer of 2012. This was necessary to satisfy infringement proceedings against the United Kingdom (UK) under the Gas Regulation. These products were originally required by Regulation (EC) No 1775/2005 which was repealed by the current Gas Regulation. The Gas Regulation compliance project will review these products with a view to their further development.\(^6\)

2.4. The future of the CAG project remains uncertain at this point but NI is obliged to implement the remaining aspects of the Gas Regulation. We therefore intend to move forward with an NI only approach to Gas Regulation compliance pending a resolution of the issues currently delaying the CAG project. The NI only approach to Gas Regulation compliance will take account of the work previously completed for CAG. In addition any work we do in an NI context to implement the new EU network code rules will need to complement the CER’s work in this regard, therefore the two Regulators will continue to liaise and work together. The Utility Regulator is committed to ensuring that an NI only regime will not obstruct any subsequent work on all-island gas transmission issues which may be taken forward. If the CAG project recommences in the interim we will review the NI only work to deliver gas compliance.

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\(^5\) In relation to entry exit tariffs see:
- CAG consultation paper on Transmission Tariff Methodology and Regulation in Ireland and Northern Ireland, 27th June 2008, **CER/08/107**, UR/27/06/08.
- CAG Consultation Paper on the Harmonisation of All – Island Moffat Entry Tariff Structures, 14 June 2011, CAG/11/004
Previous work to implement single system operation

2.5. As stated above our intention is that moving to single system operation in NI will form part of the Gas Regulation compliance project.

2.6. We advocated a single TSO for NI in 2005 in the context of changes to the transmission regime consequent to the introduction of the south north pipeline (SNP). In the interim the CAG project was commenced and the aim of the transmission system operation work stream was to deliver single system operation on the island. Much work was taken forward as part of the CAG project to implement this and we intend to build on this work in a NI only context. The UR together with the Commission for Energy Regulation (CER) considered a number of models to achieve single system operation, including the establishment of a single TSO for the island. Our proposal for single system operation in NI builds on this earlier work as set out below.

2.7. The establishment of single system operation would result in a more efficient and coordinated gas industry and as such sits comfortably with our statutory duties. The principal objective of the Utility Regulator is to promote the development and maintenance of an efficient, economic, and coordinated gas industry in NI and to do so in a way that is consistent with Article 40 of the Gas directive.

2.8. PTL and BGTL have a licence obligation to cooperate with the implementation of arrangements for a single TSO in NI (condition 3.3.4) which in their licences means a person licensed to operate the system of transmission pipelines in NI. BGE(UK) does not have a similar condition in their licence but we have signalled our preference to rationalise system operation since 2005.

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7 See for example, ‘Incorporating the South North Pipeline into the Northern Ireland Gas Transmission Regime, a consultation paper’, July 2005.
3. Building on CAG – moving to single system operation in NI

3.1. This section describes in more detail why we wish to apply proposals for single system operation in the CAG context to a NI only context. It describes what we mean by single system operation in NI, why we believe it will be beneficial in NI, and the system operation functions that we propose should be delivered in this way.

Single system operation for NI

3.2. In essence we desire to put in place single system operation for a wide range of TSO functions. In practice this means that we will need to implement a:

- single transmission code,
- single IT system for capacity bookings, nominations etc.,
- single TSO team to represent NI on all cross border issues, and
- single control room to manage gas flows on the NI transmission system.

3.3. The single IT interface would provide a single interface for users of the transportation system to interact with rather than the three existing TSOs as at present.

3.4. The concept is therefore similar to that which we wished to implement as part of CAG. However, it would be simpler to implement in a NI context as there are no issues of all-island regulation to consider.

3.5. The establishment of single system operation does not require a change in the ownership of the pipelines. Consequently, the capital revenue requirements of the current TSOs would not be affected.

