



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

## The Regulatory Treatment of the BGÉ Interconnectors in relation to Security of Gas Supply

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Commission for Energy Regulation

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## CER – Information Page

**Abstract:**

In this Consultation Paper the Commission for Energy Regulation ('the CER') provides information on the security of supply benefits provided by the two Bord Gáis Éireann subsea interconnectors and sets out the rationale for updating the current regulatory regime. The CER details guiding principles on the subject and seeks the views of interested parties on the principles put forward.

**Target Audience:**

Gas Customers, Suppliers, Shippers and Producers

Responses are requested from interested parties on the matters raised in this Consultation Paper. Comments should be submitted by 5.00pm on the 4<sup>th</sup> of February 2011.

These should be submitted to:

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**The CER intends to publish all submissions received.**

Should respondents wish to have part of their responses remain unpublished they should include the confidential parts only in a separate Annex.

## Executive Summary

In 2011 the CER will commence the third price control on the Bord Gáis Éireann (BGÉ) transmission and distribution networks (PC3). One of the main (and perhaps most complex) items to be considered in this price control will be the regulatory treatment of the BGÉ Interconnectors in relation to security of gas supply. As part of this process the CER is consulting on guiding principles for updating the regulatory treatment of the two BGÉ subsea gas interconnectors from a security of supply perspective.

The Interconnectors provide two separate physical sub-sea connections to the GB gas market thereby providing significant security of supply to consumers on the island. This is particularly pertinent in the context of requirements on infrastructure redundancy introduced under the new EU Regulation on Security of Gas Supply. At the current time, this security of supply provided by the Interconnectors is paid for by the vast majority of the Irish market, as circa 94% of gas consumed in Ireland comes across the Interconnectors. This situation is expected to change significantly as new sources of gas are introduced. When this occurs, under the current tariffing arrangements, all users of non-Interconnector gas sources will receive the same security of supply benefit as Interconnector users but will not be required to pay for it.

It is the CER's duty to ensure non-discrimination, effective competition and the efficient functioning of the natural gas market under Section 9 (1B) of the Electricity Regulation Act 1999. The potential for certain shippers to avoid payments (through no fault of their own) for a definite security of supply benefit may be considered to be a discriminatory practise which may have a detrimental effect on competition and on the Irish gas market.

Information on the current regulatory treatment of the Interconnectors is firstly set out in this paper. The significant security of supply benefits which the Interconnectors provide to the gas market in Ireland are subsequently detailed.

Taking the above issues into account, the CER requests the views of all interested parties on how the regulatory treatment of the Interconnectors may be best modified to ensure that the security of supply associated with the Interconnectors is fairly supported by all those who benefit from it. Guiding principles are therefore put forward in this Consultation Paper in relation to updating the current regulatory regime. The CER also sets out high level options for modifying the regulation of the Interconnectors. Next steps to be undertaken by the CER are lastly noted.

It is noted that the implementation of any options modifying the treatment of the Interconnectors is expected to be considered in the context of the CAG project, specifically within the context of the CAG Tariffs workstream. The interaction of this PC3 consultation with the revised CAG work plan will be detailed in due course.

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## **1.0 Introduction**

### ***1.1 The Commission for Energy Regulation***

The Commission for Energy Regulation ('the CER') is the independent body responsible for overseeing the regulation of Ireland's electricity and gas sector's. The CER was initially established and granted regulatory powers over the electricity market under the Electricity Regulation Act, 1999. The enactment of the Gas (Interim) (Regulation) Act, 2002 expanded the CER's jurisdiction to include regulation of the natural gas market, while the Energy (Miscellaneous Provisions) Act 2006 granted the CER additional powers in relation to gas and electricity safety. The CER is working to ensure that consumers benefit from regulation and the introduction of competition in the energy sector.

### ***1.2 Purpose of this paper***

The purpose of this paper is to seek the view of interested parties on guiding principles for updating the regulatory treatment of the Bord Gáis Éireann (BGÉ) subsea gas interconnectors in relation to security of gas supply. Responses will be examined in the context of the third price control on BGÉ transmission and distribution networks (PC3). It is noted that the implementation of any options modifying the treatment of the Interconnectors is expected to be considered in the context of the CAG project, specifically within the context of the CAG Tariffs workstream. The interaction of this PC3 consultation with the revised CAG work plan will be detailed in due course.

### ***1.3 Legislative Background***

- Irish Legislation

Under the Gas (Interim) (Regulation) Act, 2002, the CER is responsible for regulating charges in the natural gas market. Under Section 14 of that Act the CER may set the basis for charges for connecting to the transmission and distribution systems.

Under Section 9 (1B) of the Electricity Regulation Act 1999, as inserted by S.I. No. 452 of 2004, the Commission is responsible for ensuring non-discrimination, effective competition and the efficient functioning of the natural gas market.

- EU Legislation

Under the EU Directive 2009/73/EC<sup>1</sup>, the regulatory authority is required to:

- *carry out investigations into the functioning of the gas markets, and to decide upon and impose any necessary and proportionate measures to promote effective competition and ensure the proper functioning of the market [...]*<sup>2</sup>
- *ensure that network access tariffs collected by the independent system operator include remuneration for the network owner or network owners, which provides for adequate remuneration of the network assets and of any new investments made therein, provided they are economically and efficiently incurred*<sup>3</sup>

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<sup>1</sup> Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC.

<sup>2</sup> Directive 2009/73/EC, Article 41 4(b).

<sup>3</sup> Directive 2009/73/EC, Article 41 3(d).

## 2.0 The Subsea Interconnectors

### 2.1 Current Regulatory Regime

There are currently two interconnectors connecting Ireland and Great Britain (GB). They are owned by BGÉ and operated by Gaslink. The first interconnector (IC1) was built in 1993 with a current net book value €297m and the second interconnector (IC2) was built in 2002/03 with a current net book value of €311m.<sup>4</sup> IC1 has a capacity of 17mcm/d while IC2 has a capacity of 23mcm/d. At present 23mcm/d is the maximum combined capacity of the two pipelines.<sup>5</sup> There are currently circa 19 mcm/d of capacity bookings on the Interconnectors. The Isle of Man is also supplied with gas via a subsea connection to IC2.

The required revenues for IC1 and IC2 ('the Interconnectors') are calculated in accordance with the CER's five year revenue review decision and are combined to form a single regulated interconnector tariff.<sup>6</sup> The annual revenue allowed for the two Interconnectors is circa €50m per annum with 90% recovered through capacity charges and 10% recovered through commodity charges.<sup>7</sup>

### 2.2 Benefits Afforded by the Interconnectors

The Interconnectors provide significant benefits to the gas consumers on the island of Ireland. These benefits exist both in terms of physical and commercial features. A number of such benefits are listed below.

- The Interconnectors provide two separate physical sub-sea connections to the GB gas market thereby providing significant security of supply to consumers on the island. This is particularly pertinent in the context of requirements on infrastructure redundancy introduced under the new EU Regulation on Security of Gas Supply.<sup>8</sup>

<sup>4</sup> As per the updated [BGN Gas Transmission Network Regulatory Asset Base Report 2006](#).

<sup>5</sup> These maximum capacities of the Interconnectors are broadly accurate and are based on the latest available data from Gaslink/BGN. The actual total deliverability of the pipelines is a function of the inlet and outlet pressures. Therefore, the overall physical capacity of the combined pipelines may vary and the 23mcm/d used for the purpose of this paper should not be interpreted as a fixed total.