3.6. Clearly the sale of assets from one of the current TSOs to one of the existing TSOs would also rationalise the transmission arrangements and create a more coordinated transmission system but that is not what is envisaged here. Any sale of assets is ultimately for the TSO to decide. Instead the current proposal is to rationalise system operation in NI.

Advantages of single system operation for Northern Ireland

3.7. The advantages of single system operation in NI are virtually identical to those we identified for CAG, being linked to the high number of TSOs on the island.

3.8. The NI transmission system, with three TSOs, is clearly fragmented relative to its size. Continuing with three TSOs into the longer term increases costs and creates unnecessary duplication between the TSOs, e.g. of IT systems. In addition shippers continue to interface with each of the TSOs separately and must sign up to all three transmission codes if they wish to supply premises across NI.
3.9. Single system operation will provide administrative efficiencies on an ongoing basis both for network users and the system operators. Network users will benefit from a simplified and more efficient service as a result of communicating with one system operator as opposed to multiple transmission system operators. The system operator will also benefit from a single unified code and streamlined code modifications process which will reduce the level of monitoring and administration required. There are also administrative efficiencies for the Utility Regulator in regulating a single code and potentially adopting a single TSO price control.

3.10. A simplified transmission regime would deal with all these issues and make the NI market a much less formidable market for new suppliers to enter.

3.11. There will also be savings by avoiding the duplication that three TSOs bring. This is most clear in the case of the current IT systems of the TSOs which could be reduced to one. Significant ongoing benefits are likely to arise as a result of the need for only one IT system going forward. These benefits are largely due to licensing, maintenance and development savings. By way of illustration, as part of the CAG project we calculated that PTL will save in the area of £212,000 per annum (Net Present Value (NPV) of £3,992,000 over 10 years @ 3.5%) in the three areas below if all the IT systems on the island were rationalised to a single system. These figures therefore provide a good proxy for the savings that NI can expect in moving from two IT systems to one.

Table 1: Summary of PTL IT savings

<table>
<thead>
<tr>
<th>Description</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licences and maintenance</td>
<td>£160k per annum (NPV of £1,330k over 10 years @ 3.5%)</td>
</tr>
<tr>
<td>Development Savings</td>
<td>£26.4k per annum (NPV of £222k over 10 years @ 3.5%)</td>
</tr>
<tr>
<td>Avoided Code Mode costs</td>
<td>£26.4k per annum (NPV of £222k over 10 years @ 3.5%)</td>
</tr>
</tbody>
</table>

3.12. Single system operation in NI will also simplify implementation of the changes necessary to achieve compliance with the Gas Regulation. It would entail the establishment of a single code and single IT system to manage capacity bookings, nominations etc. Consequently code and IT changes necessary to implement the Gas Regulation would only need to be made once rather than to the multiple codes and IT systems we have at present. For this reason we wish to give consideration to whether to implement single system operation in NI in advance of any changes being made to codes, licences etc to implement the Gas Regulation.
**System operation functions**

3.13. The scope of system operation functions which could be performed by on a single basis has been well rehearsed in the CAG context.\(^8\) We envisage that in the NI context the set of functions would be similar and could include:

- Monitoring gas quality
- Long-term management of the system
- Day-to-day operations
- Balancing of the system
- Capacity trading
- Congestion management
- Measurement and end-of-day settlement and allocation
- Administration of standards
- Connection policy
- Provision of consolidated market reports
- Administration of the financial security policy
- Interaction with European work streams

3.14. The functions of planning, developing and maintain the system are also very important. If a new entity single TSO is created it will need to plan, develop and maintain the system in order to be directive compliant.