<sup>6</sup> See Bord Gáis Networks Revenue Review 2007/08 – 2011/12 Transmission Decision Paper (CER/07/110)

<sup>7</sup> See the Decision on BGN Allowed Revenues and Gas Transmission Tariffs for 2010/11 (CER/10/149)

<sup>8</sup> *Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC.*

See <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:295:0001:0022:EN:PDF>

- The Interconnectors have provided sufficient peak day capacity to the Irish market, most notably during the 1 in 50 conditions experienced in January 2010, and ensured that there have been no capacity constraints for new customers. This has been particularly relevant to power stations on the island. They have also continued to provide the required capacity to the Irish market in the absence of new alternative large-scale sources of gas supply.
- The Interconnectors provide an uncongested link (at least in the medium term) with the most liquid gas market in Europe, namely the GB National Balancing Point (NBP). This gives considerable transparency to the market.
- The Interconnectors provide users of all Entry Points on the island of Ireland (the Interconnectors itself by being twinned, Inch, the Scotland to Northern Ireland Pipeline, soon Corrib, potentially at the proposed Shannon LNG facility and at a future gas storage facility at Larne) with a back-up source of gas in the event of an outage.<sup>9</sup>

It should be noted that asset investment in the natural gas network (such as the Interconnectors) is by nature notably 'lumpy' in contrast with the electricity network. In effect, the development of the gas network so as to enhance security of supply inherently involves large-scale investment. The application of an N-1 criterion in gas involves the addition of new infrastructure of generally equal size to the existing infrastructure (for example the construction of a further pipeline of 23mcm/d capacity). Applying this criterion in electricity, however, would involve the construction (for example) of one extra power station providing a further 400MW over the 4000MW daily peak demand.

At present over 94% of gas consumed in Ireland is supplied via the Interconnectors. The security of supply benefits of the Interconnectors noted above are therefore implicit in the current regulated primary annual Interconnector tariff so that the vast majority of users in Ireland pay for and receive these benefits. The situation is expected to change significantly as new sources of gas come on stream over the coming years. When this occurs, under the current tariffing arrangements, all users of non-Interconnector gas sources will receive the same security of supply benefit as Interconnector users but will not be required to pay for it.

## ***2.3 Sources of Security of Supply***

The security of supply benefit associated with the Interconnectors stems primarily from the presence of two pipelines connected to a large, stable and liquid market in GB with multiple entry points and with access to a number of different sources of gas supply. While other new gas infrastructure projects on the island may provide sizeable and

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<sup>9</sup> Further information on transmission network in Ireland and Northern Ireland is available in the [Joint Gas Capacity Statement 2010](#).

important security of supply benefits, which should not be overlooked, such sources cannot individually support maximum Irish gas demand both at this time and, as far as can be reliably predicted, in the future (based on current system forecasts). It is the view of the CER that it is likely that users will continue to rely on the Interconnectors for security of gas supply and that the Interconnectors will remain the marginal source of gas in Ireland for the foreseeable future.

The Interconnectors provide the best form of security of gas supply for consumers in Ireland. The views of respondents are requested on this issue.

## **2.4 Security of Gas Supply & the Interconnector Tariff**

Taking into account the significant security of supply benefits afforded by the Interconnectors, it is worth examining how this benefit has been provided and how it is currently paid for.

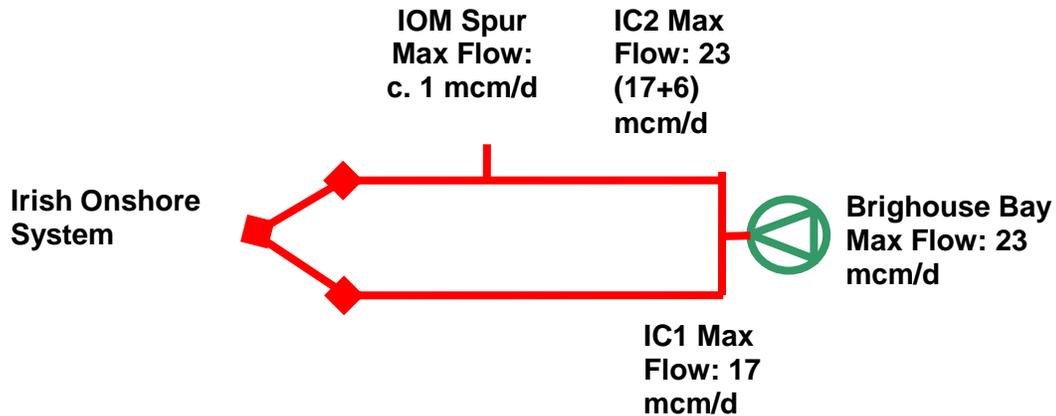
The twinning of the subsea pipelines was completed in 2002 with the construction of IC2 which has been operational since January 2003.<sup>10</sup> The addition of a second interconnector served two fundamental objectives: to cater for an expected increase in Irish gas demand in the coming years and to replicate the function of IC1 so as to significantly decrease Ireland’s reliance on a single pipeline. Therefore, IC2 was put in place with the aim of enhancing Ireland’s security of gas supply, as well as to address potential increases in capacity bookings.