3.15. Other alternatives to achieve single system operation need be less prescriptive in how planning, developing, and maintaining the system are organised:

- For example, single system operation could be organised by means of a contract between the existing TSOs (a contractual joint venture or CJV), the CJV model is explained more fully in the next section. In this case the CJV could have responsibility for the preparation of long-term development plans for the network and to up-date these plans on an annual basis. This would ensure a coordinated NI approach to planning and development. When preparing long-term development plans, we envisage that the CJV would communicate with the individual TSOs, producers and shippers regarding their respective systems; e.g. on forecasts, security of supply, and expected developments. The TSOs would submit plans and consult within the CJV on any future developments to their respective networks or to assets that will be connected to the network.
- In relation to maintenance, the TSOs would carry this out under their licence. In the CJV the TSOs would cooperate to schedule when maintenance is physically carried out by the different TSOs such that maintenance will not interfere with the normal operations of the transportation system. Decisions regarding what

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\(^8\) See for example ‘Common Arrangements for Gas: Consultation on the Common arrangements for Gas System operator, 24 August 2011.’
pipes / compressors and equipment need to be maintained and how and when the maintenance will be done will be a matter for the TSOs to the extent that is does not impact the efficient and safe operation of the transmission system.

3.16. Other potential functions include:

- Metering
- Collection and disbursement of transportation charges

3.17. With respect to metering, the entity carrying out single system operation will require immediate direct access to metering data if it is to control the system and carry out its allocation functions. The collection and disbursement of transportation charges will depend on the development of the code and licences and discussion on the future requirement of the TSOs with respect to a postalised system administrator.

**Single code and Single IT system**

3.18. Single system operation will require a single code and single IT system.

3.19. Responses to consultations on the operating regime for CAG indicated a consensus that a single code for the island should be implemented as part of CAG. We believe that a single code for NI only would have similar benefits. The analysis in the table below is based on work conducted for CAG.

3.20. Moving to a single code for NI would dispense with the need for mechanisms to ensure that the codes do not grow apart over time and make it easier to give a single service to suppliers. In moving to a single code for NI we can build on the existing streamlined nature of the codes as well as the issues discussed as part of the CAG project.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Assessment</th>
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<tbody>
<tr>
<td><strong>Efficient and Cost effective</strong></td>
<td>In the long run a single code dispenses with the need to coordinate multiple codes and is therefore more efficient and cost effective than other options</td>
</tr>
<tr>
<td><strong>Customer friendly</strong></td>
<td>A single code is the most customer friendly option as network users need only sign one code at transmission level rather than the four codes which exist at present. We believe this is a major benefit for network users and should also make the island more attractive to new suppliers</td>
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<tr>
<td><strong>Transparent</strong></td>
<td>We believe that there are transparency benefits in having one set of rules as opposed to three (in NI the rules have been streamlined but are not identical) and a single entity for network users to interface with – the single TSO. When developing the new code we will work with industry to ensure that the rules it contains are clear and that the roles and responsibility of each party to the code are properly defined</td>
</tr>
<tr>
<td><strong>Consistent</strong></td>
<td>A unified code will improve the interoperability of energy markets at EU level</td>
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with EU legislation and the EU single market | and is also consistent with developments towards an EU single market and EU network codes. We will need to ensure that the single code in NI does not preclude further integration at European level.

3.21. The provision of a single IT interface for suppliers is a requirement of single system operation in NI, just as a single IT interface was a requirement for CAG. IT savings are one of the key reasons to move toward single system operation.

3.22. If single system operation is provided by means of a new entity single TSO then it will own and host the IT interface, otherwise if a CJV is created one of the existing IT systems will become redundant. If we decide to implement single system operation by means of a CJV we propose giving the existing TSOs the opportunity to assess which of their existing IT systems would best facilitate the move to entry exit, be most effective in the long run and flexible enough to meet the uncertain demands of further EU integration.

Consultation questions
3.23. The issues to consider in this section are:

- Have we adequately described single system operation or are there other elements which would need to be delivered?
- Do you agree that, in the absence of CAG, single system operation would deliver benefits for NI over the current operational regime?
- Do you agree with the proposed list of system operation functions which would be delivered on a single basis in NI?
4. **Overview of single system operation in CAG**

4.1. As part of the CAG project we have consulted widely on the options for single system operation, including implementation issues, and criteria for assessment.\(^9\) We wish to build on this work in the NI only context. Therefore this section sets out the options most favoured for CAG and how they translate into an NI only context.