In examining how the security of supply benefit is currently supported, it is constructive to consider the objectives addressed by IC2 using the physical capacity of the two Interconnectors.

<b>Interconnectors</b>	<b>Max Flow</b>
IC1	17 mcm/d
IC2	23 mcm/d
ICs Required Revenue:	€ 50m

<sup>10</sup> The basis for this decision is set out in the 12 August 2008 letter from the Department of Communications, Energy and Natural Resources to the CER. This letter is included in Annex 1 of the published document *Common Arrangements for Gas, Draft Conclusions on Transmission Tariff Harmonisation in Ireland and Northern Ireland, 17th October 2008 (CER/08/207)*.

IC2 serves to replicate the maximum 17mcm/d made available from IC1 and also serves to provide an additional 6mcm/d of capacity to the Irish market (and the Isle of Man)<sup>11</sup>. While a combined maximum capacity of 23mcm/d is available from the Interconnectors, 40mcm/d of assets (IC1 and IC2) is being paid for by customers in Ireland.



Utilising this information, the annual required revenue of IC2 could be calculated as follows:

IC2 Capacity	Required Revenue
Back up of IC1 17mcm/d:	$50m \times (17/40) = \text{€}21.25m$
Additional capacity of 6mcm/d:	$50m \times (6/40) = \text{€}7.5m$

Therefore, gas consumers in Ireland are currently paying, and in fact are committed to continuing to pay, €21.25m each year to support the security of supply benefits of the Interconnectors. As noted above, under existing regulatory arrangements, when new sources of gas come on stream, users of these new sources will receive the same security of supply benefit as Interconnector users. However, as the current policy stands, this benefit will continue to be paid for by Interconnector users only. Users of new sources will not be required to contribute towards this security of supply benefit, thus effectively receiving a cross-subsidy.

A key concern of the CER is obviously how this security of supply cost should be fairly distributed and collected. These issues will be the subject of a further consultation (see Section 4). The CER is equally mindful that any examination of the security of supply benefit offered by the Interconnectors should take into account the connection of the Isle of Man to IC2 only.

It is the CER's duty to ensure non-discrimination, effective competition and the efficient functioning of the natural gas market under Section 9 (1B) of the Electricity Regulation Act 1999. The CER considers that the potential under the current regime for non-

<sup>11</sup> It is worth noting that the Isle of Man is connected to only one of the pipelines, IC2

Interconnector users to avoid (through no fault of their own) payments for a definite security of supply benefit may be a discriminatory practise that may adversely affect competition and the proper functioning of the Irish market.

The CER's proposed guiding principles for addressing this issue are set out in detail in the subsequent section.

## 3.0 Proposed Guiding Principles

Given the pivotal role the Interconnectors play in the market both in terms of gas molecules and on gas prices for customers, it is of vital importance that changes in their regulatory treatment do not have an undue adverse impact upon the market. Therefore, it is useful to set out clear guiding principles for modifying the treatment of the Interconnectors. The CER proposes the following principles for addressing the regulatory issues.