4.2. CAG considered four broad options - Coordination between multiple TSOs, dual TSOs on the island, various models for the single TSO, and a contractual joint venture (CJV) between the existing TSOs.

4.3. Coordination between multiple TSOs was considered as part of CAG but was ruled out. See for example, ‘CAG, Draft conclusions on the options for the Gas Operational Regime, 20 October 2008. Also ‘CAG, Conclusions on the options for the Gas Operational Regime’, 16 February 2009. Coordination between multiple TSOs is akin to the current situation in NI therefore we have not considered it further in the NI only context. Dual TSOs in the CAG context would have rationalised the number of TSOs in NI from three to one so in the NI only context effectively means the creation of a single TSO.

4.4. This leaves the options most favoured for CAG which were a new entity licensed as the single TSO, or the TSOs could form a contractual joint venture to provide single system operation. CAG identified in detail the implementation issues with these options and we believe that this analysis also holds in the NI only context. We consider these options further and how they translate into an NI only context below.

**Explanation of the single TSO option**

4.5. This option means that a single entity, the single TSO would be responsible for performing all TSO functions in NI. The new entity would provide a single interface for users of the transportation system. The existing TSO licences would be reduced to asset owner licences only. The single TSO would either need to own a control room or contract for control room services.

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\(^9\) In May 2008, the Utility Regulator and the Commission for Energy Regulation issued a discussion document outlining the operational options being considered for CAG. See [CAG, Discussion Paper on the Options for the Gas Operational Regime, May 2008](#). A further consultation paper was published in October 2008 which set out the UR’ initial conclusions on the design of the operations regime. See [CAG, Draft Conclusions on the Options for the Gas Operational Regime, October 2008](#). A Conclusions paper was published in February 2009. See ‘CAG, Conclusions on the options for the Gas Operational Regime, 16 February 2009. [CAG, Conclusions on the Options for the Gas Operational Regime, February 2009](#). In August 2011 there was a further consultation, see [CAG, Consultation on the Common Arrangements for the Gas System Operator, August 2011](#).
Implementing the single TSO

4.6. We would need to decide who would be the single TSO. It could either:

- be appointed by the Utility Regulator after a licence application process or
- its identity could be specified in legislation or
- the single TSO could also be a joint venture between the existing TSOs. This means the existing TSOs will have to put up an equity stake in the JV which will then have to acquire premises and staff etc.

4.7. Either way this option entails quite far reaching licence changes. A new system operator licence would be needed for the new entity and this would need to be developed. The existing TSO licenses would also need to be altered to take out the functions that the single TSO will perform. The legislative basis also exists to licence system operation and asset ownership separately (8B(6) of the Gas Order), however the provision needs to be commenced.

4.8. The single TSO will also be operating pipes it does not own so will need an operating agreement with the asset owners. This would be necessary to manage the operational relationship between the single TSO and the asset owners and give practical effect to the regulatory separation of responsibilities between TSOs and asset owners and generally cover matters including detailed roles and responsibilities, information provision, payment obligations, risk allocation, dispute resolution, indemnities and limitation of liability. Operating procedures covering how the single TSO will operate those pipelines it does not own, will be an essential part of this agreement.

4.9. In addition, this option would divide responsibility for health and safety between the single TSO and the asset owners. This will require the involvement of Health and Safety Executive for NI (HSE(NI)), particularly if the single TSO needs to submit a safety case to HSE(NI).

4.10. Suppliers will make nominations to the single TSO so it will need to own the single IT interface with shippers.

Table 2: Summary of advantages/disadvantages of the Single TSO model

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single TSO would be licensed therefore would be directly regulated by the Utility Regulator</td>
<td>Requires changes to the licence responsibilities of the current TSOs</td>
</tr>
<tr>
<td>Single entity responsible for all SO functions - no need for coordination between TSOs</td>
<td>Responsibility for health and safety needs to be delineated and requires the sanction of HSE(NI)</td>
</tr>
<tr>
<td>Single IT interface can be provided</td>
<td>Requires an operating agreement to be drafted</td>
</tr>
<tr>
<td>Single code can be provided</td>
<td>A new entity would be expensive to set up as it would need staff and premises</td>
</tr>
<tr>
<td>Would be independent of both asset owners in planning and developing the system</td>
<td>A new entity would also need to acquire an IT system which could mean that both existing IT</td>
</tr>
</tbody>
</table>
Explanation of the contractual joint venture (CJV)

4.11. The contractual joint venture is a means to coordinate the activities of multiple TSOs and does not involve the creation of a new company as the single TSO. The Market Operator in the Single Electricity Market is a contractual joint venture which did not involve the creation of a separate company. Instead the market operation (MO) functions are coordinated between the licensed market operators, SONI and Eirgrid. The contract between them is the vehicle for the provision of MO services. This option therefore involves the TSOs continuing to be licensed individually as system operators’ for their pipelines but they would in addition have a licence obligation to coordinate these activities in order to provide single system operation.

Implementing the CJV option

4.12. This option entails fewer licence changes as the TSOs continue to be licensed for system operation. No operating agreement would be required. However, the TSOs would need to conclude a CJV contract to agree how single system operation is to be provided.

4.13. The key issue with the CJV is how it will be governed to ensure that single decisions are taken and avoid deadlock in decision making. As part of the work on CAG there was a consensus that a CJV would have a governing committee although exactly how this would function differed. Another key issue is how the work of the CJV will be managed, e.g. whether there will be a single manager. Also, what staff will be available to fulfil the functions of the CJV.

4.14. In addition neither of the TSOs in NI currently own a control room therefore a CJV would need to contract for control room services. In effect this is what the TSOs currently do.

4.15. Much work has been done on the CJV option in the CAG context where the UR and the CER considered that it was appropriate for the CAG system operator (CAGSO) JV to be a CJV. In the summer of 2011 MEL and Bord Gais Networks (BGN)/BGE(NI) separately outlined two possible visions for how the CJV could be constructed and details of these were published by the UR and the CER.\(^\text{10}\) The key differences between the two options were:

- Both proposals contained a Governing Committee. However, the BGN/BGE(NI) proposal envisages two contract managers reporting to this Committee, one for each TSO, where the MEL proposal envisages a single general manager;
- Answering to these managers, the BGN/BGE(NI) proposal envisages separate teams from each TSO undertaking the system operation functions, while the MEL proposal proposes a separate CAGSO staff.

\(^{10}\) See ‘Common Arrangements for Gas: consultation on the Common arrangements for Gas System operator, 24\(^{th}\) August 2011’.
We would wish to consider these proposals in the NI only context and would invite the TSOs to include any further thoughts on the CAG CJV model and its application in NI in their responses to this consultation. This will assist us in assessing the model for single system operation going forward.

Table 3: Summary of advantages/disadvantages of the CJV model

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requires few licence changes</td>
<td>Requires ongoing coordination between multiple TSOs which is inefficient</td>
</tr>
<tr>
<td>Single IT interface can be provided and would be one of the existing systems</td>
<td>Requires a CJV contract to be put in place</td>
</tr>
<tr>
<td>Single code can be provided</td>
<td>Governance arrangements must be robust otherwise there is the potential for deadlock in decision making</td>
</tr>
<tr>
<td>Does not require a new entity to be set up so could be up and running more quickly and with less expense than a single TSO</td>
<td></td>
</tr>
<tr>
<td>Requires fewer changes to existing contracts</td>
<td></td>
</tr>
<tr>
<td>Responsibility for health and safety remains as is</td>
<td></td>
</tr>
</tbody>
</table>

Assessment criteria for the options

As part of the CAG project the UR outlined certain assessment criteria for the CAG operational regime, based on the Utility Regulator’s statutory duties. We believe that these criteria are valid in a NI only context as well and so would propose to adopt them. To re-cap these were:

- efficient,
- cost effective,
- customer friendly,
- transparent; and
- consistent and compatible with developments in the EU.