Any modified approach to the regulatory treatment of the Interconnectors should:

### 1. Efficiency

- ensure the integrity of the market and not allow regulatory treatment to challenge the competitive position of natural gas versus competing fuels;
- promote efficient development and operation of the gas transmission system;
- ensure that those who benefit from the security of supply associated with the Interconnectors (whether indirectly or directly) pay accordingly for that benefit;
- ensure that the security of supply benefit of the Interconnectors is supported whether the Interconnectors are utilised or not;
- avoid creating windfall winners and losers from any future change in the current arrangements (as this will impact on investment incentives and, in the end, on final costs to customers of ensuring security of supply);

### 2. Equity

- avoid unfair discrimination against end-users through an excessive Interconnector charge;
- avoid unfair discrimination between customers in different jurisdictions and between different customer types.
- avoid unfair discrimination against other entry points and/or storage;
- ensure that those who benefit from an investment in the Interconnectors (whether indirectly or directly) contribute toward paying for the investment;

### 3. Practicality

- be based on principles with a clear and transparent methodology employed; and
- avoid arrangements which are overly complex or create additional transaction costs.

- Are the stated high level principles appropriate to the modification of the regulatory treatment of the Interconnectors in relation to security of supply?
- Should further principles be included and taken into account as part of the modification to the regulatory approach?

## 4.0 Proposed High Level Options

There are a number of potential methodologies for ensuring that the security of supply value of the existing Interconnector assets is recovered from relevant parties. The CER is minded to introduce requirements on shippers based on one of these options and to amend the calculation of existing networks tariffs where appropriate. The CER recognises that prior to any decision further in-depth analysis on the impact as well as on the implementation of the preferred methodology is required. As an initial step, three options are briefly set out below for consultation:

### 1) RAB Movement to Onshore Network

Under this option, a portion of the Regulated Asset Base (RAB) of the Interconnectors would be allocated as being for security of supply. This amount would be transferred to the RAB of the onshore system. The required revenue of the Interconnectors would therefore be reduced by this amount and that of the onshore system increased. The transmission tariffs would be updated and calculated on this basis.

### 2) Back-Up Booking Requirement

As per Option 1 a given amount of the Interconnector RAB would be allocated for security of supply. This amount would be remunerated by means of an obligation on shippers to book a back-up service on the Interconnectors. Both Interconnector shippers and those utilising other Entry Points would be required to book this back-up entry capacity product on the Interconnectors at all times.

### 3) Levy at all Entry Points

A variation on options 1 and 2 involves the development and introduction of a type of public service obligation levy. The security of supply value would be remunerated by means of the introduction of a new tariff at each Entry Point including the Interconnectors. This tariff could be calculated by apportioning the relevant security of supply cost *pro rata* across each Entry Point based on capacity and commodity bookings. In the event that a public service obligation levy is regarded as the preferred approach, the CER notes that the introduction of such a mechanism would be a Government decision. EU legislation on the matter, in particular Article 3 of the EU Directive 2009/73/EC, would also have to be taken into account.

- The CER requests the view of interested parties on the advantages and disadvantages associated with each of the above options.
- Should additional methodologies for ensuring the remuneration of Interconnector security of supply be taken into account?

## 5.0 Next Steps

The CER believes that the enduring treatment of the Interconnectors in relation to security of supply should be decided upon as soon as reasonably possible so as to give regulatory certainty to the market (both to current players and potential new participants). It is with this in mind that the CER wishes to address the issues now in the context of initial analysis as part of PC3.

The CER therefore intends to carry out this consultation process in two parts:

- The first part relates to this Consultation Paper. The CER wishes to raise the issue of the significant security of supply associated with the Interconnectors. The CER also requests the views of all interested parties on how the regulatory treatment of the Interconnectors may be best modified to ensure that the security of supply value is fairly supported by all those who receive this benefit. The CER will take into consideration all responses received on the guiding principles put forward in this Paper for amending the current regime.
- The CER will produce a further consultation paper on quantifying the security of supply value of the Interconnectors and a proposed mechanism for collecting this amount. It is noted that the implementation of any options modifying the treatment of the Interconnectors is expected to be considered in the context of the CAG project, specifically within the context of the CAG Tariffs workstream. The interaction of this PC3 consultation with the revised CAG work plan will be detailed in due course.