An assessment of the models for single system operation is set out below. This applies analysis published as part of the CAG project to the NI only context.
Table 4: Assessment of the Single TSO and CJV models against the assessment criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>CJV assessment</th>
<th>Single TSO assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficient</strong></td>
<td>May be more difficult to ensure that the system is operated in an efficient manner regardless of ownership of pipelines because the system will be policed by the TSOs and each asset owner may focus on what is best for their own network. Difficulties in the operation of the CJV option may also arise if there are disagreements/disputes between the TSOs.</td>
<td>This option is the most efficient option as the single TSO can be constituted in such a way that it is independent of the asset owners and incentivised to move gas in an efficient manner regardless of the ownership of pipelines. The single TSO will be licensed and regulated by the UR allowing the UR to control its costs.</td>
</tr>
<tr>
<td><strong>Cost Effective</strong></td>
<td>Initial set up will be cheaper than a single TSO. However, coordination between multiple TSOs is not cost effective on an on-going basis.</td>
<td>Will be more expensive to set up as a new entity may be required. However, the single TSO is more cost effective in the long run as it avoids the on-going costs associated with coordinating the relationship between multiple TSOs and securing agreement between multiple TSOs.</td>
</tr>
<tr>
<td><strong>Customer Friendly</strong></td>
<td>Will facilitate a single interface for shippers. But, the CJV agreement will need to set out who will own the single IT interface and how investments in IT will be agreed and financed.</td>
<td>Will facilitate a single interface for shippers. The single TSO will own the single IT interface.</td>
</tr>
<tr>
<td><strong>Transparent</strong></td>
<td>This option does not change the current responsibilities of the TSOs. However, for this model to be transparent the contractual arrangements which underpin it will need to be clearly drafted to ensure that the roles and responsibilities of the TSOs are clear.</td>
<td>This option changes the current responsibilities of the TSOs but in such a way that a clear separation of responsibility will be needed between the TSO and the asset owners. This will be underpinned by licences and contracts.</td>
</tr>
<tr>
<td><strong>Consistent with EU Legislation and the Single EU Market</strong></td>
<td>Is consistent with current EU legislation and is not precluded by the Third Package.</td>
<td>Is consistent with current EU legislation and is not precluded by the Third Package.</td>
</tr>
</tbody>
</table>
Consultation questions

4.19.   The issues to consider in this section are:

- Are there any other advantages/disadvantages of the single TSO and CJV options which we have not considered?
- Do you agree with the criteria proposed to assess the options for single system operation?
- Do you agree with the assessment of the single TSO models against the criteria?
- Which option for single system operation in NI do you prefer and why?
- We request the TSOs to produce an updated proposal for the CJV in an NI only context
- Do you agree with our proposal to implement a single transmission code of operations and a single IT system in NI?
5. Gas Regulation compliance: proposed scope of work

Overview of European third package legislative requirements

5.1. The Gas Regulation also requires the establishment of European Network codes in a number of areas (12 in all). Work is currently ongoing in the areas of capacity allocation, interoperability, balancing and tariff rules. The twelve network codes will not all be finalised by the time we complete the Gas Regulation compliance project in NI. However, where work on EU network codes is sufficiently advanced we will seek to implement any new code requirements as part of the Gas Regulation scope of work. We will also attempt to ensure that new arrangements for Gas Regulation compliance in NI will not impede the development of the remaining EU network codes for gas in so far as the detail of these is sufficiently known. See scope of work below for more details.

5.2. The scope of work needed for Gas Regulation compliance in Northern Ireland covers:

- Introduction of an entry exit regime
- Refinement of existing products such the daily capacity product, interruptible product, and the virtual reverse flow product to make them more user friendly
- Implementation of European network code requirements where these have been agreed. The new regime must not in any case impede the development of the European network codes
- New TSO transparency requirements applicable
- Implementation of the new rules on congestion management procedures (e.g. an over subscription and buy-back regime and a firm day ahead use-it-or-lose-it mechanism)

5.3. The above will require:

- A new entry exit complaint code to replace the existing point to point codes
- Entry exit tariffs, including and a review of tariffs for the products put in place as a result of the IME2 project
- Changes to licences to underpin the new tariff regime
- Changes to the IT systems of the TSOs (single system operation would create a single IT system to which the changes would be applied)
- Review of existing contractual arrangements consequent to changes to licences and codes

5.4. This programme of work is similar in scope to CAG (for transmission) and will take a similar amount of time to complete. As with CAG the timetable will be driven by the amount of time it will take to develop the code and change the IT system. The timetable is also dependant on progress with the development of European network codes.

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11 See Article 8(6) of Regulation (EC) 715/2009.
Consistency with the development of EU network codes

5.5. The development of network codes at European level will overlap with the Gas regulation compliance project in NI. Currently, the code on capacity allocation methodology (CAM) is the most advanced and may be adopted in the summer of 2013. The key change that will be required by the CAM network code is the introduction of auctions for the allocation of capacity and the bundling of capacity at interconnection points. The code is unlikely to require implementation before 2015 and there may be a single auction platform developed. We would propose to await developments on implementation before deciding whether the introduction of auctions should be included in the gas regulation compliance programme. In relation to the bundling of capacity this will need to be include in the work programme in order to ensure that bundling occurs in a manner consistent with the capacity rights that NI has under the Transportation Agreement between PTL and BGE(UK). Issues in relation to bundling will be taken forward as part of the code and contracts work stream.

5.6. Apart from CAM, the annex 1 to Regulation 715/2009 concerning congestion management procedures (CMP) has been changed by a Commission decision of 24 August 2012 and the deadline for implementation is October 2013. The requirements of CMP envisage an entry/exit system to be in place first therefore we will need to consider how we implement CMP in NI.

5.7. Otherwise the network code on balancing is currently being drafted by European Network of Transmission System Operators for Gas (ENTSO-G) and will not be in place in the short term and the network code on tariffs will follow after the balancing code. However, the shape of codes in these areas is emerging, e.g. the tariff framework guideline (FG) requires revenues to be split on a 50:50 basis between entry and exit.

5.8. If we were to implement draft requirements of a draft FG or code, the risk is that this feature may not make it in to the final version and we would need to implement something else. As the Gas Regulation project goes forward we will cross refer to the current state of play on FG and network codes in order to assess whether any of their emerging requirements should be hardwired into the NI regime.

Consultation questions

5.9. The issues to consider in this section are:

- Are there any other services not covered in the Gas Regulation which suppliers require?
- Do you agree with how we propose to tie in the development of the single code with the EU network code process?

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6. Consultation process, timetable and next steps

Consultation process
6.1. The consultation questions are collated in the table below but we also invite stakeholders to express a view on any particular aspect of the paper and in the attached compliance tables for Regulation (EC) 715/2009.

Table 8: Consultation questions

<table>
<thead>
<tr>
<th>Section 3 Moving to single system operation in NI</th>
<th>Have we adequately described what single system operation would deliver or are there other elements which would need to be delivered?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do you agree that, in the absence of CAG, single system operation would deliver benefits for NI over the current operational regime?</td>
</tr>
<tr>
<td></td>
<td>Do you agree with the proposed list of system operation functions which would be delivered on a single basis in NI?</td>
</tr>
<tr>
<td>Section 4 Overview of single system operation in CAG</td>
<td>Are there any other advantages/disadvantages of the single TSO and CJV options which we have not considered?</td>
</tr>
<tr>
<td></td>
<td>Do you agree with the criteria proposed to assess the options for single system operation?</td>
</tr>
<tr>
<td></td>
<td>Do you agree with the assessment of the single system operation models against the criteria?</td>
</tr>
<tr>
<td></td>
<td>Which options for single system operation in NI do you prefer and why?</td>
</tr>
<tr>
<td></td>
<td>TSOs to include any further thoughts they may have on their CJV models in the NI only context</td>
</tr>
<tr>
<td></td>
<td>Do you agree with our proposal to implement a single transmission code of operations and a single IT system in NI?</td>
</tr>
<tr>
<td>Section 5 Gas Regulation compliance proposed scope of work</td>
<td>Are there any other services not mentioned which suppliers require?</td>
</tr>
<tr>
<td></td>
<td>Do you agree with how we propose to tie in the development of the single code with the EU network code process?</td>
</tr>
</tbody>
</table>

6.1. We intend to organise a workshop for early February to discuss the issues in this consultation. The date of this will be announced in early January.

6.2. Responses to the consultation should be received by 5 pm on Thursday 28 February 2013 and should be addressed to:

Roisin McLaughlin
Gas Transmission
Utility Regulator
Queens House
14 Queen Street
BELFAST
BT1 6ER
Tel: 028 9031 6350
E-mail: roisin.mclaughlin@uregni.gov.uk

6.3. Our preference would be for responses to be submitted by e-mail.

6.4. Individual respondents may ask for their responses in whole or in part, not to be published, or that their identity should be withheld from public disclosure. Where either of these is the case, we will ask respondents to also supply us with the redacted version of the response that can be published.

6.5. As a public body and non-ministerial Government department, we are bound by the Freedom of Information Act (FOIA) which came into full force and effect on 1 January 2005. According to the remit of FOIA, it is possible that certain recorded information contained in consultation responses can be put into the public domain. Hence, it is now possible that all responses made to consultations will be discoverable under FOIA – even if respondents ask the Utility Regulator to treat responses as confidential. It is therefore important that respondents note these developments and in particular, when marking responses as confidential or asking the Utility Regulator to treat responses as confidential, should specify why they consider the information in question to be confidential.

**Project timetable**

6.6. The proposed project timetable will cover both the work necessary to implement the Gas Regulation work plan and the work needed to implement single system operation in NI. We will finalise the timetable once the model is chosen to deliver single system operation in NI. We do not believe that this work will push out the timetable for the gas regulation compliance project. The timetable for gas regulation compliance is driven by the time necessary to agree a single code and the IT changes to implement it and is also dependant on progress with the development of European network codes.

6.7. There are likely to be certain interdependencies in the timetable. For example, we will need to have concluded on the structure for single system operation before work can begin on the contracts and licence changes necessary to implement single system operation. Similarly we need to have decided on the products required before the tariff regime can be designed and we will need to have decided on the shape of the tariff and product regime before we commence work on the licence changes to underpin the new products and tariffs.

**Next steps**

6.8. In parallel with this consultation we will review the CAG work on the principles for entry exit tariffs and the tariff principles for particular products that are required by the Regulation with the aim of finalising a tariff paper for consultation.

6.9. In relation to the principles for the new single code we will review the work conducted for CAG in relation to codes which could be utilised in a NI only context and discuss the utility of this with the TSOs.

6.10. Consultation papers on the tariff and code principles in the NI only context will not be finalised until the current consultation closes. We will also need to review progress with the
CAG balancing study and CER CBA before any further NI only consultation papers are published.

6.11. Once this consultation closes we will:

- Finalise our conclusions on the enduring structure for operations and next steps for further consultation, i.e. whether to have single system operation in NI and what form this should take (a new entity single TSO or a CJV).

- Finalise a scope of work for the Gas Regulation compliance project and associated timetable.

- Once the scope of work is agreed we will agree costs with the TSOs for the project.